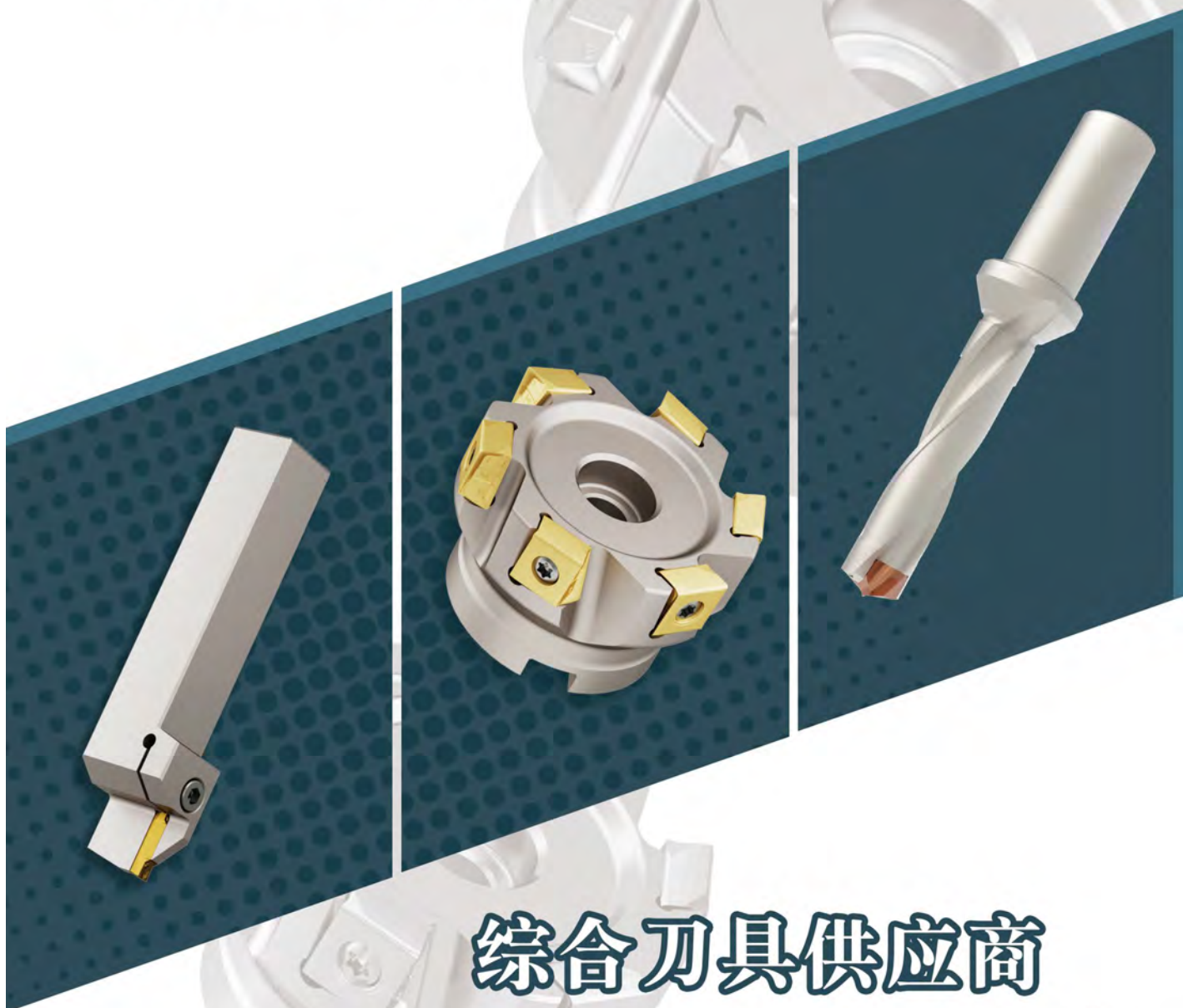


超尔切削工具

CHAI CUTTING TOOLS



综合刀具供应商
让您的机器更高效

MAKE YOUR MACHINES MORE EFFICIENT

ABOUT US 公司简介



Company Profile / 公司简介

Hangzhou Chai Cutting Tools Co., Ltd., founded in 2012, specializes in the R&D, design, production, and sales of high-end CNC tools. We aim to be a comprehensive supplier in the cutting tool industry, enhancing machine efficiency.

Our products—including cutting tools, technical consulting, and turnkey solutions—are used in mold manufacturing, automotive, aerospace, wind (nuclear) power, and rail transportation. We operate three production lines for steel tools, drilling tools, and carbide CNC inserts, ensuring stable quality in both standard and customized solutions.



Manufacturing Capabilities / 生产技术

Our steel tool production features advanced processing and inspection equipment, including German Hamer and DMG five-axis machining centers, Hexagon coordinate measuring machines, ZOLLER tool presetters, and Hamer dynamic balancing systems.

For drilling tools, we use modern manufacturing lines with Walter and HAWEMAT grinding machines, precision universal grinders, centerless grinders, and passivation polishing.

In carbide insert and mold manufacturing, our equipment includes spray drying, automatic powder forming machines, pressure sintering furnaces, double-sided grinding machines, CNC peripheral grinders, PVD coating furnaces, wire EDM, high-speed milling centers, and metallographic microscopes for quality inspection.



Talent Foundation / 人才依托

As a national high-tech enterprise and leading innovator in Zhejiang Province, we have a research and development center in Hangzhou and are recognized as a model patent enterprise. Our expert team nurtures specialists in product design, process technology, and application technology to enhance R&D and quality management.

With 51 authorized patents and nearly 20 years of market experience, our teams offer valuable insights into customer needs. We prioritize high-quality products and collaboration, looking forward to partnerships with domestic and international peers for mutual growth in high-end manufacturing.

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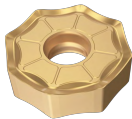
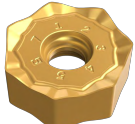
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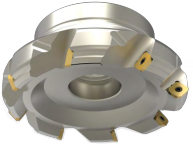


	Model/Shape	Insert	Apply	Features
Mill Cutter	CFM75SN-12J  B84-new	 SNEX1204/SNHX1206 B84-New	• D100-D315	• Magic Mirror Series • Finishing Face Mill
	Ring-type Aluminum Alloy  B90-New	 X006/XP10/SD12 B90-New	• D40-D250	• Insert edge made of polycrystalline diamond (PCD) material • Designed for high-speed machining, • Offering excellent cutting performance and long-lasting durability.
	Stacked Corn Cutter  B133-New	 EN09/EN12 B133-New	• D63-D10	• Interchangeable head corn mill
	T-type Series  B133-New	 X006/XP10/SD12 B133-New	• D21-D50	• The insert groove is sharp, enabling efficient cutting. It is suitable for slotting operations with three-flute end mills and T-shaped milling cutters

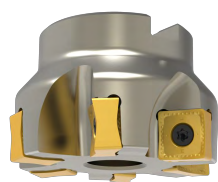
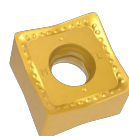
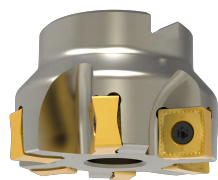
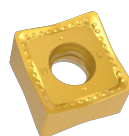
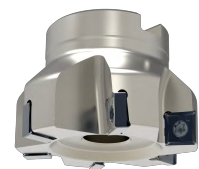
Milling Cutter

	Model / Shape	Insert	Apply	Features
Mill Cutter	CFM420N  B45	 ON 0504 B45	$Kr=42^\circ$ $ap(max)=3mm$	• Cutter DIA $\phi 50 \sim \phi 125mm$ • The insert features a double-sided 16-edge design with a large rake angle, enabling smooth and efficient cutting.
	CFM430N  B46	 ON 0706 B46	$Kr=43^\circ$ $ap(max)=3mm$	• Cutter DIA $\phi 63 \sim \phi 160mm$ • The insert features a double-sided 16-edge design with a large rake angle, enabling smooth and efficient cutting.
	CFM440N  B47	 ON 0905 B47	$Kr=44^\circ$ $ap(max)=6mm$	• Cutter DIA $\phi 63 \sim \phi 315mm$ • The insert features a double-sided 16-edge design with a large rake angle, enabling smooth and efficient cutting.
	CFM45QN  B48	 QN 0705 B48	$Kr=45^\circ$ $ap(max)=4.0mm$	• Cutter DIA $\phi 40 \sim \phi 250mm$ • The insert features a double-sided 14-edge design, suitable for machining materials such as steel, stainless steel, and cast iron.
	CFM45QNM  B50	 QN 0705 B50	$Kr=45^\circ$ $ap(max)=4.0mm$	• Cutter DIA $\phi 40 \sim \phi 160mm$ • The insert features a double-sided 14-edge design, suitable for machining materials such as steel, stainless steel, and cast iron.
	CFM45QN  B51	 QN 0906 B51	$Kr=45^\circ$ $ap(max)=5.5mm$	• Cutter DIA $\phi 63 \sim \phi 250mm$ • The insert features a double-sided 14-edge design, suitable for machining materials such as steel, stainless steel, and cast iron.

Milling Cutter

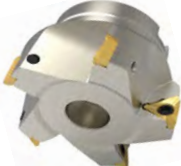
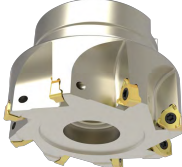
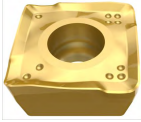
	Model / Shape	Insert	Apply	Features
Mill Cutter	CFM45QNW  B52	 QN 0906 B52	$Kr=45^\circ$ $ap(max)=5.5mm$	- Cutter DIA $\phi 80 \sim \phi 315mm$ - The insert features a double-sided 14-edge design, suitable for machining materials such as steel, stainless steel, and cast iron.
	TFM45SN-12  B53	 SN 1206 B55	$Kr=45^\circ$ $ap(max)=5.5mm$	- Cutter DIA $\phi 50 \sim \phi 315mm$ - Insert features a double-sided eight-edge design, offering good cost-effectiveness. With a large positive rake angle, it enables efficient cutting
	CFM45SN-17  B56	 SN 1707 B56	$Kr=45^\circ$ $ap(max)=7.8mm$	- Cutter DIA $\phi 63 \sim \phi 250mm$ - Insert features a double-sided eight-edge design, offering good cost-effectiveness. With a large positive rake angle, it enables efficient cutting
	CFM45SE  B57	 SE 12T3 B58	$Kr=45^\circ$ $ap(max)=6.0mm$	- Cutter DIA $\phi 50 \sim \phi 250mm$ - Insert is a positive rake angle cutter, enabling smoother cutting. - When paired with finishing insert, it can enhance the surface quality.
	TFM45HNS  B59	 HN 1006 B61	$Kr=45^\circ$ $ap(max)=6.1mm$	- Cutter DIA $\phi 63 \sim \phi 250mm$ - Double-sided slotting cutter with 12 cutting edges, providing excellent cost-effectiveness.
	TFM55AHNS  B60	 HN 0504 B61	$Kr=55^\circ$ $ap(max)=5.0mm$	- Cutter DIA $\phi 50 \sim \phi 160mm$ - Double-sided slotting cutter with 12 cutting edges, providing excellent cost-effectiveness.

Milling Cutter

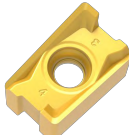
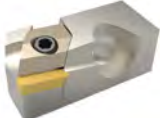
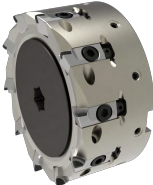
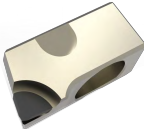
	Model / Shape	Insert	Apply	Features
Mill Cutter	TFM75SN-12  B62	 SN 1206 B63	$Kr=75^{\circ}$ $ap(max)=9.5mm$	- Cutter DIA $\phi 50 \sim \phi 315mm$ - Double-sided eight-edge design with a large positive rake angle, allowing for smooth and efficient cutting. - Sparse, Close and super close tooth design.
	CFM88SN-13  B64	 SN 1306 B66	$Kr=88^{\circ}$ $ap(max)=10.5mm$	- Cutter DIA $\phi 50 \sim \phi 200mm$ - Double-sided eight-edge design with a large positive rake angle, allowing for smooth and efficient cutting. - Available in M and ML slot types, catering to different working conditions.
	CFM90SN-13  B65	 SN 1306 B66	$Kr=90^{\circ}$ $ap(max)=10.5mm$	- Cutter DIA $\phi 50 \sim \phi 125mm$ - Double-sided eight-edge design with a large positive rake angle, allowing for smooth and efficient cutting. - Available in M and ML slot types, catering to different working conditions.
	CFM89.5SN-13  B67	 SN 1305 B67	$Kr=89.5^{\circ}$ $ap(max)=10.0mm$	- Cutter DIA $\phi 63 \sim \phi 125mm$ - Negative Insert, eight indexable cutting edges - Tool holder is designed for a 89.5° main cutting angle.
	CFM90SN-12  B68	 SN 1205 B68	$Kr=90^{\circ}$ $ap(max)=10.5mm$	- Cutter DIA $\phi 50 \sim \phi 160mm$ - Double-sided eight-edge insert - Positive large rake angle; ensures smooth cutting - Integral finishing edge; Optimized for bottom surface finishing. - Suitable for steel, stainless steel, and cast iron machining.
	CFM90SE-09  B69	 SE 09T3 B69	$Kr=90^{\circ}$ $ap(max)=9.0mm$	- Cutter DIA $\phi 50 \sim \phi 100mm$ - Four indexable cutting edges - Positive large rake angle; ensures smooth cutting

Milling Cutter



	Model / Shape	Insert	Apply	Features
Mill Cutter	3P CFM90  B70	 3P 1505 B71	$Kr=90^\circ$ $ap(max)=11mm$	- Cutter DIA $\phi 50 \sim \phi 125mm$ - Insert is a single-sided three-edge type - Large rake angle; ensures smooth cutting - Insert comes with an integrated finishing edge, ensuring high surface quality in machining.
	CFM90XN  B72	 XN 0604/0905 B72	$Kr=90^\circ$ $ap(max)=9.2mm$	- Cutter DIA $\phi 40 \sim \phi 250mm$ - Insert is double-side; six-edge type - Large rake angle; ensures smooth cutting - Integral finishing edge: Optimized for surface finishing.
	CFM90WN  B74	 WN 0403/0806 B75	$Kr=90^\circ$ $ap(max)=7.5mm$	- Cutter DIA $\phi 40 \sim \phi 160mm$ - Insert is double-side; six-edge type - Integral finishing edge: Optimized for surface finishing.
	TFM90AP  B76	 AP 1705 B77	$Kr=90^\circ$ $ap(max)=13mm$	- Cutter DIA $\phi 50 \sim \phi 200mm$ 90-degree lead angle, suitable for shoulder milling, plunge milling - Cutting edge length up to 16mm.
	CFM90SD  B78	 SD 1404 B78	$Kr=90^\circ$ $ap(max)=10.0mm$	- Cutter DIA $\phi 50 \sim \phi 160mm$ - Positive 4-edge 90° insert, offering smooth cutting. - Maximum cutting depth (AP) of 5.5-10.0mm. - The insert edge features a large radius to prevent marks from the tool when performing shoulder milling.
	CFM490LN  B79	 LN 0904/1206/1608 B80	$Kr=90^\circ$ $ap(max)=16.2mm$	- Cutter DIA $\phi 50 \sim \phi 200mm$ - Equipped with four right-hand 90° cutting edges. - The combination of spiral cutting edges and large positive front angles ensures smoother cutting. - A wide variety of grades is available: P/M/K/S

Milling Cutter

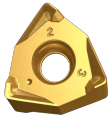
	Model / Shape	Insert	Apply	Features
Mill Cutter	CFM90AN  B81	 AN 1204/17T6 B83	$Kr=90^{\circ}$ $ap(max)=16.5mm$	- Cutter DIA $\phi 40 \sim \phi 160mm$ - Flat insert with 4 cutting edges ;positive rake angle spiral cutting edge design for smooth cutting. - For roughing to finishing of stainless steel, high-temperature alloys, and cast iron, delivering 90° cutting performance.
	CFM88LN  B84	 LN 1005/1504 B84	$Kr=88^{\circ}$	- Cutter DIA $\phi 80 \sim \phi 250mm$ - Equipped with a fine-tuning mechanism for easy adjustments, suitable for finishing operations. - The surface of the machined workpiece attains a superior finish.
	CZH  B86	 Various types of milling tool holders B87	$Kr=90^{\circ}$	- Cutter DIA $\phi 125 \sim \phi 500mm$ - Interchangeable tool holder compatible with various main cutting angles and blade shapes. - Equipped with a fine-tuning mechanism for easy adjustments, making it suitable for finishing operations.
Aluminum Cutter	CFM90PCD-L  B88	 PCD Tool Holder B88	$Kr=90^{\circ}$ $ap(max)=4mm$	- Cutter DIA $\phi 63 \sim \phi 400mm$ - Aluminum tool holder with dynamic balancing treatment, suitable for high-speed machining applications. - Equipped with a fine-tuning mechanism for easy adjustments, making it suitable for finishing operations
	CFM90AE  B89	 AE 15 B90	$Kr=90^{\circ}$ $ap(max)=11mm$	- Cutter DIA $\phi 40 \sim \phi 63mm$ - Steel tool holder with dynamic balancing treatment, suitable for high-speed machining applications. - Equipped with a fine-tuning mechanism for easy adjustments, making it suitable for finishing operations
	CFM90AE  B89	 AE 15 B90	$Kr=90^{\circ}$ $ap(max)=11mm$	- Cutter DIA $\phi 80 \sim \phi 250mm$ - Made of steel with an aluminum alloy body. Dynamic balancing, making it suitable for high-speed machining applications. - Equipped with a fine-tuning mechanism for easy adjustments, making it suitable for finishing operations

Milling Cutter



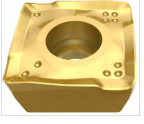
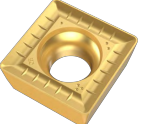
	Model / Shape	Insert	Apply	Features
High Feed Mill Cutter	TFMBL  B91	 BL 0603/0904/1105 B94	$ap(max)=1.5mm$	- Cutter DIA $\phi 32 \sim \phi 125mm$ - The insert is a double-sided slot milling insert. - Effectively decomposes radial cutting forces, enabling high-feed cutting.
	CFMP'  B95	 BL 0603 B96	$ap(max)=1.5mm$	- High feed cutter - Cutter DIA $\phi 32 \sim 66mm$ - The screw model for installation is M3.
	CFMSX-13  B97	 SX 1306 B97	$ap(max)=2.0mm$	- Cutter DIA $\phi 50 \sim \phi 100mm$ - Effectively decomposing radial cutting forces enables high-feed machining. - Used for deep overhang and low-power machine tools, suitable for roughing in molds and removing excess material from workpieces.
	CFM19PD  B98	 PD 0905 B98	$ap(max)=2.0mm$	- Cutter DIA $\phi 42 \sim \phi 100mm$ - Effectively decomposing radial cutting forces enables high-feed machining. - Used for deep overhang and low-power machine tools, suitable for roughing in molds and removing excess material from workpieces.
	TEBL  B99	 BL 0603/0904/1105 B103	$ap(max)=1.0mm$	- Cutter blade diameter $\phi 16 \sim \phi 40mm$ - The insert is a double-sided slot milling insert. - Effectively decomposing radial cutting forces enables high-feed machining. - Suitable for cavity contour milling and face milling.
	CEBL  B104	 BL 0603 B106	$ap(max)=1.0mm$	- High feed milling cutter shank - End mill shank diameter $\phi 16 \sim 40mm$ - The screw model for installation is M3.

Milling Cutter

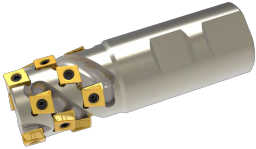
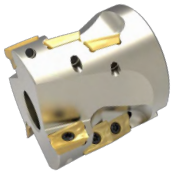
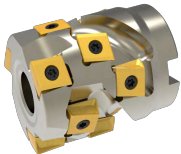
	Model / Shape	Insert	Apply	Features
High Feed Mill Cutter	TEBL  B107	 BL 1105 B107	$a_p(\max)=2.0\text{mm}$	- Cutter blade diameter $\phi 16 \sim \phi 40\text{mm}$ - The insert is a double-sided slot milling insert. - Effectively decomposing radial cutting forces enables high-feed machining. - Suitable for cavity contour milling and face milling.
	CE90AN  B108	 AN04-06 B109	$K_r=90^\circ$	- Indexable milling cutter shank - DIA $\phi 8 \sim 40\text{mm}$
End Mill Holder	CE90AP  B110	 AP 1705 B111	$K_r=90^\circ$ $a_p(\max)=13\text{mm}$	- Cutter blade diameter $\phi 25 \sim \phi 40\text{mm}$ 90-degree lead angle, suitable for shoulder milling and Plunge milling.
	CE90WN  B112	 WN 0403 B11	$K_r=90^\circ$ $a_p(\max)=4.0\text{mm}$	- Cutter blade diameter $\phi 20 \sim \phi 32\text{mm}$ - Common inserts for face milling and vertical milling
	CE90WN  B113	 WN 0403 B112	$K_r=90^\circ$ $a_p(\max)=4.0\text{mm}$	- Cutter blade diameter $\phi 20 \sim \phi 32\text{mm}$ - Threaded connection
	CE490LN  B114	 LN 0904/1206 B116	$K_r=90^\circ$ $a_p(\max)=13\text{mm}$	- Cutter blade diameter $\phi 20 \sim \phi 40\text{mm}$ 4-edged Vertical Inserts - Common Inserts for Face Milling, Vertical Milling, and Corn Milling

Milling Cutter

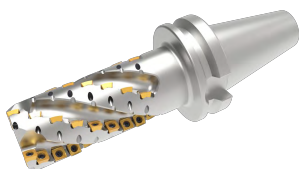
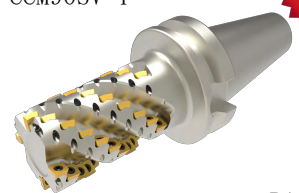
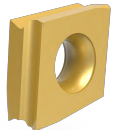
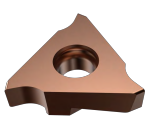
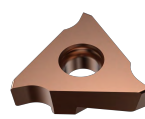
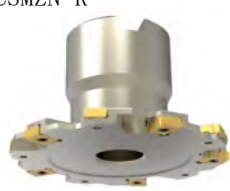


	Model / Shape	Insert	Apply	Features
End Mill Holder	CE90AN-M  B117	 AN 1204/17T6 B120	$Kr=90^{\circ}$ $ap(max)=16.5mm$	- Cutter blade diameter $\phi 20 \sim \phi 40mm$ - Flat-mounted holder with 4 cutting edges, Large positive rake angle spiral cutting edge design for efficient cutting. - Roughing to finishing operations on steels, stainless steels, high-temperature alloys, and cast iron, offering excellent 90° cutting performance.
	CE90AN  B118	 AN 1204/17T6 B120	$Kr=90^{\circ}$ $ap(max)=16.5mm$	- Cutter blade diameter $\phi 20 \sim \phi 40mm$ - Flat-mounted holder with 4 cutting edges, Large positive rake angle spiral cutting edge design for efficient cutting. - Roughing to finishing operations on steels, stainless steels, high-temperature alloys, and cast iron, offering excellent 90° cutting performance.
	CE90SD-Z  B121	 SD 1404 B121	$Kr=90^{\circ}$ $ap(max)=10.0mm$	- DIA $\phi 40 \sim \phi 63mm$ - Positive 4-Flute 90° Inserts, designed for efficient cutting. - The insert edge features a large radius design to prevent tool marks during shoulder milling. - AP maximum cutting depth: 5.5-10.0 mm.
Chamfer Mill Holder	CCF-SP  B122	 SP 1204 B122	$Kr=30^{\circ}$ $Kr=45^{\circ}$ $Kr=60^{\circ}$	Suitable for various hole types and edge chamfering.
	CCF-TC  B123	 TC 16T3 B123	$Kr=45^{\circ}$	- Cutter blade diameter $\phi 23mm$ - Suitable for chamfering small holes. - Machining holes with a diameter greater than D6.
	CCF-XC  B124	 XC 3104 B124	$Kr=30^{\circ}$ $Kr=45^{\circ}$ $Kr=60^{\circ}$	- Long Edge Chamfering Tool - Minimum machining hole diameter: $\phi 5 mm$ - Suitable for various hole types and edge chamfering.

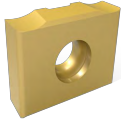
Milling Cutter

	Model / Shape	Insert	Apply	Features
Corn Mill Cutter	CCM490LN  B125	 LN 0904 B125	Kr=90°	• Cutter blade diameter $\phi 25 \sim \phi 40\text{mm}$ • Equipped with four right-hand 90° cutting edges. • The combination of spiral cutting edges and large positive front angles ensures smoother • A wide variety of grades is available: P/M/K/S.
	CCM90SV  B126	 SV 09T3/1104 B126	Kr=90° ap (max)=76mm	• Corn Milling Cutter Holder • Cutter blade diameter $\phi 25 \sim \phi 50\text{mm}$
	CCM90AP  B127	 AP 1705 B127	Kr=90° ap (max)=44mm	• Corn Milling Cutter Holder • Cutter blade diameter $\phi 32 \sim \phi 40\text{mm}$
	CCM90AP  B128	 AP 1705 B128	Kr=90° ap (max)=88mm	• Corn Mill Cutter • Cutter blade diameter $\phi 50 \sim \phi 100\text{mm}$
	CCM490LN  B129	 LN 1206/1608 B129	Kr=90°	• Cutter blade diameter $\phi 50 \sim \phi 100\text{mm}$ • Equipped with four right-hand 90° cutting edges. • The combination of spiral cutting edges and large positive front angles ensures smoother.
	CCM90SV  B130	 SV 1104 B130	Kr=90°	• Cutter blade diameter $\phi 40 \sim \phi 80\text{mm}$ • Equipped with four right-hand 90° cutting edges. • The combination of spiral cutting edges and large positive front angles ensures smoother.

Milling Cutter

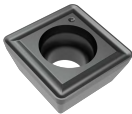
	Model / Shape	Insert	Apply	Features
Corn Mill Cutter	CCM90SV-T  B131	 SV 1104 B130	• $kr=90^\circ$	• Half-Power Solid Corn Milling Cutter • DIA $\phi 50\sim 80\text{mm}$
	CCM90SV-T  B131	 SV 1104 B130	• $kr=90^\circ$	• Full-Power Solid Corn Milling Cutter • DIA $\phi 50\sim 80\text{mm}$
	CCM90EN-H  B132	 EN 0904/1206 B132	$Kr=90^\circ$	• Stackable Corn Milling Cutter • Cutter blade diameter $\phi 50\sim \phi 100\text{mm}$ • Interchangeable Head Design with Good Cost-Effectiveness
Three-Edge End Mill	CE3CGF  B134	 3CGF16~22 B136	• Cutting Width: 1.1~4.8mm • Maximum Cutting Depth: 5.0mm	• Shallow Groove Milling Cutter Shank • Cutter blade diameter $\phi 25\sim \phi 44\text{mm}$ • Wide range of blade widths, suitable for all kinds of shallow grooves and spring grooves
	CSM3CGF  B135	 3CGF16~22 B136	• Cutting Width: 1.1~4.8mm • Maximum Cutting Depth: 5.0mm	• Shallow Groove Milling Cutter • Cutter blade diameter $\phi 63\sim \phi 125\text{mm}$ • Wide range of blade widths, suitable for all kinds of shallow grooves and spring grooves.
	CSMZN-R  B138	 ZN 023~073 B141	• Cutting Width: 4~14mm • Maximum Cutting Depth: 42mm	• DIA $\phi 80\sim \phi 160\text{mm}$ • Flange-Type Three-Edge Milling Cutter • Vertical Insert Design for enhanced Strength and Safety • Suitable for Various Slot Milling Applications

Milling Cutter

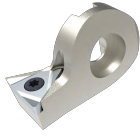
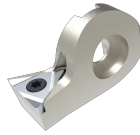
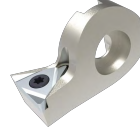
	Model / Shape	Insert	Apply	Features
Three-Edge End Mill	CSMZN-H  B142	 ZN 023~073 B145	• Cutting Width: 4~14mm • Maximum Cutting Depth: 89mm	• DIA $\phi 63 \sim \phi 250\text{mm}$ • Single-Blade Type Three-Edge Milling Cutter • Vertical Insert Design for enhanced Strength and Safety • Suitable for Various Slot Milling Applications
	CSMCN-H  B146	 CN 1005/1311/1606 B147	• Cutting Width: 15~25mm	• DIA $\phi 63 \sim \phi 250\text{mm}$ • Single-Blade Type Three-Edge Milling Cutter • Vertical Insert Design for enhanced Strength and Safety
Thread Mill	SR00  B148	 12~40	$K_r=90^\circ$ $a_p(\text{max})=40\text{mm}$	• Single-Blade Designed • Cutter blade diameter $\phi 9.5 \sim \phi 48\text{mm}$
Gear Mill Cutter	CSM  B153	 CLX-Insert B157		• Design Insert accordingly • Customizable Design for Rough and Finish Milling Cutter Heads with 2 or 4 Stations Based on Customer Requirements
Solid Carbide End Mill	CLF/CLB/CHF/CHB  B163		• $\phi 1.0 \sim \phi 20.0$	• Solid Carbide Milling Tool Holder • Including: a. Two-Flute Straight Shank End Mill b. Four-Flute Straight Shank End Mill c. Two-Flute Straight Shank Ball Nose End Mill d. Four-Flute Straight Shank Ball Nose End Mill

Dilling Cutter



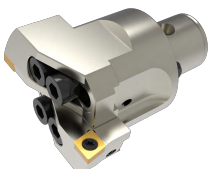
	Model / Shape	Insert	Apply	Features
Shallow Drill Cutter	XOP -T2  C02	 XOMX C01	• 2-5X DIA	• Indexable Drill Holder • Drilling DIA: $\phi 14 \sim 50\text{mm}$ • Double Internal Cooling Design
	CDR -T2  C19	 SPMG C01	• 2.5~3.5X DIA	• Large Diameter Drill • Adjustable Diameter with Tool Holder • Indexable Tool Holder Drill • Drilling DIA: $\phi 51 \sim 80\text{mm}$ • Internal Cooling Design
	XCP -T1  C23	 XCMT C24	• 3X DIA	• Multifunctional Drill • Single blade design • Suitable for Drilling, Boring, and Turning • Drilling DIA: $\phi 12 \sim 32\text{mm}$ • Internal Cooling Design
Solid Carbide Drill	CH  C26		• 3~5X DIA	• Solid Carbide Twist Drill • Drilling DIA: $\phi 3.3 \sim 16.0\text{mm}$
Head change-able Drill	CDH  C56	 CDH C52	• 1~10X DIA	• High-Precision Drill Tip Design • Pull-Type Design After Tip Installation • Durable and Sharp Tip with Excellent Chip Removal Performance • Maximum Extension Up to 10 Times Diameter with Good Rigidity • Suitable for Machining Steel, Stainless Steel, Cast Iron, and Other Materials

Boring Cutter

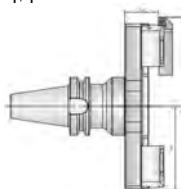
	Model / Shape	Insert	Apply	Features
Modular Precision Boring Tool & Tool Holder	CDJ  D01	 CC/TC/TP	$Kr=90^\circ$ $Kr=95^\circ$	• Micro-Adjustment Tool Holder • Adjustment Precision: 0.005 Radius/Division • Maximum Radial Adjustment: 1mm Diameter, Axial Adjustment: 1mm
	R/LCR  D03	 CC/TC/TP	$Kr=90^\circ$	• Fine Boring Unit • Two Installation Methods: Angle Installation and Right Angle Installation • Adjustment Precision: 0.01 Radius/Division
	CTD-WFH  D08	 WFH Precision Boring Tool Holder D09	$Kr=25^\circ$ $Kr=30^\circ$ $Kr=45^\circ$ $Kr=90^\circ$ $Kr=92^\circ$	• Precision Boring Body • CK Interface • Standard Tool Head with Internal Cooling
	CTD-WFB  D13	 WFH Precision Boring Tool Holder D13页	$Kr=92^\circ$	• Self-Balancing Precision Boring Body • CK Interface • Standard Tool Head with Internal Cooling
	BBT50-WFH  D15	 WFH Precision Boring Tool Holder D15	$Kr=92^\circ$	• Self-Balancing Precision Boring Body • CK Interface • Standard Tool Head with Internal Cooling

Boring Cutter



	Model / Shape	Insert	Apply	Features
Finishing Bridge Boring	CLF  D16	 CC 09/TC 11	Kr=92°	• Standard Steel Bridge Type Precision Boring Tool (Large Diameter) • Processing Range: $\phi 150 - \phi 850$
	CLF-AL  D17	 CC 09/TC 11	Kr=92°	• Lightweight Aluminum Bridge Type Precision Boring Tool ((Large Diameter) • Processing Range: $\phi 150 - \phi 530$
	CNP-AL  D19	 CC 09/TC 11	Kr=92°	• Lightweight Aluminum Bridge Type Precision Boring Tool (Large Diameter) • Processing Range: $\phi 200 - \phi 840$ • Internal Cooling
Modular Rough Boring Tool & Tool Holder	CTD-WRH  D21	 WRH Rough Boring Tool Holder D22	Kr=90°	• CK Interface • Standard Tool Head with Internal Cooling
	CTD-WRH-SC  D23	 WRH Rough Boring Tool Holder D24	Kr=84°	• Through Hole Rough Boring Head • CK Interface • Standard Tool Head with Internal Cooling

Boring Cutter

	Model / Shape	Insert	Apply	Features
Modular Rough Boring Tool & Tool Holder	CTD-WRH-CC-T  D25	 CC 09/12 D26	Kr=90°	• Step-Type Rough Boring Head • CK Interface • Standard Tool Head with Internal Cooling
	CFT-WRH-CC  D27	 CC 06/09/12 D28	Kr=90°	• Lightweight Aluminum Bridge Type Precision Boring Tool (Large Diameter) • Processing Range: $\phi 150 - \phi 530$
	BBT50-WRH  D29	 CC 12 D29	Kr=90°	• Damping Vibration-Resistant Rough Boring Head • Processing Range: $\phi 41 - \phi 203$
Rough Bridge Boring	CLR  D30	 CC 12	Kr=90°	• Standard Steel Bridge Type Precision Boring Tool (Large Diameter) • Processing Range: $\phi 150 - \phi 850$
	CLR-AL  D31	 CC 12	Kr=90°	• Lightweight Aluminum Bridge Type Precision Boring Tool (Large Diameter) • Processing Range: $\phi 150 - \phi 530$
	CLR-FT  D32	 CC 12	Kr=90°	• Steel Bridge Type Back Boring Rough Boring Tool • Processing Range: $\phi 165 - \phi 505$

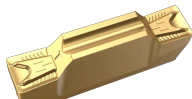
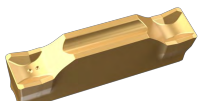
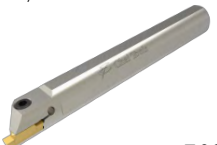
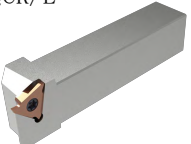
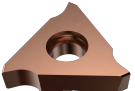
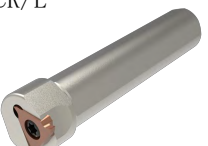
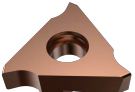
Boring Cutter

	Model / Shape	Insert	Apply	Features
Rough Bridge Boring	CNR-AL  D33	 CC 12	Kr=90°	• Internal Coolant Large Diameter Rough Boring Tool • Full body Aluminum-Based Bridge Frame • Processing Range: $\phi 150$-$\phi 530$ $\phi 200$-$\phi 840$
Standard Boring Tool Holder	SCFCR/L  D34	 CC	Kr=90°	• Standard Boring Tool Holder • Axial and Radial Adjustable • Minimum Machining Boring Hole Diameter: D25mm • Suitable for Machining Hole Tolerance: ± 0.03 and above
	SSKCR/L  D34	 SC	Kr=75°	• Standard Boring Tool Holder • Axial and Radial Adjustable • Minimum Machining Boring Hole Diameter: D25mm • Suitable for Machining Hole Tolerance: ± 0.03 and above
	SSSCR/L  D35	 SC	Kr=45°	• Standard Boring Tool Holder • Axial and Radial Adjustable • Minimum Machining Boring Hole Diameter: D25mm • Suitable for Machining Hole Tolerance: ± 0.03 and above
	STFCR/L  D35	 TC	Kr=90°	• Standard Boring Tool Holder • Axial and Radial Adjustable • Minimum Machining Boring Hole Diameter: D25mm • Suitable for Machining Hole Tolerance: ± 0.03 and above

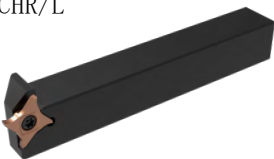
Boring Cutter

	Model / Shape	Insert	Apply	Features
Small Diameter Boring Tool	CBJ  D37	 WB/TB/TP	Kr=93°	• Steel Boring Bar • Processing Range:D6-D50 • Achieve Precision Boring with an Assembly Micro-Adjustment Mechanism
	CBJ  D37			• Precision Boring Micro-Adjustment Mechanism • CK6 Standard Interface • Optional Adapter Set for D8-D16 Shank Diameter Compatibility
	CN  D38	 TP 08	Kr=93°	• Small Diameter Precision Boring Head • Compatible with CWC Solid Boring Bars • Achieve Precision Boring with an Assembly Micro-Adjustment Mechanism
	CWC  D39			• Solid Shock-Resistant Boring Bar • Compatible with CN Precision Boring Heads • Achieve Precision Boring with an Assembly Micro-Adjustment Mechanism
	CEC  D39			• Shank Diameter Adapter
Chamfer Ring	MC  D40	 VC11/16	Kr=30° Kr=45°	• Chamfer Ring

Turning Tool

	Model / Shape	Insert	Apply	Features
Grooving /Cutting Tool	TTER/L  E04	 TDGU/X/C E01	• Cutting Width: 2~6mm • Maximum Cutting Depth: 32mm	• External Grooving Tool Holder
	TTFR/L-RN  E06	 TDGU/X/C E01	• Cutting Width: 3~6mm • Maximum Cutting Depth: 25mm	• External Grooving Tool Holder
	TGFR/L  E08	 TDGU/X/C E01	• Cutting Width: 2~4mm • Maximum Cutting Depth: 8.5mm	• External Shallow Grooving Tool Holder
	TGIFR/L  E09	 TDGU/X/C E01	• Cutting Width: 3~6mm • Maximum Cutting Depth: 5.5mm	• End Face Internal Shallow Grooving and Turning Tool Holder
	TTIR/L  E10	 TDGU/X/C E01	• Cutting Width: 2~4mm • Maximum Cutting Depth: 8.5mm	• Internal Grooving Tool Holder
	CQCR/L  E11	 3CGF16-20 E13	• Cutting Width: 1.1~4.8mm	• External Shallow Grooving Turning Tool Holder
	SQCR/L  E12	 3CGF16-20 E13	• Cutting Width: 2~4mm • Maximum Cutting Depth: 8.5mm	• Internal Shallow Grooving Turning Tool Holder

TURNING TOOL

	Series/Shape	Insert	Apply	Features
Grooving Tool	4CHR/L  E15	 4CGF 27 E17	• Cutting Width: 2.0~3.5mm • Cutting Depth: 4.5~6.5mm	• Shallow Grooving Turning Tool Holder
	4CHPR/L  E16	 4CGF 27 E17	• Cutting Width: 2.0~3.5mm • Cutting Depth: 4.5~6.5mm	• Shallow Grooving Turning Tool Holder
External Turning Tool Holder	 E35	 E23		• External Turning Tool Holder • Negative Cutting Insert • T-Slot Clamp Tightening Method • Various types of tool holders are compatible with different cutting inserts.
	 E43	 E30		• External Turning Tool Holder • Positive Cutting Insert • S-Type Screw Tightening Method • Various types of tool holders are compatible with different cutting inserts.
Internal Turning Tool Holder	 E50	 E23		• Internal Turning Tool Holder • Negative Cutting Insert • T-Slot Clamp Tightening Method • Various types of tool holders are compatible with different cutting inserts.
	 E54	 E30		• Internal Turning Tool Holder • Positive Cutting Insert • S-Type Screw Tightening Method • Various types of tool holders are compatible with different cutting inserts.

TOOL SYSTEM



	Series/Shape		Series/Shape		Series/Shape
Elastic Collet Holder	BT-ER Elastic Collet Holder  F01	Face Mill Tool Holder	BT-FMB Face Mill Tool Holder  F12	Side Milling Tool Holder	BT-XS Side Milling Tool Holder  F24
	SK-ER Elastic Collet Holder  F03		SK-FMB Face Mill Tool Holder  F14		SK-XS Side Milling Tool Holder  F26
	HSK-ER Elastic Collet Holder  F05		HSK-FMB Face Mill Tool Holder  F16	Power Mill Tool Holder	BT-C Power Milling Tool Holder  F28
High-Speed Precision Collet Tool Holder	BT-GSK High-Speed Precision Collet Tool Holder  F08	Side Lock Tool Holder	BT-SLN Side Lock Tool Holder  F18		SK-C Power Mill Tool Holder  F29
	SK-GSK High-Speed Precision Collet Tool Holder  F10		SK-SLNBT-SLN Side Lock Tool Holder  F20		HSK-C Power Mill Tool Holder  F30
	HSK-GSK High-Speed Precision Collet Tool Holder  F11		HSK-SLNBT-SLN Side Lock Tool Holder  F21		

TOOL SYSTEM

	Series/Shape		Series/Shape		Series/Shape
Hydraulic Tool Holder	BT-CY Hydraulic Tool Holder  F32	Tapping Tool Holder	BT-TER-B Rigid Expandable Tapping Tool Holder  F52	Boring Tool Holder	HSK A-CK Boring Tool Holder  F60
	HSK-CY Hydraulic Tool Holder  F34		SK-TER-B Rigid Expandable Tapping Tool Holder  F53		CK Equal Diameter Extension Holder  F62
Shrink Fit Tool Holder	BT-SF Shrink Fit Tool Holder  F36	Boring Tool Holder	SCB Solid Hard CK Interface Boring Bar  F54		CT Bridge Boring Tool Holder  F64
	HSK-SF Shrink Fit Tool Holder  F43		SSB Steel CK Interface Straight Boring Bar  F55		
Tapping Tool Holder	BT-GT Torque Expandable Tapping Body  F50		BT-CK Boring Tool Holder  F56		
	SK-GT Torque Expandable Tapping Body  F51		SK-CK Boring Tool Holder  F58		

TOOL SYSTEM

	Series/Shape		Series/Shape		Series/Shape
Collet	ER Collet  F54	Collet	DHC:D-Type Hydraulic Tool Holder Conversion Collet with Side Water Outlet  F72	NUT	ER Nut  F76
	ER Seal Collet  F56		ODHC:OD-Type Hydraulic Tool Holder Conversion Collet with Center Water Outlet  F73		GSK Nut  F76
	GT Tapping Head  F59	Rivet	BT-1982 Rivet  F74	Wrench	ER Wrench  F77
	ERG Rigid Tapping Collet  F63		DIN 69872-SK Rivet  F74		GSK Wrench  F77
	GSK Precision Collet  F70		ISO7388 Rivet  F75		MLC Wrench  F77
	SC Power Collet  F71		ISO RIVET  F75		

铣削系列



超尔铣削刀片系列

Chai Tools >



MILLING INSERT GRADE



Reference Table

Insert Grades & Recommended Materials						
Materials	Steel	Stainless Steel	Cast Iron	Non-ferrous Metals	Heat-resistant Alloys	Hard Material
	P	M	K	N	S	H
CT101				●		
CT4100	●	●	●			●
CT5320	●	●				
CT5420	●	●				
CT5520	●	●				
CT7320			●			

Insert Grades & Recommended Materials						
Materials	Steel	Stainless Steel	Cast Iron	Non-ferrous Metals	Heat-resistant Alloys	Hard Material
	P	M	K	N	S	H
CT7420			●			
CT8320		●				
CT8330		●				
CT8420		●			●	
CT8520	●	●			●	
CT9320	●					

Grade	Machinable Workpiece Materials	Directions
CT101	N	◇ Uncoated ◇ Primarily suitable for finishing and medium machining of non-ferrous metals.
CT4100	P M K H	◇ Metallic Ceramics ◇ Suitable for machining steel, stainless steel, Cast iron, and Hardened steel.
CT5320 CT5420 CT5520	P M	◇ Coated ◇ Primarily used for medium and rough machining of steel and stainless steel ◇ Nano-scale TiAlN + TiN coating. ◇ Exhibits high wear resistance and toughness.
CT7320 CT7420	K	◇ Coated ◇ Primarily used for general machining of cast iron.
CT8320 CT8330 CT8420 CT8520	P M S	◇ Coated ◇ Primarily used for medium machining of stainless steel. ◇ Medium machining of heat-resistant alloys.
CT9320	P K	◇ Coated ◇ Primarily used for general machining of steel. ◇ Exhibits high wear resistance and good toughness.

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MILLING INSERT



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H	161	HNKX 050410N-MM	B19
	162	HNKX 1006ANTN-M	
L	163	LNKX 100512-ML	B20
	164	LNKX 120608N	
	165	LNKX 120608N-W	B21
	166	LNHU 090404-M	
	167	LNHU 120608-M	
	168	LNHU 120612-M	
	169	LNHU 120608-AL	
	170	LNHU 160808-M	B22
	171	LNHU 150812T-ML	
	172	LNGX 1504R1. 2-MLW-B	B23
	173	LNGX 2008R2	
	174	LNGX 2008R2. 5	
	175	LNGX 2008R3	
	176	LNGX 2008R3. 2	
	177	LNGX 2008R4	
	178	LNGX 2008R4. 8	
	179	LNGX 2008R5	
	180	LNGX 2008R6	B24
	181	LOHX 140708-ML	
	182	LOHX 140712-ML	
	183	LOHX 140716-ML	
	184	LOHX 140720-ML	
	185	LOHX 140724-ML	
	186	LOHX 140731-ML	
	187	LOHX 140740-ML	
	188	LOHX 140750-ML	
	189	LOHX 140760-ML	

Cat .	N0.	Model	Page
O	190	ONGU 050408-M	B25
	191	ONGU 050408-ML	
	192	ONGU 050408-MW	
	193	ONGU 050408-MLW	
	194	ONKU 050408-M	
	195	ONKU 050408-ML	
	196	ONKX 070608N-M	B26
	197	ONGU 090506-ML	B27
	198	ONGU 090506-MLW	
	199	ONGU 090510-ML	
	200	ONGU 090510-MLW	
	201	ONGU 090520-ML	
P	202	PDKT 090508R-MW	B28
	203	PDKT 090508L-MW	
	204	PDKT 090530R-M	
	205	PNEJ1223N	B29
	206	PNEJ1225N	
	207	PNEJ1230N	
	208	PNEJ1235N	
	209	PNEJ1240N	
	210	PNEJ1245N	
Q	211	QNKX 070508N-M	B30
	212	QNGX 070508N-M	
	213	QNGX 070508N-MW	
	214	QNKX 070508N-MS	
	215	QNGX 070508N-MLW	
	216	QNMX 070508-ML	B31
	217	QNMX 070508-MLW	
	218	QNKU 0906NB-MM	B32
	219	QNKU 0906NB-ML	
S	220	SEKT 12T3AFTN-M	B33
	221	SEKT 12T3AFTN-WC	
	222	SEET 09T308PER-PM	B34
	223	SNKX 1206XTN	
	224	SNHX 1206XTN-ML	
	225	SNHX 1206XTN-AL	
	226	SNKX 1707XTN-M	

MILLING INSERT



Insert Catalog

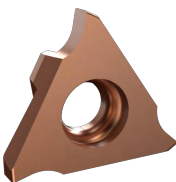
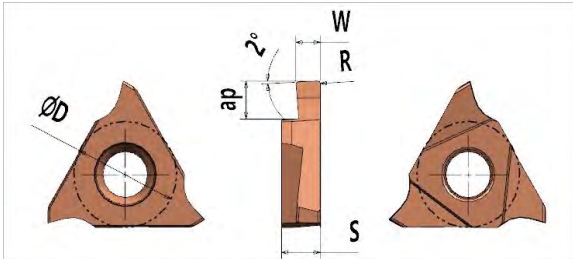
Cat .	NO.	Model	Page
S	227	SNKX 1206ANSN-W	B35
	228	SNHX 120508-M	
	229	SNHX 120508-MW	
	230	SNEX 1204P-W	B36
	231	SNEX 1204R-CBN	
	232	SNMF 130508R-M	
	233	SXMT 130625-M	B37
	234	SNEA 1370-M	
	235	SNGX 1306ZN-M	
	236	SNGX 1306ZN-ML	B38
	237	SNGX 130608-M	
	238	SNGX 130608-ML	
	239	SNGX 130608-AL	
	240	SNGX 130612-M	
	241	SNGX 130616-M	
	242	SNGX 130620-M	
	243	SNGX 130625-M	
	244	SNGX 130630-M	
	245	SNGX 130634-M	
	246	SDKT 09T308-M	B39
	247	SDKT 09T308-KM	
	248	SDGT 09T308-KM	
	249	SDKT 09T312-KM	
	250	SDMT 09T320-M	
	251	SDKT 120408-M	
	252	SDKT 140408M-PM	
	253	SVKT 09T308-M	B40
	254	SVKT 110408-ML	
W	255	WNHX 040308-ML	B40
	256	WNHX 080608-ML	
	257	WNHX 080608-TR	

Cat .	NO.	Model	Page
X	258	XCET 310404	B41
	259	XNGU 060408-M	B42
	260	XNGU 090508-M	
	261	XNGU 090508-ML	
	262	XNMU 090508R-M	
Z	263	ZNHT 018-04-ML	B43
	264	ZNHT 023-04-ML	
	265	ZNHT 028-04-ML	
	266	ZNHT 033-04-ML	
	267	ZNHT 038-04-ML	
	268	ZNHT 043-04-ML	
	269	ZNHT 043-08-ML	
	270	ZNHT 048-04-ML	
	271	ZNHT 048-08-ML	
	272	ZNHT 053-04-ML	
	273	ZNHT 053-08-ML	
	274	ZNHT 058-04-ML	
	275	ZNHT 058-08-ML	
	276	ZNHT 063-04-ML	
	277	ZNHT 063-08-ML	
	278	ZNHT 068-08-ML	
	279	ZNHT 068-12-ML	
	280	ZNHT 073-08-ML	
	281	ZNHT 073-12-ML	

MILLING INSERT



3CGF**16L/22L

Insert						Intro
 Image shows a left-hand insert.						• Vertical insert • Shallow groove insert • 3CGF 16/20L**is left hand insert
Insert Model	Dimension (mm)					Grade
	W	ap	øD	S	R	CT5520
3CGF 16L110-R01	1.10	2.0	9.525	3.18	0.1	●
3CGF 16L125-R02	1.25	2.0	9.525	3.18	0.2	●
3CGF 16L145-R02	1.45	2.0	9.525	3.18	0.2	●
3CGF 16L150-R02	1.50	2.0	9.525	3.18	0.2	●
3CGF 16L175-R02	1.75	2.0	9.525	3.18	0.2	●
3CGF 16L185-R02	1.85	2.5	9.525	3.18	0.2	●
3CGF 16L200-R02	2.00	2.5	9.525	3.18	0.2	●
3CGF 16L250-R02	2.50	2.5	9.525	3.18	0.2	●
3CGF 16L300-R02	3.00	3.0	9.525	3.18	0.2	●
3CGF 22L125-R02	1.25	2.0	12.7	3.18	0.2	●
3CGF 22L145-R02	1.45	2.0	12.7	3.18	0.2	●
3CGF 22L150-R02	1.50	3.5	12.7	4.76	0.2	●
3CGF 22L175-R02	1.75	3.5	12.7	4.76	0.2	●
3CGF 22L185-R02	1.85	3.5	12.7	4.76	0.2	●
3CGF 22L200-R02	2.00	3.5	12.7	4.76	0.2	●
3CGF 22L230-R02	2.30	3.5	12.7	4.76	0.2	●
3CGF 22L250-R03	2.50	4.0	12.7	4.76	0.3	●
3CGF 22L265-R03	2.65	4.0	12.7	4.76	0.3	●
3CGF 22L280-R03	2.80	4.0	12.7	4.76	0.3	●
3CGF 22L300-R03	3.00	4.0	12.7	4.76	0.3	●
3CGF 22L320-R03	3.20	4.0	12.7	4.76	0.3	●
3CGF 22L330-R03	3.30	4.0	12.7	4.76	0.3	●
3CGF 22L350-R03	3.50	5.0	12.7	4.76	0.3	●
3CGF 22L400-R04	4.00	5.0	12.7	4.76	0.4	●
3CGF 22L430-R04	4.30	5.0	12.7	4.76	0.4	●
3CGF 22L450-R04	4.50	5.0	12.7	4.76	0.4	●
3CGF 22L480-R04	4.80	5.0	12.7	5.06	0.4	●

©Insert matches tool page:B134、B135、E11、E12。

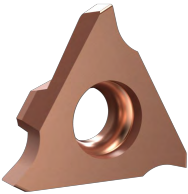
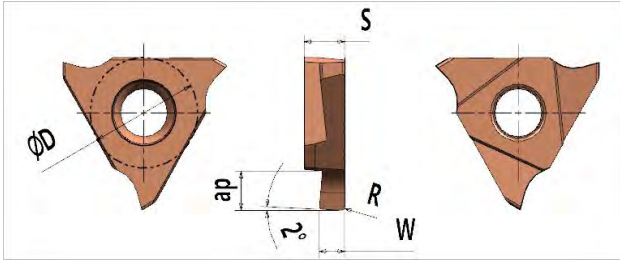
B06

- Regular stock
- Reserve stock

Milling Insert



3CGF**16R/22R

Insert						Intro
 Image shows a right-hand insert						• Vertical insert • Shallow groove insert • 3CGF 16/20R**is right hand insert
Model	Dimension (mm)					Grade
	W	ap	øD	S	R	CT5520
3CGF 16R110-R01	1.10	2.0	9.525	3.18	0.1	●
3CGF 16R125-R02	1.25	2.0	9.525	3.18	0.2	●
3CGF 16R145-R02	1.45	2.0	9.525	3.18	0.2	●
3CGF 16R150-R02	1.50	2.0	9.525	3.18	0.2	●
3CGF 16R175-R02	1.75	2.0	9.525	3.18	0.2	●
3CGF 16R185-R02	1.85	2.5	9.525	3.18	0.2	●
3CGF 16R200-R02	2.00	2.5	9.525	3.18	0.2	●
3CGF 16R250-R02	2.50	2.5	9.525	3.18	0.2	●
3CGF 16R300-R02	3.00	3.0	9.525	3.18	0.2	●
3CGF 22R125-R02	1.25	2.0	12.7	3.18	0.2	●
3CGF 22R145-R02	1.45	2.0	12.7	3.18	0.2	●
3CGF 22R150-R02	1.50	3.5	12.7	4.76	0.2	●
3CGF 22R175-R02	1.75	3.5	12.7	4.76	0.2	●
3CGF 22R185-R02	1.85	3.5	12.7	4.76	0.2	●
3CGF 22R200-R02	2.00	3.5	12.7	4.76	0.2	●
3CGF 22R230-R02	2.30	3.5	12.7	4.76	0.2	●
3CGF 22R250-R03	2.50	4.0	12.7	4.76	0.3	●
3CGF 22R265-R03	2.65	4.0	12.7	4.76	0.3	●
3CGF 22R280-R03	2.80	4.0	12.7	4.76	0.3	●
3CGF 22R300-R03	3.00	4.0	12.7	4.76	0.3	●
3CGF 22R320-R03	3.20	4.0	12.7	4.76	0.3	●
3CGF 22R330-R03	3.30	4.0	12.7	4.76	0.3	●
3CGF 22R350-R03	3.50	5.0	12.7	4.76	0.3	●
3CGF 22R400-R04	4.00	5.0	12.7	4.76	0.4	●
3CGF 22R430-R04	4.30	5.0	12.7	4.76	0.4	●
3CGF 22R450-R04	4.50	5.0	12.7	4.76	0.4	●
3CGF 22R480-R04	4.80	5.0	12.7	5.06	0.4	●

©Insert matches tool page: B134、B135、E11、E12。

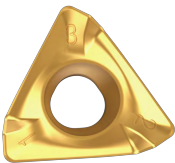
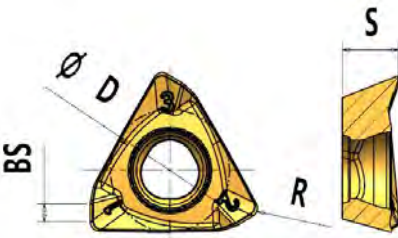
● Regular Stock
○ Reserve Stock

B07

Milling Insert



3P** 10/15

						Intro			
 						• Flat Insert Type 3-Blade Cutter • Large positive rake angle for smooth cutting • Tool holder suitable for 90° main cutting angle • Milling insert, suitable for step milling and face milling			
Model	Dimension (mm)					Grade			
	D	S	APMAX	R	BS	CT101	CT5320	CT7320	CT8320
3PKT 100404R-ML	6.9	4.0	7.0	0.4	1.6		●		
3PKT 150508R-M	10.7	5.0	11.0	0.8	1.6		●	●	
3PKT 150508R-ML	10.7	5.0	11.0	0.8	1.6		●	●	●
3PHT 150508R-AL	10.7	5.0	11.0	0.8	1.6	●			

©Insert matches tool page:B70.



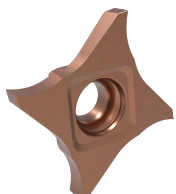
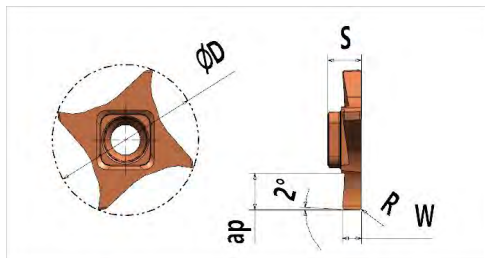
B08

- Regular Stock
- Reserve Stock

4CGF



4CGF**27

Insert t						Intro	
 Image shows a right-hand insert						• Vertical Insert • 4-Blade Shallow Groove Insert • 4CGF 27L**left hand insert • 4CGF 27R**right hand insert • Can be used for both milling and turning applications	
Model	Dimension (mm)					L/R	Grade
	øD	W	S	ap	R		CT5520
4CGF 27L200-R02	27.0	2.0	5.2	4.5	0.2	Left	●
4CGF 27L230-R02		2.3		5.5	0.2		●
4CGF 27L250-R03		2.5		5.5	0.3		●
4CGF 27L270-R03		2.7	6.2	5.5	0.3		●
4CGF 27L300-R03		3.0		6.5	0.3		●
4CGF 27L320-R03		3.2		6.5	0.3		●
4CGF 27L330-R03		3.3		6.5	0.3		●
4CGF 27L340-R03		3.4		6.5	0.3		●
4CGF 27L350-R03		3.5		6.5	0.3		●
4CGF 27L360-R02		3.6	7.2	6.5	0.2		●
4CGF 27L375-R02		3.75		6.5	0.2		●
4CGF 27L400-R04		4.0		6.5	0.4		●
4CGF 27L400-R08		4.0		6.5	0.8		●
4CGF 27L415-R02		4.15		6.5	0.2		●
4CGF 27L450-R04		4.5		6.5	0.4		●
4CGF 27R200-R02	27.0	2.0	5.2	4.5	0.2	Right	●
4CGF 27R230-R02		2.3		5.5	0.2		●
4CGF 27R250-R03		2.5		5.5	0.3		●
4CGF 27R270-R03		2.7	6.2	5.5	0.3		●
4CGF 27R300-R03		3.0		6.5	0.3		●
4CGF 27R320-R03		3.2		6.5	0.3		●
4CGF 27R330-R03		3.3		6.5	0.3		●
4CGF 27R340-R03		3.4		6.5	0.3		●
4CGF 27R350-R03		3.5		6.5	0.3		●
4CGF 27R360-R02		3.6	7.2	6.5	0.2		●
4CGF 27R375-R02		3.75		6.5	0.2		●
4CGF 27R400-R04		4.0		6.5	0.4		●
4CGF 27R400-R08		4.0		6.5	0.8		●
4CGF 27R415-R02		4.15		6.5	0.2		●
4CGF 27R450-R04		4.5		6.5	0.4		●

©Insert matches tool page:E15、E16。

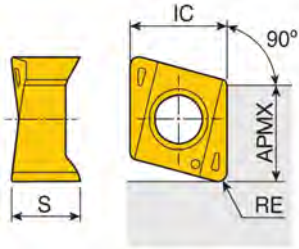
● Regular Stock
○ Reserve Stock

B09

Milling Insert



AN**04/06

Insert					Intro		
					• Small Diameter Specialized Milling Inserts • can replace solid carbide tools		
Model	Dimension				Grade		
	I. C	S	APMAX	RE	CT5320	CT8320	CT9320
ANKT 040208R-M	4.5	3.10	4.1	0.8	●		
ANKT 060308R-M	7.0	4.57	6.6	0.8	●		
ANKT 060308R-ML	7.0	4.57	6.6	0.8	●		

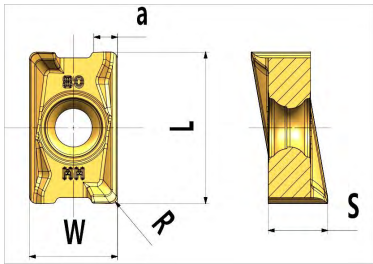
© Insert matches tool page: B108.



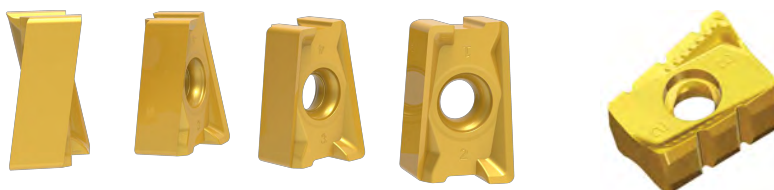
B10

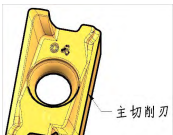
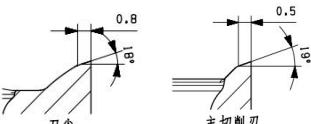
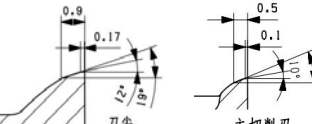
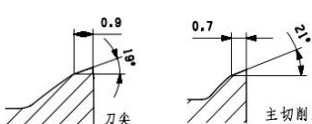
- Regular Stock
- Reserve Stock

AN**12/17

								Intro				
								• 90° double-sided 4-edge precision pressed and ground blades, cost-effective. • Large positive rake angle spiral cutting edge design for smooth cutting. • Integral bottom finishing for excellent flat machining quality.				
Model	Edge Length	Kr	Dimension (mm)					Grade				
			L	W	S	a	R	CT5320	CT5420	CT7320	CT8320	CT8520
ANKU 120404PFR-M	12	90°	12.55	7.0	4.84	1.7	0.4	●		○		
ANHU 120404PFR-M							0.4	●		○		
ANKU 120408PFR-M							0.8	●		●		
ANKU 120408PER-MM							0.8	●		○	●	
ANKU 120412PFR-M							1.2	●		○		
ANKU 17T608PFR-M	17	90°	17.5	10.5	6.95	2.7	0.8	●		●	●	●
ANKU 17T608PER-MM							0.8	●		○		
ANHU 17T608PER-MM							0.8	●		○		
ANHU 17T608PER-M							0.8	●		○		
ANHU 17T608PER-SM							0.8	●		○		
ANKU 17T616PFR-M							1.6	●		○		

©Insert matches tool page: B81、B117、B118.



Model	Groove Design	Groove Design	Groove Design
AN** 1204** AN** 17T6** 	-M 	-MM 	-SM Chip Breaker Groove Type 

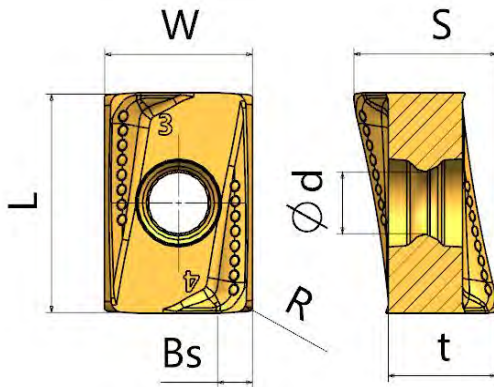
B11

- Regular Stock
- Reserve Stock

Milling Insert



AN**16

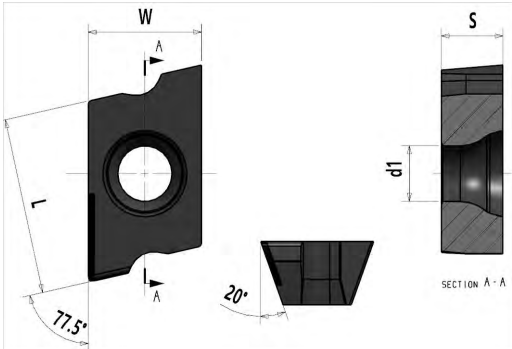
									Intro			
									• 90° double-sided 4-edge precision pressed and ground blades, cost-effective. • Large positive rake angle spiral cutting edge design for smooth cutting. • Integral bottom finishing for excellent flat machining quality.			
Model	Dimension (mm)							Grade				
	L	W	S	t	R	d	Bs	CT5320	CT5420	CT7420	CT8320	
ANHX 160708R-M	16.0	11.0	10.63	8.01	0.8	4.5	1.5	●	○	●	○	
ANHX 160716R-M	16.0	11.0	10.46	7.98	1.6	4.5	1.5	●	○	●	○	

©This Insert currently has no applicable tool page number and can be customized according to customer requirements.

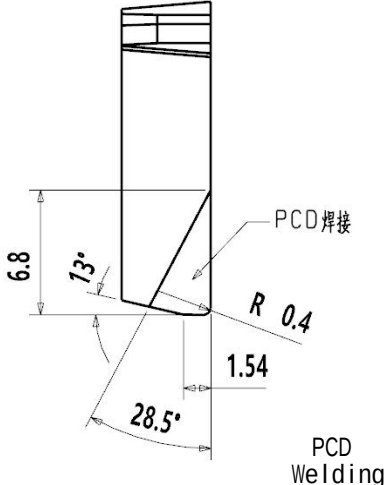
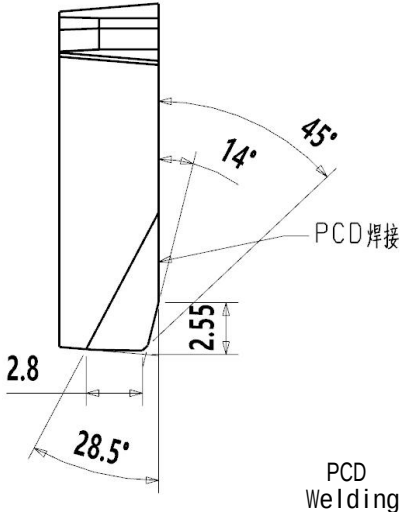
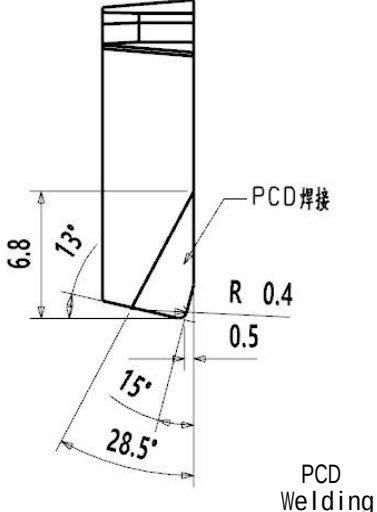
Milling Insert



AE**15

		Intro					
							
Insert Model	Edge Length	F. E.	Dimension (mm)				Edge Material
			L	W	S	d1	
AEGT 1504X-PCD	15	有	14.0	9.2	5.0	4.4	PCD
AEGT1504W-PCD	15	有	14.0	9.2	5.0	4.4	PCD
AEGT1504PT-PCD	15	无	13.97	9.2	5.0	4.4	PCD

© Insert matches tool page: B89
 © F. E. :Finishing Edge

AEGT 1504X-PCD Standard Insert	AEGT1504W-PCD Finishing Insert	AEGT1504PT-PCD Textured Insert
		

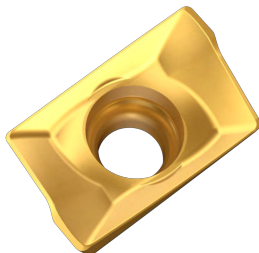
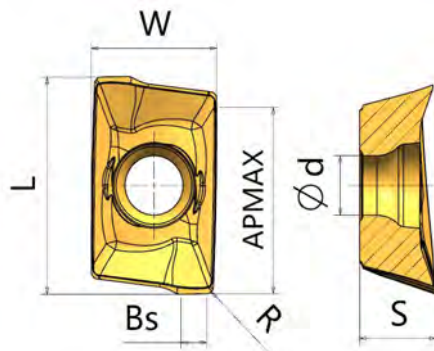
B12

- Regular Stock
- Reserve Stock

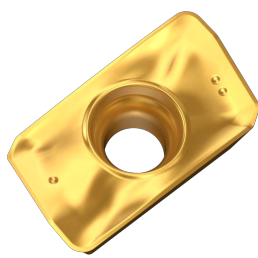
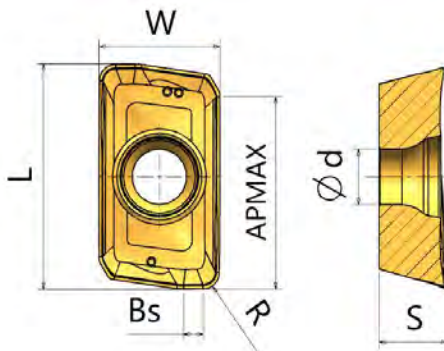
Milling Insert



AP**09/11

								Intro				
								• Flat Shank Standard Two-Flute Insert • Large Positive Rake Angle for Smooth Cutting • Tool Holder Designed for 90° Main Cutting Angle • Suitable for Shoulder Milling, Corn Milling, Face Milling, and Other General Milling Applications with Good Versatility				
Model		Dimension (mm)						Grade				
		L	APMAX	W	S	R	Bs	d	CT5320	CT5420	CT7420	CT9320
APKT 09T3PER-EM		10.56	9.0	6.2	3.8	0.4	1.3	2.9	●	●		

©This insert currently has no applicable tool page number and can be customized according to customer requirements.

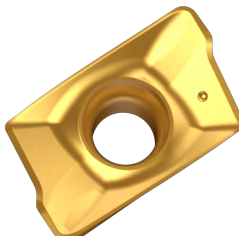
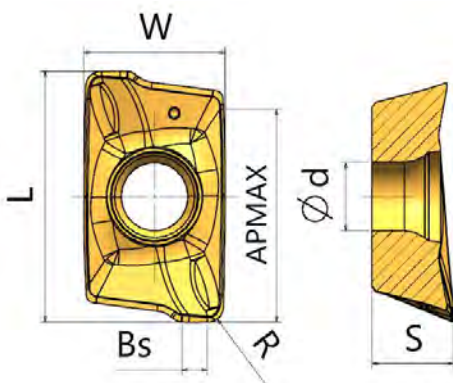
									Intro			
		• Flat Shank Standard Two-Flute Insert • Large Positive Rake Angle for Smooth Cutting • Tool Holder Designed for 90° Main Cutting Angle • Suitable for Shoulder Milling, Corn Milling, Face Milling, and Other General Milling Applications with Good Versatility										
Model		Dimension (mm)							Grade			
		L	APMAX	W	S	R	Bs	d	CT5320	CT5420	CT8520	CT9320
APMT 1135PDER		11.26	9.5	6.2	3.51	0.8	1.0	2.8	●	●	●	

©This insert currently has no applicable tool page number and can be customized according to customer requirements.

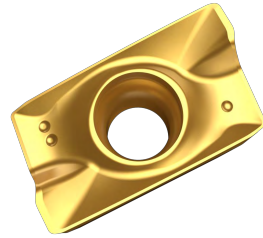
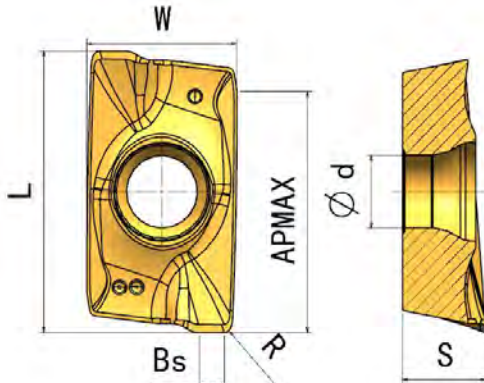
Milling Insert



AP**12/16

		Intro									
		• Flat Shank Standard Two-Flute Insert • Large Positive Rake Angle for Smooth Cutting • Tool Holder Designed for 90° Main Cutting Angle • Suitable for Shoulder Milling, Corn Milling, Face Milling, and Other General Milling Applications with Good Versatility									
Model	Dimension (mm)							Grade			
	L	APMAX	W	S	R	Bs	d	CT5320	CT5520	CT8520	CT7420
APKT 1204PER-EM	14.73	12.0	8.46	4.89	1.0	1.6	4.0		○	●	○

©This insert currently has no applicable tool page number and can be customized according to customer requirements.

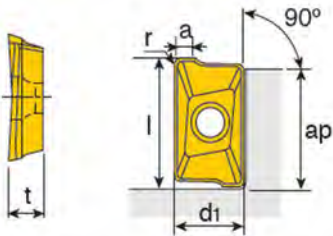
		Intro									
		• Flat Shank Standard Two-Flute Insert • Large Positive Rake Angle for Smooth Cutting • Tool Holder Designed for 90° Main Cutting Angle • Suitable for Shoulder Milling, Corn Milling, Face Milling, and Other General Milling Applications with Good Versatility									
Model	Dimension (mm)							Grade			
	L	APMAX	W	S	R	Bs	d	CT5320	CT5520	CT8320	CT8520
APMT 1604PDER	17.35	14.8	9.33	5.26	/	1.4	4.46	●	○	●	●

©This insert currently has no applicable tool page number and can be customized according to customer requirements.

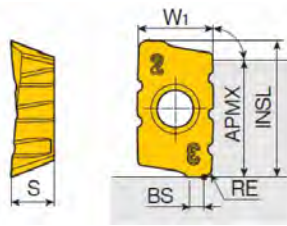
Milling Insert



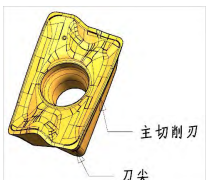
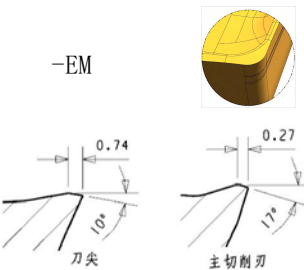
AP**17

								Intro				
		• Flat Shank Standard Two-Flute Insert • Large Positive Rake Angle for Smooth Cutting • Tool Holder Designed for 90° Main Cutting Angle • Suitable for Shoulder , Corn, Face and Other General Milling Applications with Good Versatility										
Insert Model	Edge Length	Dimension (mm)						Grade				
		d	ap	L	t	a	r	CT5320	CT5420	CT7420	CT8320	CT8520
APKT 170508-EM	17	10.7	16.1	18.5	5.56	2.26	0.8	●		●		
APKT 170508-M	17	10.7	16.1	18.5	5.56	2.26	0.8	●		●		
APKT 170516-EM	17	10.7	16.1	18.5	5.56	2.26	1.6	●	●			

© Insert matches tool page: B76、B110、B127、B128。

								Intro				
		• Flat Shank Standard Two-Flute Insert • Large Positive Rake Angle for Smooth Cutting • Tool Holder Designed for 90° Main Cutting Angle • Suitable for Shoulder Milling, Corn Milling, Face Milling, and Other General Milling Applications with Good Versatility • -SML-is Chip Breaker Design										
Model	Edge Length	Dimension (mm)						Grade				
		INSL	W1	APMX	S	BS	RE	CT5320	CT5420	CT7420	CT8320	CT8520
APKT 1705PER-SML	17	18.5	10.7	16.0	5.56	2.26	0.8	●		●		

© Insert matches tool page: B76、B110、B127、B128。

Insert Model	Groove Design
APKT 1705**	 

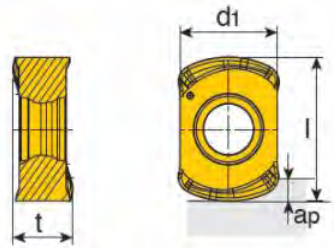
- Regular Stock
- Reserve Stock

B13

Milling Insert



BL**06/09/11

							Intro			
 							• High Feed Insert			
Model	Dimension (mm)						Grade			
	l	d1	t	ap	Feed mm/Tooth	C. D. mm	CT5320	CT5420	CT5520	CT8320
BLMP 0603R-M	9.0	6.39	3.73	1.0	0.3-2.5	0.1-1.0	●	●	●	
BLMP 0904R-M	11.9	9.18	4.80	1.5	0.3-3.5	0.1-1.5	●	●		○
BLMP 1105R-M	14.6	11.2	6.54	2.0	0.3-4.0	0.3-2.0	●			
BLMP 1105R-ML							●			

©BLMP 0603R-M, The insert locking screw is M2.5.

©Insert matches tool page: B91、B99、B107。

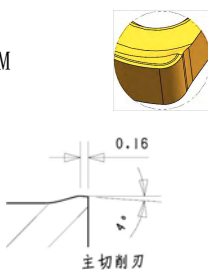
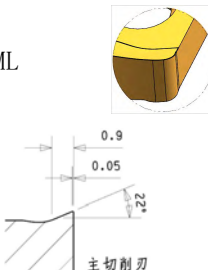
©C. D. :Cutting Depth

Model	Dimension (mm)						Grade			
	l	d1	t	ap	Feed mm/teeth	C. D. mm	CT5320	CT5420	CT5520	CT8320
BLMP 0603RD-ML	9.0	6.39	3.73	1.0	0.3-2.5	0.1-1.0	●			

©BLMP 0603RD-ML, The insert locking screw is M3

©Insert matches tool page: B95、B104。

©C. D. :Cutting Depth

Model	Groove Design	Groove Design
BLMP 0603** BLMP 0904** BLMP 1105** 	-M 	R-ML 

B14

- Regular Stock
- Reserve Stock

Milling Insert



CN**08/10/12/13/16

							Intro				
							• Vertical insert blade • Center insert, no hand type distinction • Double-sided with 4 edges • When using three edges, all 4 cutting edges of the blade can be utilized • Face milling and double-sided blades of the same hand type can use 2 cutting edges of the blade.				
Model	Edge Length	Dimension (mm)				Feed (mm/Tooth)	Grade				
		L	H	S	R		CT5320	CT5420	CT7320	CT7420	CT101
CNHX 080504E-M	08	10	8	5.64	0.4	0.1~0.3		●			
CNHX 080508E-M	08	10	8	5.64	0.8	0.1~0.3		●			○
CNHX 080512E-M	08	10	8	5.64	1.2	0.1~0.3		●			○
CNHX 080524E-M	08	10	8	5.64	2.4	0.1~0.3		●			○
CNHX 100504-ML	10	10	10	5.4	0.4	0.1~0.3		○			
CNHX 100508-ML	10	10	10	5.4	0.8	0.1~0.3	●	●	○	○	
CNHX 100512-ML	10	10	10	5.4	1.2	0.1~0.3	○		○		
CNHX 100516-ML	10	10	10	5.4	1.6	0.1~0.3	○		○		
CNHX 120604	12	12	12	6.35	1.6	0.1~0.3		●			
CNHX 121116	12	12.46	11.15	5.12	1.6	0.1~0.3				○	
CNHX 121120	12	12.46	11.15	5.12	2.0	0.1~0.3				●	
CNHX 131104	13	12.7	11	5.4	0.4	0.1~0.35	○				
CNHX 131108	13	12.7	11	5.4	0.8	0.1~0.35	●		●	●	
CNHX 131112	13	12.7	11	5.4	0.4	0.1~0.35				○	
CNHX 131116	13	12.7	11	5.4	1.6	0.1~0.35	○				
CNHX 131120	13	12.7	11	5.4	2.0	0.1~0.35	●		●		
CNHX 131124-ML	13	12.7	11	5.4	2.4	0.1~0.35				○	
CNHX 131130-ML	13	12.7	11	5.4	3.0	0.1~0.35				○	
CNHX 160604-ML	16	16.0	12	6.4	0.4	0.1~0.4	○				
CNHX 160608-ML	16	16.0	12	6.4	0.8	0.1~0.4	●	○	●	●	
CNHX 160612-ML	16	16.0	12	6.4	1.2	0.1~0.4	○				
CNHX 160616-ML	16	16.0	12	6.4	1.6	0.1~0.4	○				
CNHX 160624-ML	16	16.0	12	6.4	2.4	0.1~0.4	○				
CNHX 160630-ML	16	16.0	12	6.4	3.0	0.1~0.4	○				

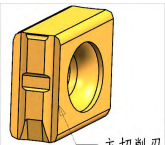
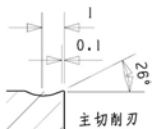
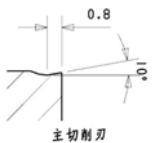
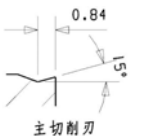
© Insert matches tool page: B146.

Milling Insert



CN**08/10/12/13/16



Model	Groove Design	Groove Design	Groove Design
CNHX 08/10** CNHX 13/16** 	-M  	-ML  	-No Code  

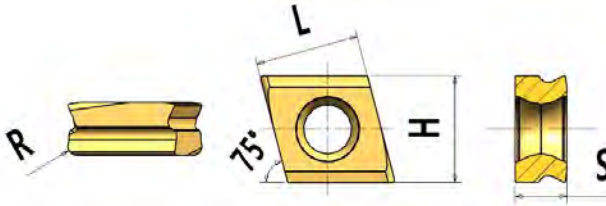
B16

- Regular Stock
- Reserve Stock

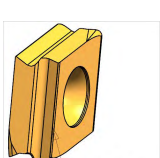
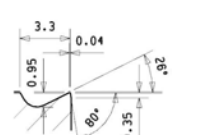
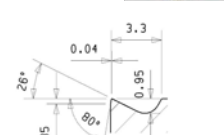
Milling Insert



EN**09/12

						Intro				
		 Image shows a right-hand insert					• Vertical insert blade • left-hand and right-hand • Double-sided with a total of 4 cutting edges • When using three cutting edges, left-hand and right-hand blades must be used in combination Face milling and double-sided blades of the same hand configuration can use all 4 cutting edges of the blade			
Model	Grade			Model	Grade	Edge Length	Dimension			
	CT5320	CT5420	CT7420				S	H	L	R
ENGX 090406R	●	●	○	ENGX 090406R-AL	●	09	4.76	9.525	9.525	0.6
ENGX 090406L	●	●	○	ENGX 090406L-AL	●					0.8
ENGX 090408R		●	○	ENGX 090408R-AL	●					
ENGX 090408L		●	○	ENGX 090408L-AL	○					
ENGX 120608R	●	●	○	ENGX 120608R-AL	●	12	6.35	12.7	12.7	0.8
ENGX 120608L	●	●	○	ENGX 120608L-AL	●					1.0
ENGX 120610R		●	○	ENGX 120610R-AL	●					
ENGX 120610L		○	○	ENGX 120610L-AL	○					

© Insert matches tool page: B132.

Model	Groove Design	
ENGX 09/12**	-R	-L
 主切削刃	 主切削刃	 主切削刃

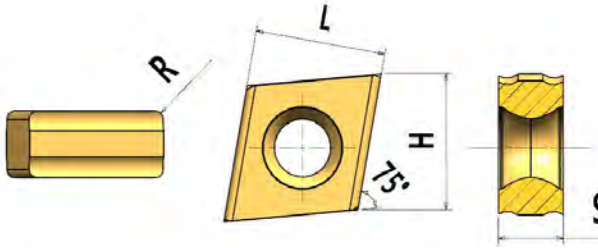
● Regular Stock
○ Reserve Stock

B17

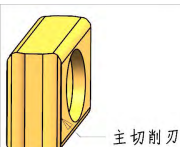
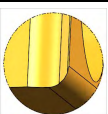
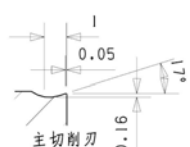
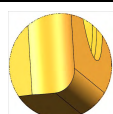
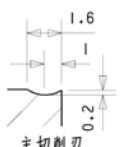
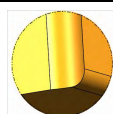
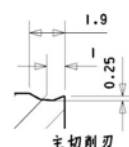
Milling Insert



EN**08/09/12

					Intro		
 					• Vertical insert blade • Center insert, no hand type distinction • Double-sided with 4 edges • When using three edges, all 4 cutting edges of the blade can be utilized • Face milling and double-sided blades of the same hand type can use 2 cutting edges of the blade.		
Model	Dimension				Grade		
	S	H	L	R	CT5420	CT7420	CT101
ENHX 080408-M	4.76	9.525	8.0	0.8	●	●	
ENHX 080408-ML					●		●
ENHX 090408-M		9.525	9.525	0.8	●	○	
ENHX 090408-ML					○	○	
ENHX 120604-AL	6.35	12.7	12.7	0.4			●
ENHX 120604-ML					○		
ENHX 120608-M				0.8	●	●	
ENHX 120610-M				1.0		●	

©This insert currently has no applicable tool page number and can be customized according to customer requirements.

Model	Groove Design	Groove Design	Groove Design
ENHX 08/09/12**  主切削刃	0804**-M   主切削刃	0904**-M   主切削刃	1206**-M   主切削刃

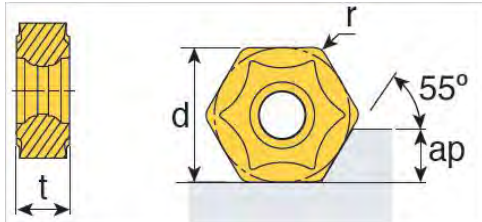
B18

- Regular Stock
- Reserve Stock

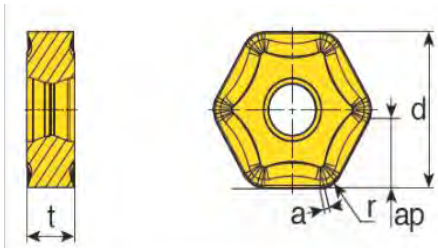
Milling Insert



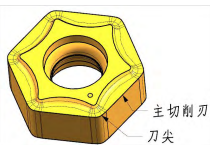
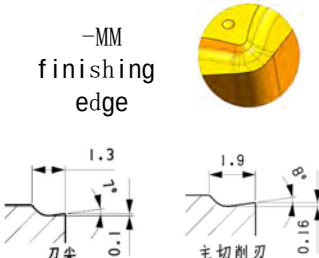
HN**05

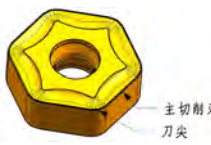
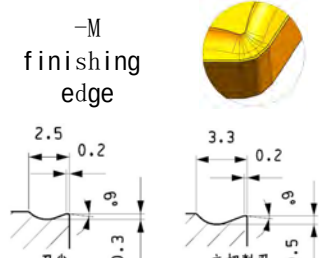
		Intro								
						• Negative double-sided 12-edge flat insert • Positive rake angle for smooth cutting • Tool holder designed for a 55° primary angle • Suitable for face milling				
Insert Model	Edge Length	Dimension (mm)				Feed	Grade			
		d	t	ap	r	(mm/Tooth)	CT5320	CT5420	CT7320	CT7420
HNKX 050410N-MM	05	12.7	5.0	5.0	1.0	0.05~0.2	●		●	

© Insert matches tool page: B60.

						Intro				
		• Negative double-sided 12-edge flat insert • Positive rake angle for smooth cutting • Tool holder designed for a 45° primary angle • Suitable for face milling								
Model	Edge Length	Dimension (mm)				Feed	Grade			
		d	t	ap	r	(mm/Tooth)	CT5320	CT5420	CT7320	CT7420
HNKX 1006ANTN-M	10	19.05	6.35	6.1	1.0	0.1~0.2	●		●	

© Insert matches tool page: B59.

Insert Model	Groove Design
HNKX 0504**	-MM finishing edge  

Insert Model	Groove Design
HNKX 1006**	-M finishing edge  

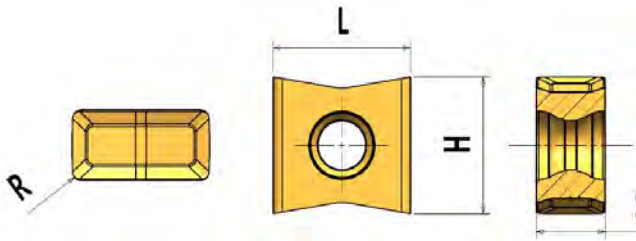
- Regular
- StockReserve

B19

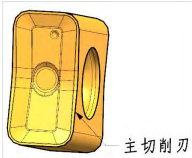
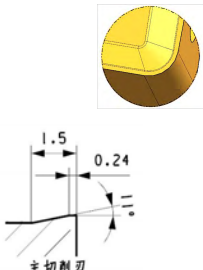
Milling Insert



LNKX 10/11/12

		Intro									
							• Butterfly insert • Commonly used for double-edged tool holders • If designed as a three-edge blade, the bottom will be uneven • Double-sided with a total of 8 cutting edges				
Model	Edge Length	Dimension (mm)									
		L	H	S	R	CT5320	CT5420	CT7320	CT7420	CT8320	
LNKX 100512-ML	10	10.0	9.53	5.2	1.2	●					
LNKX 110512-ML	11	10.3	9.53	5.6	1.2	●					
LNKX 120608N	12	12.7	12.3	6.35	0.8		●				
LNKX 120608N-W	12	12.7	12.3	6.35	0.8		●		●		

©This insert currently has no applicable tool page number and can be customized according to customer requirements.

Model	Groove Design
LNKX 10/12** 	-ML 

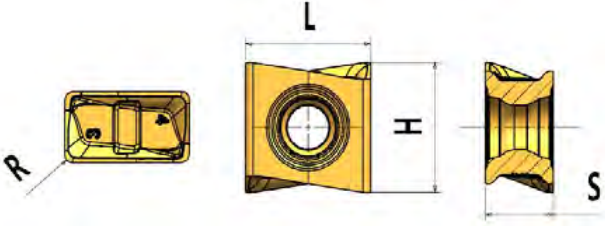
B20

- Regular Stock
- Reserve Stock

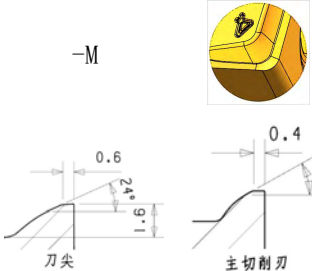
Milling Insert



LNHU 09/12/16

		Intro									
											
		• Features four right-hand 90° cutting edges • Combination of helical cutting edges and a large positive rake angle for smoother cutting • Face milling and double-edged tools of the same type can utilize all four cutting edges of the blade • Not suitable for use as a three-edge blade of the same hand orientation									
Model	Edge Length	Kr (°)	Dimension (mm)					Grade			
			L	H	S	R	APmax	CT5320	CT7320	CT8320	CT101
LNHU 090404-M	09	90	9.02	8.55	4.48	0.4	8.5	●		●	
LNHU 120608-M	12		12.7	13.0	6.75	0.8	11.5	●	●	●	
LNHU 120612-M	12		12.7	13.0	6.75	1.2	11.5			●	
LNHU 120608-AL	12		12.7	13.0	6.75	0.8	11.5				●
LNHU 160808-M	16		16.4	16.2	8.0	0.8	15.0	●	●	●	

© Insert matches tool page: B79、B114、B125、B129.

Model	Groove Design
LNHU 09/12/16** 	-M 

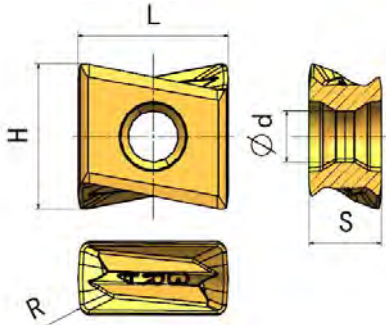
● Regular Stock
○ Reserve Stock

B21

Milling Insert



LN**13

							Intro				
							• Features four right-hand 90° cutting edges • Combination of helical cutting edges and a large positive rake angle for smoother cutting • Face milling and double-edged tools of the same type can utilize all four cutting edges of the blade • Not suitable for use as a three-edge blade of the same hand orientation				
	Model	Edge Length	Dimension (mm)								
		L	H	S	R	d	CT5320	CT5420	CT7320	CT8320	CT8520
LNHT1306PNTR-ML	13	13.81	13.05	6.65	0.85	4.6	○		●	●	

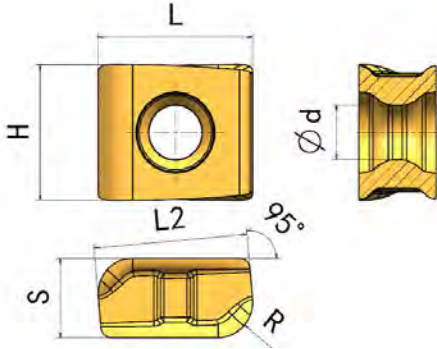
©This insert currently has no applicable tool page number and can be customized according to customer requirements.



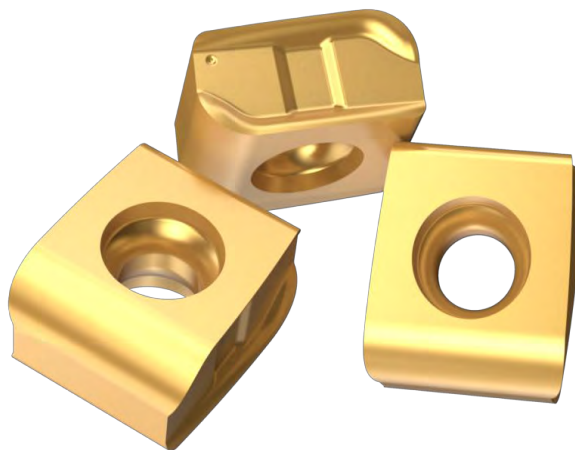
Milling Insert



LN**12/13

		Intro									
		• Four-edge vertical-mounted blade • Large arc blade with robust design • Large positive rake angle for smooth cutting • Center-mounted blade, suitable for any hand orientation • Commonly used three-edge blade, with four cutting edges available • Face milling and double-edged tools of the same type can utilize two cutting edges of the blade									
		Dimension (mm)						Grade			
Model	Edge Length	L	H	L2	R	d	S	CT5320	CT5520	CT7320	CT7420
LNHT 120625-MD	12	12.8	11.5	12.7	2.5	4.5	6.3	○		●	○
LNC 131005R3.0	13	13.39	11.48	13.3	3.0	4.6	6.7		○		●
LNC 131005R3.15	13	13.36	11.45	13.3	3.15	4.6	6.7				●

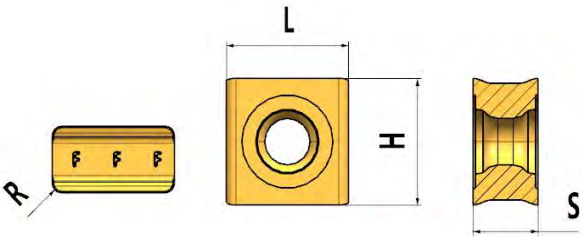
©This insert currently has no applicable tool page number and can be customized according to customer requirements.



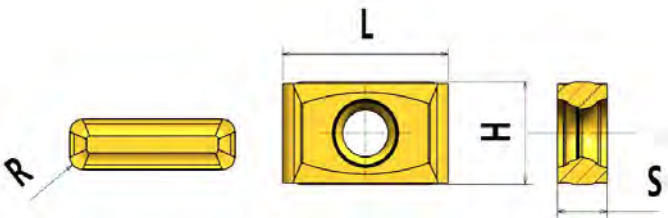
Milling Insert



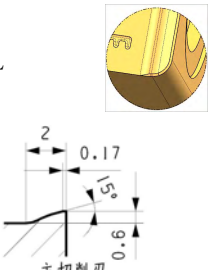
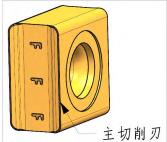
LN**15

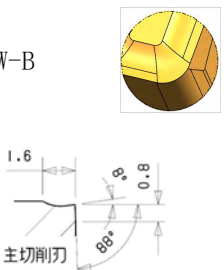
		Intro						
		• Vertical-mounted 4-edge blade • Suitable for face milling at various angles • Tool holder cannot have a 90° primary angle • Commonly used blade for bevel milling • Can be used for heavy machining of cast iron						
Model	Dimension (mm)				Grade			
	L	H	R	S	CT5320	CT7320	CT8320	CT9320
LNHU 150812T-ML	15.0	15.2	1.2	8.0	●	●	○	

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						Intro				
						• Vertical-mounted blade • Large arc blade, used for finishing with face milling tool holders				
Model	Edge Length	Dimension (mm)				Grade				
		L	H	S	R	CT5320	CT7320	CT7420	CT8320	CT9320
LNGX 1504R1.2-MLW-B	15	15.87	9.52	4.76	1.2	○		●		

©Insert matches tool page: B84.

Model	Groove Design
LNHU 1508**	-ML 
	主切削刃

Model	Groove Design
LNGX 1504**	-MLW-B 
	主切削刃

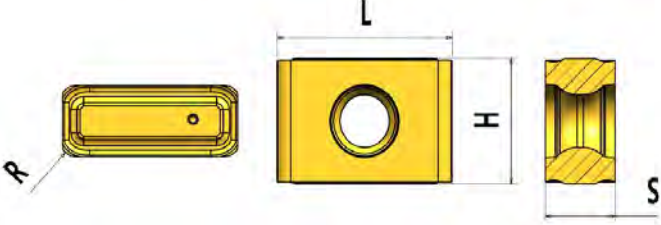
B22

- Regular Stock
- Reserve Stock

Milling Insert

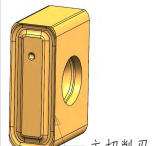
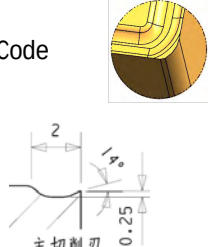


LN**20

		Intro							
									
		• Vertical-mounted large arc blade • 8-edge design for high cost-effectiveness • Commonly used three-edge blade for calipers • Suitable for horizontal and vertical overlapping tool holders • Single blade cannot be used for 90° primary angle design; blade overlapping can achieve 90° primary angle design							
Model	Edge Length	Dimension (mm)				Grade			
		L	S	H	R	CT5320	CT5420	CT7420	CT8320
LNGX 2008R2	20	20.2	8.2	14.2	2.0	○	○	○	○
LNGX 2008R2.5					2.5	○	○	○	○
LNGX 2008R3					3.0	●	●	○	○
LNGX 2008R3.2					3.2	○			
LNGX 2008R4					4.0	●	○	○	○
LNGX 2008R4.8					4.8	○			
LNGX 2008R5					5.0	●	○	○	○
LNGX 2008R6					6.0	○			

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Model	Groove Design
LNGX 2008** 	-No Code 

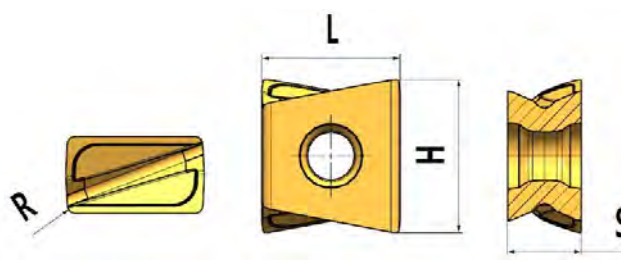
● Regular Stock
○ Reserve Stock

B23

Milling Insert

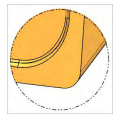
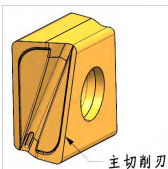


L0**14

		Intro									
											
		• Vertical-mounted blade • Rich arc angles to accommodate large arc cutting, can be custom-ground for various arcs • Blades are sharp, offering excellent cutting performance • In three-edge configurations, four cutting edges of the blade can be utilized • Face milling and double-edged tools of the same type can use two cutting edges of the blade									
Model	Edge Length	Dimension (mm)				Grade					
		L	H	S	R	CT5420	CT7320	CT7420	CT8320	CT8420	CT101
LOHX 140708-ML	14	13.97	14.48	7.5	0.8	●			●	●	
LOHX 140712-ML					1.1	○			○	○	
LOHX 140716-ML					1.6	●			●	●	
LOHX 140720-ML					2.0		○		●		○
LOHX 140724-ML					2.4	●					
LOHX 140731-ML					3.1	○			○	●	
LOHX 140740-ML					4.0	●			●		
LOHX 140750-ML					5.0			○	○	○	
LOHX 140760-ML					6.0			○			

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Insert Model	Groove Design
LOHX 1407**	-ML  

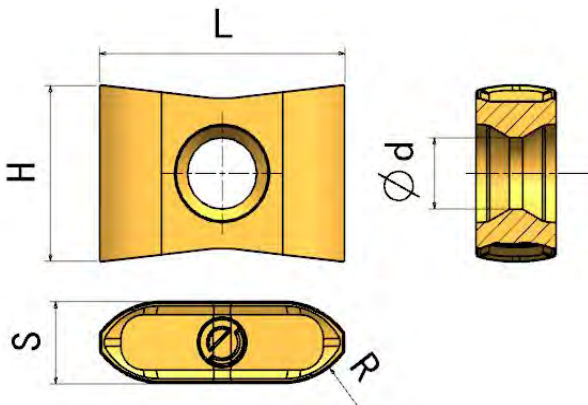
B24

- Regular Stock
- Reserve Stock

Milling Insert



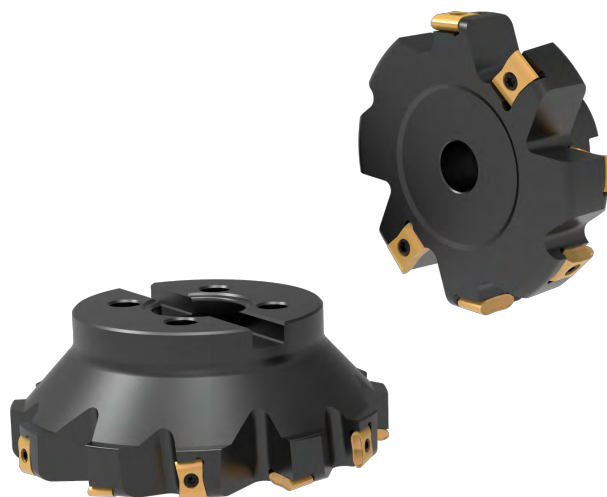
LN**15

		Intro								
								• Vertical-mounted 8-edge blade • R5 large arc blade • Insert must overlap with R5 arc in both horizontal and vertical orientations • Overlapping arcs allow for force-distributed cutting, reducing resistance for smoother cutting • Commonly used for face milling, designed for three-edge blade holders		
	Model I	Edge Length	Dimension (mm)							
		L	H	S	R	d		CT5320	CT7420	CT8520
LNGU 150550-ML	15	15.875	11.15	5.2	5.0	4.4		●	●	

©This insert currently has no applicable tool page number and can be customized according to customer requirements.



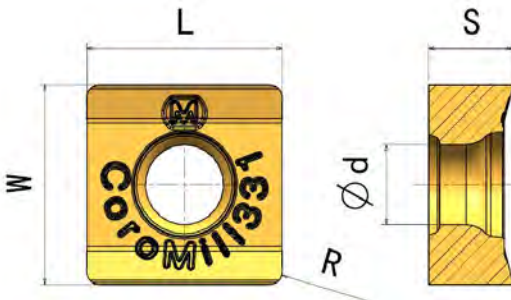
Insert overlapping with R5 arc in both horizontal and vertical orientations



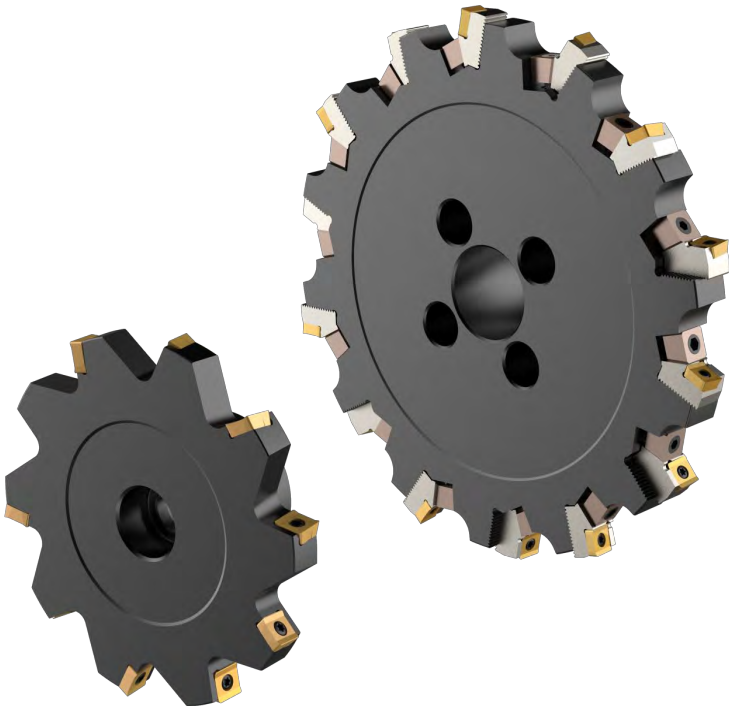
Milling Insert



N331**11

							Intro		
							• Flat-mounted 2-edge blade • Sharp front angle for smooth cutting • Commonly used for face milling, designed for three-edge blade holders		
Model	Edge Length	Dimension (mm)							
		L	W	S	R	d	CT5520	CT7520	CT9320
N331.1A-115008E-KM	11	11.5	11.5	4.95	0.8	4.6	○	●	

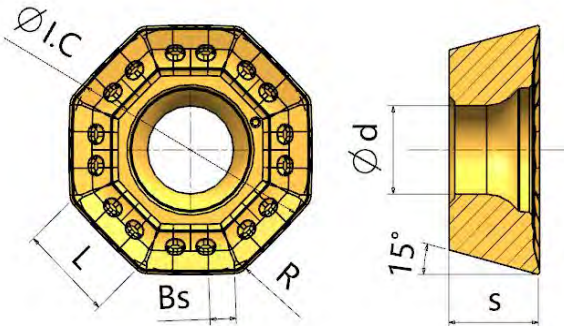
©This insert currently has no applicable tool page number and can be customized according to customer requirements.



Milling Insert



OD**05

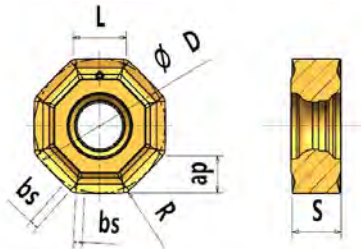
									Intro			
									• 8-edge face milling inserts, good cost-effectiveness. • Positive inserts, sharp cutting edges, low cutting resistance, and smooth machining. • Equipped with finishing edges, ensuring good surface machining quality.			
Model	Dimension (mm)							Grade				
	I. C	L	S	R	Bs	d		CT5320	CT5420	CT7420	CT8320	
ODKT 050408-M15	12.7	4.9	4.7	0.8	1.4	4.5		●			●	

©This insert currently has no applicable tool page number and can be customized according to customer requirements.

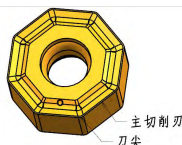
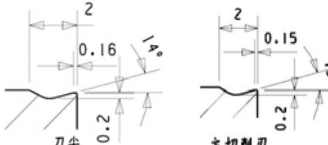
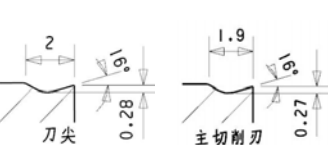
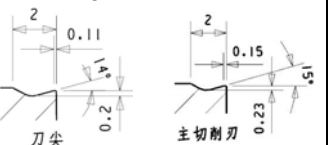
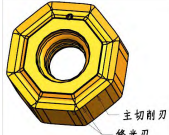
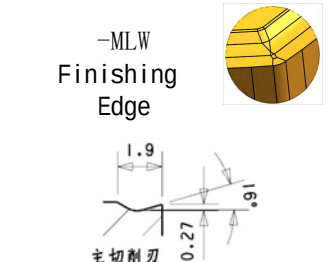
Milling Insert



ON**05

									Intro			
									• Flat inserts • Double-sided 16 edges • Large positive rake angle design • MLW groove type inserts are finishing edge inserts			
Model	Edge Length	Dimension (mm)						Grade				
		D	L	S	ap	R	bs	CT5320	CT7320	CT7420	CT8520	
ONGU 050408-M	05	12.7	5.2	4.76	3	0.8	/		●	●	●	
ONGU 050408-ML							/				●	
ONGU 050408-MW							0.8	●	●			
ONGU 050408-MLW							0.8				○	
ONKU 050408-M							/			●		
ONKU 050408-ML							/			○		

© Insert matches tool page: B45.

Model	Groove Design		Groove Design		Groove Design	
ONGU 0504** ONKU 0504** 	-M		-ML		-MW Finishing Edge	
ONGU 0504** 	-MLW Finishing Edge					

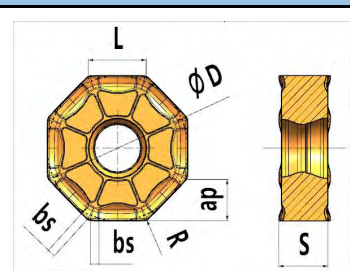
● Regular Stock
○ Reserve Stock

B25

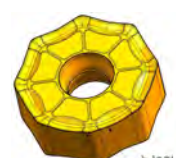
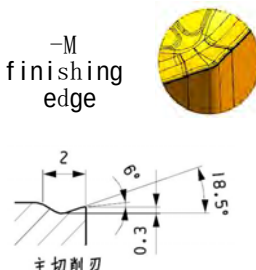
Milling Insert



ON**07

									Intro						
												• Flat insert • Double-sided 16 edges • Large positive rake angle design			
	Model	Edge Length	Angle (°)	Dimension (mm)						Grade					
			D	L	S	ap	R	bs	CT5320	CT7320	CT7420	CT8420			
ONKX 070608N-M	07	45	19.05	7.8	6.64	5.3	0.8	1.1	●	●	●				

© Insert matches tool page: B46.

Model	Groove Design
ONKX 0706** 	-M finishing edge 

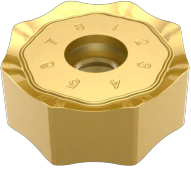
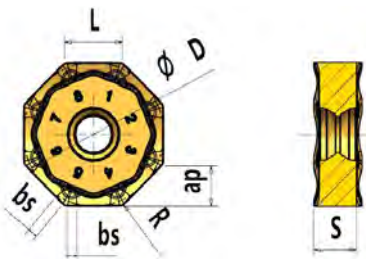
B26

- Regular Stock
- Reserve Stock

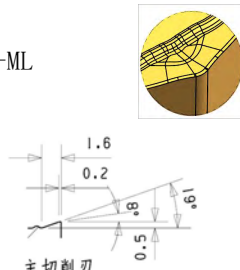
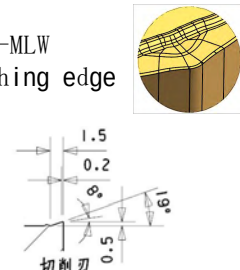
Milling Insert



ON**09

		Intro										
												
		• Flat inserts • Double-sided 16 edges • Large positive rake angle design • MLW groove type inserts are finishing edge inserts										
Model	Edge Length	Dimension (mm)						Grade				
		D	L	S	ap	R	bs	CT5320	CT7420	CT8320	CT8420	CT8520
ONGU 090506-ML	09	21.85	8.9	7.62	5.0	0.6	/				●	●
ONGU 090506-MLW							1.5			○	○	
ONGU 090510-ML						1.0	/		●		●	●
ONGU 090510-MLW							1.5	○	○			●
ONGU 090520-ML						2.0	/			●		●

© Insert matches tool page: B47.

Model	Groove Design	Groove Design
ONGU 0905**	-ML 	-MLW finishing edge 

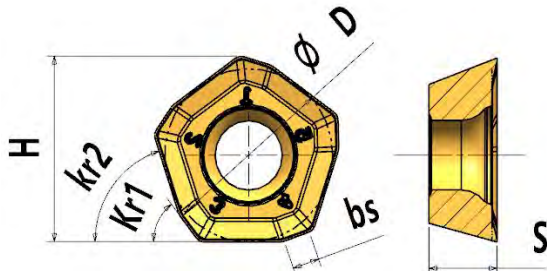
● Regular Stock
○ Reserve Stock

B27

Milling Insert

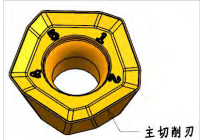
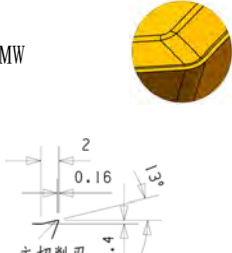


PD**09

									Intro				
									• High Feed Insert • Suitable for high-feed machining.				
Model	Edge Length	Dimension (mm)						Grade					
		D	H	S	Kr1°	Kr2°	bs	CT5320	CT5420	CT7320	CT8320	CT8520	
PDKT 090508R-MW	09	13.5	14.46	5.45	19	72	2.1	●	●		●	●	
PDKT 090508L-MW		13.5	14.46	5.45	19	72	2.1		●				
PDKT 090530R-M		13.5	14.46	5.45	—	72	—	●	○				

◎-MW groove type with finishing edges; -M groove type without finishing edges.

◎Insert matches tool page: B98.

Model	Groove Design	Groove Design
PDKT 0905** 	-MW 	-M 

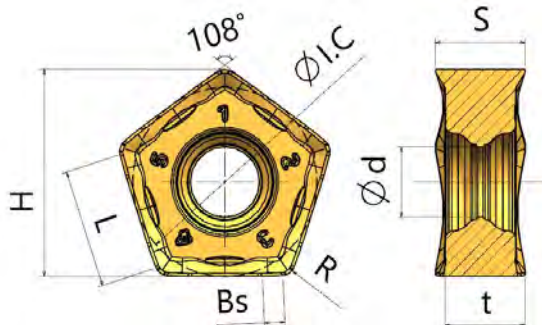
B28

- Regular Stock
- Reserve Stock

Milling Insert

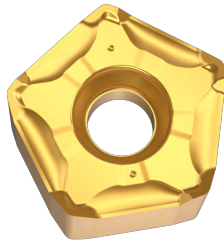
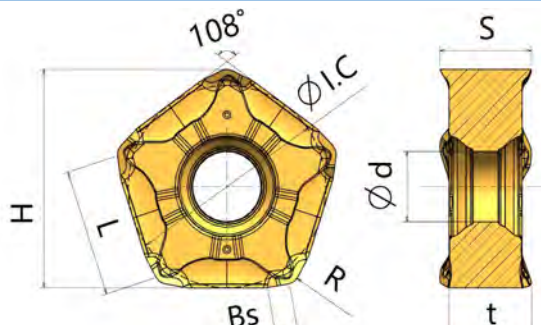


PN**08/09

		Intro									
		• 10-edge face milling inserts with good cost-effectiveness. • Center-mounted inserts ,not hand-specific. • Equipped with finishing edges, providing excellent surface machining quality.									
Model	Dimension (mm)								Grade		
	H	I. C	L	S	t	R	d	Bs	CT5320	CT8320	CT8520
PNMU 080508N-M	13.4	12.2	7.6	5.96	5.3	0.8	4.6	1.3		●	○

©This insert currently has no applicable tool page number and can be customized according to customer requirements.



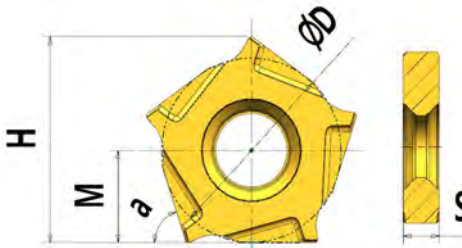
		Intro									
		• 10-edge face milling inserts with good cost-effectiveness. • Center-mounted inserts, not hand-specific. • Equipped with finishing edges, providing excellent surface machining quality.									
Model	Dimension (mm)								Grade		
	H	I. C	L	S	t	R	d	Bs	CT5320	CT5420	CT5520
PNMU 090508ZNER-GM	14.6	13.52	8.5	6.28	5.64	0.8	4.7	1.6	●	●	○

©This insert currently has no applicable tool page number and can be customized according to customer requirements.

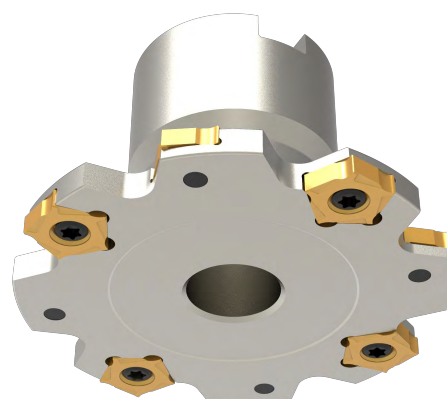
Milling Insert

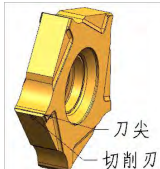
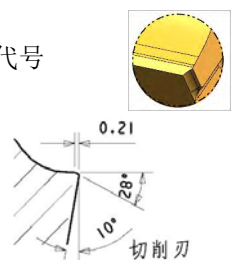


PNEJ**1223-1245

						Intro
						• Shallow groove milling inserts • Three-edge common inserts • Negative inserts • Effective cutting edges : 5 edges
Model	Dimension (mm)					Grade
	S	D	H	M	a°	CT5320
PNEJ1223N	2.3	12.5	13.975	6.25	72	●
PNEJ1225N	2.5					●
PNEJ1230N	3.0					●
PNEJ1235N	3.5					●
PNEJ1240N	4.0					●
PNEJ1245N	4.5					●

©This insert currently has no applicable tool page number and can be customized according to customer requirements.



Model	Groove Design
PNEJ ** 	无代号 

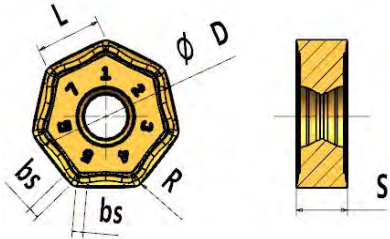
● Regular Stock
○ Reserve Stock

B29

Milling Insert



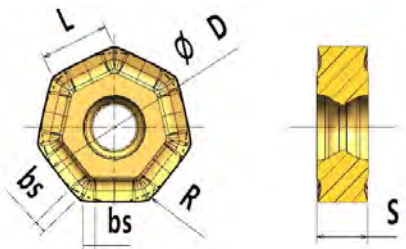
QN**07

								Intro					
								• Flat inserts • Double-sided 14-edge • Maximum cutting depth: 4.0 mm • -MW groove type is the finishing edge inserts					
Model	Dimension (mm)					Grade						Adapter screw	
	L	D	bs	S	R	CT5320	CT5420	CT7320	CT7420	CT8420	CT8520		
QNKX 070508N-M	6.80	14.4	—	5.36	0.8	●			●	●	●	M3.5	
QNGX 070508N-M						●			●	○			
QNGX 070508N-MW			1.1			●	●	●			○		
QNKX 070508N-MS						○							

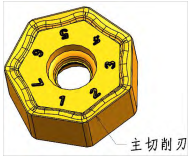
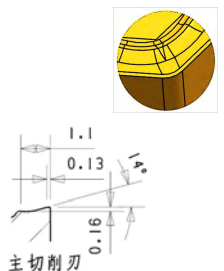
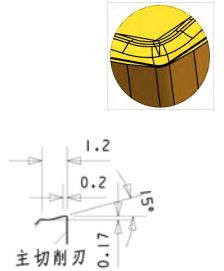
©Note: The inserts are divided into two types of mounting screws: M3.5 and M4

©The M3.5 screw inserts are compatible with WT tools, while the M4 screw inserts are compatible with -S tool holders.

©Insert matches tool page: B48、B49。

								Intro				
								• 14-edge face milling inserts • Flat inserts • Finishing edge insert				
Model	Edge Length	Dimension (mm)					Grade					Adapter screw
		L	D	bs	R	S	CT5320	CT7320	CT7420	CT8320	CT8330	
QNGX 070508N-MLW	07	6.76	14.4	1.18	0.8	5.0	●			○		M4

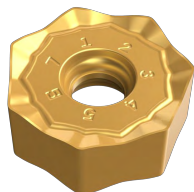
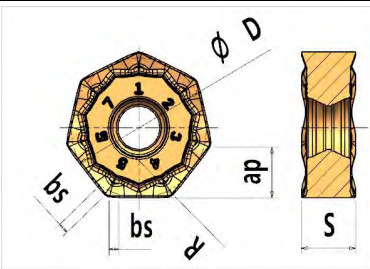
©Insert matches tool page: B49。

QNGX 0705 			
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B30

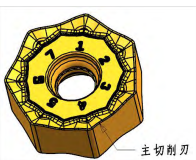
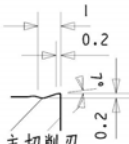
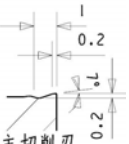
- Regular Stock
- Reserve Stock

QN**07

							Intro						
								• Double-sided 14-edge milling inserts • Flat inserts • -MLW is the finishing edge groove type					
Model	Edge Length	Dimension (mm)					Grade					Adapter screw	
		D	S	ap	R	bs	CT5320	CT7320	CT8320	CT8420	CT8520		
QNMX 070508-ML	07	14.5	6.47	5.0	0.8	—	○	○			●	M4	
QNMX 070508-MLW	07	14.5	6.47	5.0	0.8	1.0	○	○			●	M4	

©The insert is mounted with M4 screws.

©Insert matches tool page: B50.

Model	Groove Design	Groove Design
QNMX 0705** 	-ML  	-MLW Finishing Edge  

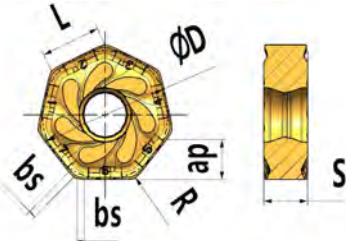
- Regular Stock
- Reserve Stock

B31

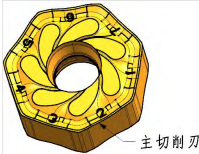
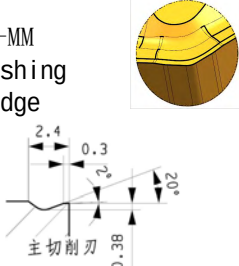
Milling Insert



QN**09

								Intro				
								• 14-edge face milling inserts • Flat inserts • Suitable for 45° primary angle tools				
Model I	Edge Length	Dimension (mm)					Grade					
		D	L	S	ap	R	bs	CT5320	CT5520	CT7320	CT7420	CT8330
QNKU 0906NB-MM	09	18.5	8.7	6.35	5.5	0.8	1.0	●	●	○	●	
QNKU 0906NB-ML	09	18.5	8.7	6.35	5.5	0.8	1.0	●		●	○	

© Insert matches tool page: B51、B52。

Model	Groove Design
QNKU 0906** 	-MM Finishing Edge 

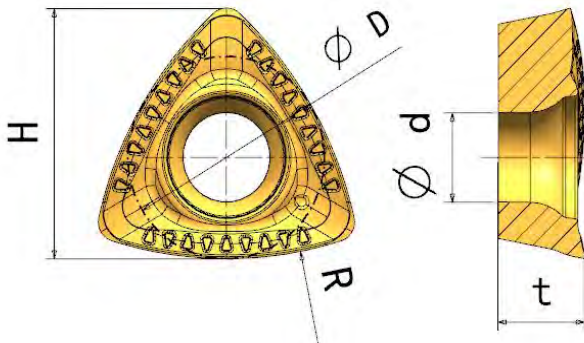
B32

- Regular Stock
- Reserve Stock

Milling Insert



RB**40/50

		Intro						
						• Large radius inserts • Commonly used for ball end mills • Can be indexed 3 times • Suitable for ball end mills and ball nose corn mills		
Model	Dimension (mm)					Grade		
	D	t	R	H	d	CT5310	CT5320	CT7420
RBEX 40-M	12.7	5.56	20	15.46	5.6	●	●	
RBEX 50-M	12.7	5.56	25	15.69	5.6	●	●	

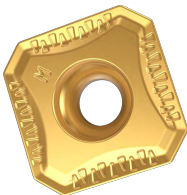
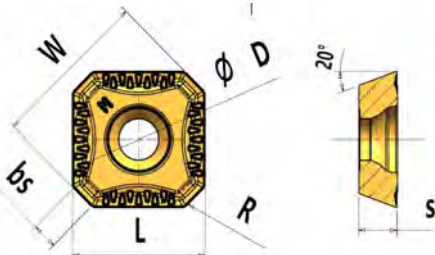
©This insert currently has no applicable tool page number and can be customized according to customer requirements.



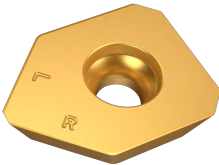
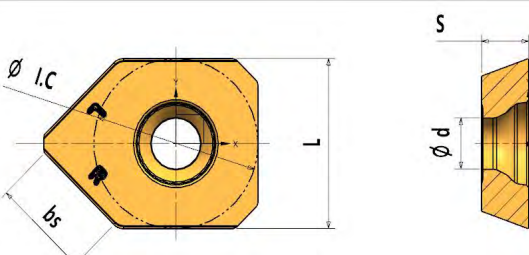
Milling Insert



SE**12

		Intro											
		• Flat positive inserts • Large positive rake angle for light cutting; versatile face milling inserts. • Compatible with 45° lead angle design. • Used in conjunction with finishing inserts to improve surface roughness.											
		Model	Edge Length	Dimension (mm)						Grade			
		L	D	S	bs	R	W	CT5320	CT7320	CT8420	CT8520		
SEKT 12T3AFTN-M	12	13.15	13.15	3.8	2.5	0.8	15.75	●	●				

© Insert matches tool page: B57.

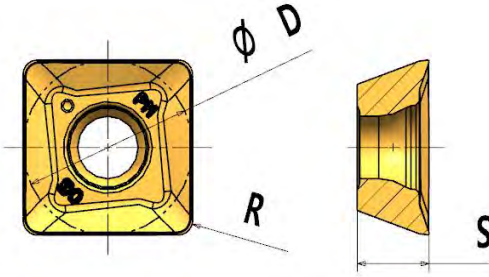
								Intro			
		• Specialized finishing inserts that enhance surface roughness • Compatible with 45° lead angle design.									
Model	Edge Length	Dimension (mm)						Grade			
		L	ΦI.C	S	Φd	bs	R	CT5320	CT7320	CT8420	CT8520
SEKT 12T3AFTN-WC	12	13.14	13.14	3.74	3.95	7.8	—	●	●		

© Insert matches tool page: B57.

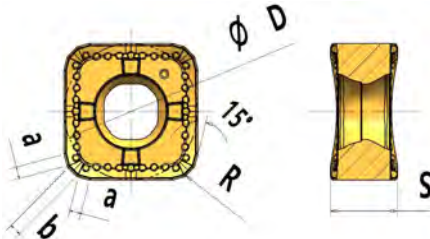
Milling Insert



SE**09/SN**12

		Intro				
				• Flat inserts • 90° lead angle design for the tool holder		
Model	Edge Length	Dimension (mm)			Grade	
		D	S	R	CT5320	CT7320
SEET 09T308PER-PM	09	9.525	4.0	0.8	●	○

© Insert matches tool page: B69.

		Intro											
												• Flat double-sided 8-edge inserts • Insert design with large rake angle for light cutting • Tool performance and lifespan have been highly recognized by customers	
Model	Dimension					Grade							
	D	S	a	b	R	CT5320	CT5420	CT7320	CT7420	CT8330	CT9320	CT101	
SNKX 1206XTN	12.7	6.35	1.25	1.3	0.4			●		●	●		
SNHX 1206XTN-ML						●		●					
SNHX 1206XTN-AL												●	
SNKX 1707XTN-M	17.2	7.8	1.6	1.5	0.5	●		●					

© Insert matches tool page: B53、B56、B62。

SNKX 1206**	-No code Finishing Edge	

SNKX 1707**	-M Finishing Edge	

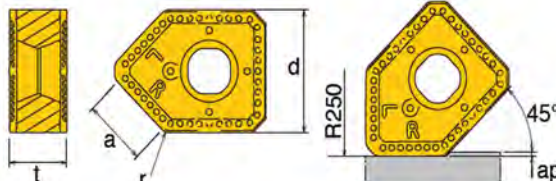
B34

- Regular Stock
- Reserve Stock

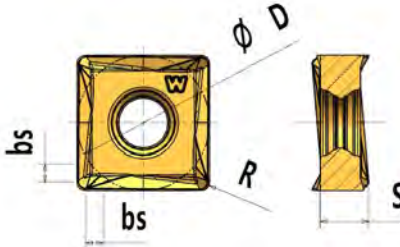
Milling Insert



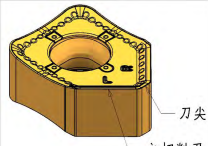
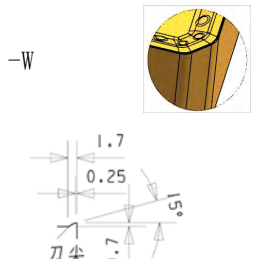
SN**12

								Intro					
										• Flat inserts • Designed for tool holders with a 45° lead angle • Double-sided with a total of 4 cutting edges			
	Model	Edge Length	Kr (°)	Dimension (mm)						Grade			
				d	t	a	r			CT5320	CT7320	CT8320	CT9320
	SNKX 1206ANSN-W	12	45	12.7	6.45	6.9	0.4				●		

© Insert matches tool page: B53.

							Intro						
						• Flat double-sided inserts with eight 90-degree cutting edges, ideal for side milling and slotting. • Outstanding axial depth of cut performance, with a maximum of 10 mm for AP. • -MW groove-type inserts feature a solid finishing edge design							
	Model I	Edge Length	Dimension (mm)				Grade						
			D	S	Bs	R	CT5320	CT5420	CT7420	CT8420	CT9320		
			SNHX 120508-M	12	12.7	4.65	—	0.8		●	○		
			SNHX 120508-MW	12	12.7	4.65	1.7	0.8	○	○	○	●	

© Insert matches tool page: B68.

Model	Groove Design
SNKX 1206**	 

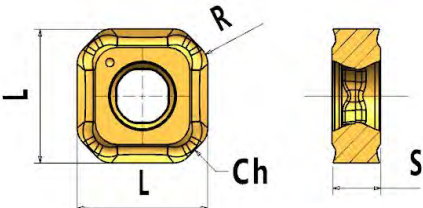
● Regular Stock
○ Reserve Stock

B35

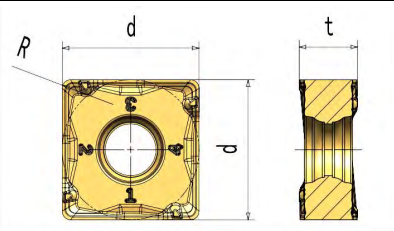
Milling Insert



SN**12/SN**13

								Intro				
NEW 		• Negative double-sided 8-edge inserts • Positive rake angle for light cutting • Designed for finishing with face milling cutters										
Model		Dimension (mm)						Grade				
		L	H	S	R	Ch			CT5320	CT7420	CT7520	CT300
SNEX 1204P-W		12.7	—	4.66	2.0	2.5			○	●	●	
SNEX 1204R-CBN		12.7	—	4.66	0.8	1.5						●

© Insert matches tool page: B84.

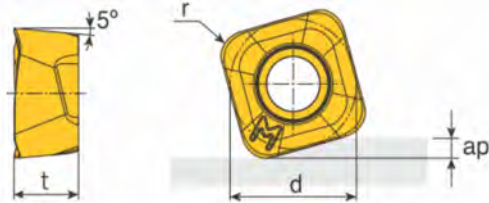
		Intro				
NEW 				• Negative double-sided 8-edge inserts • Positive rake angle for light cutting • Designed for tool holders with a 89.5° lead angle • Applicable for step milling and face milling		
Model	Dimension (mm)			Grade		
	d	t	R	CT5320	CT5520	CT7420
SNMF 130508R-M	13.0	5.55	0.8	●	●	●

© Insert matches tool page: B67.

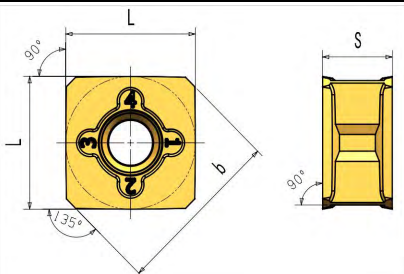
Milling Insert



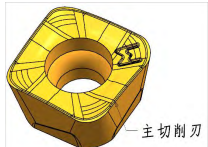
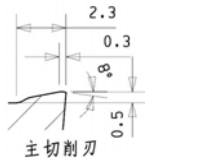
SN**13/SX**13

		Intro							
		• Flat 4-edge high-feed inserts - Maximum depth of cut: 2.0 mm • Positive inserts with low cutting forces, suitable for machines with long overhangs and low power • Used for roughing in mold machining and for removing excess material from workpieces							
		Dimension (mm)				Grade			
Model	Edge Length	d	t	ap	r	CT5320	CT5420	CT5520	CT7420
SXMT 130625-M	13	13.05	6.65	2.0	2.5	●	●	○	

© Insert matches tool page: B97.

		Intro							
		• Vertical double-sided 8-edge inserts • Commonly used for bevel milling • Special rounded corner design for better insert overlap • Not suitable for face milling applications							
		Dimension (mm)				Grade			
Model	Edge Length	L	S	b		CT5320	CT5420	CT7320	CT7420
SNEA 1370-M	13	13.02	7.0	16.9		●	●		

© This insert currently has no applicable tool page number and can be customized according to customer requirements.

Model	Groove Design
SXMT 1306**	 

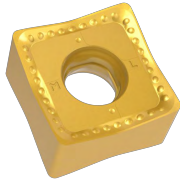
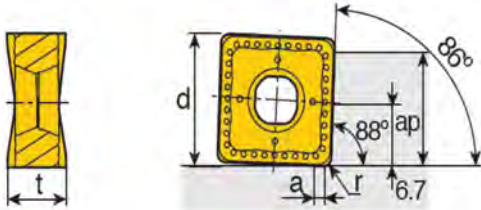
- Regular Stock
- Reserve Stock

B37

Milling Insert

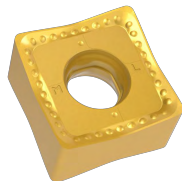
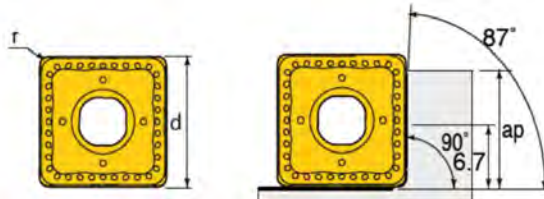


SN**13

							Intro				
							• Double-sided 8-edge inserts • Designed with a large positive rake angle for light cutting • Suitable for most step milling and face milling applications				
Model	Edge Length	Kr (°)	Dimension (mm)				Grade				
			d	a	r	ap	CT5320	CT7320	CT8320	CT8520	CT101
SNGX 1306ZN-M	13	88	13.5	2.2	0.8	2-10	●	●	●		
SNGX 1306ZN-ML	13	88	13.5	2.2	0.8	2-10	●	●	○	●	

©SNGX1306ZN-M/ML slot inserts compatible with 88° lead angle tool holders

©Insert matches tool page: B64.

						Intro				
						• Double-sided 8-edge inserts • Designed with a large positive rake angle for light cutting • Suitable for most step milling and face milling applications				
Model	Edge Length	Kr (°)	Dimension (mm)			Grade				
			d	r	ap	CT5320	CT7320	CT8320	CT8520	CT101
SNGX 130608-M	13	90	13.5	0.8	2-10	●	●	●		
SNGX 130608-ML				0.8		●	●	●	●	
SNGX 130608-AL				0.8						●
SNGX 130612-M				1.2		○	●			
SNGX 130616-M				1.6		○	●			
SNGX 130620-M				2.0		○	●			
SNGX 130625-M				2.5		○	●			
SNGX 130630-M				3.0		○	●			
SNGX 130634-M				3.4		○	●			

©SNGX130608-M/ML/AL slot inserts compatible with 90° lead angle tool holders

©Insert matches tool page: B65.

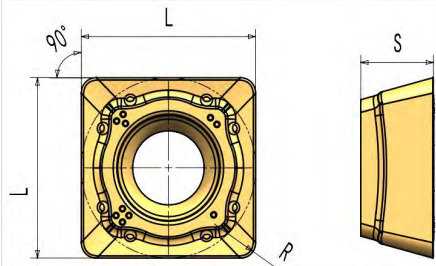
B38

- Regular Stock
- Reserve Stock

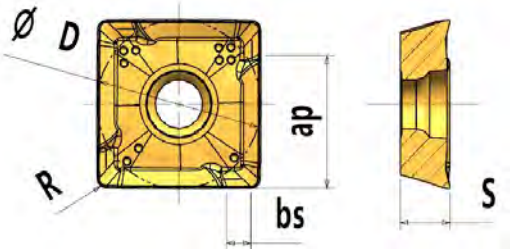
Milling Insert



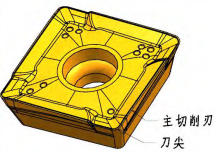
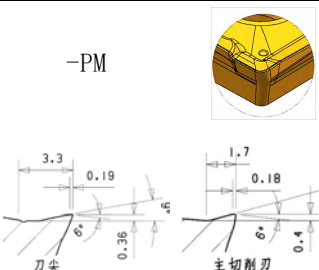
SD**14

		Intro									
						• Flat 4-edge inserts • Sharp cutting edges for easy cutting • Commonly used inserts for spiral shell machining					
Model	Edge Length	Dimension (mm)			Grade						
		L	S	R	CT5320	CT5520	CT7420	CT8320	CT8420	CT8520	
SDKT 09T308-KM	09	9.525	3.97	0.8	●			●			
SDGT 09T308-KM				1.2						●	
SDKT 09T312-KM				0.8		●				●	
SDMT 09T320-M				2.0						●	
SDKT 120408-M	12	12.7	4.76	0.8	●						

©This insert currently has no applicable tool page number and can be customized according to customer requirements.

							Intro						
										• Flat 4-edge inserts • Maximum depth of cut: 10 mm • Sharp cutting edges for smooth cutting performance • Effectively improves the surface quality of workpieces			
	Model	Edge Length	Dimension (mm)					Grade					
			D	ap	S	bs	R	CT5320	CT5420	CT7320	CT7420		
			SDKT 140408M-PM	14	13.8	10.3	4.2	2.0	0.8	●	●		●

©Insert matches tool page: B78、B121。

Model	Groove Design
SDKT 1404** 	-PM 

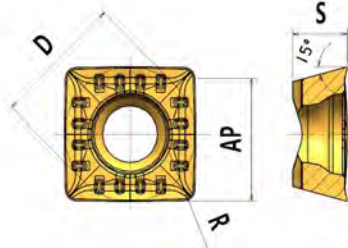
- Regular Stock
- Reserve Stock

B39

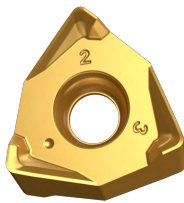
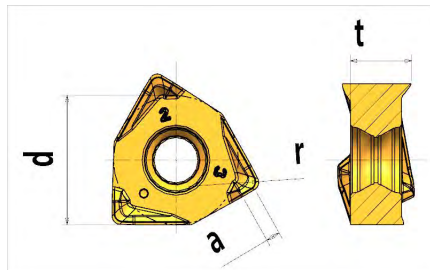
Milling Insert



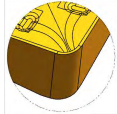
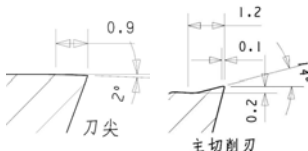
WN**04/08

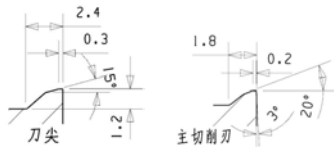
				Intro					
						• Flat single-sided 4-edge inserts • Large positive rake angle for easy cutting • Equipped with finishing edge design			
Model I	Edge Length	Dimension (mm)				Grade			
		D	S	AP	R	CT5320	CT7320	CT8320	CT9320
SVKT 09T308-M	09	9.525	3.97	8.5	0.8	●	●	●	
SVKT 110408-ML	11	11.0	4.5	10.0	0.8	●	●	●	

© Insert matches tool page: B126、B130、B131。

						Intro				
						• Double-sided 6-edge inserts • Large positive rake angle design for easy cutting • Suitable for 90° primary angle design of milling cutters • Applicable to most step milling and face milling operations				
Model	Edge Length	Dimension (mm)				Grade				
		d	r	t	a	CT5320	CT7420	CT8320	CT8420	CT9320
WNHX 040308-ML	04	7.64	0.8	3.29	1.1	○				
WNHX 080608-ML	08	12.48	0.8	6.35	1.2~2.0	●	●			
WNHX 080608-TR	08	12.48	0.8	6.35	1.2~2.0	●	●			

© Insert matches tool page: B74、B112。

Model	Groove Design
SVKT 09T3** SVKT 1104**	-M  

Model	Groove Design
WNHX 0403** WNHX 0806**	-ML  

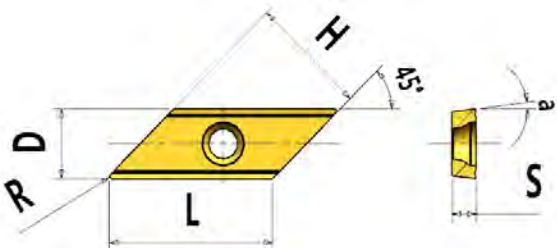
B40

- Regular Stock
- Reserve Stock

Milling Insert



XC**31

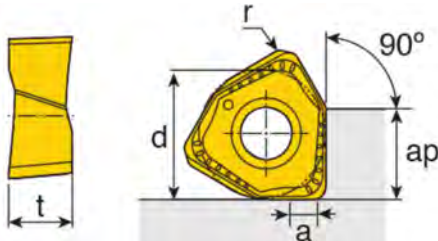
		Intro									
											
		• Long edge chamfer inserts • Flat insert									
Model	Edge Length	Dimension (mm)						Grade			
		L	H	D	S	a	R	CT5320	CT5420	CT7320	CT7420
XCET 310404	31	30.47	22	12.7	4.5	7°	0.4	●	○	●	

© Insert matches tool page: B124.

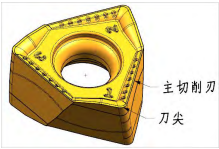
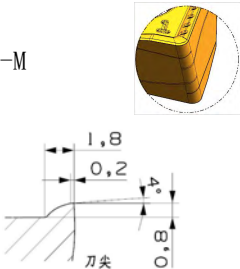
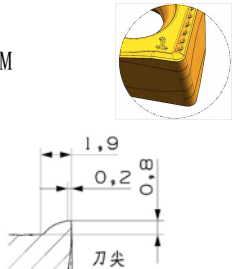
Milling Insert



XN**06/09

							Intro			
							• Flat double-sided 6-edge inserts • Large positive rake angle for easy cutting • Equipped with finishing edge design			
Model	Dimension (mm)						Grade			
	d	t	ap	a	r	Feed (mm/Tooth)	CT5320	CT5420	CT7320	CT7420
XNGU 060408-M	9.26	4.76	6.2	1.96	0.8	0.08-0.15	●	○	●	○
XNGU 090508-M	13.05	6.70	9.2	2.0	0.8	0.10-0.20	●	○		○
XNGU 090508-ML	13.05	6.70	9.2	2.0	0.8	0.05-0.10	●			●
XNMU 090508R-M	13.05	6.70	9.2	2.0	0.8	0.05-0.10	●	●		●

© Insert matches tool page: B72.

Model	Groove Design	Groove Design
XNGX 0604** XN** 0905** 	-M 	R-M 

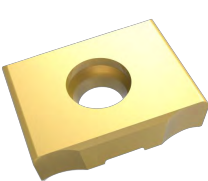
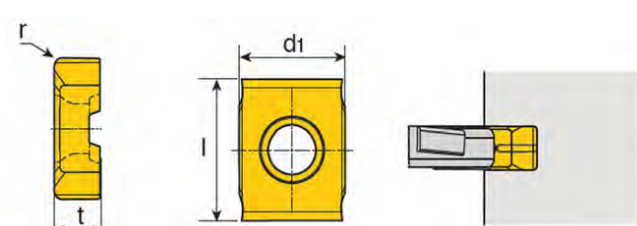
B42

- Regular Stock
- Reserve Stock

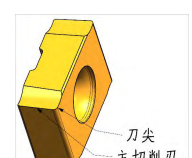
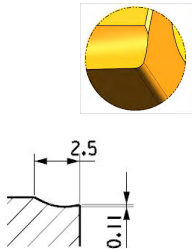
Milling Insert



ZN**023-073

						Intro	
						• Vertical inserts • Common three-edge inserts • Typically used for cutting three-edge milling cutters with a width of 4-14 mm	
Model	Edge Length	Dimension (mm)				Feed	Grade
		l	d1	t	r	(mm/Tooth)	CT5320
ZNHT 018-04-ML	018	10	7.5	1.8	0.4	0.05~0.08	●
ZNHT 023-04-ML	023	10	7.5	2.3	0.4	0.05~0.08	●
ZNHT 028-04-ML	028	10	7.5	2.8	0.4	0.05~0.08	●
ZNHT 033-04-ML	033	10	7.5	3.3	0.4	0.05~0.12	●
ZNHT 038-04-ML	038	13	10	3.8	0.4	0.05~0.12	●
ZNHT 043-04-ML	043	13	10	4.3	0.4	0.05~0.12	●
ZNHT 043-08-ML	043	13	10	4.3	0.8	0.05~0.12	●
ZNHT 048-04-ML	048	13	10	4.8	0.4	0.05~0.12	●
ZNHT 048-08-ML	048	13	10	4.8	0.8	0.05~0.12	●
ZNHT 053-04-ML	053	13	10	5.3	0.4	0.05~0.12	●
ZNHT 053-08-ML	053	13	10	5.3	0.8	0.05~0.12	●
ZNHT 058-04-ML	058	15	12	5.8	0.4	0.05~0.12	●
ZNHT 058-08-ML	058	15	12	5.8	0.8	0.05~0.12	●
ZNHT 063-04-ML	063	15	12	6.3	0.4	0.05~0.12	●
ZNHT 063-08-ML	063	15	12	6.3	0.8	0.05~0.12	●
ZNHT 068-08-ML	068	15	12	6.8	0.8	0.05~0.12	●
ZNHT 068-12-ML	068	15	12	6.8	1.2	0.05~0.12	●
ZNHT 073-08-ML	073	15	12	7.3	0.8	0.05~0.12	●
ZNHT 073-12-ML	073	15	12	7.3	1.2	0.05~0.12	●

© Insert matches tool page: B138、B142.

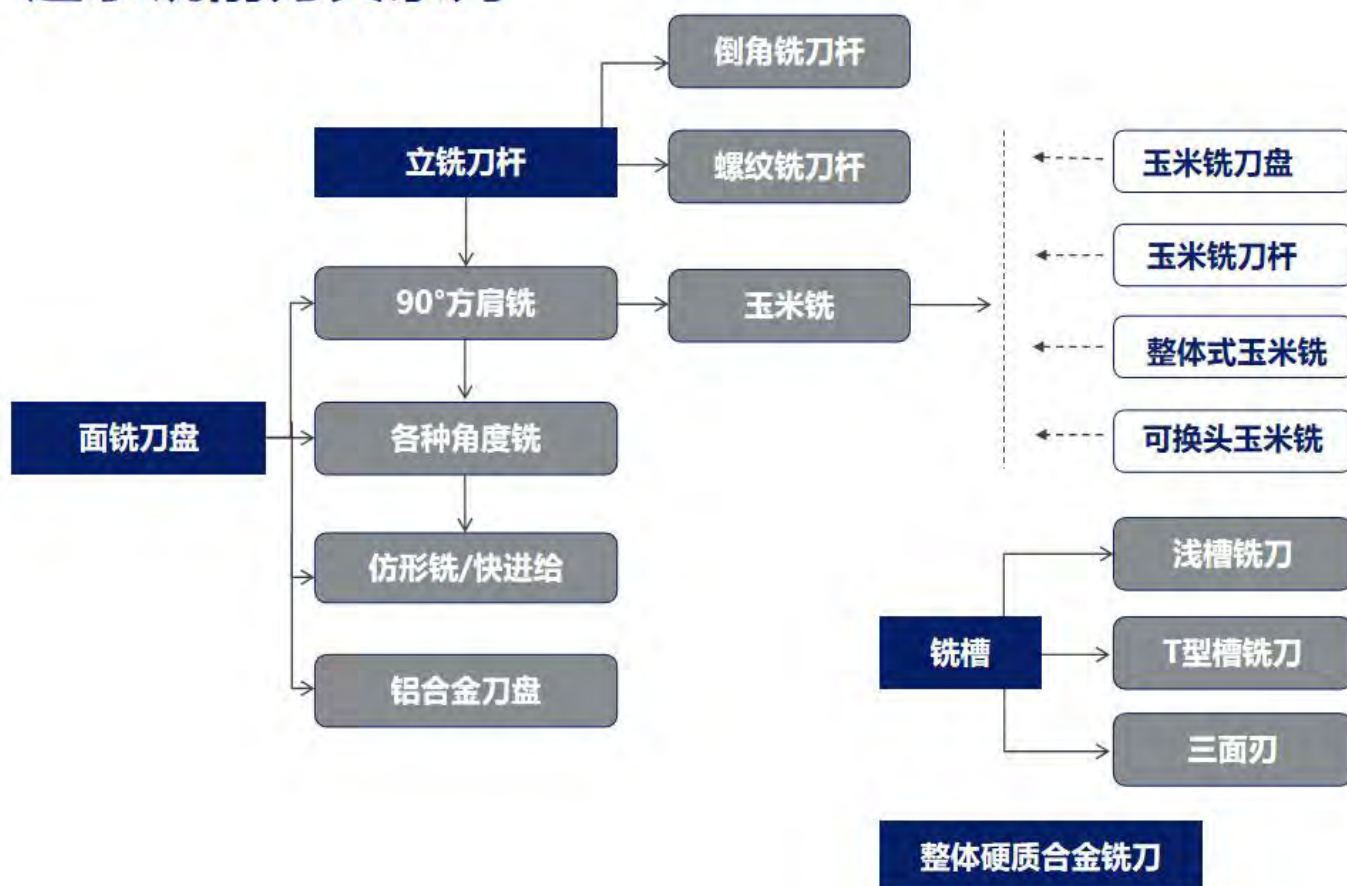
Model	Groove Design
ZNHT ** 	-ML 

● Regular Stock
○ Reserve Stock

B43



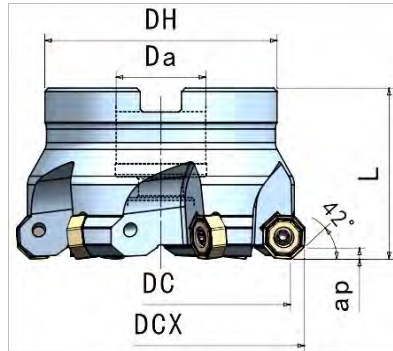
超尔铣削刀具系列



ON: CFM42ON-05

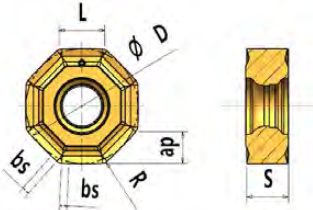


Face Mill Cutter; Kr=42°



Model		Dimension (mm)					I/F Type	Kg	Insert
		DC	DCX	L	ap	Da			
CFM42ON-450A22R-05	4	50	56.2	40	3	22	A	0.4	ONGU 0504
CFM42ON-550A22R-05	5	50	56.2	40	3	22	A	0.4	
CFM42ON-650A22R-05	6	50	56.2	40	3	22	A	0.4	
CFM42ON-663A22R-05	6	63	69.2	40	3	22	A	0.7	
CFM42ON-863A22R-05	8	63	69.2	40	3	22	A	0.7	
CFM42ON-680A27R-05	6	80	86.2	50	3	27	A	1.3	
CFM42ON-880A27R-05	8	80	86.2	50	3	27	A	1.4	
CFM42ON-980A27R-05	9	80	86.2	50	3	27	A	1.4	
CFM42ON-7100B32R-05	7	100	106.2	50	3	32	B	1.8	
CFM42ON-9100B32R-05	9	100	106.2	50	3	32	B	1.8	
CFM42ON-11100B32R-05	11	100	106.2	50	3	32	B	1.8	
CFM42ON-7125B40R-05	7	125	131.2	63	3	40	B	2.9	
CFM42ON-9125B40R-05	9	125	131.2	63	3	40	B	2.9	
CFM42ON-12125B40R-05	12	125	131.2	63	3	40	B	2.9	

©Standard cutter head without internal cooling. Inserts need to be ordered separately.

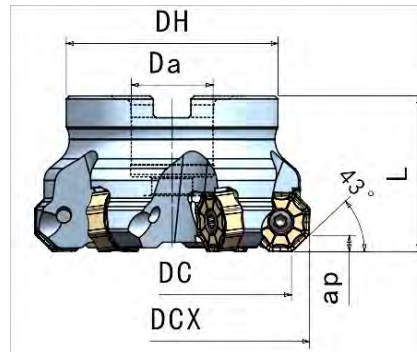
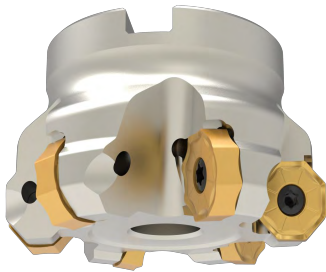
							Intro			
							• Flat insert • Double-sided 16-edge insert • Large positive rake angle design • MLW groove type insert is a finishing insert			
Model	Dimension (mm)					Grade				Screw/Wrench
	D	L	S	R	bs	CT5320	CT7320	CT7420	CT8520	
ONGU 050408-M	12.7	5.2	4.76	0.8	/		●	●	●	CSC4090 CTS15W
ONGU 050408-ML					/				●	
ONGU 050408-MW					0.8	●	●			
ONGU 050408-MLW					0.8				○	
ONKU 050408-M					/			●		
ONKU 050408-ML					/			○		

B45

ON: CFM43ON-07



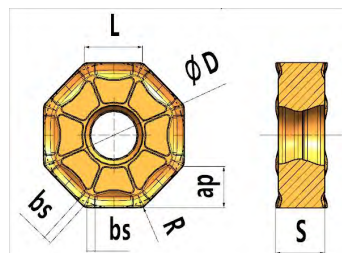
Face Mill Cutter; $Kr=43^\circ$



Model		Dimension (mm)					I/F Type	Kg	Insert t
		D	D1	L	ap	Da			
CFM43ON-563A22R-07	5	63	75.2	50	4	22	A	0.6	ONKX 0706
CFM43ON-680A27R-07	6	80	92.2	50	4	27	A	1.4	
CFM43ON-780A27R-07	7	80	92.2	50	4	27	A	1.4	
CFM43ON-7100B32R-07	7	100	112.2	60	4	32	B	2.3	
CFM43ON-8100B32R-07	8	100	112.2	60	4	32	B	2.3	
CFM43ON-8125B40R-07	8	125	137.2	63	4	40	B	3.3	
CFM43ON-10125B40R-07	10	125	137.2	63	4	40	B	3.3	
CFM43ON-10160C40R-07	10	160	172.2	63	4	40	C	4.7	
CFM43ON-12160C40R-07	12	160	172.2	63	4	40	C	4.7	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

Model	Edge Length	Kr (°)	Dimension (mm)						Grade			
			D	L	S	ap	R	bs	CT5320	CT7320	CT7420	CT8420
ONKX 070608N-M	07	43	19.05	7.8	6.64	5.3	0.8	1.1	●	●	●	



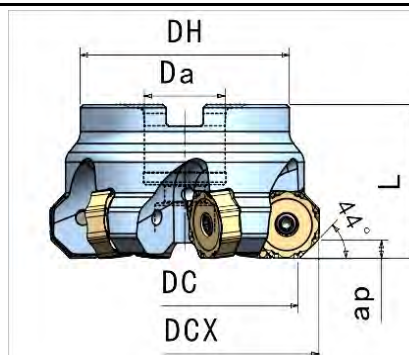
Spare Parts

Model	Screw	Wrench
CFM43ON-07	CSG5016	CTS20W

ON: CFM440N-09



Face Mill Cutter; Kr=44°



Model		Dimension (mm)					I/F Type	Kg	Insert
		DC	DCX	L	ap	Da			
CFM440N-563A22R-09	5	63	78	40	5.0	22	A	0.7	ONGU 0905
CFM440N-663A22R-09	6	63	78	40	5.0	22	A	0.7	
CFM440N-680A27R-09	6	80	95	50	5.0	27	A	1.5	
CFM440N-780A27R-09	7	80	95	50	5.0	27	A	1.5	
CFM440N-7100B32R-09	7	100	115	50	5.0	32	B	1.9	
CFM440N-8100B32R-09	8	100	115	50	5.0	32	B	2.0	
CFM440N-8125B40R-09	8	125	140	63	5.0	40	B	3.0	
CFM440N-10125B40R-09	10	125	140	63	5.0	40	B	3.2	
CFM440N-10160C40R-09	10	160	175	63	5.0	40	C	4.6	
CFM440N-12160C40R-09	12	160	175	63	5.0	40	C	4.8	
CFM440N-12200C60R-09	12	200	215	63	5.0	60	C	6.5	
CFM440N-16250C60R-09	16	250	265	63	5.0	60	C	11.7	
CFM440N-20315D60R-09	20	315	330	80	5.0	60	D	22.7	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

Model	Edge Length	Dimension (mm)						Grade				
		D	L	S	ap	R	bs	CT5320	CT7420	CT8320	CT8420	CT8520
ONGU 090506-ML	09	21.85	8.9	7.62	5.0	0.6	/				●	●
ONGU 090506-MLW							1.5			○	○	
ONGU 090510-ML						1.0	/		●		●	●
ONGU 090510-MLW							1.5	○	○			●
ONGU 090520-ML						2.0	/			●		●

NOTE: MLW-groove type insert is a finishing insert.

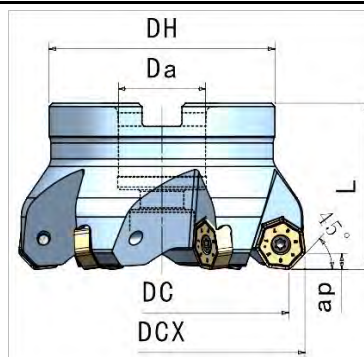
Spare Parts

Model	Screw	Wrench
CFM440N-09	CSG5016	CTS20W

QN: CFM45QN-07



Face Mill Cutter; Kr=45°



Model		Dimension (mm)					I/F Type	Kg	Insert t
		DC	Da	DH	L	ap			
CFM45QN-340A16R-07	3	40	50	16	40	4.0	A	0.3	QNKX 0705
CFM45QN-450A22R-07	4	50	60	22	45	4.0	A	0.5	
CFM45QN-550A22R-07	5	50	60	22	45	4.0	A	0.5	
CFM45QN-563A22R-07	5	63	73	22	45	4.0	A	0.7	
CFM45QN-663A22R-07	6	63	73	22	45	4.0	A	0.7	
CFM45QN-680A27R-07	6	80	90	27	50	4.0	A	1.3	
CFM45QN-780A27R-07	7	80	90	27	50	4.0	A	1.3	
CFM45QN-7100B32R-07	7	100	110	32	50	4.0	B	1.8	
CFM45QN-8100B32R-07	8	100	110	32	50	4.0	B	1.8	
CFM45QN-8125B40R-07	8	125	135	40	63	4.0	B	3.1	
CFM45QN-10125B40R-07	10	125	135	40	63	4.0	B	3.1	
CFM45QN-9160C40R-07	9	160	170	40	63	4.0	C	4.5	
CFM45QN-12160C40R-07	12	160	170	40	63	4.0	C	4.5	
CFM45QN-18250C60R-07	18	250	260	60	63	4.0	C	11.1	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

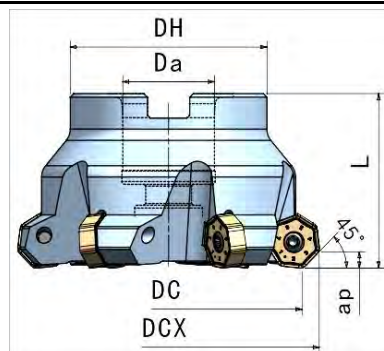
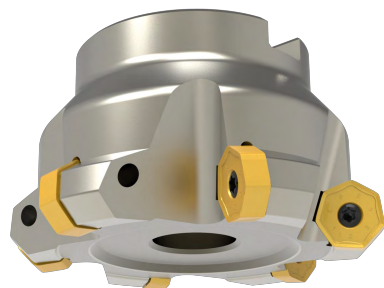
©Note: The mounting screws for this type of tool holder are M3.5, compatible with WT standard.

								Intro			
								• Flat insert • Double-sided 14-edge • Maximum cutting depth: 4.0 mm • Recommended cutting depth should be controlled below 3.0 mm • Compatible screws: M3.5			
Model	Edge Length	Dimension (mm)					Grade				Screw/Wrench
		L	D	bs	S	R	CT5320	CT7420	CT8420	CT8520	
QNKX 070508N-M	07	6.80	14.4	—	5.36	0.8	●	●	●	●	CSG3585-P CTS10W-P

QN: CFM45QN-07S



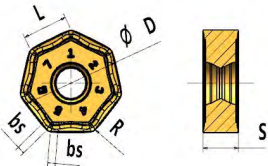
Face Mill Cutter; Kr=45°



Model		Dimension (mm)					I/F Type	Kg	Insert t
		DC	DCX	Da	L	ap			
CFM45QN-340A16R-07S	3	40	50	16	40	4.0	A	0.3	QNGX 07 QNKX 07
CFM45QN-450A22R-07S	4	50	60	22	45	4.0	A	0.5	
CFM45QN-550A22R-07S	5	50	60	22	45	4.0	A	0.5	
CFM45QN-563A22R-07S	5	63	73	22	45	4.0	A	0.7	
CFM45QN-663A22R-07S	6	63	73	22	45	4.0	A	0.7	
CFM45QN-680A27R-07S	6	80	90	27	50	4.0	A	1.3	
CFM45QN-780A27R-07S	7	80	90	27	50	4.0	A	1.3	
CFM45QN-7100B32R-07S	7	100	110	32	50	4.0	B	1.8	
CFM45QN-8100B32R-07S	8	100	110	32	50	4.0	B	1.8	
CFM45QN-8125B40R-07S	8	125	135	40	63	4.0	B	3.1	
CFM45QN-10125B40R-07S	10	125	135	40	63	4.0	B	3.1	
CFM45QN-9160C40R-07S	9	160	170	40	63	4.0	C	4.5	
CFM45QN-12160C40R-07S	12	160	170	40	63	4.0	C	4.5	
CFM45QN-12200C60R-07S	12	200	210	60	63	4.0	C	6.6	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

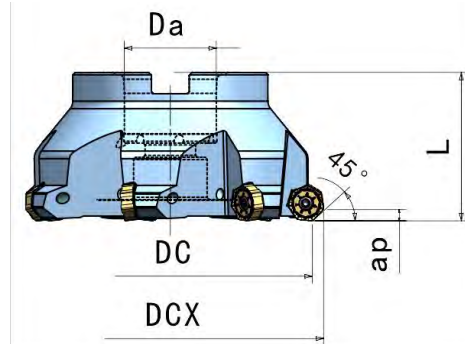
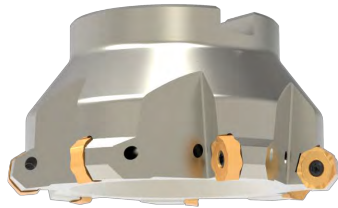
©Note: The mounting screws for this type of -S tool holder are M4. This tool holder is only compatible with the MS groove type when installing QNKX series inserts.

Insert (-M/MW/MS)		Insert (-MLW)Finishing edge groove type					Intro					
							• Flat insert • Double-sided 14-edge • Maximum cutting depth: 4.0 mm • 45° lead angle • Compatible screws: CSG4013-P					
Model	Edge Length	Dimension (mm)					Grade					
		L	D	bs	S	R	CT5320	CT5420	CT7320	CT8320	CT8420	CT8520
QNGX 070508N-M	07	6.80	14.4	—	5.36	0.8		●			●	○
QNGX 070508N-MW				1.1			●	●	●			○
QNKX 070508N-MS				—			○					
QNGX 070508N-MLW	07	6.76	14.4	1.18	0.8	5.0	●			○		

QN: CFM45QNM-07S-C



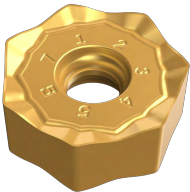
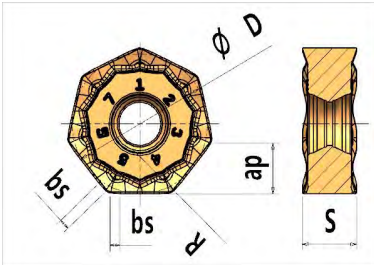
Face Mill Cutter; $Kr=45^\circ$



Model		Dimension (mm)					I/F Type		Insert t
		DC	DCX	Da	L	ap			
CFM45QNM-563A22R-07S-C	5	63	73	22	45	4.0	A	0.7	QNMX 07
CFM45QNM-780A27R-07S-C	7	80	90	27	50	4.0	A	1.3	
CFM45QNM-7100A32R-07S-C	7	100	110	32	50	4.0	B	1.8	
CFM45QNM-7125A40R-07S-C	7	125	135	40	63	4.0	B	3.1	

©Note: The CFM45QN-07S series tool holder is not compatible with the CFM45QN-07S-C

©Standard tool holder with internal cooling

							Intro					
							• Double-sided 14-edge milling insert • Flat insert					
Model	Edge Length	Dimension (mm)					Grade					Screw
		D	S	ap	R	bs	CT5320	CT7320	CT8320	CT8420	CT8520	
QNMX 070508-ML	07	14.5	6.47	5.0	0.8	—	○	○			●	M4

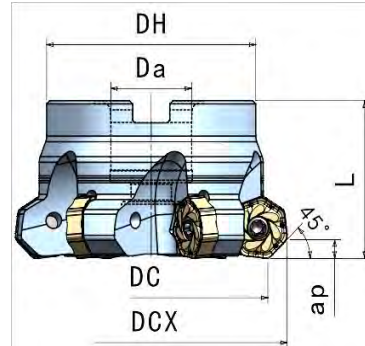
Spare Parts

Model	Screw	Wrench
CFM45QNM	CSG4013-P	CTS15W-P

QN: CFM45QN-09



Face Mill Cutter; $Kr=45^\circ$



Model		Dimension (mm)					I/F Type	Kg	Insert
		DC	DCX	L	ap	Da			
CFM45QN-563A22R-09	5	63	74.9	50	5.5	22	A	0.8	QNKU 0906
CFM45QN-663A22R-09	6	63	74.9	50	5.5	22	A	0.8	
CFM45QN-680A27R-09	6	80	91.9	50	5.5	27	A	1.3	
CFM45QN-780A27R-09	7	80	91.9	50	5.5	27	A	1.3	
CFM45QN-7100B32R-09	7	100	112	55	5.5	32	B	2.1	
CFM45QN-9100B32R-09	9	100	112	55	5.5	32	B	2.1	
CFM45QN-8125B40R-09	8	125	137	63	5.5	40	B	3.4	
CFM45QN-10125B40R-09	10	125	137	63	5.5	40	B	3.5	
CFM45QN-12125B40R-09	12	125	137	63	5.5	40	B	3.5	
CFM45QN-10160C40R-09	10	160	172	63	5.5	40	C	5.2	
CFM45QN-12160C40R-09	12	160	172	63	5.5	40	C	5.2	
CFM45QN-14160C40R-09	14	160	172	63	5.5	40	C	5.2	
CFM45QN-12200C60R-09	12	200	212	63	5.5	60	C	7.5	
CFM45QN-16200C60R-09	16	200	212	63	5.5	60	C	7.6	
CFM45QN-16250C60R-09	16	250	262	63	5.5	60	C	12.4	
CFM45QN-20250C60R-09	20	250	262	63	5.5	60	C	12.5	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

©For details about the insert, please refer to page B52.

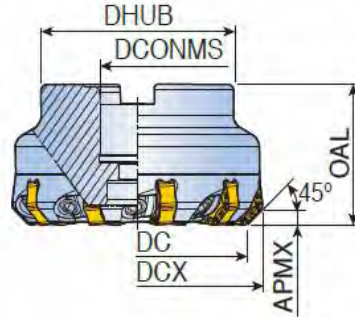
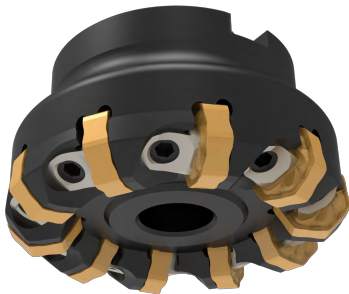
Spare Parts

Model	Screw	Wrench
CFM45QN-09	CSG5016	CTS20W

QNW: CFM45QNW-09

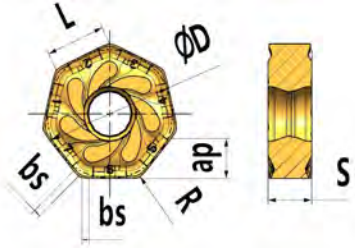


Face Mill Cutter; Kr=45°



Model		Dimension (mm)						I/F Type	Kg	Insert
		DC	DCX	DCONM	DHUB	OAL	APMAX			
CFM45QNW-1080A27R-09	10	80	91.9	27	70	50	5.5	A	1.5	QNKU 0906
CFM45QNW-13100B32R-09	13	100	112	32	85	55	5.5	B	2.3	
CFM45QNW-17125B40R-09	17	125	137	40	85	63	5.5	B	3.5	
CFM45QNW-18160C40R-09	18	160	172	40	110	63	5.5	C	5.6	
CFM45QNW-21160C40R-09	21	160	172	40	110	63	5.5	C	5.6	
CFM45QNW-26200C60R-09	26	200	212	60	130	63	5.5	C	7.9	
CFM45QNW-34250C60R-09	34	250	262	60	160	63	5.5	C	13.5	
CFM45QNW-42315D60R-09	42	315	327	60	220	63	5.5	D	21.3	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

								Intro					
								• Double-sided 14-edge milling insert • Flat insert					
Model I	Edge Length	Dimension (mm)					Grade						
		D	L	S	ap	R	bs	CT5320	CT5520	CT7320	CT7420	CT8330	
QNKU 0906NB-MM	09	18.5	8.7	6.35	5.5	0.8	1.0	●	●	○	●		
QNKU 0906NB-ML	09	18.5	8.7	6.35	5.5	0.8	1.0	●		●	○		

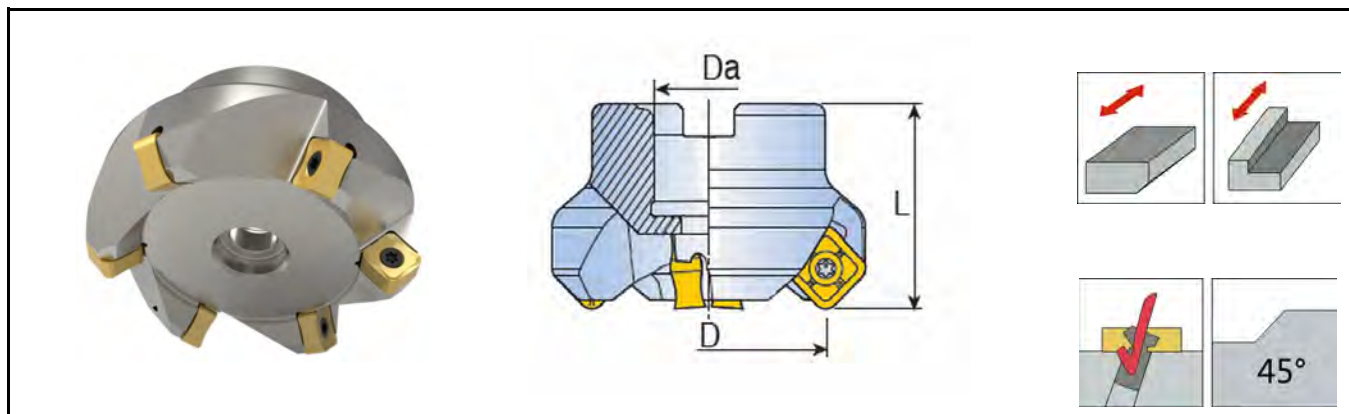
Spare Parts

Model	Wedge	Screw (Fine)	Wrench
CFM45QNW-09			
	CYX8H-X	CLD0802010	CBL40

SN: TFM45SN



Face Mill Cutter, $Kr=45^\circ$



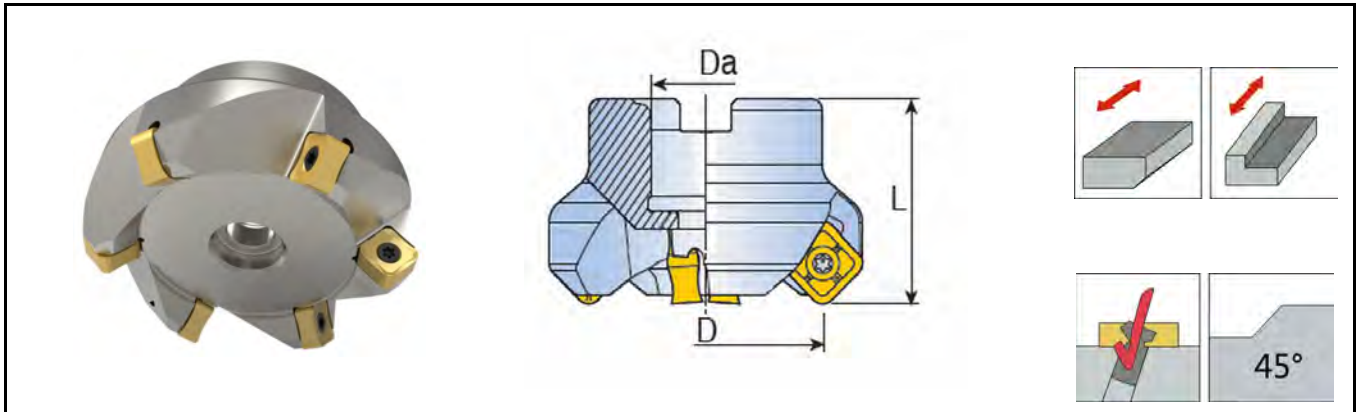
Model		Dimension (mm)			Cutting Depth	I/F Type	Kg	Insert
		D	Da	L				
TFM45SN-350-22R-12	3	50	22	40	6.0	A	0.3	SNKX 1206
TFM45SN-450-22R-12	4	50	22	40		A	0.3	
TFM45SN-550-22R-12	5	50	22	40		A	0.3	
TFM45SN-463-22R-12	4	63	22	40		A	0.5	
TFM45SN-563-22R-12	5	63	22	40		A	0.5	
TFM45SN-663-22R-12	6	63	22	40		A	0.5	
TFM45SN-580-27R-12	5	80	27	50		A	1.2	
TFM45SN-680-27R-12	6	80	27	50		A	1.2	
TFM45SN-1080-27R-12	10	80	27	50		A	1.2	
TFM45SN-6100-32R-12	6	100	32	50		B	1.8	
TFM45SN-8100-32R-12	8	100	32	50		B	1.8	
TFM45SN-12100-32R-12	12	100	32	50		B	1.8	
TFM45SN-7125-40R-12	7	125	40	63		B	3.0	
TFM45SN-10125-40R-12	10	125	40	63		B	3.0	
TFM45SN-16125-40R-12	16	125	40	63		B	3.0	
TFM45SN-8160-40R-12	8	160	40	63		C	4.6	
TFM45SN-12160-40R-12	12	160	40	63		C	4.6	
TFM45SN-20160-40R-12	20	160	40	63		C	4.6	
TFM45SN-10200-60R-12	10	200	60	63		C	6.5	
TFM45SN-18200-60R-12	18	200	60	63		C	6.5	
TFM45SN-22200-60R-12	22	200	60	63		C	6.5	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

SN: TFM45SN



Face Mill Cutter, $Kr=45^\circ$

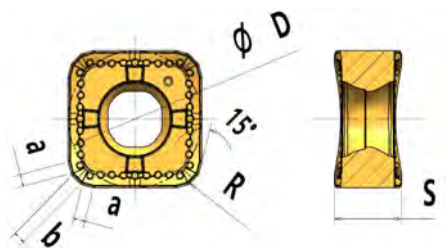


Model		Dimension (mm)			Max. cutting Depth	I/F Type		Insert
		D	Da	L				
TFM45SN-12250-60R-12	12	250	60	63	6.0	C	10.2	SNKX 1206
TFM45SN-20250-60R-12	20	250	60	63		C	10.2	
TFM45SN-24250-60R-12	24	250	60	63		C	10.2	
TFM45SN-15315-60R-12	15	315	60	63		D	18.0	
TFM45SN-22315-60R-12	22	315	60	63		D	18.0	
TFM45SN-26315-60R-12	26	315	60	63		D	18.0	

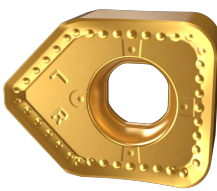
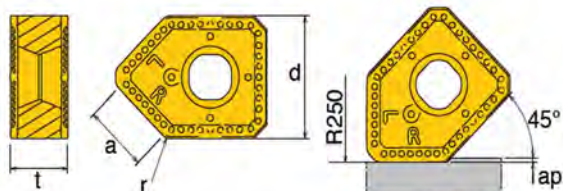
©Standard cutter head without internal cooling; Inserts need to be ordered separately.

Spare Parts

Model	Screw	Wrench
TFM45SN	CST4010	CTS15W

							Intro						
							• Flat mounted double-sided 8-edge insert • Large positive rake angle design for smooth cutting • The tool's performance and lifespan during trials have received high recognition from customers						
Model	Dimension					Grade							
	D	S	a	b	R	CT5320	CT5420	CT7320	CT7420	CT8330	CT9320	CT101	
SNKX 1206XTN	12.7	6.35	1.25	1.3	0.4			●		●	●		
SNHX 1206XTN-ML						●		●					
SNHX 1206XTN-AL												●	

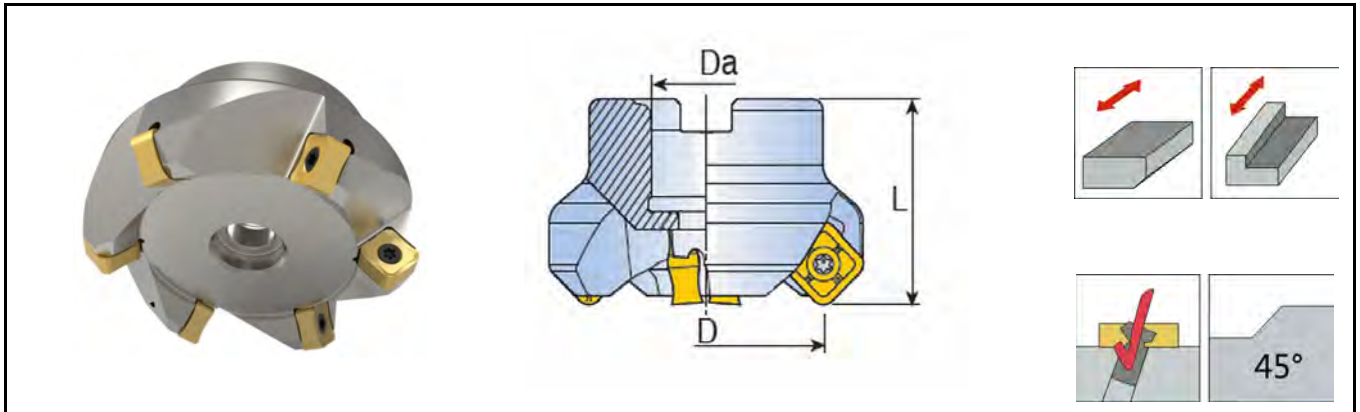
SNKX-W Finishing Edge insert

								Intro				
								• Flat mounted insert • Designed for a 45° main angle tool holder • Double-sided with a total of 4 cutting edges				
Model	Edge Length	Kr (°)	Dimension (mm)						Grade			
			d	t	a	r			CT5320	CT7320	CT8320	CT9320
SNKX 1206ANSN-W	12	45	12.7	6.45	6.9	0.4				●		

SN: CFM45SN

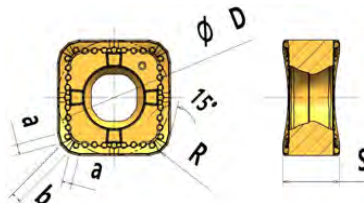


Face Mill Cutter, $Kr=45^\circ$



Model		Dimension (mm)			Max. Cutting Depth	I/F Type	Kg	Insert
		D	Da	L				
CFM45SN-463A22R-17	4	63	22	50	7.8	A	1.0	SNKX 1707
CFM45SN-580A27R-17	5	80	27	50		A	1.5	
CFM45SN-7100B32R-17	7	100	32	50		B	2.3	
CFM45SN-8125B40R-17	8	125	40	63		B	4.0	
CFM45SN-10125B40R-17	10	125	40	63		B	4.0	
CFM45SN-10160C40R-17	10	160	40	63		C	5.4	
CFM45SN-12160C40R-17	12	160	40	63		C	5.4	
CFM45SN-12200C60R-17	12	200	60	63		C	7.5	
CFM45SN-14250C60R-17	14	250	60	63		C	13.0	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

							Intro						
							• Flat mounted double-sided 8-edge insert • Large positive rake angle design for smooth cutting • The tool's performance and lifespan during trials have received high acclaim from customers						
Model	Dimension					Grade							
	D	S	a	b	R	CT5320	CT5420	CT7320	CT7420	CT8330	CT9320	CT101	
SNKX 1707XTN-M	17.2	7.8	1.6	1.5	0.5	●		●					

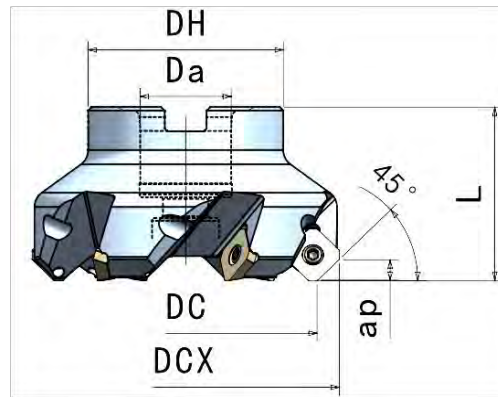
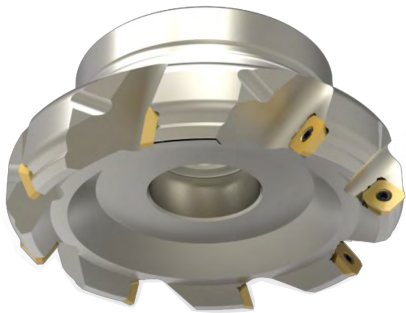
Spare Parts

Model	Screw	Wrench
		
CFM45SN-17	CSG5016	CTS20W

SE: CFM45SE



Face Milling Cutter, $K_r=45^\circ$

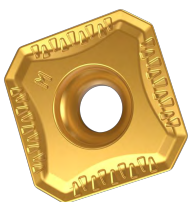
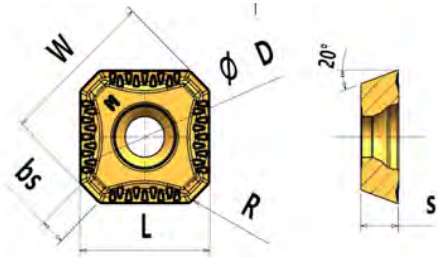


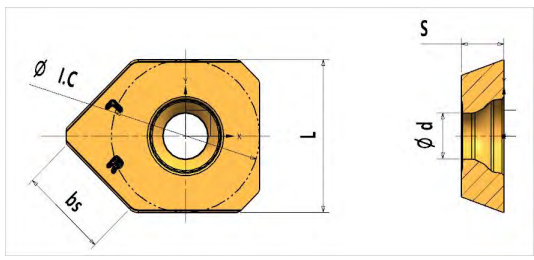
Model		Dimension (mm)					I/F Type	Kg	Insert
		DC	DCX	Da	L	ap			
CFM45SE-450A22R-12	4	50	62	22	40	6	A	0.3	SEKT 12T3
CFM45SE-563A22R-12	5	63	75	22	40	6	A	0.5	
CFM45SE-680A27R-12	6	80	92	27	50	6	A	1.2	
CFM45SE-7100B32R-12	7	100	112	32	50	6	B	1.2	
CFM45SE-8125B40R-12	8	125	137	40	63	6	B	2.6	
CFM45SE-10160C40R-12	10	160	172	40	63	6	C	4.3	
CFM45SE-12200C60R-12	12	200	212	60	63	6	C	7.6	
CFM45SE-14250C60R-12	14	250	262	60	63	6	C	13.5	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

Spare Parts

Model	Screw	Wrench
CFM45SE	CSC3580	CTS15W

		Intro									
		• Flat positive insert • Large positive rake angle, facilitates smooth cutting; versatile face milling insert. • The tool holder is designed for a 45° main cutting angle. • Can be used in conjunction with finishing inserts to improve surface roughness.									
		Dimension (mm)						Grade			
Model	Edge Length	L	D	S	bs	R	W	CT5420	CT7320	CT8420	CT8520
SEKT 12T3AFTN-M	12	13.15	13.15	3.8	2.5	0.8	15.75	●	●		

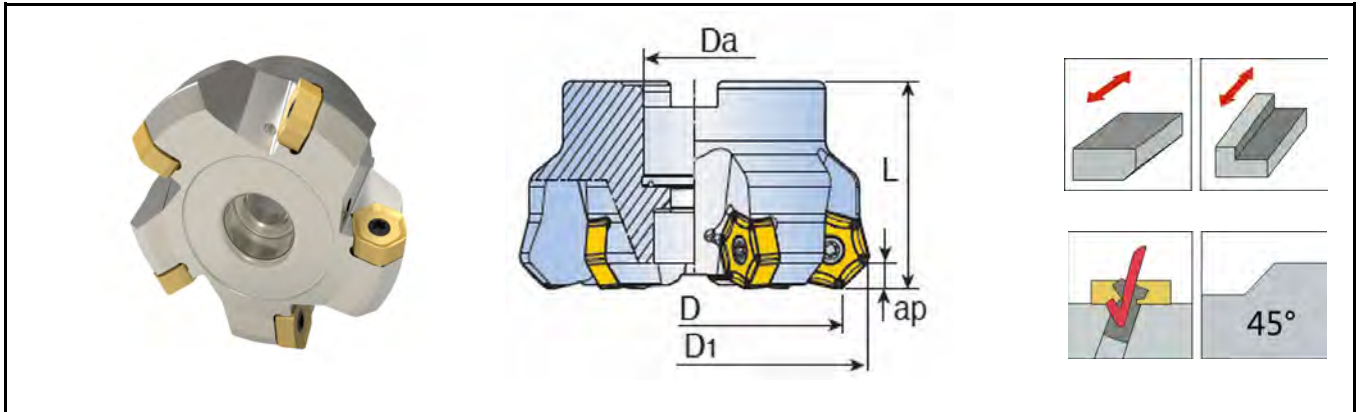
		Intro									
		• Specialized finishing insert, provides good surface roughness. • The tool holder is designed for a 45° main cutting angle.									
		Dimension (mm)						Grade			
Model	Edge Length	L	ΦI.C	S	Φd	bs	R	CT5420	CT7320	CT8420	CT8520
SEKT 12T3AFTN-WC	12	13.4	13.4	3.97	4.1	2.55	—	○	●		



HN: TFM45HNS



Face Milling Cutter, $Kr=45^\circ$



Model		Dimension (mm)					I/F Type	 Kg	Insert
		D	D1	Da	L	ap			
TFM45HNS-563-22R-10	5	63	77	22	50	6.1	A	0.8	HNKX 1006
TFM45HNS-663-22R-10	6	63	77	22	50	6.1	A	0.9	
TFM45HNS-680-27R-10	6	80	94	27	55	6.1	A	1.6	
TFM45HNS-780-27R-10	7	80	94	27	55	6.1	A	1.6	
TFM45HNS-7100-32R-10	7	100	114	32	63	6.1	B	2.7	
TFM45HNS-9100-32R-10	9	100	114	32	63	6.1	B	2.8	
TFM45HNS-8125-40R-10	8	125	139	40	63	6.1	B	3.4	
TFM45HNS-10125-40R-10	10	125	139	40	63	6.1	B	3.4	
TFM45HNS-12125-40R-10	12	125	139	40	63	6.1	B	3.4	
TFM45HNS-10160-40R-10	10	160	174	40	63	6.1	C	4.8	
TFM45HNS-12160-40R-10	12	160	174	40	63	6.1	C	4.8	
TFM45HNS-14160-40R-10	14	160	174	40	63	6.1	C	4.9	
TFM45HNS-12200-60R-10	12	200	214	60	63	6.1	C	6.9	
TFM45HNS-16200-60R-10	16	200	214	60	63	6.1	C	7.0	
TFM45HNS-16250-60R-10	16	250	264	60	63	6.1	C	11.8	
TFM45HNS-20250-60R-10	20	250	264	60	63	6.1	C	12.0	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

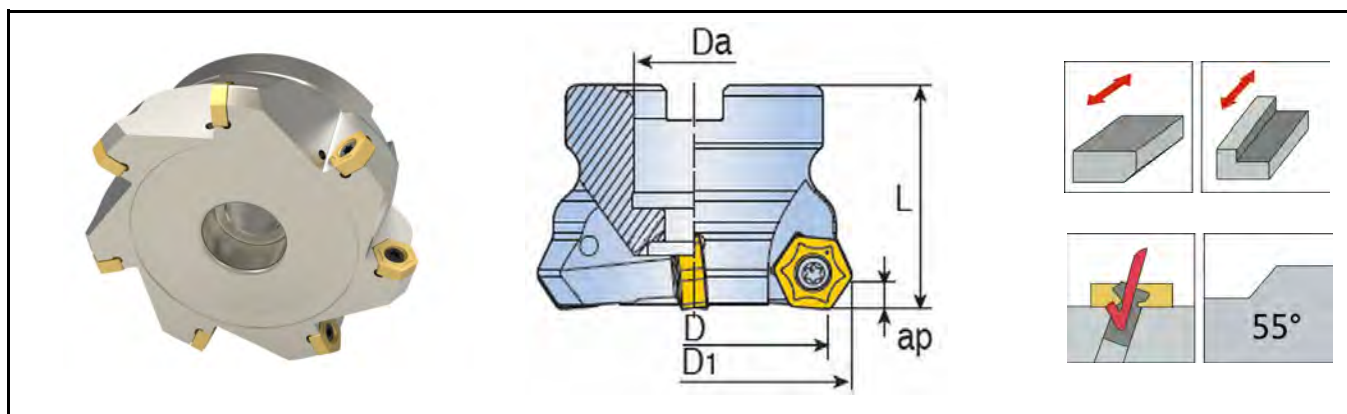
Spare Parts

Model	Screw	Wrench
		
TFM45HNS	CSG5016	CTS20W

HN: TFM55AHNS



Face Milling Cutter, $Kr=55^\circ$



Model		Dimension (mm)					I/F Type		Insert
		D	D1	Da	L	ap			
TFM55AHNS 450-22R-05B	4	50	58.16	22	40	5	A	0.4	HNKX 0504
TFM55AHNS 650-22R-05	6	50	58.16	22	40	5	A	0.4	
TFM55AHNS 563-22R-05B	5	63	71.16	22	40	5	A	0.6	
TFM55AHNS 863-22R-05	8	63	71.16	22	40	5	A	0.5	
TFM55AHNS 680-27R-05B	6	80	88.16	27	50	5	A	1.3	
TFM55AHNS 880-27R-05	8	80	88.16	27	50	5	A	1.2	
TFM55AHNS 1080-27R-05	10	80	88.16	27	50	5	A	1.2	
TFM55AHNS 7100-32R-05B	7	100	108.16	32	50	5	B	2.0	
TFM55AHNS 10100-32R-05	10	100	108.16	32	50	5	B	2.0	
TFM55AHNS 12100-32R-05	12	100	108.16	32	50	5	B	2.0	
TFM55AHNS 10125-40R-05B	10	125	133.16	40	63	5	B	3.2	
TFM55AHNS 12125-40R-05	12	125	133.16	40	63	5	B	3.4	
TFM55AHNS 16125-40R-05	16	125	133.16	40	63	5	B	3.2	
TFM55AHNS 12160-40R-05B	12	160	168.16	40	63	5	C	4.7	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

©The tool holder model ending with "B" is designed with an unequal tooth configuration.

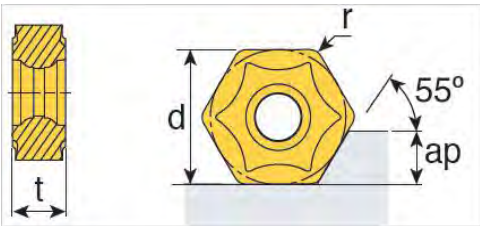
Spare Parts

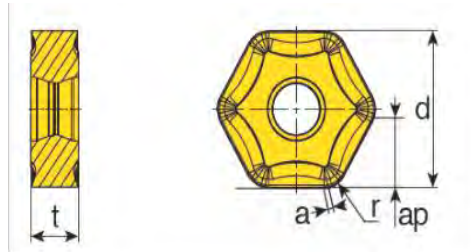
Model	Screw	Wrench
TFM55AHNS	CST4010	CTS15W

HN: TFM55AHNS



Face Milling Cutter, $Kr=55^\circ$

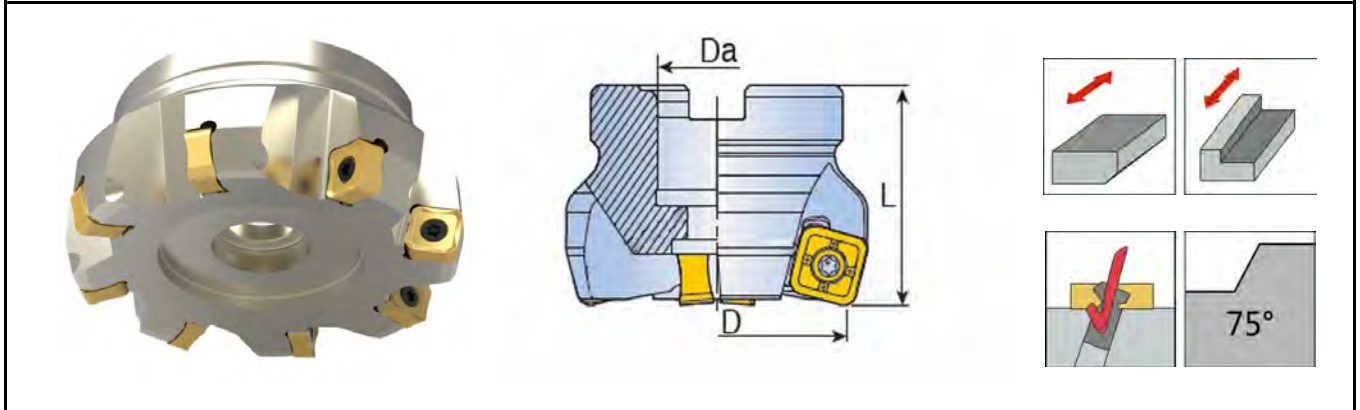
						Intro				
							• Flat Insert • Double-Sided Insert with 12 Cutting Edges			
Model	Edge Length	Dimension (mm)				Feed (mm/Tooth)	Grade			
		d	t	ap	r		CT5320	CT5420	CT7320	CT7420
HNKX 050410N-MM	05	12.7	5.0	5.0	1.0	0.05~0.2	●		●	

						Intro				
						• Flat Insert • Double-Sided Insert with 12 Cutting Edges				
Model	Edge Length	Dimension (mm)				Feed (mm/Tooth)	Grade			
		d	t	ap	r		CT5320	CT5420	CT7320	CT7420
HNKX 1006ANTN-M	10	19.05	6.35	6.1	1.0	0.1~0.2	●		●	

SN: TFM75SN



Face Milling Cutter, $K_r=75^\circ$



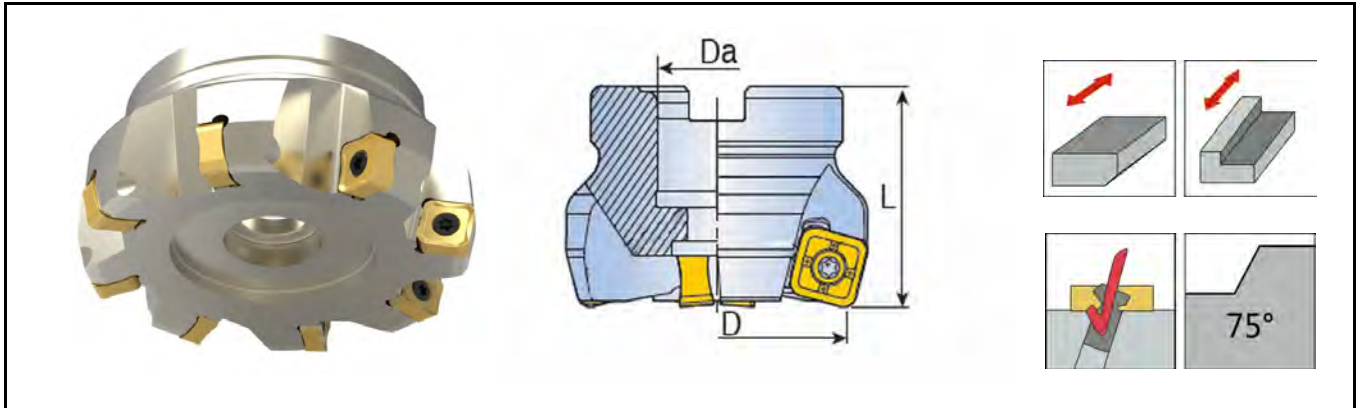
Model		Dimension (mm)			Max. Cutting Depth	I/F Type	Kg	Insert
		D	Da	L				
TFM75SN-350-22R-12	3	50	22	40	9.0	A	0.3	SNKX 1206
TFM75SN-450-22R-12	4	50	22	40		A	0.3	
TFM75SN-550-22R-12	5	50	22	40		A	0.3	
TFM75SN-463-22R-12	4	63	22	40		A	0.5	
TFM75SN-563-22R-12	5	63	22	40		A	0.5	
TFM75SN-663-22R-12	6	63	22	40		A	0.5	
TFM75SN-580-27R-12	5	80	27	50		A	1.2	
TFM75SN-680-27R-12	6	80	27	50		A	1.2	
TFM75SN-1080-27R-12	10	80	27	50		A	1.2	
TFM75SN-6100-32R-12	6	100	32	50		B	1.8	
TFM75SN-8100-32R-12	8	100	32	50		B	1.8	
TFM75SN-12100-32R-12	12	100	32	50		B	1.8	
TFM75SN-7125-40R-12	7	125	40	63		B	3.0	
TFM75SN-10125-40R-12	10	125	40	63		B	3.0	
TFM75SN-16125-40R-12	16	125	40	63		B	3.0	
TFM75SN-8160-40R-12	8	160	40	63		C	4.6	
TFM75SN-12160-40R-12	12	160	40	63		C	4.6	
TFM75SN-20160-40R-12	20	160	40	63		C	4.6	
TFM75SN-10200-60R-12	10	200	60	63		C	6.5	
TFM75SN-18200-60R-12	18	200	60	63		C	6.5	
TFM75SN-22200-60R-12	22	200	60	63		C	6.5	
TFM75SN-12250-60R-12	12	250	60	63		C	10.2	
TFM75SN-20250-60R-12	20	250	60	63		C	10.2	
TFM75SN-24250-60R-12	24	250	60	63		C	10.2	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

SN: TFM75SN

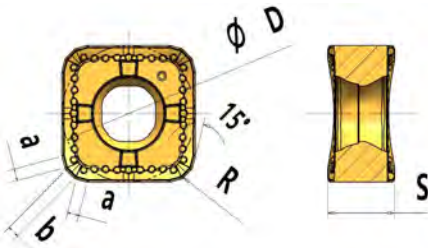


Face Mill Cutter, $K_r=75^\circ$



Model		Dimension (mm)			Max. Cutting Depth	I/F Type		Insert
		D	Da	L				
TFM75SN-15315-60R-12	15	315	60	63	9.0	D	18.0	SNKX 1206
TFM75SN-22315-60R-12	22	315	60	63		D	18.0	
TFM75SN-26315-60R-12	26	315	60	63		D	18.0	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

							Intro						
							• Flat mounted double-sided 8-edge insert • Large positive rake angle design for smooth cutting • The tool's performance and lifespan during trials have received high acclaim from customers						
Model	Dimension					Grade							
	D	S	a	b	R	CT5320	CT5420	CT7320	CT7420	CT8330	CT9320	CT101	
SNKX 1206XTN	12.7	6.35	1.25	1.3	0.4			●		●	●		
SNHX 1206XTN-ML						●		●					
SNHX 1206XTN-AL											●		

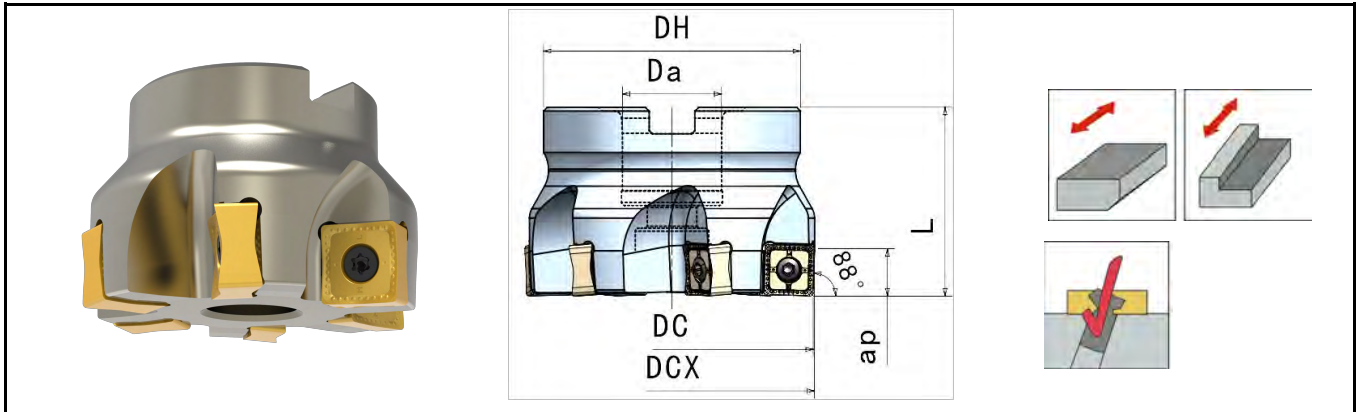
Spare Parts

Model	Screw	Wrench
TFM75SN	CST4010	CTS15W

SN: CFM88SN



Face Mill Cutter, Kr=88°



Model	kr (°)		Dimension (mm)				I/F Type	Kg	Insert
			DC	DCX	Da	L			
CFM88SN-450A22R-13-B	88°	4	50	51	22	40	A	0.4	SNGX 1306ZN
CFM88SN-550A22R-13		5	50	51	22	40	A	0.4	
CFM88SN-563A22R-13-B		5	63	64	22	40	A	0.6	
CFM88SN-663A22R-13		6	63	64	22	40	A	0.6	
CFM88SN-680A27R-13-B		6	80	81	27	50	A	1.3	
CFM88SN-780A27R-13		7	80	81	27	50	A	1.3	
CFM88SN-980A27R-13		9	80	81	27	50	A	1.3	
CFM88SN-7100B32R-13-B		7	100	101	32	50	B	1.8	
CFM88SN-8100B32R-13		8	100	101	32	50	B	1.8	
CFM88SN-11100B32R-13		11	100	101	32	50	B	1.8	
CFM88SN-10125B40R-13		10	125	125.9	40	63	B	2.9	
CFM88SN-14125B40R-13		14	125	125.9	40	63	B	2.9	
CFM88SN-12160C40R-13		12	160	160.8	40	63	C	4.3	
CFM88SN-18160C40R-13		18	160	160.8	40	63	C	4.3	
CFM88SN-14200C60R-13		14	200	200.8	60	63	C	6.2	
CFM88SN-22200C60R-13		22	200	200.8	60	63	C	6.2	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

©D1 is the maximum diameter of the tool holder, -B represents the variable pitch tool holder

©If ap is less than 6.7, the main angle is 88 degrees, If ap is greater than 6.7, the main angle is 86 degrees

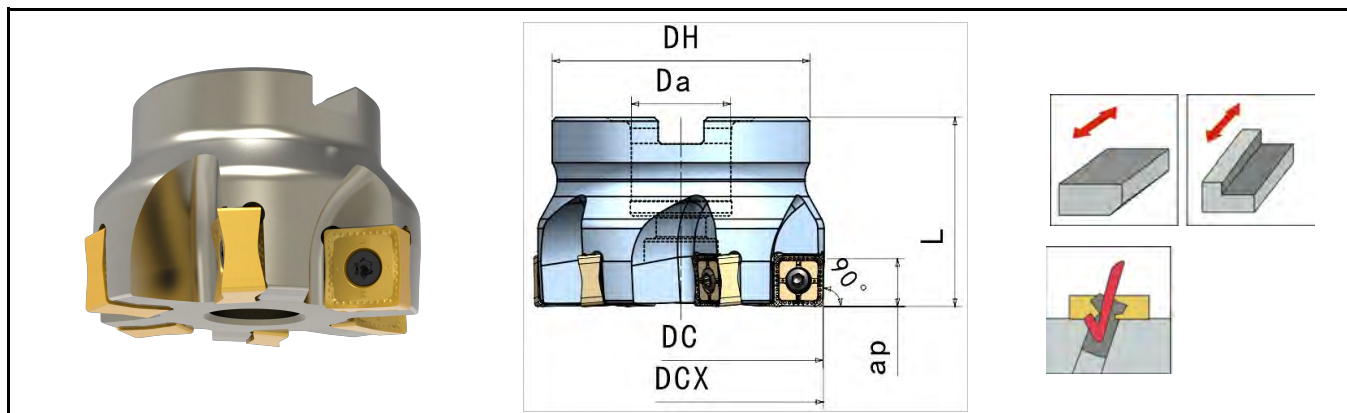
Spare Parts

Model	Screw	Wrench
CFM88SN	CST4010	CTS15W

SN: CFM90SN



Face Mill Cutter, Kr=90°



Model	kr (°)		Dimension (mm)				I/F Type	 Kg	Insert
			DC	DCX	Da	L			
CFM90SN-450A22R-13-B	90°	4	50	50.84	22	40	A	0.4	SNGX 1306
CFM90SN-550A22R-13		5	50	50.84	22	40	A	0.4	
CFM90SN-563A22R-13-B		5	63	63.52	22	40	A	0.6	
CFM90SN-663A22R-13		6	63	63.52	22	40	A	0.6	
CFM90SN-680A27R-13-B		6	80	80.6	27	50	A	1.3	
CFM90SN-780A27R-13		7	80	80.6	27	50	A	1.3	
CFM90SN-980A27R-13		9	80	80.6	27	50	A	1.3	
CFM90SN-7100B32R-13-B		7	100	100.58	32	50	B	1.8	
CFM90SN-8100B32R-13		8	100	100.58	32	50	B	1.8	
CFM90SN-13100B32R-13		13	100	100.58	32	50	B	1.9	
CFM90SN-10125B40R-13		10	125	125.72	40	63	B	3.0	
CFM90SN-16125B40R-13		16	125	125.72	40	63	B	3.0	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

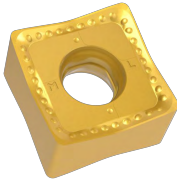
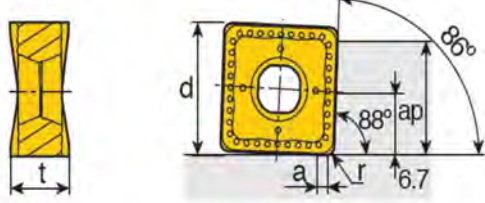
©D1 is the maximum diameter of the tool holder, -B represents the variable pitch tool holder.

©If ap is less than 6.7, the main angle is 90 degrees, If ap is greater than 6.7, the main angle is 87 degrees.

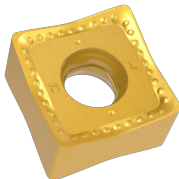
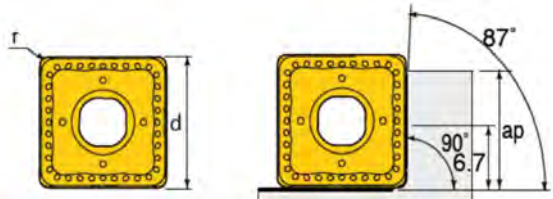
©Note that this tool holder is not compatible with the SNGX1306ZN insert type.

Spare Parts

Model	Screw	Wrench
		
CFM90SN	CST4010	CTS15W

							Intro				
							• Double-sided 8-edge insert • Large positive rake angle design for smooth cutting • Suitable for most step milling and face milling applications				
Model	Edge Length	Kr (°)	Dimension (mm)				Grade				
			d	a	r	ap	CT5320	CT7320	CT8320	CT8520	CT101
SNGX 1306ZN-M	13	88	13.5	2.2	0.8	2-10	●	●	●		
SNGX 1306ZN-ML	13	88	13.5	2.2	0.8	2-10	●	●	○	●	

©SNGX1306ZN-M/ML insert type is compatible with the 88° main angle tool holder

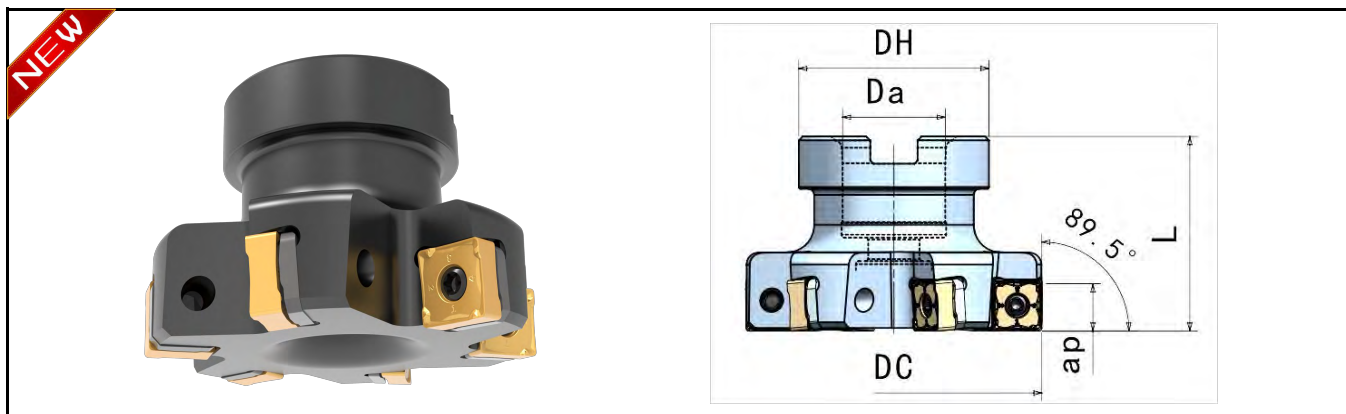
						Intro				
						• Double-sided 8-edge insert • Large positive rake angle design for smooth cutting • Suitable for most step milling and face milling applications				
Model	Edge Length	Kr (°)	Dimension (mm)			Grade				
			d	r	ap	CT5320	CT7320	CT8320	CT8520	CT101
SNGX 130608-M	13	90	13.5	0.8	2-10	●	●	●		
SNGX 130608-ML				0.8		●	●	●	●	
SNGX 130608-AL				0.8						●
SNGX 130612-M				1.2		○	●			
SNGX 130616-M				1.6		○	●			
SNGX 130620-M				2.0		○	●			
SNGX 130625-M				2.5		○	●			
SNGX 130630-M				3.0		○	●			
SNGX 130634-M				3.4		○	●			

©SNGX130608-M/ML/AL insert type is compatible with the 88° main angle tool holder

SN: CFM89.5SN

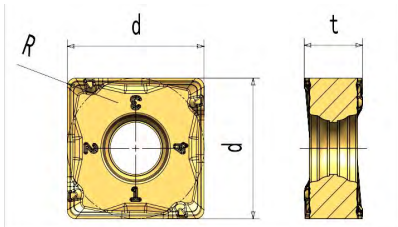


Face Mill Cutter, $Kr=89.5^\circ$



Model		Dimension (mm)					I/F Type	Kg	Insert
		DC	Da	L	ap	DH			
CFM89.5SN-563A22R-13	5	63	22	40	10	42	A	0.45	SNMF 1305
CFM89.5SN-680A27R-13	6	80	27	50	10	50	A	0.78	
CFM89.5SN-880A27R-13	8	80	27	50	10	50	A	0.80	
CFM89.5SN-8100B32R-13	8	100	32	50	10	61	B	1.10	
CFM89.5SN-10100B32R-13	10	100	32	50	10	61	B	1.20	
CFM89.5SN-10125B40R-13	10	125	40	63	10	73	B	1.70	
CFM89.5SN-12125B40R-13	12	125	40	63	10	73	B	1.80	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

				Intro		
				• Negative double-sided insert • Number of indexable positions: 8 times		
Model	Dimension (mm)			Grade		
	d	t	R	CT5320	CT5520	CT7420
SNMF 130508R-M	13.0	5.55	0.8	●	●	●

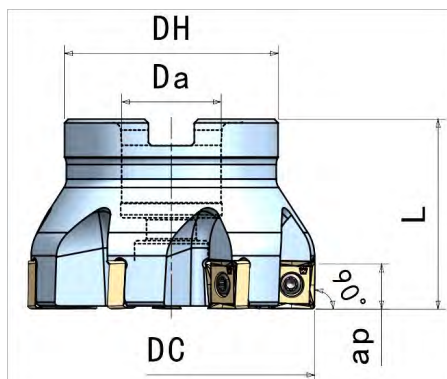
Spare Parts

Model	Insert Screw	Wrench	Tool Pad	Tool pad screw	Wrench
CFM89.5SN	CSG4013-P	CTS15W-P	5532-472-04	CSD6040	CBL40

SNHX: CFM90SN



Face Mill Cutter, $Kr=90^\circ$



Model		Dimension (mm)					I/F Type		Insert
		DC	Da	L	ap	DH			
CFM90SN-450A22R-12	4	50	22	40	10	47	A	0.32	SNHX 1205
CFM90SN-550A22R-12	5	50	22	40	10	47	A	0.32	
CFM90SN-563A22R-12	5	63	22	40	10	47	A	0.48	
CFM90SN-663A22R-12	7	63	22	40	10	47	A	0.45	
CFM90SN-580A27R-12	5	80	27	50	10	58	A	0.96	
CFM90SN-780A27R-12	7	80	27	50	10	58	A	1.03	
CFM90SN-6100B32R-12	6	100	32	50	10	70	B	1.69	
CFM90SN-8100B32R-12	8	100	32	50	10	70	B	1.58	
CFM90SN-7125B40R-12	7	125	40	63	10	85	B	2.79	
CFM90SN-10125B40R-12	10	125	40	63	10	85	B	2.98	
CFM90SN-8160C40R-12	8	160	40	63	10	110	C	4.10	
CFM90SN-12160C40R-12	12	160	40	63	10	110	C	4.15	

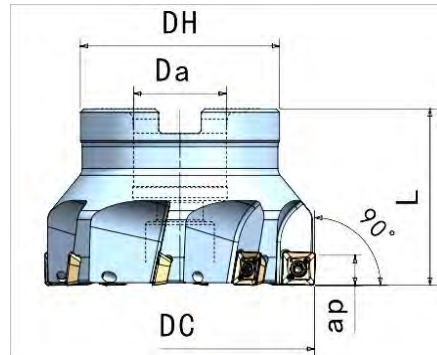
©Standard cutter head without internal cooling; Inserts need to be ordered separately.

		Intro								
		• Flat-mounted double-sided insert with 8 cutting edges at 90 degrees, ideal for side milling and layer milling. • Excellent axial depth of cut performance, with a maximum AP of up to 10mm. • Integral design of the insert for smooth cutting edges								
Model	Edge Length	Dimension (mm)				Grade				
		D	S	Bs	R	CT5320	CT5420	CT7420	CT8420	CT9320
SNHX 120508-M	12	12.7	4.65	—	0.8		●	○		
SNHX 120508-MW	12	12.7	4.65	1.7	0.8	○	○	○	●	

SE: CFM90SE

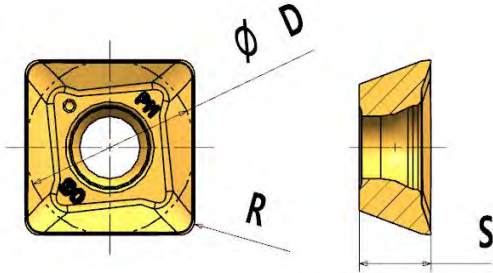


Face Mill Cutter; $Kr=90^\circ$



Model		Dimension (mm)				I/F Type	Weight	Insert
		DC	Da	L	Kr			
CFM90SE-550L40A22R-09	5	50	22	40	90°	A	0.4	SE 09T3
CFM90SE-750L40A22R-09	7	50	22	40		A	0.4	
CFM90SE-663L40A22R-09	6	63	22	40		A	0.5	
CFM90SE-863L40A22R-09	8	63	22	40		A	0.5	
CFM90SE-880L50A27R-09	8	80	27	50		A	1.0	
CFM90SE-1080L50A27R-09	10	80	27	50		A	1.0	
CFM90SE-8100L50B32R-09	8	100	32	50		B	1.8	
CFM90SE-10100L50B32R-09	10	100	32	50		B	1.8	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

		Intro				
						
Model	Edge Length	Dimension (mm)			Grade	
		D	S	R	CT5320	CT7320
SEET 09T308PER-PM	09	9.525	4.0	0.8	●	○

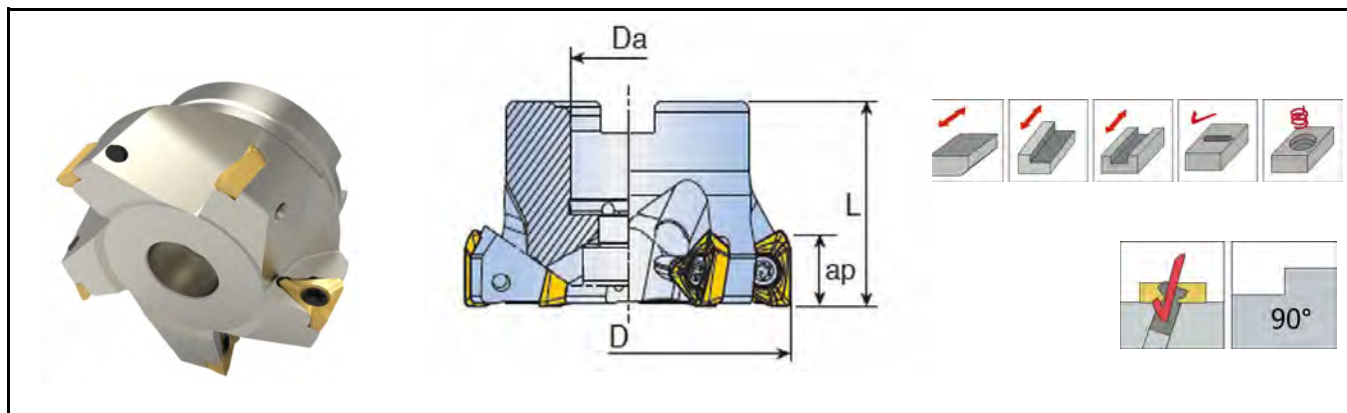
Spare Parts

Model	Screw	Wrench
CFM90SE -09	CSC3080	CTS10W

3P: 3P CFM90



Face Mill Cutter; $K_r=90^\circ$



Model		Dimension (mm)				I/F Type	Kg	Insert
		D	Da	L	ap			
3P CFM90-450A22R-15	4	50	22	40	11	A	0.3	3PKT 1505 3PHT 1505
3P CFM90-550A22R-15	5	50	22	40	11	A	0.3	
3P CFM90-463A22R-15-B	4	63	22	40	11	A	0.5	
3P CFM90-663A22R-15	6	63	22	40	11	A	0.5	
3P CFM90-480A27R-15-B	4	80	27	50	11	A	1.0	
3P CFM90-780A27R-15	7	80	27	50	11	A	1.0	
3P CFM90-880A27R-15	8	80	27	50	11	A	1.0	
3P CFM90-6100A32R-15-B	6	100	32	50	11	A	1.8	
3P CFM90-8100A32R-15	8	100	32	50	11	A	1.9	
3P CFM90-10100A32R-15	10	100	32	50	11	A	1.9	
3P CFM90-7125A40R-15-B	7	125	40	63	11	A	3.0	
3P CFM90-10125A40R-15	10	125	40	63	11	A	3.1	
3P CFM90-12125A40R-15	12	125	40	63	11	A	3.1	
3P CFM90-12160C40R-15	12	160	40	63	11	C	4.4	
3P CFM90-15160C40R-15	15	160	40	63	11	C	4.4	
3P CFM90-15200C60R-15	15	200	60	63	11	C	6.0	
3P CFM90-18200C60R-15	18	200	60	63	11	C	5.8	

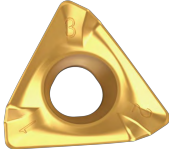
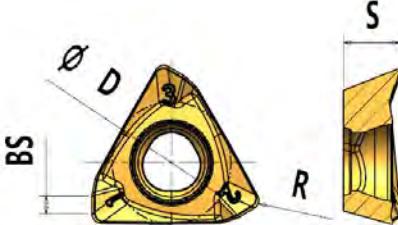
©Standard tool holder without internal cooling; inserts need to be ordered separately.

Model	Screw	Wrench
3P CFM90-15	CST4010	CTS15W

3P: 3P CFM90



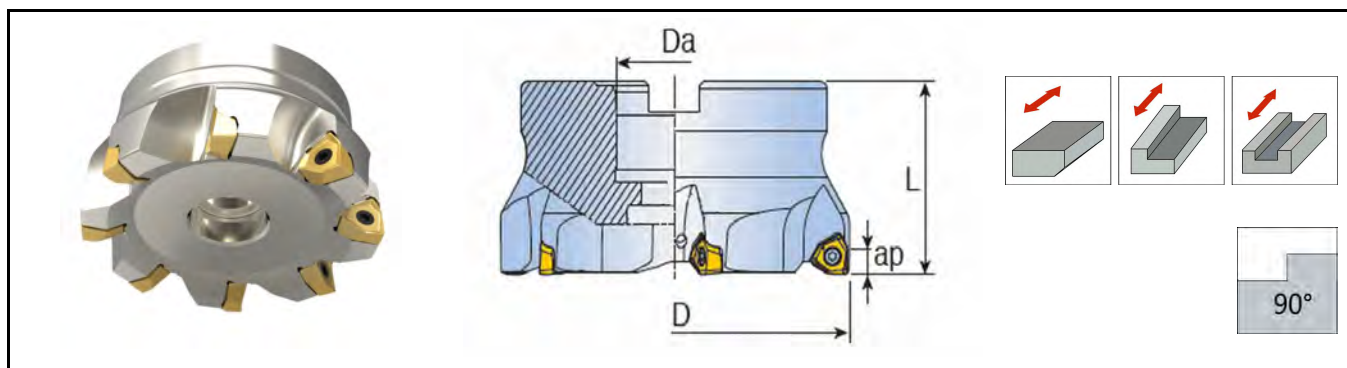
Face Mill Cutter; $Kr=90^\circ$

						Intro			
						• Flat-mounted positive 3-flute insert • Large positive rake angle for smooth cutting • Tool holder designed for 90° main angle • Versatile milling insert suitable for most step milling and face milling applications.			
Model	Dimension (mm)					Grade			
	D	S	APMAX	R	BS	CT101	CT5320	CT7320	CT8320
3PKT 150508R-M	10.7	5.0	11.0	0.8	1.6		●	●	
3PKT 150508R-ML	10.7	5.0	11.0	0.8	1.6		●	●	●
3PHT 150508R-AL	10.7	5.0	11.0	0.8	1.6	●			

XN: CFM90XN



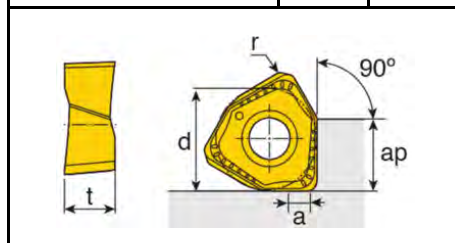
Face Mill Cutter, $Kr=90^\circ$



Model		Dimension (mm)				I/F Type		Insert
		D	Da	L	ap			
CFM90XN-440A16R-06	4	40	16	40	6.2	A	0.3	XNGU 0604
CFM90XN-450A22R-06	4	50	22	40	6.2	A	0.4	
CFM90XN-650A22R-06	6	50	22	40	6.2	A	0.4	
CFM90XN-463A22R-06	4	63	22	40	6.2	A	0.5	
CFM90XN-663A22R-06	6	63	22	40	6.2	A	0.5	
CFM90XN-763A22R-06	7	63	22	40	6.2	A	0.5	
CFM90XN-580A27R-06	5	80	27	50	6.2	A	1.0	
CFM90XN-780A27R-06	7	80	27	50	6.2	A	1.0	
CFM90XN-980A27R-06	9	80	27	50	6.2	A	1.0	
CFM90XN-6100B32R-06	6	100	32	50	6.2	B	1.9	
CFM90XN-8100B32R-06	8	100	32	50	6.2	B	1.9	
CFM90XN-11100B32R-06	11	100	32	50	6.2	B	1.9	
CFM90XN-7125B40R-06	7	125	40	63	6.2	B	3.2	
CFM90XN-11125B40R-06	11	125	40	63	6.2	B	3.2	
CFM90XN-14125B40R-06	14	125	40	63	6.2	B	3.2	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

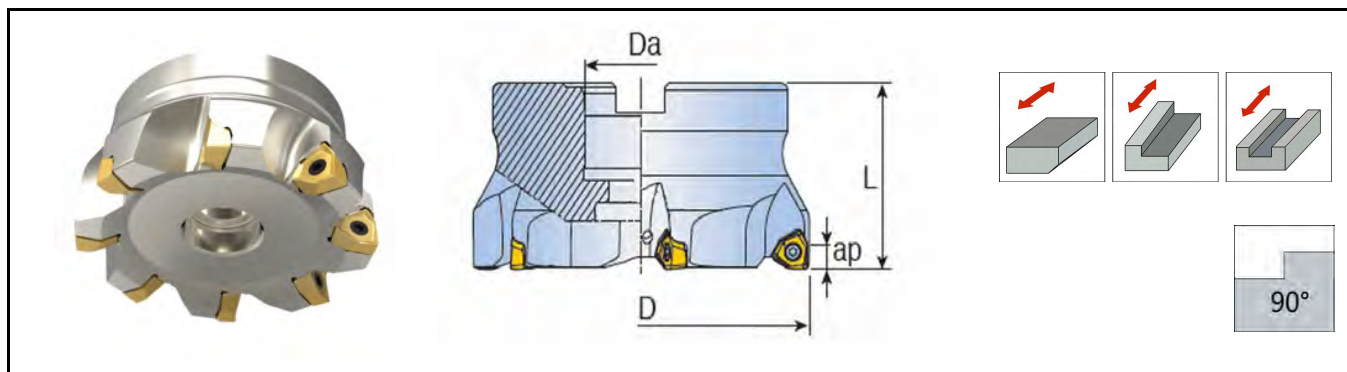
Model	Dimension (mm)						Grade			
	d	t	ap	a	r	Feed (mm/Tooth)	CT5320	CT5420	CT7320	CT7420
XNGU 060408-M	9.26	4.76	6.2	1.96	0.8	0.08-0.15	●	○	●	○
XNGU 090508-M	13.05	6.70	9.2	2.0	0.8	0.10-0.20	●	○		○
XNGU 090508-ML	13.05	6.70	9.2	2.0	0.8	0.05-0.10	●			●
XNMU 090508R-M	13.05	6.70	9.2	2.0	0.8	0.05-0.10	●	●		●



Model	Screw	Wrench
CFM90XN-06	CSC3080	CTS10W
CFM90XN-09	CST4010	CTS15W

XN: CFM90XN

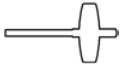
Face Mill Cutter, $Kr=90^\circ$



Model		Dimension (mm)				I/F Type		Insert
		D	Da	L	ap			
CFM90XN-450A22R-09	4	50	22	40	9.2	A	0.3	XNGU 0905
CFM90XN-550A22R-09	5	50	22	40	9.2	A	0.4	
CFM90XN-463A22R-09	4	63	22	40	9.2	A	0.5	
CFM90XN-663A22R-09	6	63	22	40	9.2	A	0.5	
CFM90XN-763A22R-09	7	63	22	40	9.2	A	0.5	
CFM90XN-580A27R-09	5	80	27	50	9.2	A	1.0	
CFM90XN-780A27R-09	7	80	27	50	9.2	A	1.1	
CFM90XN-980A27R-09	9	80	27	50	9.2	A	1.1	
CFM90XN-6100B32R-09	6	100	32	50	9.2	A	1.9	
CFM90XN-8100B32R-09	8	100	32	50	9.2	B	1.8	
CFM90XN-11100B32R-09	11	100	32	50	9.2	B	1.9	
CFM90XN-7125B40R-09	7	125	40	63	9.2	B	3.1	
CFM90XN-11125B40R-09	11	125	40	63	9.2	B	3.1	
CFM90XN-14125B40R-09	14	125	40	63	9.2	B	3.2	
CFM90XN-12160C40R-09	12	160	40	63	9.2	C	4.3	
CFM90XN-16160C40R-09	16	160	40	63	9.2	C	4.3	
CFM90XN-14200C60R-09	14	200	60	63	9.2	C	5.9	
CFM90XN-18200C60R-09	18	200	60	63	9.2	C	5.9	
CFM90XN-18250C60R-09	18	250	60	63	9.2	C	10.7	
CFM90XN-22250C60R-09	22	250	60	63	9.2	C	10.8	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

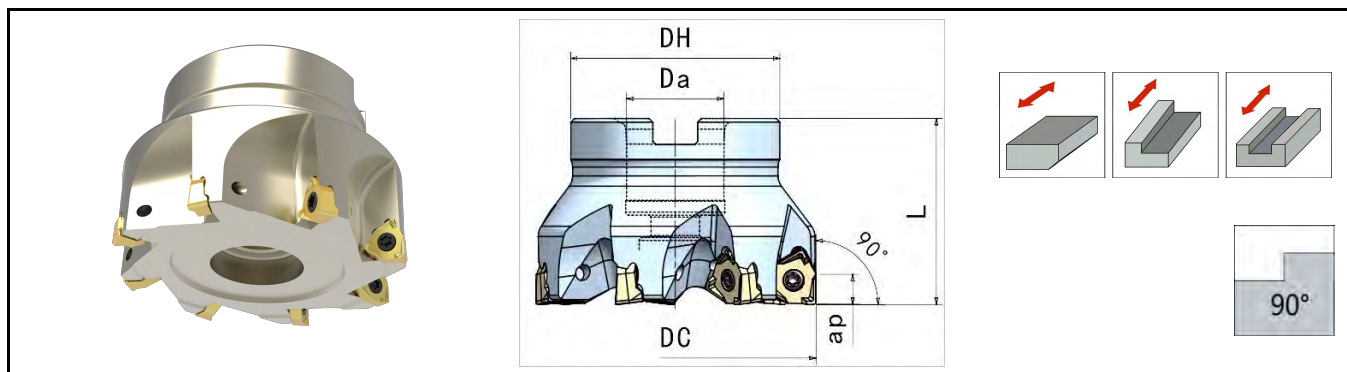
©For detailed information on the insert, please refer to page B72.。

Model	Screw	Wrench
		
CFM90XN-09	CST4010	CTS15W

WN: CFM90WN

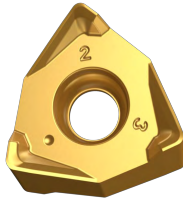
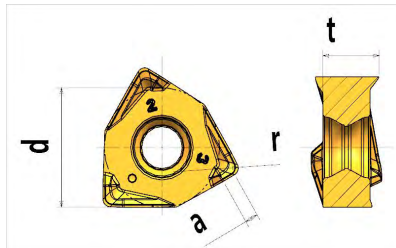


Face Mill Cutter, $Kr=90^\circ$



Model		Dimension (mm)				I/F Type		Insert
		D	Da	L	ap			
CFM90WN-640A16R-04	6	40	16	40	4.0	A	0.2	WNHX 0403
CFM90WN-740A16R-04	7	40	16	40	4.0	A	0.2	
CFM90WN-850A22R-04	8	50	22	40	4.0	A	0.4	
CFM90WN-950A22R-04	9	50	22	40	4.0	A	0.4	
CFM90WN-963A22R-04	9	63	22	40	4.0	A	0.7	
CFM90WN-1063A27R-04	10	63	22	40	4.0	A	0.7	
CFM90WN-450A22R-08	4	50	22	40	7.5	A	0.3	WNHX 0806
CFM90WN-550A22R-08	5	50	22	40	7.5	A	0.3	
CFM90WN-463A22R-08	4	63	22	40	7.5	A	0.4	
CFM90WN-663A22R-08	6	63	22	40	7.5	A	0.4	
CFM90WN-763A22R-08	7	63	22	40	7.5	A	0.4	
CFM90WN-663A27R-08	6	63	27	40	7.5	A	0.4	
CFM90WN-763A27R-08	7	63	27	40	7.5	A	0.4	
CFM90WN-580A27R-08	5	80	27	50	7.5	A	1.0	
CFM90WN-780A27R-08	7	80	27	50	7.5	A	1.0	
CFM90WN-980A27R-08	9	80	27	50	7.5	A	1.0	
CFM90WN-6100B32R-08	6	100	32	50	7.5	B	1.5	
CFM90WN-8100B32R-08	8	100	32	50	7.5	B	1.5	
CFM90WN-11100B32R-08	11	100	32	50	7.5	B	1.5	
CFM90WN-7125B40R-08	7	125	40	63	7.5	B	2.8	
CFM90WN-11125B40R-08	11	125	40	63	7.5	B	2.8	
CFM90WN-14125B40R-08	14	125	40	63	7.5	B	2.8	
CFM90WN-12160C40R-08	12	160	40	63	7.5	C	4.8	
CFM90WN-16160C40R-08	16	160	40	63	7.5	C	4.8	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

							Intro				
						• Double-sided 6-flute insert • Insert features a large positive rake angle for smooth cutting • Tool holder designed for 90° main angle • Suitable for most step milling and face milling applications.					
Insert Model	Edge Length	Dimension (mm)				Grade					
		d	r	t	a	CT5320	CT7420	CT8320	CT8420	CT9320	
WNHX 040308-ML	04	7.64	0.8	3.29	1.1	○					
WNHX 080608-ML	08	12.48	0.8	6.35	1.2~2.0	●	●				
WNHX 080608-TR	08	12.48	0.8	6.35	1.2~2.0	●	●				

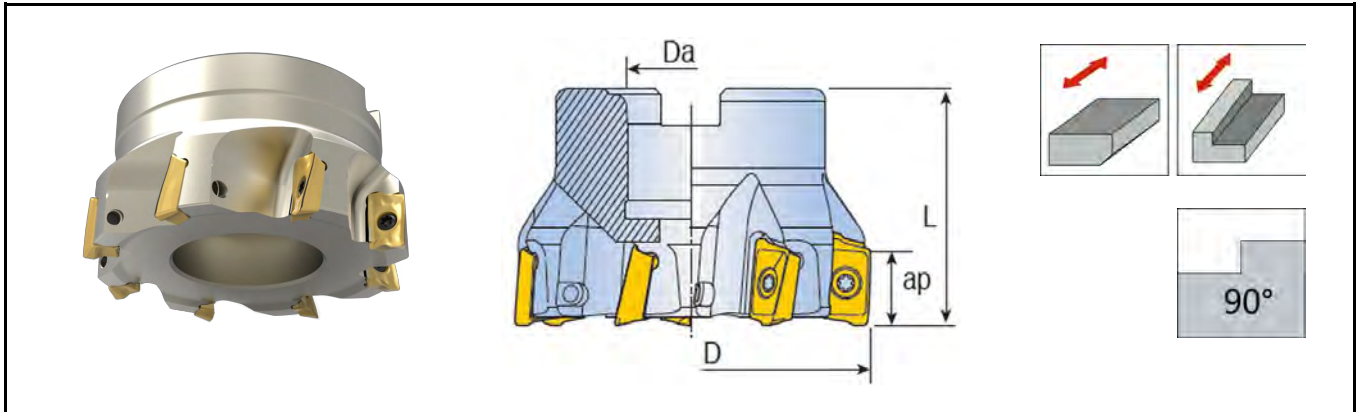


Model	Screw	Wrench
		
CFM9OWN-06	CSG2565-P	CTS08W-P
CFM9OWN-08	CSG4013-P	CTS15W-P

AP17: TFM90AP



Face Mill Cutter, $Kr=90^\circ$



Model		Dimension (mm)				I/F Type		Insert
		D	Da	L	ap			
TFM90AP 350-22R-17-B	3	50	22	40	16.1	A	0.4	APKT 1705
TFM90AP 450-22R-17-B	4	50	22	40	16.1	A	0.3	
TFM90AP 550-22R-17	5	50	22	40	16.1	A	0.4	
TFM90AP 463-22R-17-B	4	63	22	40	16.1	A	0.5	
TFM90AP 663-22R-17	6	63	22	40	16.1	A	0.5	
TFM90AP 480-27R-17-B	4	80	27	50	16.1	A	0.8	
TFM90AP 680-27R-17	6	80	27	50	16.1	A	0.9	
TFM90AP 780-27R-17	7	80	27	50	16.1	A	0.9	
TFM90AP 6100-32R-17-B	6	100	32	50	16.1	B	1.3	
TFM90AP 8100-32R-17	8	100	32	50	16.1	B	1.5	
TFM90AP 7125-40R-17-B	7	125	40	63	16.1	B	2.9	
TFM90AP 8125-40R-17	8	125	40	63	16.1	B	3.0	
TFM90AP 9125-40R-17	9	125	40	63	16.1	B	3.1	
TFM90AP 8160-40R-17-B	8	160	40	63	16.1	C	4.1	
TFM90AP 10160-40R-17	10	160	40	63	16.1	C	4.2	
TFM90AP 12200-60R-17	12	200	60	63	16.1	C	6.1	

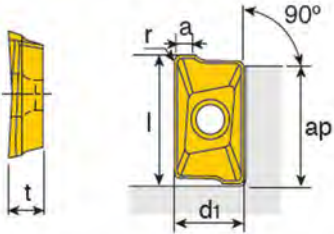
©Standard cutter head without internal cooling; Inserts need to be ordered separately.

©Tool holders with model numbers ending in B feature an unequal tooth design.

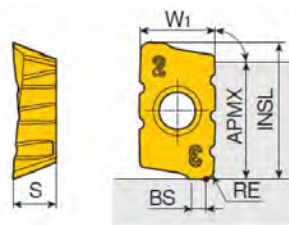
Spare Parts

Model	Screw	Wrench
TFM90AP	CSC4090	CTS15W

APKT 17

								Intro				
		• Flat-mounted positive 2-flute insert • Large positive rake angle for smooth cutting • Tool holder designed for 90° main angle • Suitable for shoulder milling, corn milling, face milling, and other general milling applications with good versatility.										
		Dimension (mm)						Grade				
Model	Edge Length	d	ap	L	t	a	r	CT5320	CT5420	CT7420	CT8320	CT8520
APKT 170508-EM	17	10.7	16.1	18.5	5.56	2.26	0.8	●		●		
APKT 170508-M	17	10.7	16.1	18.5	5.56	2.26	0.8	●		●		
APKT 170516-EM	17	10.7	16.1	18.5	5.56	2.26	1.6	●	●			

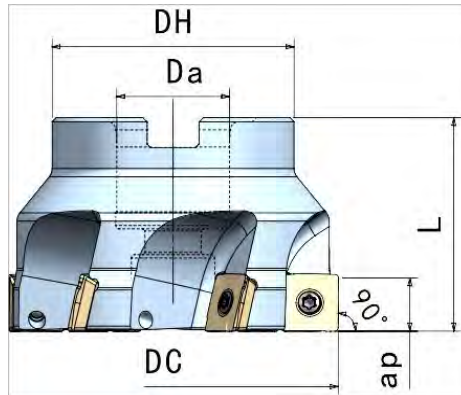
© Insert matches tool page: B76、B110、B127、B128。

		Intro										
		• Flat-mounted positive 2-flute insert • Large positive rake angle for smooth cutting • Tool holder designed for 90° main angle • Suitable for shoulder milling, corn milling, face milling, and other general milling applications with good versatility. • -SML denotes chipbreaker slot type.										
		Dimension (mm)							Grade			
Model	Edge Length	INSL	W1	APMX	S	BS	RE	CT5320	CT5420	CT7420	CT8320	CT8520
APKT 1705PER-SML	17	18.5	10.7	16.0	5.56	2.26	0.8	●		●		

SD14: CFM90SD



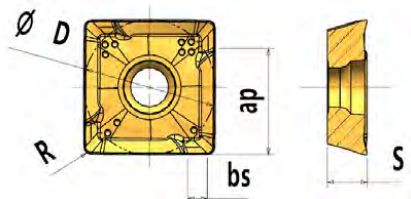
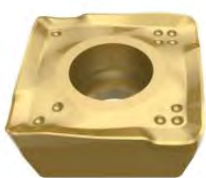
Face Mill Cutter, $Kr=90^\circ$



Model		Dimension (mm)				I/F Type	Kg	Insert
		DC	L	ap	Da			
CFM90SD-550A22R-14	5	50	40	10	22	A	0.7	SDKT 1404
CFM90SD-663A22R-14	6	63	40	10	22	A	0.7	
CFM90SD-680A27R-14	6	80	50	10	27	A	1.2	
CFM90SD-880A27R-14	8	80	50	10	27	A	1.1	
CFM90SD-8100B32R-14	8	100	50	10	32	B	1.1	
CFM90SD-10100B32R-14	10	100	50	10	32	B	1.9	
CFM90SD-10125B40R-14	10	125	63	10	40	B	1.8	
CFM90SD-12125B40R-14	12	125	63	10	40	B	1.7	
CFM90SD-15160C40R-14	15	160	63	10	40	C	3.2	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

Model	Edge Length	Dimension (mm)					Grade			
		D	ap	S	bs	R	CT5320	CT5420	CT7320	CT7420
SDKT 140408M-PM	14	13.8	10.3	4.2	2.0	0.8	●	●		●



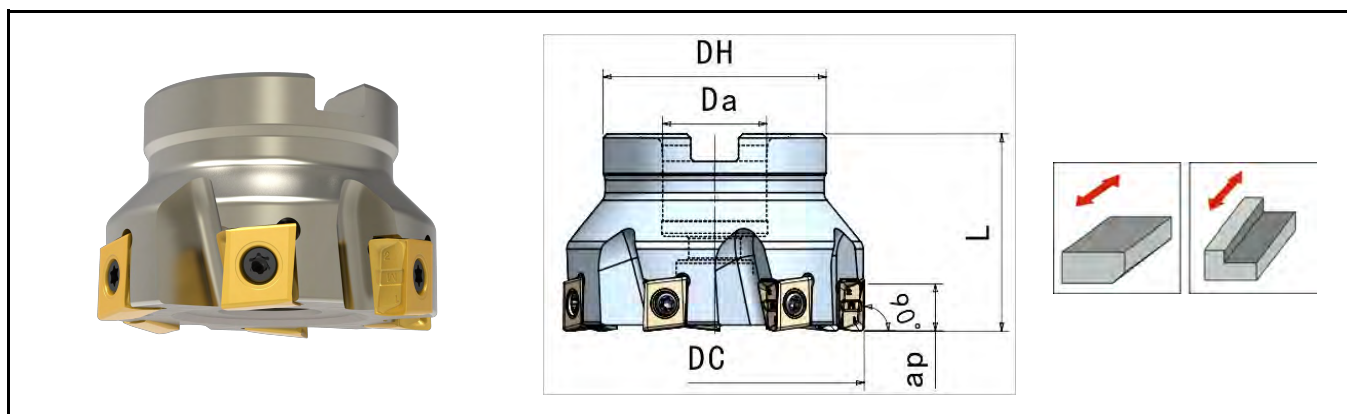
Spare Parts

Model	Screw	Wrench
CFM90SD-14	CSG3585-P	CTS10W-P

LN: CFM490LN



Face Mill Cutter, $K_r=90^\circ$



Model	kr (°)		Dimension (mm)				I/F Type	Kg	Insert
			DC	Da	L	ap			
CFM490LN-550A22R-09	90°	5	50	22	40	8.5	A	0.3	LNHU 0904
CFM490LN-750A22R-09		7	50	22	40		A	0.4	
CFM490LN-663A22R-09		6	63	22	40		A	0.5	
CFM490LN-1063A22R-09		10	63	22	40		A	0.5	
CFM490LN-450A22R-12		4	50	22	40	11.5	A	0.3	LNHU 1206
CFM490LN-650A22R-12		6	50	22	40		A	0.3	
CFM490LN-663A22R-12		6	63	22	40		A	0.5	
CFM490LN-863A22R-12		8	63	22	40		A	0.5	
CFM490LN-780A27R-12		7	80	27	50		A	1.0	
CFM490LN-1080A27R-12		10	80	27	50		A	1.2	
CFM490LN-8100B32R-12		8	100	32	50		B	2.0	
CFM490LN-12100B32R-12		12	100	32	50		B	2.1	
CFM490LN-10125B40R-12		10	125	40	63		B	3.1	
CFM490LN-14125B40R-12		14	125	40	63		B	3.4	
CFM490LN-12160C40R-12		12	160	40	63		C	4.5	
CFM490LN-16160C40R-12		16	160	40	63		C	4.7	
CFM490LN-11160C40R-16		11	160	40	63	15.0	C	4.1	LNHU 1608
CFM490LN-14160C40R-16		14	160	40	63		C	4.3	
CFM490LN-12200C60R-16		12	200	60	63		C	5.7	
CFM490LN-16200C60R-16		16	200	60	63		C	5.8	

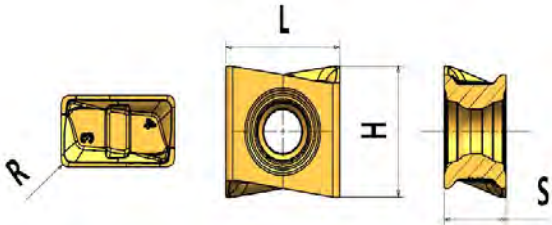
©Standard cutter head without internal cooling; Inserts need to be ordered separately. .

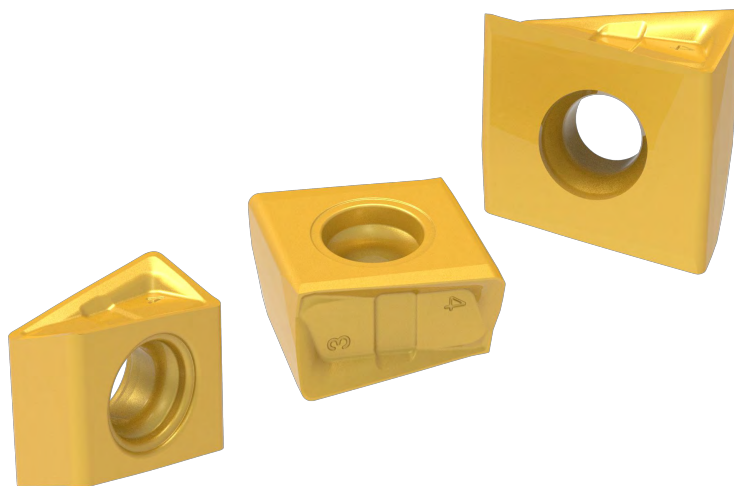
Spare Parts	Model	Screw	Wrench
	CFM490LN-09	CSC3010	CTS08W
	CFM490LN-12	CSG4013-P	CTS15W-P
	CFM490LN-16	CSG5016	CTS20W

LN: CFM490LN



Face Mill Cutter, $Kr=90^\circ$

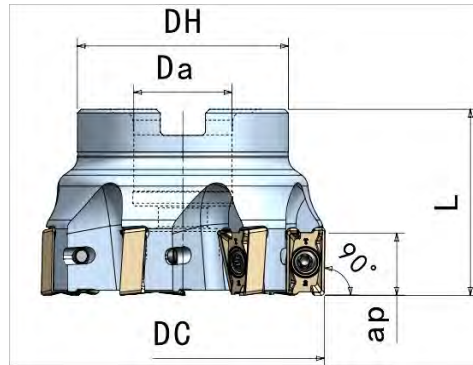
			Intro								
											
			• Equipped with four right-hand 90° cutting edges • Combination of helical cutting edges and a large positive rake angle for enhanced cutting performance • Face milling and double-sided tool holders can utilize all four cutting edges of the insert • Not suitable for use as a right-hand three-edge insert								
Model	Edge length	Kr ($^\circ$)	Dimension (mm)					Grade			
			L	H	S	R	AP _{max}	CT5320	CT7320	CT8320	CT101
LNHU 090404-M	09	90	9.02	8.55	4.48	0.4	8.5	●		●	
LNHU 120608-M	12		12.7	13.0	6.75	0.8	11.5	●	●	●	
LNHU 120612-M	12		12.7	13.0	6.75	1.2	11.5			●	
LNHU 120608-AL	12		12.7	13.0	6.75	0.8	11.5				●
LNHU 160808-M	16		16.4	16.2	8.0	0.8	15.0	●	●	●	



AN: CFM90AN



Face Mill Cutter, $K_r=90^\circ$



Model	K_r ($^\circ$)		Dimension (mm)						Insert
			DC	Da	DH	L	ap		
CFM90AN-440A16R-12	90 $^\circ$	4	40	16	37	40	11.5	0.23	ANKU 1204
CFM90AN-640A16R-12		6	40	16	37	40	11.5	0.22	
CFM90AN-740A16R-12		7	40	16	37	40	11.5	0.23	
CFM90AN-550A22R-12		5	50	22	42	40	11.5	0.31	
CFM90AN-750A22R-12		7	50	22	42	40	11.5	0.32	
CFM90AN-950A22R-12		9	50	22	42	40	11.5	0.32	
CFM90AN-663A22R-12		6	63	22	50	40	11.5	0.56	
CFM90AN-963A22R-12		9	63	22	50	40	11.5	0.56	
CFM90AN-880A27R-12		8	80	27	60	50	11.5	1.12	
CFM90AN-1080A27R-12		10	80	27	60	50	11.5	1.11	

©Standard tool holder does not come with internal cooling.

©Inserts must be ordered separately.

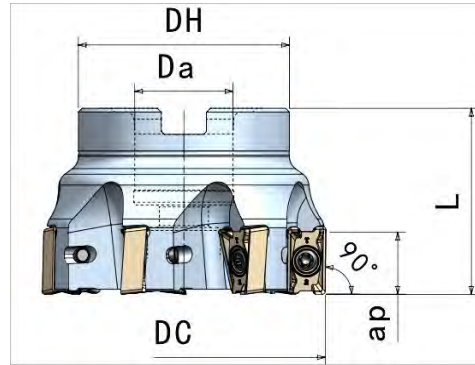
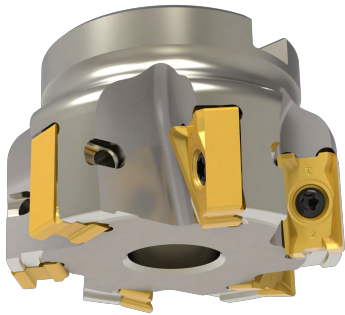
Spare Parts

Model	Screw	Wrench
		
CFM90AN-**-12	CSC3080	CTS10W

AN: CFM90AN



Face Mill Cutter, Kr=90°

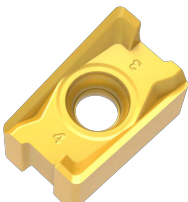
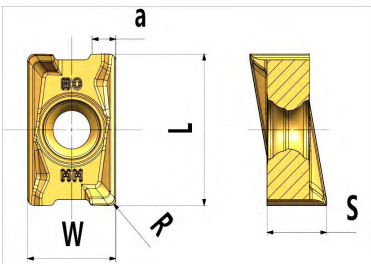


Model	Kr		Dimension (mm)						Insert
			DC	Da	DH	L	ap		
CFM90AN-440A16R-17	90°	4	40	16	38	40	16.5	0.20	ANKU 17T6 ANHU 17T6
CFM90AN-540A16R-17		5	40	16	38	40	16.5	0.19	
CFM90AN-450A22R-17		4	50	22	45	40	16.5	0.28	
CFM90AN-550A22R-17		5	50	22	45	40	16.5	0.28	
CFM90AN-650A22R-17		6	50	22	45	40	16.5	0.27	
CFM90AN-563A22R-17		5	63	22	47	40	16.5	0.50	
CFM90AN-663A22R-17		6	63	22	47	40	16.5	0.49	
CFM90AN-763A22R-17		7	63	22	47	40	16.5	0.50	
CFM90AN-580A27R-17		5	80	27	58	50	16.5	1.03	
CFM90AN-780A27R-17		7	80	27	58	50	16.5	1.02	
CFM90AN-980A27R-17		9	80	27	58	50	16.5	1.04	
CFM90AN-6100B32R-17		6	100	32	85	50	16.5	1.58	
CFM90AN-8100B32R-17		8	100	32	85	50	16.5	1.57	
CFM90AN-11100B32R-17		11	100	32	85	50	16.5	1.64	
CFM90AN-7125B40R-17		7	125	40	85	63	16.5	2.93	
CFM90AN-9125B40R-17		9	125	40	85	63	16.5	2.98	
CFM90AN-12125B40R-17		12	125	40	85	63	16.5	3.00	
CFM90AN-8160C40R-17		8	160	40	110	63	16.5	4.67	
CFM90AN-12160C40R-17		12	160	40	110	63	16.5	4.78	
CFM90AN-16160C40R-17		16	160	40	110	63	16.5	4.75	

©Standard tool holder does not come with internal cooling.
 ©Inserts must be ordered separately.

Spare Parts

Model	Screw	Wrench
CFM90AN-**-17	CSC4013	CTS15W

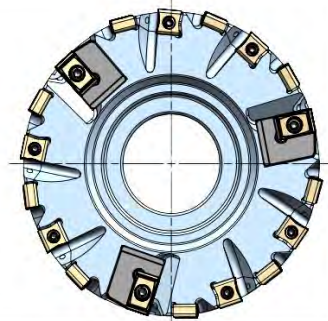
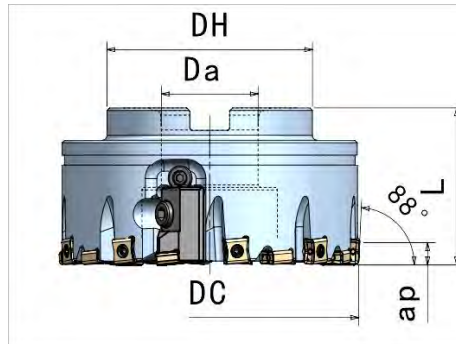
		Intro										
								• 90° double-sided 4-edge precision pressed and ground inserts, offering good economy. • Large positive rake angle helical cutting edge design for smoother cutting performance • Integral bottom finishing for excellent surface quality in flat machining.				
Model	Edge Length	Kr	Dimension (mm)					Grade				
			L	W	S	a	R	CT5320	CT5420	CT7320	CT8320	CT8520
ANKU 120404PFR-M	12	90°	12.55	7.0	4.84	1.7	0.4	●		○		
ANHU 120404PFR-M							0.4	●		○		
ANKU 120408PFR-M							0.8	●		●		
ANKU 120408PER-MM							0.8	●		○	●	
ANKU 120412PFR-M							1.2	●		○		
ANKU 17T608PFR-M	17	90°	17.5	10.5	6.95	2.7	0.8	●		●	●	●
ANKU 17T608PER-MM							0.8	●		○		
ANHU 17T608PER-MM							0.8	●		○		
ANHU 17T608PER-M							0.8	●		○		
ANHU 17T608PER-SM							0.8	●		○		
ANKU 17T616PFR-M							1.6	●		○		



CFM88LN



Precision Finishing Face Mill Cutter



Model		Dimension (mm)				I/F Type	Kg	Insert
		DC	Da	DH	L			
CFM88LN-1080A27R-10J	2+8	80	27	58	50	A	2.0	LNKX 1005 LNGX 1504 SNEX 1204
CFM88LN-12100A32R-10J	2+10	100	32	70	50	A	2.5	
CFM88LN-18125B40R-10J	3+15	125	40	85	63	B	4.0	
CFM88LN-21160C40R-10J	3+18	160	40	110	63	C	6.0	
CFM88LN-27200C60R-10J	3+24	200	60	130	70	C	9.0	
CFM88LN-32250C60R-10J	4+28	250	60	160	70	C	16.3	

- ©Standard cutter head without internal cooling; Inserts need to be ordered separately.
- ©Standard product includes tool holder "CXGDJ-LN15-WL", compatible with insert LNGX1504.
- ©Optional tool holder "CXGDJ-SN12-W", compatible with insert SNEX1204.
- ©No tool holder is provided for Ø80 diameter, designed for fixed insert installation.

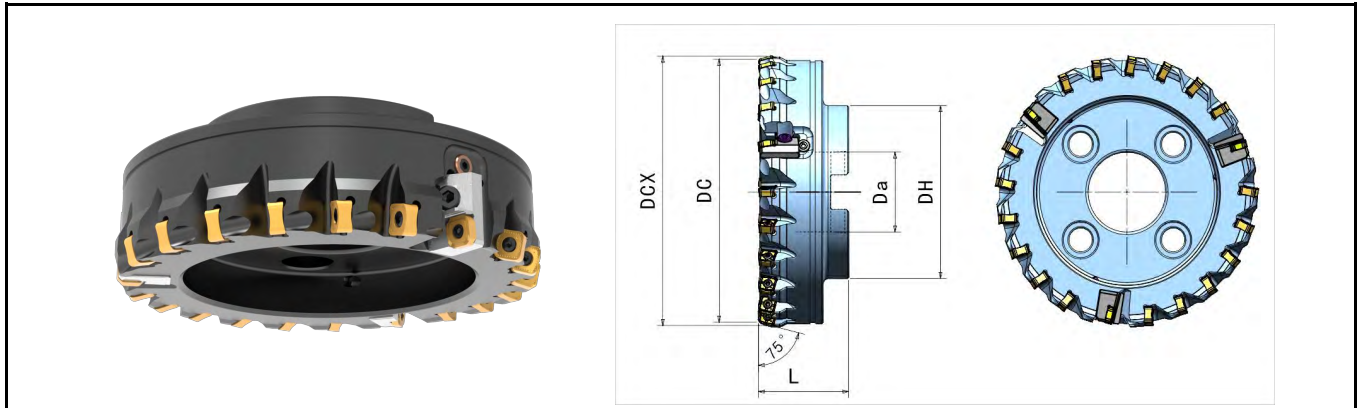
LNKX 10		LNGX 15		SN 12					
Model	Dimension (mm)					Grade			Screw/Wrench
	L	H	S	R	Ch	CT5320	CT7420	CT300	
LNKX 100512-ML	10.0	9.53	5.2	1.2	—	●			CSC3080/CTS10W
LNGX 1504R1.2-MLW-B	15.87	9.52	4.76	1.2	—	○	●		CSC4090/CTS15W
SNEX 1204P-W	12.7	—	4.66	2.0	2.5	○	●		CSC3511/CTS15W
SNEX 1204R-CBN	12.7	—	4.66	0.8	1.5			●	

CFM75SN-12J



Precision Finishing Face Mill Cutter

Kr:75°



Model	No. fixed inserts	No. Tool clamp	Dimension (mm)					I/F Type	(KG)	Insert t
			DC	DCX	Da	DH	L			
CFM75SN-10100A32R-12J	8	2	100	105	32	70	50	A	2.3	SNHX1206 SNEX1204
CFM75SN-15125B40R-12J	12	3	125	130	40	85	63	B	3.8	
CFM75SN-18160C40R-12J	15	3	160	165	40	110	63	C	5.9	
CFM75SN-21200C60R-12J	18	3	200	205	60	130	70	C	8.8	
CFM75SN-24250C60R-12J	20	4	250	255	60	160	70	C	16.1	
CFM75SN-28315D60R-12J	24	4	315	320	60	220	70	D	25.7	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

©Standard product includes tool holder “CXGDJ-SN12-W”



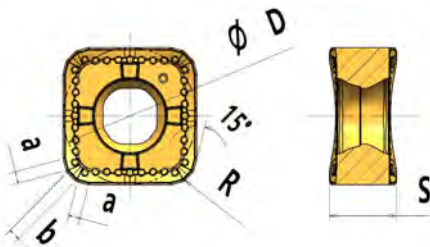
Spare Parts

Model	Tool Clamp	Tool Clamp Installation Screws	Wrench	Adjustment Wedge	Screw	Wrench
CFM75SN-12J	CXGDJ-SN12-W	CLA0603010	CBL50	CYX6Y	CLD0602010	CBL30
	Finishing Insert Screw	Locking Insert Screw	Wrench			
	CSC3511	CST4010	CTS15W			

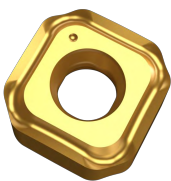
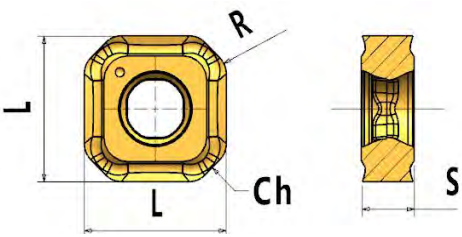
CFM75SN-12J



Precision Finishing Face Mill Cutter

		Intro										
						• Flat-pack Double-sided 8-edge Blade • Blade features a Large Positive Rake Angle Design for Effortless Cutting • The tool's performance and lifespan have received high recognition from customers						
Model	Dimension					Grade						
	D	S	a	b	R	CT5320	CT5420	CT7320	CT7420	CT8330	CT9320	CT101
SNHX 1206XTN-ML	12.7	6.35	1.25	1.3	0.4	●		●				



	Finishing Tool Clamp Inserts				Intro			
					• Negative Double-sided 8-edge Insert • Positive Rake Angle for Effortless Cutting • Designed for Precision Milling Cutter Finish			
Model	Dimension (mm)				Grade			
	L	S	R	Ch	CT5320	CT7420	CT7520	CT300
SNEX 1204P-W	12.7	4.66	2.0	2.5	○	●	●	
SNEX 1204R-CBN	12.7	4.66	0.8	1.5				●

精加工面铣刀盘使用说明书



使用步骤:

1. 固定刀片①安装至刀盘上；
修光刀片⑤安装至刀夹上，确认刀片无缝。
2. 安装修光刀夹到刀盘，注意调节楔块③小头朝里，临时预紧固定螺钉②，防止刀夹掉落但可以上下移动。
3. 调节楔块螺钉④使楔块与修光刀夹接触，楔块螺钉④逆时针旋转则楔块③向外移，刀夹升高；楔块螺钉④顺时针旋转则楔块③向内移，刀夹降低。预调节修光刀片⑤高于刀片①至0-2丝左右（最终高5-7丝）。
4. 旋紧锁紧螺钉②，预紧扭矩6N*M。
5. 逆时针旋转调节楔块螺钉④，调整修光刀片⑤至合适高度（比刀片1轴向凸出5-7丝，注：所有修光刀片⑤最高点跳动要在1丝以内）。
6. 旋紧锁紧螺钉②(10N*M)后，如果修光刀片高度不合适，放松锁紧螺钉②，重复3-5步骤至修光刀片到合适高度。

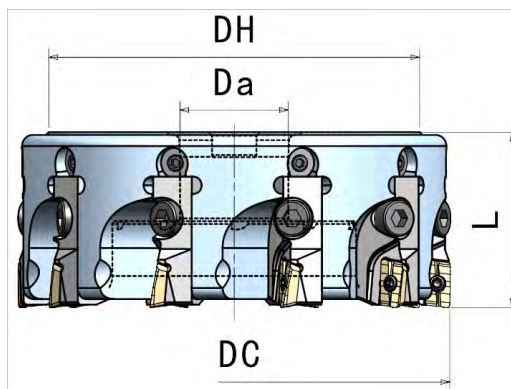
注意点:

- 1 调节时，在锁紧螺钉旋松或者预紧下进行。如果在螺钉锁紧时强行调节，可能损坏调节楔块和刀夹。

CZH



Milling Tool Clamp System

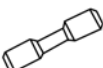
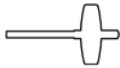


Model		Dimension (mm)				I/F Type	 Kg	Tool Clamp
		DC	Da	DH	L			
CZH-6125B40R	6	125	40	108	68	B	3.83	CZH-CA
CZH-8125B40R	8	125	40	108	68	B	3.54	
CZH-8160C40R	8	160	40	137	63	C	5.78	
CZH-12160C40R	12	160	40	137	63	C	5.20	
CZH-10200C60R	10	200	60	178	63	C	8.80	
CZH-14200C60R	14	200	60	178	80	C	12.57	
CZH-12250C60R	12	250	60	228	63	C	14.78	
CZH-18250C60R	18	250	60	228	63	C	13.93	
CZH-16315D60R	16	315	60	293	80	D	30.74	
CZH-20315D60R	20	315	60	293	80	D	25.42	
CZH-26400D60R	26	400	60	300	80	D	—	

©Standard cutter head without internal cooling;

©Tool clamps must be ordered separately; standard tool holders do not include tool clamps.

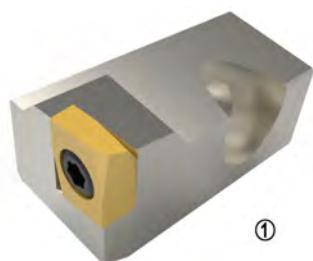
Spare Parts

Model	Tool Clamp	Wedge	Wedge Screw	Screw	Wrench	Wrench
						
CZH	CZH-CA	CYC12Y	CLD0602010	CLA08025125	CBL30	CTS15W

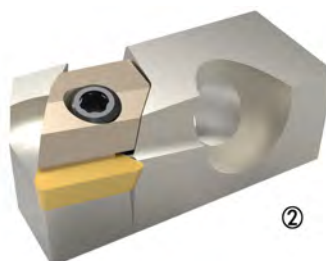
CZH-CA



Milling Tool Clamp Suitable for CZH Tool Clamp Milling System



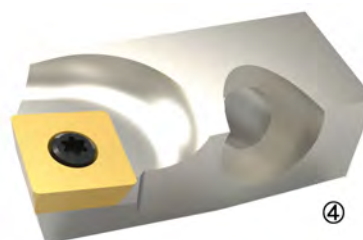
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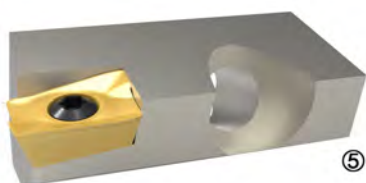
②



③



④



⑤



⑥

Item	Model	Insert
1	CZH-MDHX10CA	MDHX...10
2	CZH-TP1603CA	TP...1603
3	CZH-RP1605CA	RP...1605
4	CZH-SD1204CA	SD...1204
5	CZH-AP1705CA	AP...1705
6	CZH-LN1206CA	LN...1206

©Inserts must be ordered separately.

CZH Milling Tool Clamp System

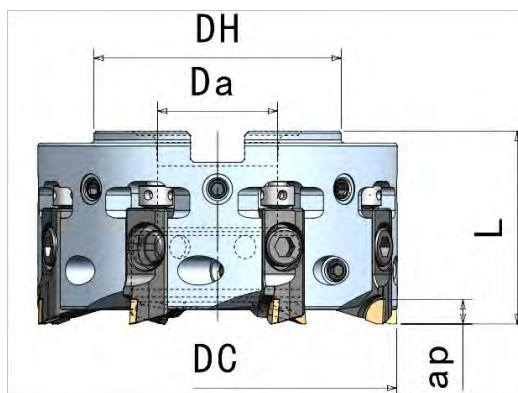
- Using a Single Tool for Rough Machining and Finishing
- Quick Tool Clamp Fixing Function
- Easy Adjustment of Tool Runout Value
- Easy to Replace Tool Clamps with Different Blade Types and Main Angles



Aluminum Alloy Mill Cutter: CFM90PCD-L



Aluminum Alloy Mill Cutter



Model		Dimension (mm)				 Kg	Tool Clamp
		DC	Da	L	ap		
CFM90PCD-463B22R-L	4	63	22	48	4	0.80	DJ-PCD-AL DJ-PCD-AL-W
CFM90PCD-680B27R-L	6	80	27	50	4	0.75	
CFM90PCD-8100B32R-L	8	100	32	50	4	1.20	
CFM90PCD-10125B40R-L	10	125	40	63	4	2.20	
CFM90PCD-12160C40R-L	12	160	40	63	4	2.15	
CFM90PCD-14180C40R-L	14	180	40	63	4	2.60	
CFM90PCD-16200C60R-L	16	200	60	63	4	4.40	
CFM90PCD-18250C60R-L	18	250	60	63	4	7.00	
CFM90PCD-20315C60R-L	20	315	60	80	4	14.10	
CFM90PCD-22400C60R-L	22	400	60	80	4	22.10	

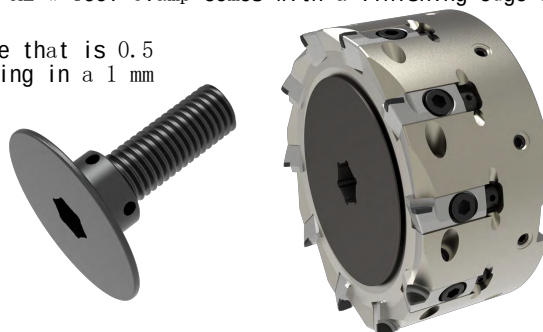
©Standard Tool Holder with Internal Cooling

©Tool clamps must be ordered separately; standard tool holders do not include tool clamps.

©DJ-PCD-AL Tool Clamp is suitable for rough machining, DJ-PCD-AL-W Tool Clamp comes with a finishing edge and is suitable for precision machining.

©The precision machining tool clamp DJ-PCD-AL-W has an F value that is 0.5 smaller than the rough machining tool clamp DJ-PCD-AL, resulting in a 1 mm reduction in the diameter of the tool holder.

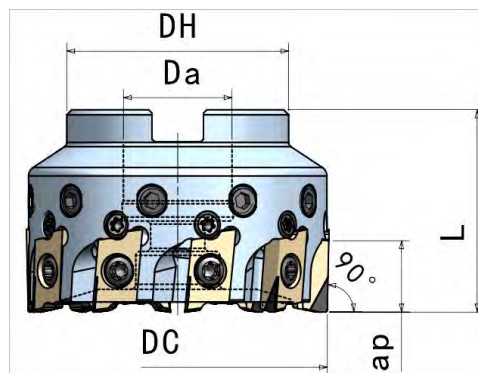
©The standard tool holder diameter is based on the DJ-PCD-AL rough machining tool clamp.



Spare Parts

Model	Tool Clamp	Tool Clamp Screw	Wrench	Clamping Screw on Tool Holder Dynamic Balance Adjustment Screw
				
CFM90PCD-L	DJ-PCD-AL	CLA0601210	CBL50/CBL30	CLC0600610
CFM90PCD-L	DJ-PCD-AL-W	CLA0601210	CBL50/CBL30	CLC0600610

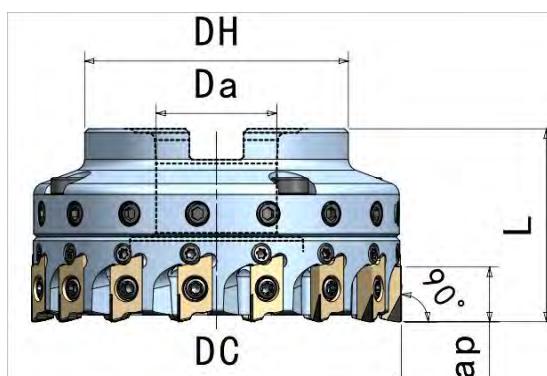
Aluminum Alloy Mill Cutter: CFM90AE



Model		Dimension (mm)						Material	Insert
		DC	Da	DH	L	ap			
CFM90AE-640A16R-15	6	40	16	36	40	11	0.36	Steel	AEGT 1504
CFM90AE-850A22R-15	8	50	22	45	40	11	0.55		
CFM90AE-1063A22R-15	10	63	22	45	40	11	0.75		

©Standard Tool Holder with Internal Cooling

©Inserts must be ordered separately.



Model		Dimension (mm)						Material	Insert
		DC	Da	DH	L	ap			
CFM90AE-1280A27R-15	12	80	27	50	50	11	0.96	Steel Tool Ring + Aluminum Alloy Tool Body	AEGT 1504
CFM90AE-16100B32R-15	16	100	32	70	50	11	1.45		
CFM90AE-20125B40R-15	20	125	40	90	63	11	2.40		
CFM90AE-24160C40R-15	24	160	40	115	63	11	3.00		
CFM90AE-30200C40R-15	30	200	60	150	63	11	4.25		
CFM90AE-36250C60R-15	36	250	60	200	63	11	6.50		

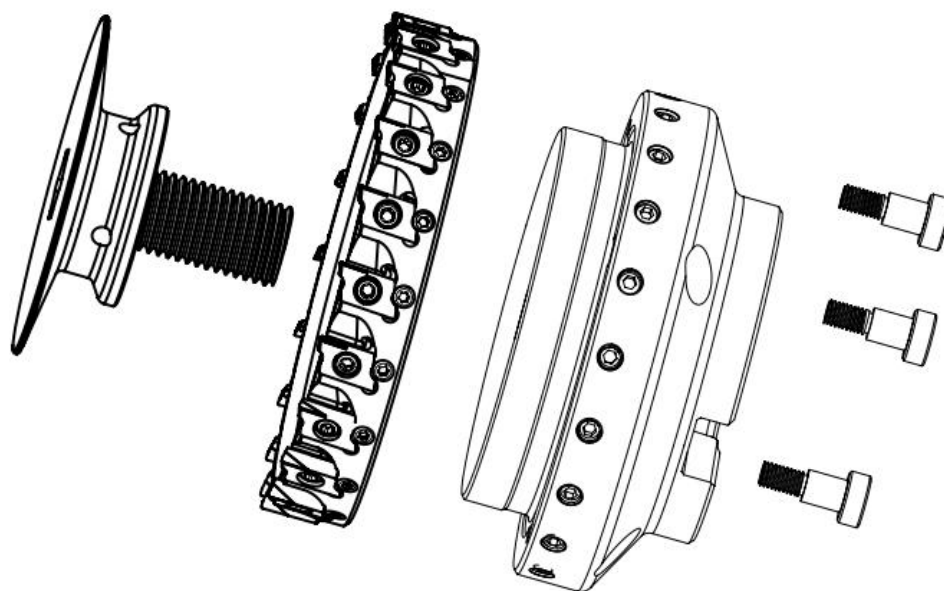
©Standard Tool Holder with Internal Cooling

©Inserts must be ordered separately.

Aluminum Alloy Mill Cutter : CFM90AE



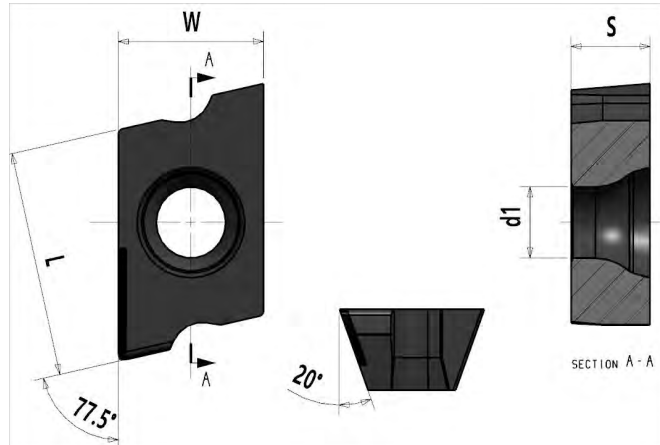
Cutter DIA	Cover Bolts	Screws	Wrench
			
40-63	CLP10	—	—
80	CLP12	CLJ0510	CBL25
100	CLP16	CLJ0610	CBL30
125	CLP20	CLJ0810	CBL40
160	CLP24	CLJ0810	CBL40
200	CLP28	CLJ0810	CBL40
250	CLP32	CLJ0810	CBL40



Spare Parts

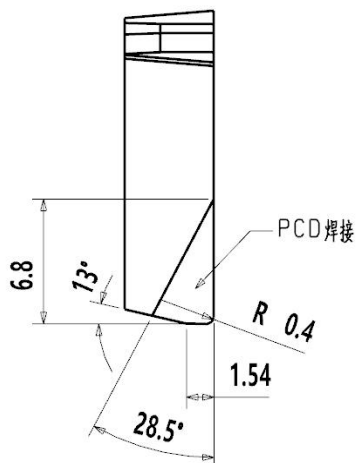
Model	Cutter DIA	Insert Screw	Adj.Screw	Wrench	Dyn.Bal.Screw	Wrench	Wire Insert
CFM90AE	40-63						
	80-250						— CLGC060

Aluminum Alloy Mill Cutter: CFM90AE

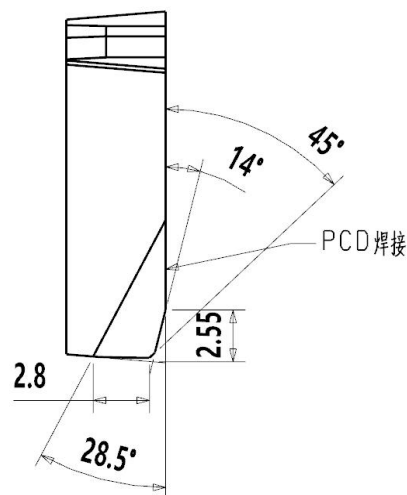


Model	Edge Length	Fin. Edge	Dimension (mm)				Cutting Edge Material
			L	W	S	d1	
AEGT 1504X-PCD	15	Y	14.0	9.2	5.0	4.4	PCD
AEGT1504W-PCD	15	Y	14.0	9.2	5.0	4.4	PCD
AEGT1504PT-PCD	15	N	13.97	9.2	5.0	4.4	PCD

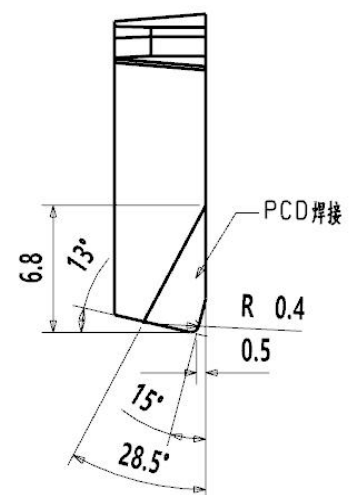
AEGT 1504X-PCD Standard Insert



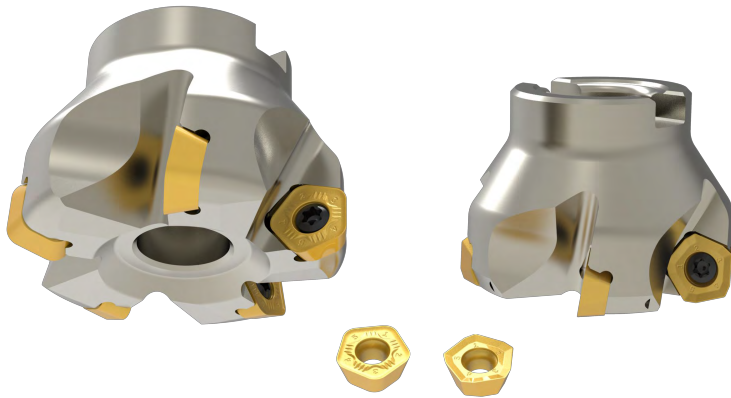
AEGT1504W-PCD Finishing Insert



AEGT1504PT-PCD Textured Insert



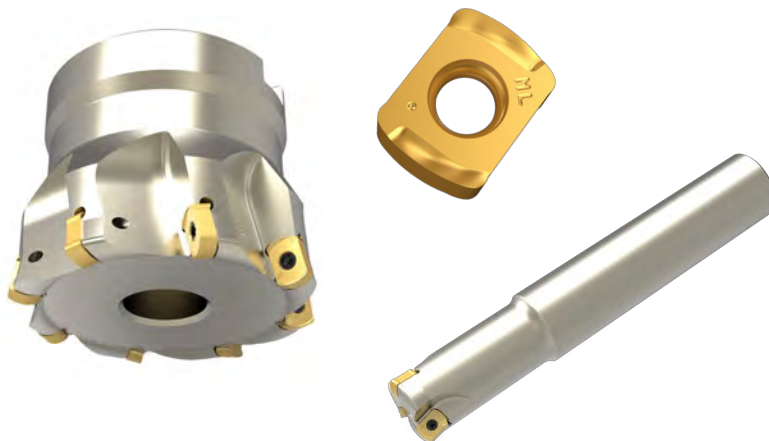
Fast Feed Mill Cutter Series



PD Series

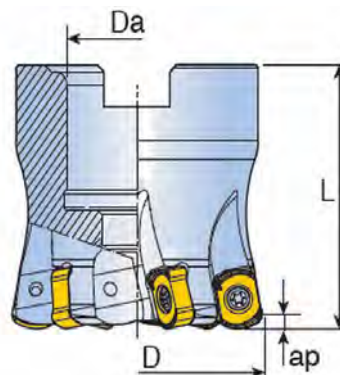


SX Series



BL Series

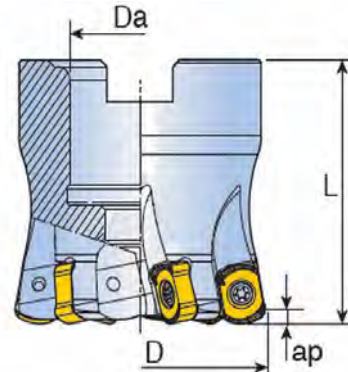
Fast Feed Mill Cutter : TFMBL



Model		Dimension (mm)				I/F Type	 Kg	Insert
		D	da	L	ap			
TFMBL 432-16R-06	4	32	16	40	1.0	A	0.1	BLMP 0603
TFMBL 532-16R-06	5	32	16	40	1.0	A	0.1	
TFMBL 640-16R-06	6	40	16	40	1.0	A	0.2	
TFMBL 640-22R-06	6	40	22	40	1.0	A	0.2	
TFMBL 650-22R-06	6	50	22	50	1.0	A	0.4	
TFMBL 750-22R-06	7	50	22	50	1.0	A	0.4	
TFMBL 850-22R-06	8	50	22	50	1.0	A	0.4	
TFMBL 752-22R-06	7	52	22	40	1.0	A	0.4	
TFMBL 852-22R-06	8	52	22	40	1.0	A	0.4	
TFMBL 763-22R-06	7	63	22	50	1.0	A	0.6	
TFMBL 863-22R-06	8	63	22	50	1.0	A	0.6	
TFMBL 963-22R-06	9	63	22	50	1.0	A	0.6	
TFMBL 966-27R-06	9	66	27	50	1.0	A	0.7	
TFMBL 440-16R-09	4	40	16	40	1.5	A	0.2	BLMP 0904
TFMBL 540-16R-09	5	40	16	40	1.5	A	0.2	
TFMBL 550-22R-09	5	50	22	50	1.5	A	0.4	
TFMBL 650-22R-09	6	50	22	50	1.5	A	0.4	
TFMBL 750-22R-09	7	50	22	50	1.5	A	0.4	
TFMBL 652-22R-09	6	52	22	40	1.5	A	0.4	
TFMBL 752-22R-09	7	52	22	40	1.5	A	0.4	
TFMBL 663-22R-09	6	63	22	50	1.5	A	0.4	
TFMBL 763-22R-09	7	63	22	50	1.5	A	0.4	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

Fast Feed Mill Cutter : TFMBL



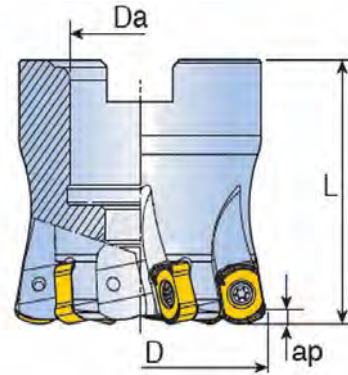
Model		Dimension (mm)				I/F Type		Insert
		D	da	L	ap			
TFMBL 863-22R-09	8	63	22	50	1.5	A	0.6	BLMP 0904
TFMBL 766-27R-09	7	66	27	50	1.5	A	0.7	
TFMBL 866-27R-09	8	66	27	50	1.5	A	0.8	
TFMBL 780-27R-09	7	80	27	50	1.5	A	1.2	
TFMBL 880-27R-09	8	80	27	50	1.5	A	1.2	
TFMBL 980-27R-09	9	80	27	50	1.5	A	1.2	
TFMBL 1080-27R-09	10	80	27	50	1.5	A	1.2	
TFMBL 8100-32R-09	8	100	32	60	1.5	A	2.3	
TFMBL 9100-32R-09	9	100	32	60	1.5	A	2.3	
TFMBL 10100-32R-09	10	100	32	60	1.5	A	2.3	
TFMBL 11100-32R-09	11	100	32	60	1.5	A	2.3	
TFMBL 12100-32R-09	12	100	32	60	1.5	A	2.3	
TFMBL 12125-40R-09	12	125	40	60	1.5	B	2.7	
TFMBL 14125-40R-09	14	125	40	60	1.5	B	2.7	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

Spare Parts

Model	Screw	Wrench
TEBL-06	CSC2560	CTS08W
TEBL-09	CSC3581	CTS15W

Fast Feed Mill Cutter : TFMBL



Model		Dimension (mm)				I/F Type	 Kg	Insert
		D	da	L	ap			
TFMBL 440-16R-11	4	40	16	40	2.0	A	0.2	BLMP 1105
TFMBL 450-22R-11	4	50	22	40	2.0	A	0.3	
TFMBL 550-22R-11	5	50	22	40	2.0	A	0.3	
TFMBL 552-22R-11	5	52	22	40	2.0	A	0.3	
TFMBL 563-22R-11	5	63	22	50	2.0	A	0.7	
TFMBL 663-22R-11	6	63	22	50	2.0	A	0.7	
TFMBL 666-22R-11	6	66	22	50	2.0	A	0.83	
TFMBL 680-27R-11	6	80	27	60	2.0	A	1.4	
TFMBL 780-27R-11	7	80	27	60	2.0	A	1.4	
TFMBL 6100-32R-11	6	100	32	60	2.0	B	2.2	
TFMBL 7100-32R-11	7	100	32	60	2.0	B	2.2	

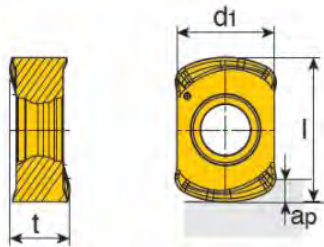
©Standard cutter head without internal cooling; Inserts need to be ordered separately.

Spare Parts

Model	Screw	Wrench
		
TEBL-11	CSD5012	CTS20W

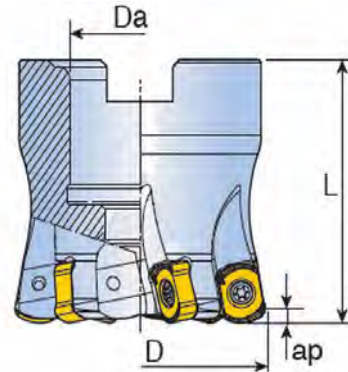
Fast Feed Mill Cutter : TFMBL



		Intro								
		Fast Feed Insert								
Model	Dimension (mm)						Grade			
	l	d1	t	ap	Feed mm/Tooth	Cut.Depth/mm	CT5320	CT5420	CT5520	CT8320
BLMP 0603R-M	9.0	6.39	3.73	1.0	0.3-2.5	0.1-1.0	●	●	●	
BLMP 0904R-M	11.9	9.18	4.80	1.5	0.3-3.5	0.1-1.5	●	●		○
BLMP 1105R-M	14.6	11.2	6.54	2.0	0.3-4.0	0.3-2.0	●			
BLMP 1105R-ML							●			

©BLMP 0603R-M, Blade Locking ScrewM2.5

Fast Feed Mill Cutter : CFMBL



Model		Dimension (mm)				I/F Type	 Kg	Insert
		D	da	L	ap			
CFMBL 432-16R-06	4	32	16	40	1.0	A	0.1	BLMP 0603
CFMBL 532-16R-06	5	32	16	40	1.0	A	0.1	
CFMBL 640-16R-06	6	40	16	40	1.0	A	0.2	
CFMBL 640-22R-06	6	40	22	40	1.0	A	0.2	
CFMBL 650-22R-06	6	50	22	50	1.0	A	0.4	
CFMBL 750-22R-06	7	50	22	50	1.0	A	0.4	
CFMBL 850-22R-06	8	50	22	50	1.0	A	0.4	
CFMBL 752-22R-06	7	52	22	40	1.0	A	0.4	
CFMBL 852-22R-06	8	52	22	40	1.0	A	0.4	
CFMBL 763-22R-06	7	63	22	50	1.0	A	0.6	
CFMBL 863-22R-06	8	63	22	50	1.0	A	0.6	
CFMBL 963-22R-06	9	63	22	50	1.0	A	0.6	
CFMBL 966-27R-06	9	66	27	50	1.0	A	0.7	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

©Note: The mounting screws for CFMBL cutter holders are M3

©This cutter holder is only compatible with the BL..RD-M slot type when installing BL series inserts.

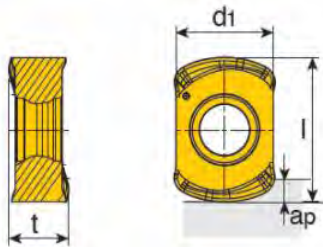
Spare Parts

Model	Screw	Wrench
		
CEBL-06	CSC3080	CTS10W

Fast Feed Mill Cutter : CFMBL



Fast Feed Milling Insert

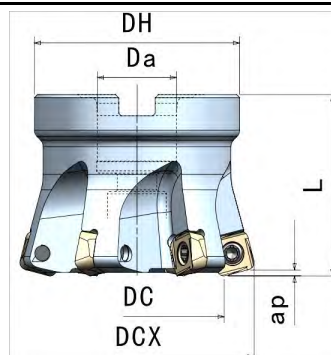
								Intro			
							Fast Feed Milling Insert				
Model	Dimension (mm)						Grade				
	l	d1	t	ap	Feed mm/Tooth	Cut.Depth mm	CT5320	CT5420	CT5520	CT8320	
BLMP 0603RD-ML	9.0	6.39	3.73	1.0	0.3-2.5	0.1-1.0	●				

©BLMP 0603RD-ML, Blade Locking Screw M3

Spare Parts

Model	Screw	Wrench
		
CEBL-06	CSC3080	CTS10W

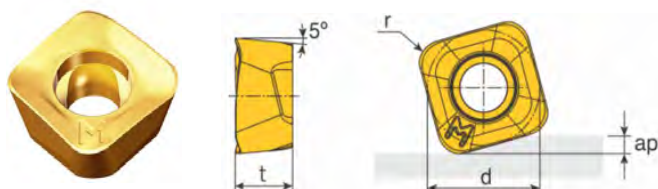
Fast Feed Mill Cutter : CFMSX-13



Model		Dimension (mm)					I/F Type	Kg	Insert
		DCX	DC	L	ap	Da			
CFMSX-350A22R-13	3	50	29.3	40	2	22	A	0.3	SXMT 1306
CFMSX-450A22R-13	4	50	29.3	40	2	22	A	0.4	
CFMSX-452A22R-13	4	52	31.3	40	2	22	A	0.3	
CFMSX-552A22R-13	5	52	31.3	40	2	22	A	0.2	
CFMSX-463A22R-13	4	63	42.4	50	2	22	A	0.6	
CFMSX-563A22R-13	5	63	42.4	50	2	22	A	0.5	
CFMSX-463A27R-13	4	63	42.4	50	2	27	A	0.5	
CFMSX-566A27R-13	5	66	45.3	50	2	27	A	0.6	
CFMSX-580A27R-13	5	80	59.4	60	2	27	A	1.3	
CFMSX-680A27R-13	6	80	59.4	60	2	27	A	1.3	
CFMSX-580B32R-13	5	80	59.4	60	2	32	A	1.3	
CFMSX-6100B32R-13	6	100	79.4	60	2	32	B	1.9	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

Insert Model	Edge Length	Dimension (mm)				Grade			
		d	t	ap	r	CT5320	CT5420	CT7320	CT7420
SXMT 130625-M	13	13.05	6.65	2.0	2.5	●	●	●	●



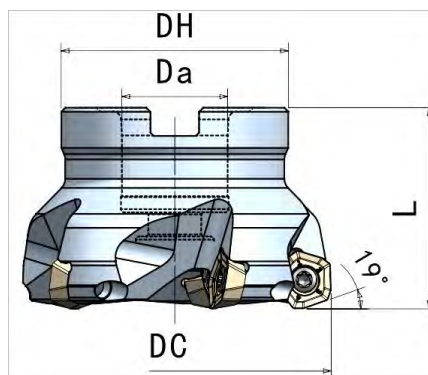
Spare Parts

Model	Screw	Wrench
CFMSX-13	CSG5012-P	CTS20W-P

PD: CFM19PD

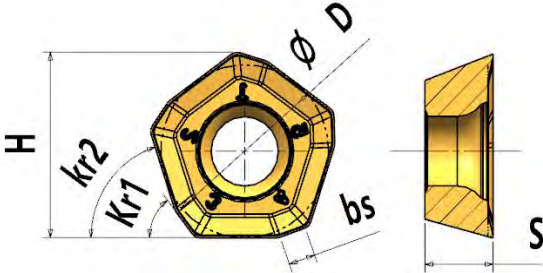


Fast Feed Milling Cutter $Kr=19^\circ$



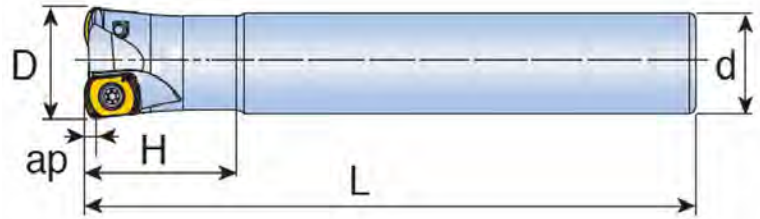
Model		Dimension (mm)				I/F Type	Kg	Insert
		DCX	Da	L	Kr°			
CFM19PD-342A16R-09	3	42	16	40	19	A	0.18	PDKT 0905
CFM19PD-450A22R-09	4	50	22	40			0.23	
CFM19PD-452A22R-09	4	52	22	40			0.24	
CFM19PD-563A22R-09	5	63	22	40			0.31	
CFM19PD-666A22R-09	6	66	22	40			0.32	
CFM19PD-580A27R-09	5	80	27	50			0.83	
CFM19PD-6100B32R-09	6	100	32	50		B	1.40	
CFM19PD-8100B32R-09	8	100	32	50			1.38	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

								Intro			
								• Fast Feed Insert • Suitable for High Feed Machining			
Model	Dimension (mm)						Grade				Screw/Wrench
	D	H	S	Kr1°	Kr2°	bs	CT5320	CT5420	CT8320	CT8520	
PDKT 090508R-MW	13.5	14.46	5.45	19	72	2.1	●	●	●	●	CSD5012 CTS20W
PDKT 090508L-MW	13.5	14.46	5.45	19	72	2.1		●			
PDKT 090530R-M	13.5	14.46	5.45	—	72	—	●	○			

Fast Feed Mill Cutter : TEBL

Fast Feed End Mill Holder



Model		Dimension (mm)							Insert
		D	d	L	H	ap			
TEBL 216-15-06-L150	2	16	15	150	40	0.7			BLMP 0603
TEBL 216-16-06	2	16	16	150	40	0.7			
TEBL 216-16-06-S	2	16	16	100	30	0.7			
TEBL 217-16-06-S	2	17	16	100	30	0.7			
TEBL 217-16-06	2	17	16	150	40	0.7			
TEBL 217-16-06-L200	2	17	16	200	20	0.7			
TEBL 218-16-06	2	18	16	150	25	0.7			
TEBL 220-20-06-L200	2	20	20	200	80	1.0			
TEBL 320-19-06-L180	3	20	19	180	80	1.0			
TEBL 320-20-06-S	3	20	20	130	50	1.0			
TEBL 320-20-06	3	20	20	160	80	1.0			
TEBL 321-20-06-S	3	21	20	150	20	1.0			
TEBL 321-20-06-L200	3	21	20	200	20	1.0			
TEBL 325-25-06-L220	3	25	25	220	50	1.0			
TEBL 425-24-06-L180	4	25	24	180	60	1.0			
TEBL 425-25-06-S	4	25	25	140	60	1.0			
TEBL 425-25-06	4	25	25	180	60	1.0			
TEBL 425-25-06-L250	4	25	25	250	40	1.0			
TEBL 326-25-06-L200	3	26	25	200	30	1.0			
TEBL 326-25-06-L250	3	26	25	250	30	1.0			
TEBL 426-25-06-S	4	26	25	150	30	1.0			
TEBL 426-25-06-L200	4	26	25	200	30	1.0			
TEBL 426-25-06-L250	4	26	25	250	30	1.0			
TEBL 530-32-06-S	5	30	32	150	70	1.0			

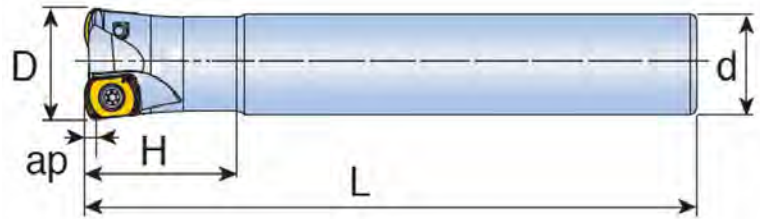
©Standard Tool Holder Without Internal Cooling

©Inserts must be ordered separately.

Fast Feed Mill Cutter : TEBL



Fast Feed End Mill Holder



Model		Dimension (mm)							Insert
		D	d	L	H	ap			
TEBL 430-32-06-S	4	30	32	150	70	1.0			BLMP 0603
TEBL 430-32-06-L200	4	30	32	200	120	1.0			
TEBL 530-32-06-L200	5	30	32	200	120	1.0			
TEBL 432-32-06-S	4	32	32	150	70	1.0			
TEBL 532-32-06-S	5	32	32	150	70	1.0			
TEBL 532-32-06-L200	5	32	32	200	120	1.0			
TEBL 433-32-06-L220	4	33	32	220	40	1.0			
TEBL 433-32-06-L300	4	33	32	300	50	1.0			
TEBL 533-32-06-S	5	33	32	150	30	1.0			
TEBL 533-32-06-L200	5	33	32	200	40	1.0			
TEBL 533-32-06-L250	5	33	32	250	40	1.0			
TEBL 435-32-06-L200	4	35	32	200	50	1.0			
TEBL 435-32-06-L300	4	35	32	300	50	1.0			
TEBL 535-32-06-L200	5	35	32	200	50	1.0			
TEBL 535-32-06-L300	5	35	32	300	50	1.0			
TEBL 540-32-06-L220	5	40	32	220	40	1.0			
TEBL 640-32-06-S	6	40	32	150	40	1.0			
TEBL 640-32-06-L220	6	40	32	220	40	1.0			

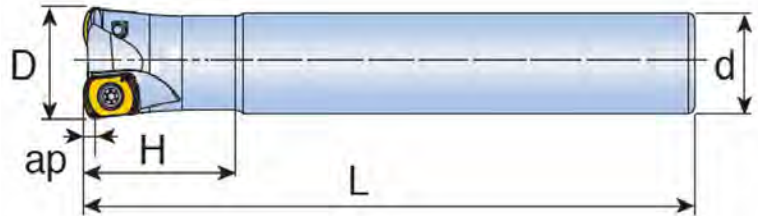
©Standard Tool Holder Without Internal Cooling

©Inserts must be ordered separately.

Fast Feed Mill Cutter : TEBL



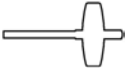
Fast Feed End Mill Holder



Model		Dimension (mm)							Insert
		D	d	L	H	ap			
TEBL 225-25-09-L150	2	25	25	150	70	1.5			BLMP 0904
TEBL 225-25-09-L200	2	25	25	200	100	1.5			
TEBL 325-25-09-L150	3	25	25	150	70	1.5			
TEBL 325-25-09-L200	3	25	25	200	110	1.5			
TEBL 326-25-09-L150	3	26	25	150	30	1.5			
TEBL 326-25-09-L220	3	26	25	220	30	1.5			
TEBL 330-32-09-L160	3	30	32	160	70	1.5			
TEBL 330-32-09-L220	3	30	32	220	120	1.5			
TEBL 332-32-09-L160	3	32	32	160	70	1.5			
TEBL 332-32-09-L220	3	32	32	220	120	1.5			
TEBL 432-32-09-L160	4	32	32	160	70	1.5			
TEBL 432-32-09-L220	4	32	32	220	120	1.5			
TEBL 433-32-09-L180	4	33	32	180	30	1.5			
TEBL 433-32-09-L250	4	33	32	250	30	1.5			
TEBL 440-32-09-L180	4	40	32	180	40	1.5			
TEBL 440-32-09-L250	4	40	32	250	40	1.5			
TEBL 540-32-09-L180	5	40	32	180	40	1.5			
TEBL 540-32-09-L250	5	40	32	250	40	1.5			

©Standard Tool Holder Without Internal Cooling; Inserts must be ordered separately.

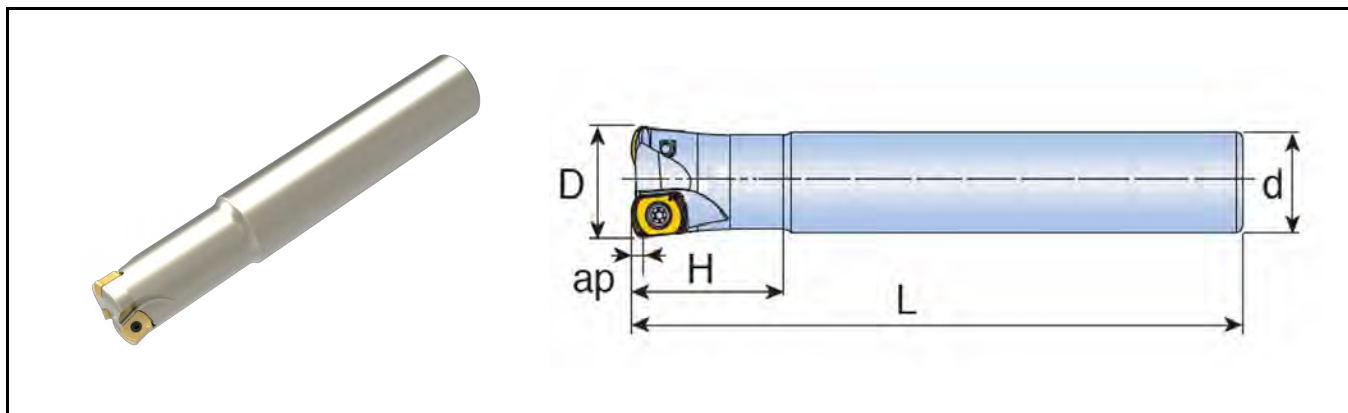
Spare Parts

Model	Screw	Wrench
		
TEBL-06	CSC2560	CTS08W
TEBL-09	CSC3581	CTS15W

Fast Feed Mill Cutter : TEBL



Fast Feed Milling Tool Holder



Model		Dimension (mm)							Insert
		D	d	L	H	ap			
TEBL 230-32-11-L150	2	30	32	150	70	2.0			BLMP 1105
TEBL 232-32-11-L150	2	32	32	150	70	2.0			
TEBL 232-32-11-L200	2	32	32	200	70	2.0			
TEBL 332-32-11-L200	3	32	32	200	70	2.0			
TEBL 233-32-11-L200	2	33	32	200	40	2.0			
TEBL 233-32-11-L250	2	33	32	250	50	2.0			
TEBL 333-32-11-L250	3	33	32	250	50	2.0			
TEBL 335-32-11-L200	3	35	32	200	40	2.0			
TEBL 340-32-11-L150	3	40	32	150	40	2.0			
TEBL 340-32-11-L200	3	40	32	200	40	2.0			

©Standard Tool Holder Without Internal Cooling

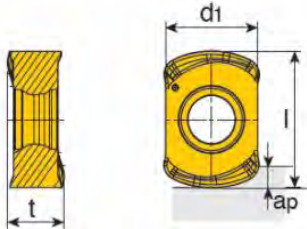
©Inserts must be ordered separately.

Spare Parts

Model	Screw	Wrench
TEBL-11	CSD5012	CTS20W

Fast Feed Mill Cutter : TEBL



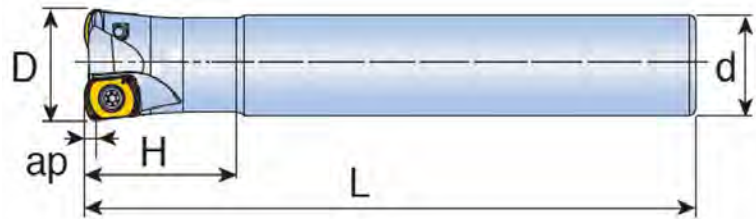
		Intro								
							Fast Feed Milling Insert			
Insert Model	Dimension (mm)						Grade			
	l	d1	t	ap	Feed mm/Tooth	Cut.Depth/mm	CT5320	CT5420	CT5520	CT8320
BLMP 0603R-M	9.0	6.39	3.73	1.0	0.3-2.5	0.1-1.0	●	●	●	
BLMP 0904R-M	11.9	9.18	4.80	1.5	0.3-3.5	0.1-1.5	●	●		○
BLMP 1105R-M	14.6	11.2	6.54	2.0	0.3-4.0	0.3-2.0	●			
BLMP 1105R-ML							●			

©BLMP 0603R-M, Blade Locking Screw M2.5

Fast Feed Mill Cutter : CEBL



Fast Feed End Mill Holder



Model		Dimension (mm)							Insert
		D	d	L	H	ap			
CEBL 216-15-06-L150	2	16	15	150	40	0.7			BLMP 0603
CEBL 216-16-06	2	16	16	150	40	0.7			
CEBL 216-16-06-S	2	16	16	100	30	0.7			
CEBL 217-16-06-S	2	17	16	100	30	0.7			
CEBL 217-16-06	2	17	16	150	40	0.7			
CEBL 217-16-06-L200	2	17	16	200	20	0.7			
CEBL 218-16-06	2	18	16	150	25	0.7			
CEBL 220-20-06-L200	2	20	20	200	80	1.0			
CEBL 320-19-06-L180	3	20	19	180	80	1.0			
CEBL 320-20-06-S	3	20	20	130	50	1.0			
CEBL 320-20-06	3	20	20	160	80	1.0			
CEBL 321-20-06-S	3	21	20	150	20	1.0			
CEBL 321-20-06-L200	3	21	20	200	20	1.0			
CEBL 325-25-06-L220	3	25	25	220	50	1.0			
CEBL 425-24-06-L180	4	25	24	180	60	1.0			
CEBL 425-25-06-S	4	25	25	140	60	1.0			
CEBL 425-25-06	4	25	25	180	60	1.0			
CEBL 425-25-06-L250	4	25	25	250	40	1.0			
CEBL 326-25-06-L200	3	26	25	200	30	1.0			
CEBL 326-25-06-L250	3	26	25	250	30	1.0			
CEBL 426-25-06-S	4	26	25	150	30	1.0			

©Standard Tool Holder Without Internal Cooling

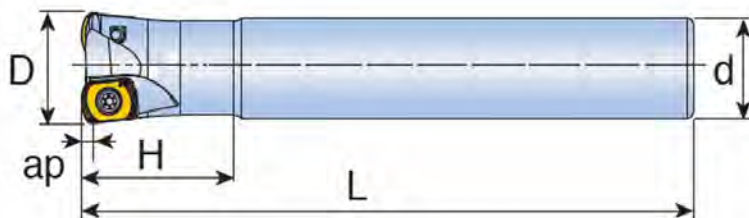
©Inserts must be ordered separately.

©Note: The mounting screws for this type of CEBL tool holder are M3

©This tool holder is only compatible with the BL..RD-M slot type when installing BL series inserts.

Fast Feed Mill Cutter : CEBL

Fast Feed End Mill Holder



Model		Dimension (mm)							Insert
		D	d	L	H	ap			
CEBL 426-25-06-L200	4	26	25	200	30	1.0			BLMP 0603
CEBL 426-25-06-L250	4	26	25	250	30	1.0			
CEBL 530-32-06-S	5	30	32	150	70	1.0			
CEBL 430-32-06-S	4	30	32	150	70	1.0			
CEBL 430-32-06-L200	4	30	32	200	120	1.0			
CEBL 530-32-06-L200	5	30	32	200	120	1.0			
CEBL 432-32-06-S	4	32	32	150	70	1.0			
CEBL 532-32-06-S	5	32	32	150	70	1.0			
CEBL 532-32-06-L200	5	32	32	200	120	1.0			
CEBL 433-32-06-L220	4	33	32	220	40	1.0			
CEBL 433-32-06-L300	4	33	32	300	50	1.0			
CEBL 533-32-06-S	5	33	32	150	30	1.0			
CEBL 533-32-06-L200	5	33	32	200	40	1.0			
CEBL 533-32-06-L250	5	33	32	250	40	1.0			
CEBL 435-32-06-L200	4	35	32	200	50	1.0			
CEBL 435-32-06-L300	4	35	32	300	50	1.0			
CEBL 535-32-06-L200	5	35	32	200	50	1.0			
CEBL 535-32-06-L300	5	35	32	300	50	1.0			
CEBL 540-32-06-L220	5	40	32	220	40	1.0			
CEBL 640-32-06-S	6	40	32	150	40	1.0			
CEBL 640-32-06-L220	6	40	32	220	40	1.0			

◎Standard Tool Holder Without Internal Cooling

◎Inserts must be ordered separately.

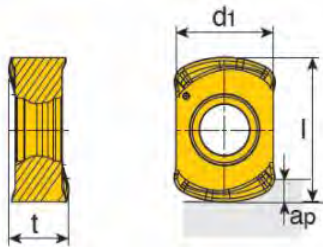
◎Note: The mounting screws for this type of CEBL tool holder are M3

◎This tool holder is only compatible with the BL..RD-M slot type when installing BL series inserts.

Fast Feed Mill Cutter : CEBL



Fast Feed Milling Insert

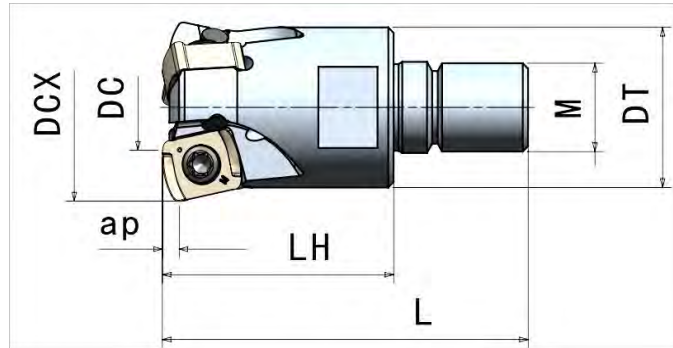
								Intro			
							Fast Feed Milling Insert				
Model	Dimension (mm)						Grade				
	l	d1	t	ap	Feed mm/Tooth	Cut.Depth/mm	CT5320	CT5420	CT5520	CT8320	
BLMP 0603RD-ML	9.0	6.39	3.73	1.0	0.3-2.5	0.1-1.0	●				

©BLMP 0603RD-ML, Blade Locking Screw M3

Spare Parts

Model	Screw	Wrench
		
CEBL-06	CSC3080	CTS10W

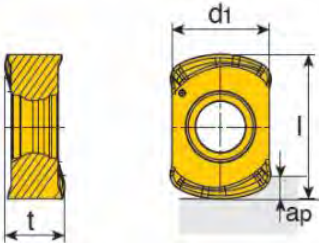
Fast Feed Mill Cutter : TFMBL



Model		Dimension (mm)							Insert
		DCX	DC	LH	DT	ap	M		
TEBL 230-M16-11	2	30	14.7	43	29	2.0	16		BLMP 1105
TEBL 232-M16-11	2	32	16.6	43	29	2.0	16		
TEBL 233-M16-11	2	33	17.6	43	29	2.0	16		
TEBL 335-M16-11	3	35	19.5	43	29	2.0	16		
TEBL 340-M16-11	3	40	24.4	43	29	2.0	16		
TEBL 342-M16-11	3	42	26.4	43	29	2.0	16		

©Standard Tool Holder Without Internal Cooling

©Inserts must be ordered separately.

							Intro			
							Fast Feed Milling Insert			
Model	Dimension (mm)						Grade			
	1	d1	t	ap	Feed mm/Tooth	Cut.Depth/mm	CT5320	CT5420	CT5520	CT8320
	14.6	11.2	6.54	2.0	0.3-4.0	0.3-2.0	●			
BLMP 1105R-M							●			
BLMP 1105R-ML							●			

AN: CE90AN



End Mill Holder; Kr=90°

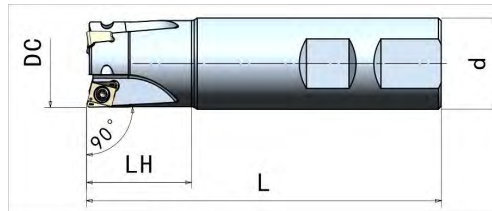


Fig.1

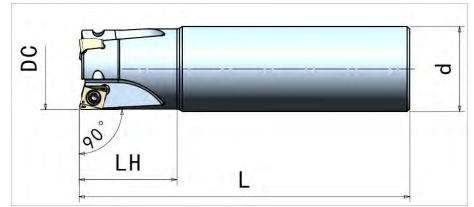


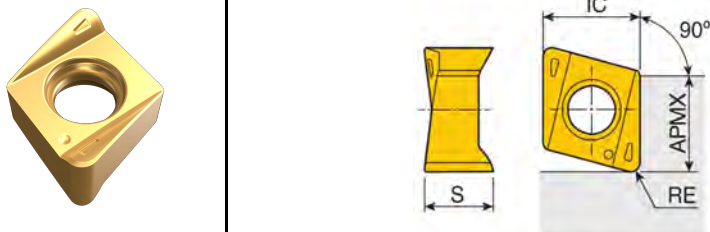
Fig.2

Model		Dimension (mm)					Figure	Insert
		DC	d	LH	L			
CE90AN-108L80Y8R-04	1	8	8	17	80		2	AN 0402
CE90AN-110L80Y10R-04	1	10	10	17	80		2	
CE90AN-211L80Y10R-04	2	11	10	17	80		2	
CE90AN-212L80Y12R-04	2	12	12	18	80		2	
CE90AN-313L90Y12R-04	3	13	12	20	90		2	
CE90AN-316L90Y16R-04	3	16	16	20	90		2	
CE90AN-420L105Z20R-04	4	20	20	25	105		1	
CE90AN-420L160Y20R-04	4	20	20	25	160		2	
CE90AN-216L150Y15R-06	2	16	15	25	150		2	AN 0603
CE90AN-216L90Z16R-06	2	16	16	25	90		1	
CE90AN-216L150Y16R-06	2	16	16	25	150		2	
CE90AN-217L90Y16R-06	2	17	16	25	90		2	
CE90AN-217L200Y16R-06	2	17	16	25	200		2	
CE90AN-220L160Y19R-06	2	20	19	25	160		2	
CE90AN-220L90Z20R-06	2	20	20	25	90		1	
CE90AN-220L160Y20R-06	2	20	20	25	160		2	
CE90AN-221L200Y20R-06	2	21	20	25	200		2	
CE90AN-325L100Z25R-06	3	25	25	30	100		1	
CE90AN-325L200Y25R-06	3	25	25	30	200		2	
CE90AN-326L200Y25R-06	3	26	25	30	200		2	
CE90AN-432L110Z32R-06	4	32	32	35	110		1	
CE90AN-432L210Y32R-06	4	32	32	35	210		2	
CE90AN-540L110Z32R-06	5	40	32	40	110		1	
CE90AN-540L150Y32R-06	5	40	32	40	150		2	

©Standard Tool Holder Without Internal Cooling; Inserts must be ordered separately.

AN: CE90AN



					Intro		
					• Special small-diameter milling cutters, replaceable solid carbide tools.		
Model	Dimension				Grade		
	I. C	S	APMAX	RE	CT5320	CT8320	CT9320
ANKT 040208R-M	4.5	3.10	4.1	0.8	●		
ANKT 060308R-M	7.0	4.57	6.6	0.8	●		
ANKT 060308R-ML	7.0	4.57	6.6	0.8	●		



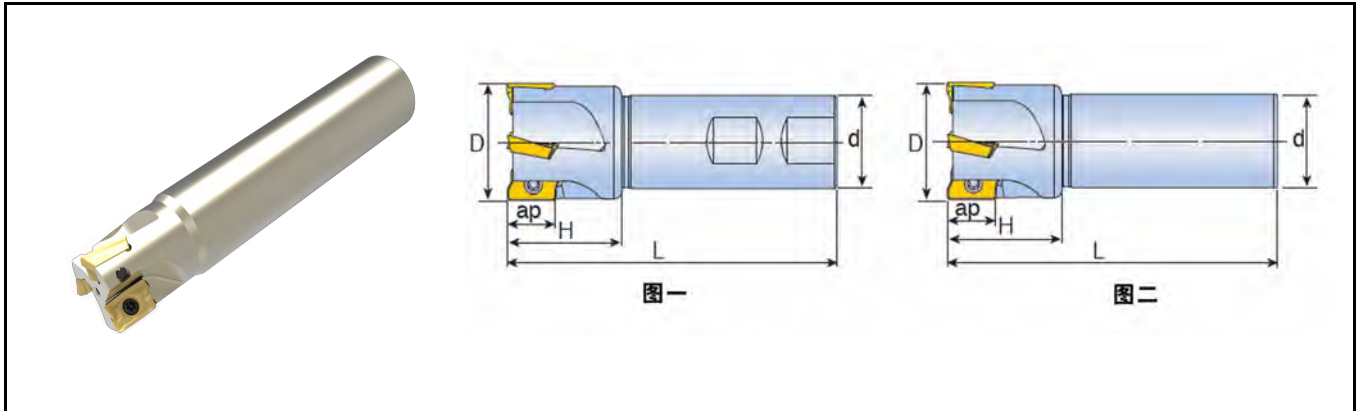
Spare Parts

Model	Screw	Wrench
		
CE90AN-04	TS 180411/HG	CTS06W
CE90AN-06	CSB3070	CTS08W

AP17: CE90AP



End Mill Holder



Model		Dimension (mm)					Figure	Insert
		D	d	L	H	ap		
CE90AP-225L210Y24R-17	2	25	24	210	40	16.1	二	APKT 1705
CE90AP-225L210Y25R-17	2	25	25	210	40	16.1	二	
CE90AP-226L200Y25R-17	2	26	25	200	40	16.1	二	
CE90AP-226L250Y25R-17	2	26	25	250	40	16.1	二	
CE90AP-232L250Y32R-17	2	32	32	250	65	16.1	二	
CE90AP-233L300Y32R-17	2	33	32	300	40	16.1	二	
CE90AP-332L200Y32R-17	3	32	32	200	65	16.1	二	
CE90AP-333L200Y32R-17	3	33	32	200	55	16.1	二	
CE90AP-333L250Y32R-17	3	33	32	250	55	16.1	二	
CE90AP-240L250Y32R-17	2	40	32	250	54	16.1	二	
CE90AP-340L200Y32R-17	3	40	32	200	54	16.1	二	
CE90AP-440L200Y32R-17	4	40	32	200	57	16.1	二	

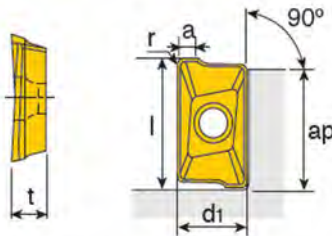
©Standard Tool Holder Without Internal Cooling

©Standard stock drawing for handle type Fig. 2. For handle type Fig. 1, please inquire separately for ordering.

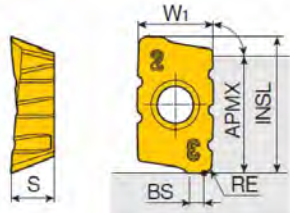
©Inserts must be ordered separately.

Spare Parts

Model	Screw	Wrench
CE90AP	CSC4090	CTS15W

								Intro				
								• Plain insert with regular 2-flute design • Large positive front angle for efficient cutting • Tool holder designed for 90° main cutting angle • Suitable for shoulder milling, corn milling, face milling, and other conventional milling applications, offering good versatility				
Model	Edge Length	Dimension (mm)						Grade				
		d	ap	L	t	a	r	CT5320	CT5420	CT7420	CT8320	CT8520
APKT 170508-EM	17	10.7	16.1	18.5	5.56	2.26	0.8	●		●		
APKT 170508-M	17	10.7	16.1	18.5	5.56	2.26	0.8	●		●		
APKT 170516-EM	17	10.7	16.1	18.5	5.56	2.26	1.6	●	●			

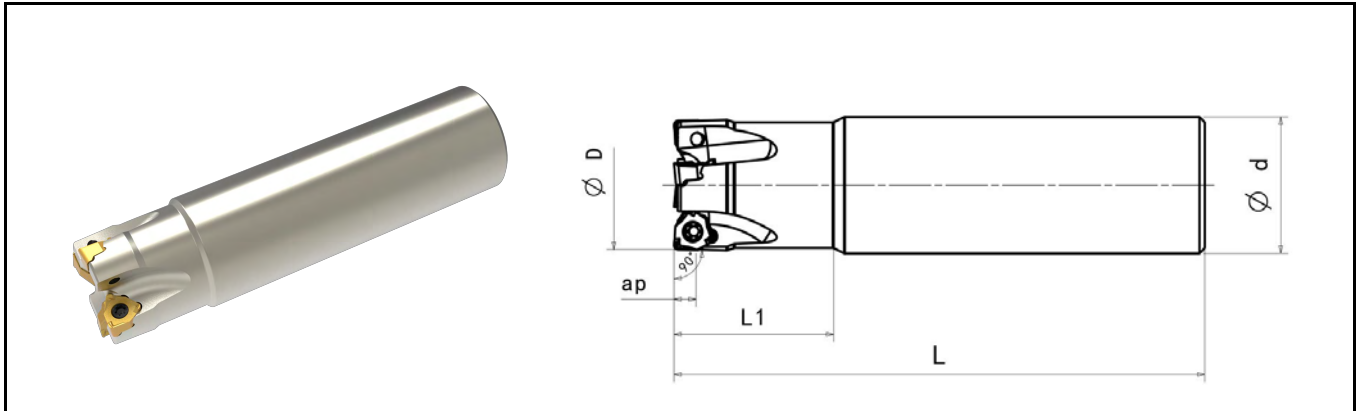
© Insert matches tool page: B76、B110、B127、B128.

		Intro										
			• Plain insert with regular 2-flute design • Large positive front angle for efficient cutting • Tool holder designed for 90° main cutting angle • Suitable for shoulder milling, corn milling, face milling, and other conventional milling applications, offering good versatility • SML denotes the chip breaker groove type.									
Model	Edge Length	Dimension (mm)						Grade				
		INSL	W1	APMX	S	BS	RE	CT5320	CT5420	CT7420	CT8320	CT8520
APKT 1705PER-SML	17	18.5	10.7	16.0	5.56	2.26	0.8	●		●		

WN04: CE90WN



End Mill Holder



Model		Dimension (mm)					Weight	Insert
		D	d	L	H	ap		
CE90WN-220L150Y20R-04	2	20	20	150	29	4.0	0.7	WNHX 0403
CE90WN-320L150Y20R-04	3	20	20	150	29	4.0	0.7	
CE90WN-425L170Y25R-04	4	25	25	170	29	4.0	0.6	
CE90WN-525L170Y25R-04	5	25	25	170	29	4.0	0.6	
CE90WN-532L195Y32R-04	5	32	32	195	31	4.0	1.2	
CE90WN-632L195Y32R-04	6	32	32	195	31	4.0	1.2	

©Standard Tool Holder Without Internal Cooling

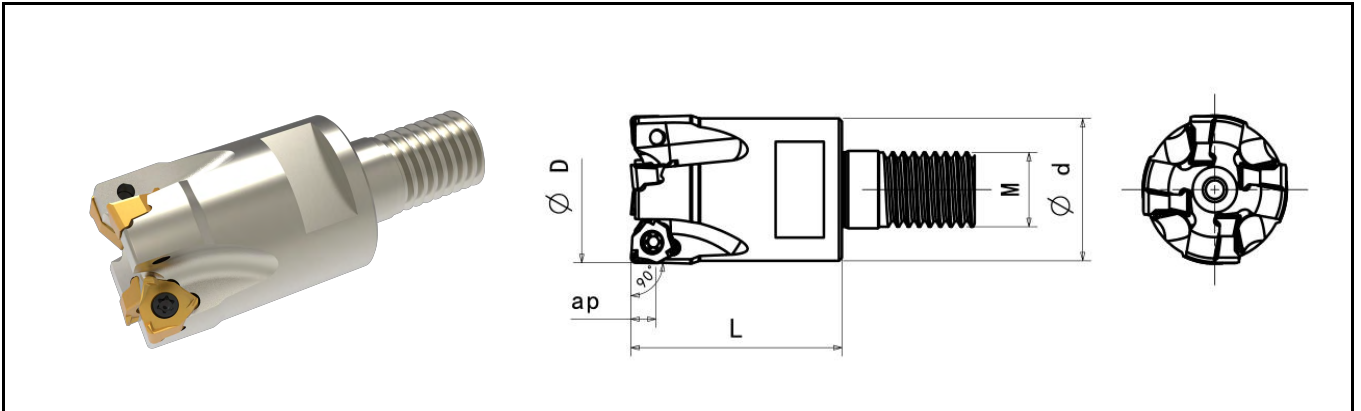
©Inserts must be ordered separately.

		Intro								
		• Double-sided 6-edge insert • Insert features a large clearance angle design for smooth cutting • Tool holder is suitable for a 90° main cutting angle design • Applicable for most groove milling and face milling operations								
Model	Edge Length	Dimension (mm)				Grade				
		d	r	s	a	CT5320	CT7420	CT8320	CT8420	CT9320
WNHX 040308-ML	04	7.64	0.8	3.29	1.1	○				

WN04: CE90WN



End Mill Holder



Model		Dimension (mm)					Weight	Insert
		D	d	L	M	ap		
CE90WN-220M10R-04	2	20	18.3	28	M10	4.0	0.1	WNHX 0403
CE90WN-320M10R-04	3	20	18.3	28	M10	4.0	0.1	
CE90WN-425M12R-04	4	25	23	30	M12	4.0	0.2	
CE90WN-525M12R-04	5	25	23	30	M12	4.0	0.2	
CE90WN-532M16R-04	5	32	30	40	M16	4.0	0.3	
CE90WN-632M16R-04	6	32	30	40	M16	4.0	0.3	

©Standard Tool Holder Without Internal Cooling

©Inserts must be ordered separately.

©For details on the insert, please refer to page112

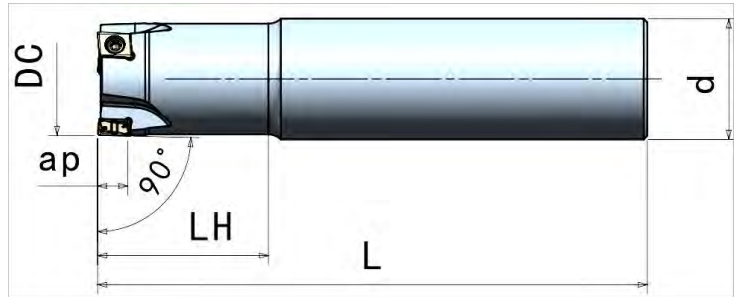
Spare Parts

Model	Screw	Wrench
		
CE90WN	CSG2565-P	CTS08W-P

LN: CE490LN



End Mill Holder, Kr=90°



Model	kr		Dimension (mm)					Insert
			DC	LH	d	L	ap	
CE490LN-220L150Y20R-09	90°	2	20	30	20	150	8.5	LNHU 0904
CE490LN-320L150Y20R-09		3	20	30	20	150		
CE490LN-325L150Y25R-09		3	25	30	25	150		
CE490LN-425L150Y25R-09		4	25	30	25	150		
CE490LN-332L150Y32R-09		3	32	30	32	150		
CE490LN-532L150Y32R-09		5	32	30	32	150		
CE490LN-440L170Y32R-09		4	40	30	32	170		
CE490LN-640L170Y32R-09		6	40	30	32	170		

©Standard Tool Holder Without Internal Cooling

©Inserts must be ordered separately.

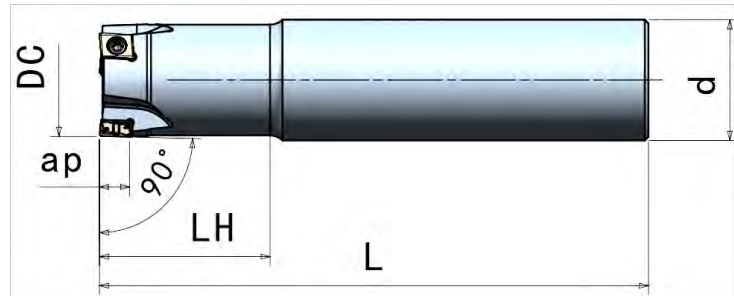
Spare Parts

Model	DIA	Screw	Wrench
			
CE490LN-09	20	CSC3080	CTS10W
CE490LN-09	25、32、40	CSC3010	CTS08W

LN: CE490LN



End Mill Holder, Kr=90°



Model	kr		Dimension (mm)					Insert
			DC	LH	d	L	APmax	
CE490LN-230L150Y25R-12	90°	2	30	35	25	150	11.5	LNHU 1206
CE490LN-330L150Y25R-12		3	30	35	25	150		
CE490LN-232L150Y32R-12		2	32	35	32	150		
CE490LN-332L150Y32R-12		3	32	35	32	150		
CE490LN-235L150Y32R-12		2	35	35	32	150		
CE490LN-335L150Y32R-12		3	35	35	32	150		
CE490LN-340L170Y32R-12		3	40	35	32	170		
CE490LN-440L170Y32R-12		4	40	35	32	170		

©Standard Tool Holder Without Internal Cooling

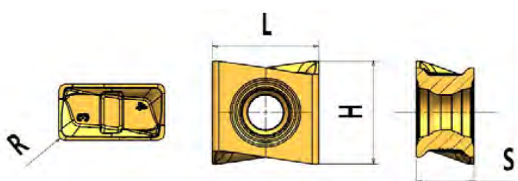
©Inserts must be ordered separately.

Spare Parts

Model	Screw	Wrench
		
CE490LN-12	CSC4013	CTS15W

LN

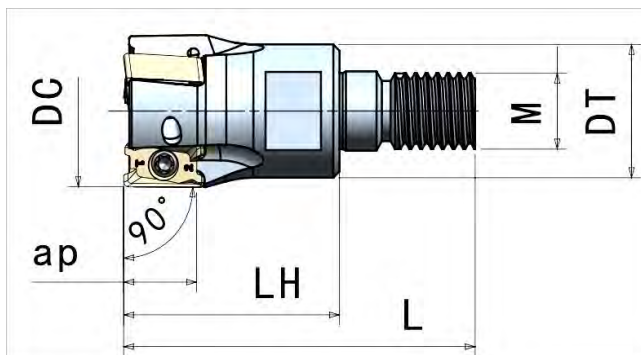


			Intro								
						• Features four right-hand 90° cutting edges • The combination of spiral cutting edges and a large positive rake angle design enables smoother cutting • Face milling and double-sided insert tool holders can utilize all four cutting edges of the insert • Not suitable for use with three-edge inserts of the same hand orientation					
Model	Edge Length	Kr (°)	Dimension (mm)					Grade			
			L	H	S	R	AP _{max}	CT5320	CT7320	CT8320	CT101
LNHU 090404-M	09	90	9.02	8.55	4.48	0.4	8.5	●		●	
LNHU 120608-M	12		12.7	13.0	6.75	0.8	11.5	●	●	●	
LNHU 120612-M	12		12.7	13.0	6.75	1.2	11.5			●	
LNHU 120608-AL	12		12.7	13.0	6.75	0.8	11.5				●
LNHU 160808-M	16		16.4	16.2	8.0	0.8	15.0	●	●	●	

AN: CE90AN-M



Threaded end mill holder, $Kr=90^\circ$



Model		Dimension (mm)							Insert
		DC	DT	M	LH	ap			
CE90AN-220M10R-12	2	20	18	M10	28	11.5			ANKU 1204
CE90AN-325M12R-12	3	25	21	M12	40				
CE90AN-432M16R-12	4	32	29	M16	40				
CE90AN-532M16R-12	5	32	29	M16	40				
CE90AN-225M12R-17	2	25	21	M12	32	16.5			ANKU 17T6 ANHU 17T6
CE90AN-332M16R-17	3	32	29	M16	40				
CE90AN-435M16R-17	4	35	29	M16	40				
CE90AN-540M16R-17	5	40	29	M16	40				

©Standard Tool Holder Without Internal Cooling

©Inserts must be ordered separately.

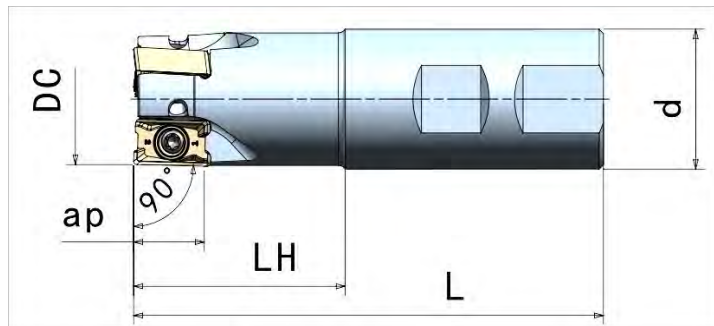
Spare Parts

Model	DIA	Screw	Wrench
CE90AN-**-12	20、25、32、40	CSC3080	CTS10W
CE90AN-**-17	25	CSD4010	CTS15W
CE90AN-**-17	32、40	CSC4013	CTS15W

AN: CE90AN-Z



End Mill Holder, Kr=90°



Model	Kr		Dimension (mm)						Insert
			DC	d	L	LH	ap		
CE90AN-220L79Z20R-12	90°	2	20	20	79	28	11.5	0.17	ANKU 1204
CE90AN-320L79Z20R-12		3	20	20	79	28		0.16	
CE90AN-325L89Z25R-12		3	25	25	89	32		0.29	
CE90AN-432L110Z32R-12		4	32	32	110	49		0.60	
CE90AN-540L110Z32R-12		5	40	32	110	49		0.66	
CE90AN-225L89Z25R-17		2	25	25	89	32	16.5	0.28	ANKU 17T6 ANHU 17T6
CE90AN-332L111Z32R-17		3	32	32	111	50		0.58	
CE90AN-340L111Z32R-17		3	40	32	111	50		0.65	
CE90AN-440L111Z32R-17		4	40	32	111	50		0.65	

©Standard Tool Holder Without Internal Cooling

©Inserts must be ordered separately.

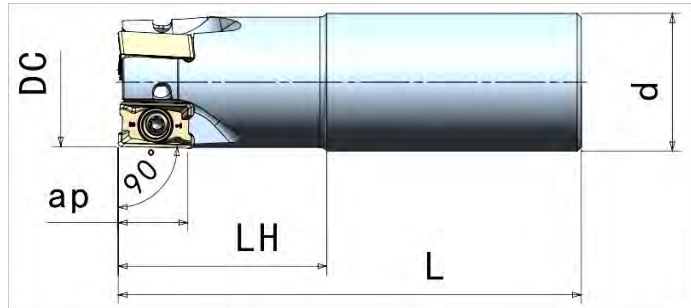
Spare Parts

Model	DIA	Screw	Wrench
CE90AN-**-12	20、25、32、40	CSC3080	CTS10W
CE90AN-**-17	25	CSD4010	CTS15W
CE90AN-**-17	32、40	CSC4013	CTS15W

AN: CE90AN-Y



End Mill Holder, Kr=90°



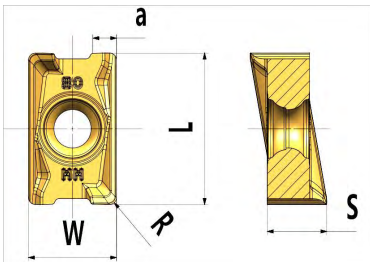
Model	Kr		Dimension (mm)					 Kg	Insert
			D	d	L	L1	ap		
CE90AN-220L150Y20R-12	90°	2	20	20	150	28	11.5	0.33	ANKU 1204
CE90AN-320L90Y20R-12		3	20	20	90	28		0.21	
CE90AN-320L150Y20R-12		3	20	20	150	28		0.33	
CE90AN-325L170Y25R-12		3	25	25	170	43		0.63	
CE90AN-425L100Y25R-12		4	25	25	100	43		0.33	
CE90AN-425L170Y25R-12		4	25	25	170	43		0.59	
CE90AN-432L200Y32R-12		4	32	32	200	49		1.16	
CE90AN-532L110Y32R-12		5	32	32	110	49		0.61	
CE90AN-532L200Y32R-12		5	32	32	200	49		1.17	
CE90AN-540L200Y32R-12		5	40	32	200	49		1.22	
CE90AN-225L100Y25R-17		2	25	25	100	43	16.5	0.28	ANKU 17T6 ANHU 17T6
CE90AN-225L170Y25R-17		2	25	25	170	43		0.58	
CE90AN-332L110Y32R-17		3	32	32	110	49		0.58	
CE90AN-332L200Y32R-17		3	32	32	200	50		1.14	
CE90AN-340L200Y32R-17		3	40	32	200	50		1.21	
CE90AN-440L200Y32R-17		4	40	32	200	50		1.20	

©Standard Tool Holder Without Internal Cooling

©Inserts must be ordered separately.

AN



		Intro										
								• 90° double-sided 4-edge precision pressed and ground insert, offering good cost-effectiveness. • Large positive rake angle spiral cutting edge design for smooth cutting. • Integral bottom polishing for achieving excellent surface finish quality.				
Model	Edge Length	Kr	Dimension (mm)					Grade				
			L	W	S	a	R	CT5320	CT5420	CT7320	CT8320	CT8520
ANKU 120404PFR-M	12	90°	12.55	7.0	4.84	1.7	0.4	●		○		
ANHU 120404PFR-M							0.4	●		○		
ANKU 120408PFR-M							0.8	●		●		
ANKU 120408PER-MM							0.8	●		○	●	
ANKU 120412PFR-M							1.2	●		○		
ANKU 17T608PFR-M	17	90°	17.5	10.5	6.95	2.7	0.8	●		●	●	●
ANKU 17T608PER-MM							0.8	●		○		
ANHU 17T608PER-MM							0.8	●		○		
ANHU 17T608PER-M							0.8	●		○		
ANHU 17T608PER-SM							0.8	●		○		
ANKU 17T616PFR-M							1.6	●		○		



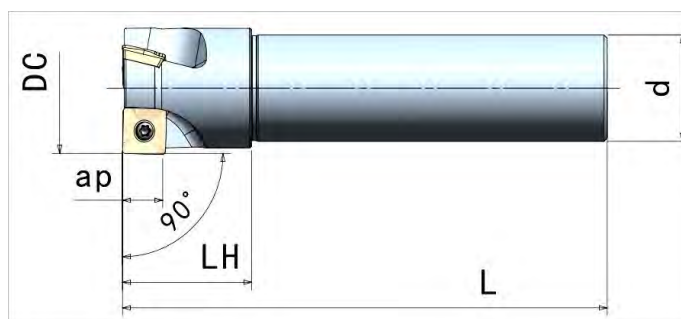
Spare Parts

Model	DIA	Screw	Wrench
			
CE90AN-**-12	20、25、32、40	CSC3080	CTS10W
CE90AN-**-17	25	CSD4010	CTS15W
CE90AN-**-17	32、40	CSC4013	CTS15W

SD14: CE90SD-Z



Cylindrical Shank End Mill Holder, Kr=90 °

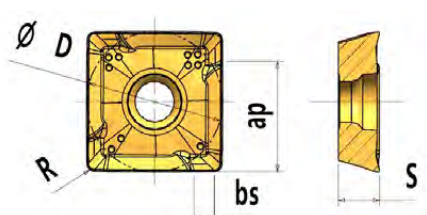
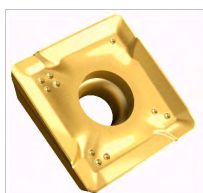


Model		Dimension (mm)							Insert
		DC	L	ap	LH	d			
CE90SD-340L170Y32R-14	3	40	170	10	40	32		1.0	SDKT 1404
CE90SD-340L250Y32R-14	3	40	250	10	40	32		1.5	
CE90SD-440L170Y32R-14	4	40	170	10	40	32		1.0	
CE90SD-350L120Y32R-14	3	50	120	10	40	32		0.8	
CE90SD-450L120Y32R-14	4	50	120	10	40	32		0.8	
CE90SD-463L120Y32R-14	4	63	120	10	40	32		1.0	
CE90SD-563L120Y32R-14	5	63	120	10	40	32		1.0	

©Standard Tool Holder Without Internal Cooling

©Inserts must be ordered separately.

Model	Edge Length	Dimension (mm)					Grade			
		D	ap	S	bs	R	CT5320	CT5420	CT7320	CT7420
SDKT 140408M-PM	14	13.8	10.3	4.2	2.0	0.8	●	●		●



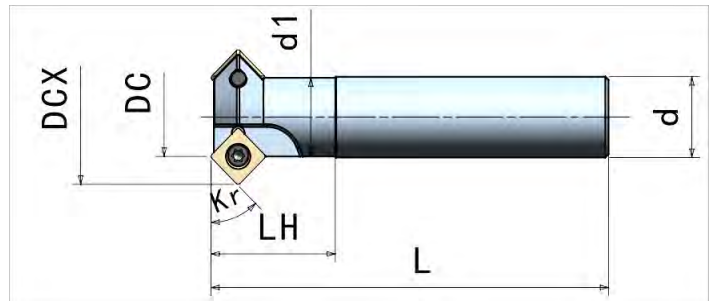
Spare Parts

Model	Screw	Wrench
CE90SD-14	CSG3585-P	CTS10W-P

CCF...SP

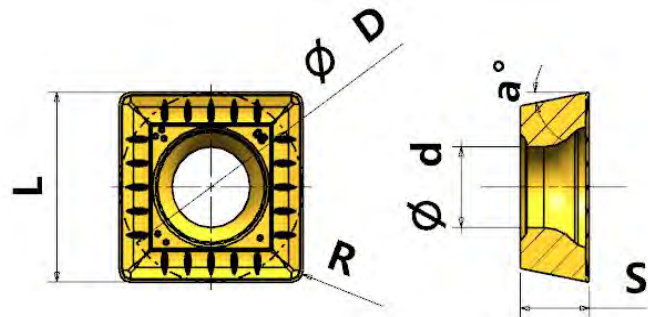


Chamfer End Mill Holder



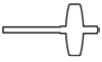
Model	Kr (°)		Dimension (mm)						Insert
			DCX	DC	d	L	LH	d1	
CCF30SP-112L120Y20R-12	30	1	32.4	11.6	20	120	40	18	SPKT 1204
CCF45SP-112L120Y20R-12	45	1	28.6	11.35	20	120	40	18	
CCF45SP-225L160Y25R-12	45	2	41.66	24.34	25	160	40	24.4	
CCF60SP-225L160Y25R-12	60	2	36.78	24.48	25	160	40	24.4	

©Standard Tool Holder Without Internal Cooling, Inserts must be ordered separately.



Model	Dimension (mm)						Grade			
	L	D	d	a	S	r	CT5320	CT7320	CT8420	CT9320
SPKT 120408-KM	12.7	12.7	5.4	11°	4.76	0.8			●	

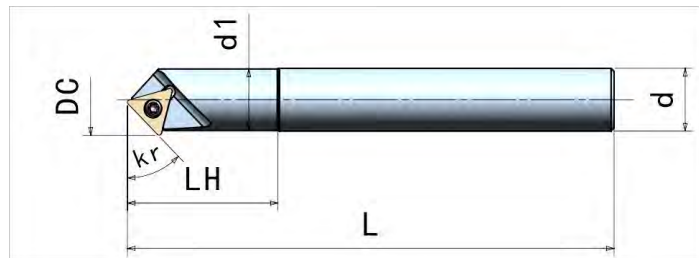
Spare Parts

Model	Insert Screw	Wrench
		
CCF...SP	CSD5012	CTQ20

CCF...TC



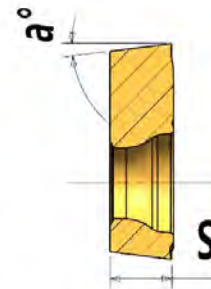
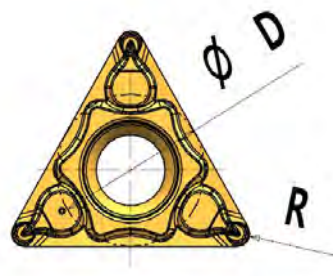
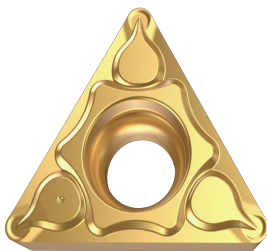
Chamfer End Mill Holder



Model	Kr (°)		Min. Hole Dia.	Dimension (mm)					Insert
				DC	d1	d	L	LH	
CCF45TC-D4RY16R-11	45	1	4	16	15.5	16	130	30	TCMT 1102□□
CCF45TC-D6RY20R-16	45	1	6	23.3	19.6	20	200	50	TCMT 16T3□□

©Standard Tool Holder Without Internal Cooling

©Inserts must be ordered separately.



Model	Dimension (mm)				Grade			
	D	S	a		CT5320	CT7320	CT8330	CT9320
TCMT 1102□□	6.35	2.38	7°		•	•	•	•
TCMT 16T3□□	9.52	3.97	7°		•	•	•	•

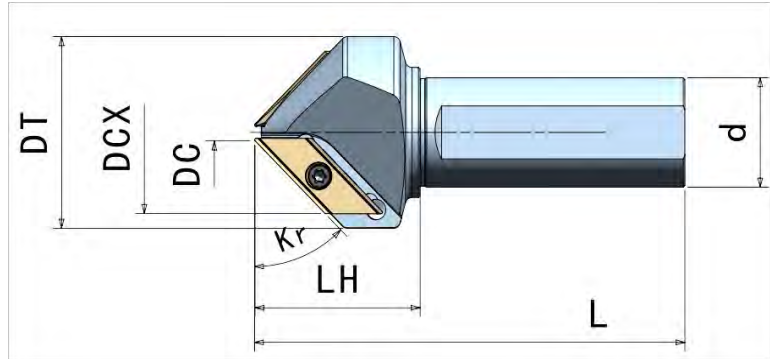
Spare Parts

Model	Insert Screw	Wrench
CCF...TC...11	CSC2560	CTS08W
CCF...TC...16	CSC4090	CTS15W

CCF...XC



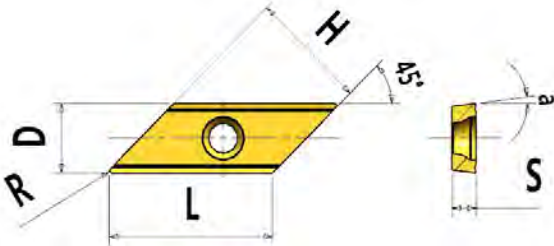
Chamfer End Mill Holder



Model		Dimension (mm)									
		Kr	DC	DCX	DT	LH	L	d			
CCF60XC-134L130W32R-31	1	60	5	34	40	50	130	32			
CCF45XC-246L130W32R-31	2	45	5	46	56	50	130	32			
CCF30XC-255L130W32R-31	2	30	5	55	72	50	130	32			

©Standard Tool Holder Without Internal Cooling, Inserts must be ordered separately.

©Minimum Machining Hole Diameter: $\phi 5\text{mm}$

		Intro									
			• Long Edge Chamfer Insert • Flat Insert								
Model	Edge Length	Dimension (mm)						Grade			
		L	H	D	S	a	R	CT5320	CT5420	CT7320	CT7420
XCET 310404	31	30.47	22	12.7	4.5	7°	0.4	●	○	●	

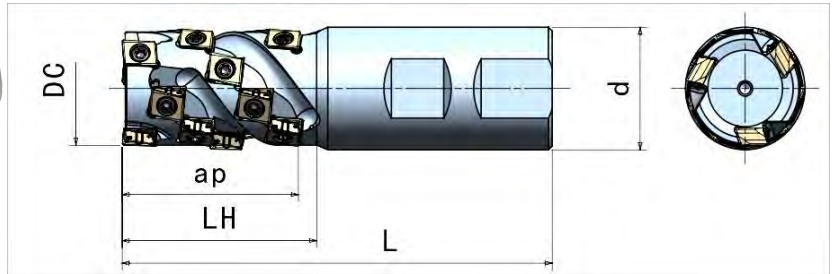
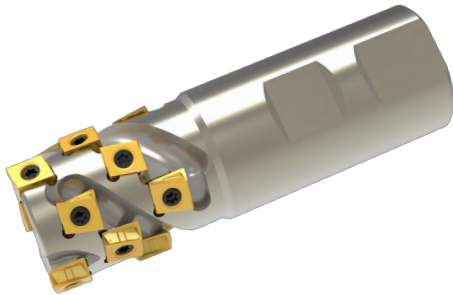
Spare Parts

Model	Insert Screw	Wrench
CCF60XC-134L130W32R-31	CSY5012	CTS20W
CCF45XC-246L130W32R-31		
CCF30XC-255L130W32R-31		

LN: CCM490LN



Corn Milling Cutter Holder, $Kr=90^\circ$



Model	Kr		Total Teeth	Dimension (mm)					Insert
				DC	ap	LH	L	d	
CCM490LN-2525L100Z25R-09	90°		10	25	36	43	100	25	LNHU 0904
CCM490LN-3532L105Z32R-09			15	32	36	44	105	32	
CCM490LN-3632L115Z32R-09			18	32	43	52	115	32	
CCM490LN-3640L125Z40R-09			18	40	43	54	125	40	
CCM490LN-3740L135Z40R-09			21	40	51	64	135	40	

©Standard Tool Holder Without Internal Cooling; Inserts must be ordered separately.

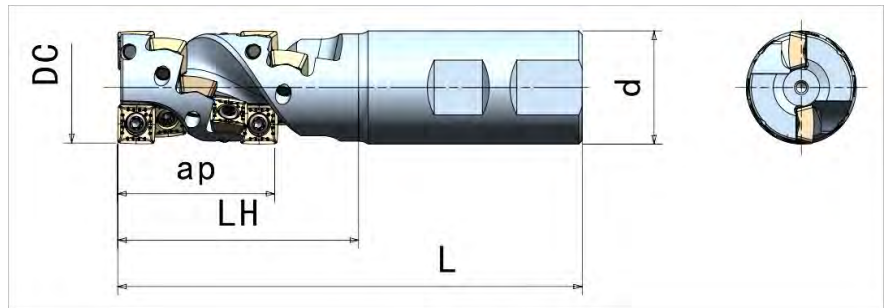
				Intro							
				• Features four right-hand 90° cutting edges • The combination of spiral cutting edges and a large positive rake angle design enables smoother cutting • Face milling and double-sided insert tool holders can utilize all four cutting edges of the insert • Not suitable for use with three-edge inserts of the same hand orientation							
Model	Edge Length	Kr (°)	Dimension (mm)					Grade			
			L	H	S	R	APmax	CT5320	CT7320	CT8320	CT101
LNHU 090404-M	09	90	9.02	8.55	4.48	0.4	8.5	●		●	

Spare Parts	Model	Screw	Wrench
		CSC3010	CTS08W

SV: CCM90SV

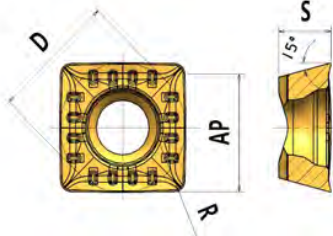


Corn Milling Cutter Holder, $Kr=90^\circ$



Model	Kr		Teeth	Dimension (mm)					Insert
				DC	ap	LH	L	d	
CCM90SV-2625L120Z25R-09	90°	2	12	25	40	58	120	25	SVKT 09T3
CCM90SV-2732L135Z32R-09		2	14	32	52	70	135	32	
CCM90SV-2632L135Z32R-11		2	12	32	52	70	135	32	SVKT 1104
CCM90SV-3640L135Z32R-11		3	18	40	52	75	135	32	
CCM90SV-3740L180Z32R-11		3	21	40	60	85	180	32	
CCM90SV-4650L145Z40R-11		4	24	50	52	75	145	40	
CCM90SV-4950L170Z40R-11		4	36	50	76	100	170	40	

©Standard Tool Holder Without Internal Cooling; Inserts must be ordered separately..

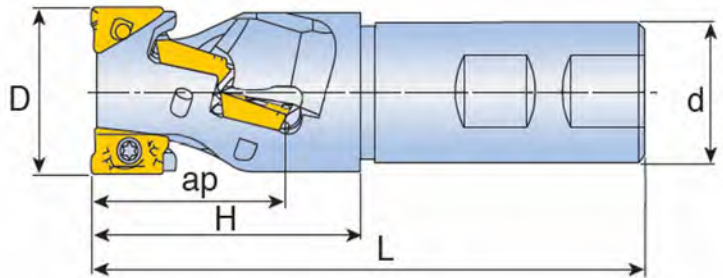
						Intro			
						• Flat single-sided 4-edge inserts • Large positive rake angle for easycutting			
Model	Edge Length	Dimension (mm)							
		D	S	AP	R	CT5320	CT7320	CT8320	CT9320
SVKT 09T308-M	09	9.525	3.97	8.5	0.8	●	●	●	
SVKT 110408-ML	11	11.0	4.5	10.0	0.8	●	●	●	

Spare Parts	Model	Screw	Wrench
	CCM90SV-**-09	CSG3585-P	CTS15W-P
	CCM90SV-**-11	CSD4010	CTS15W

AP17: CCM90AP



Corn Milling Holder



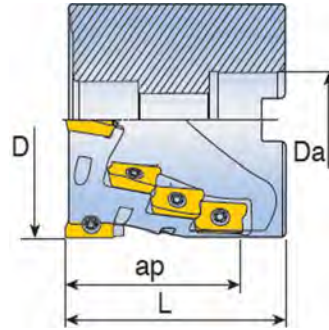
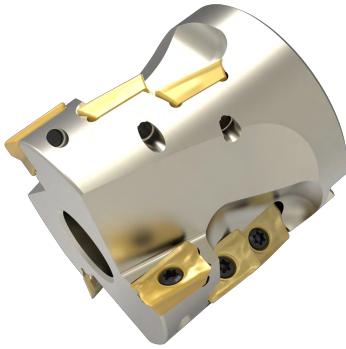
Model		Teeth	Dimension (mm)						Insert
			D	d	H	L	ap		
CCM90AP-2232L120Z32-17	2	4	32	32	50	120	30		APKT 1705
CCM90AP-2340L140Z32-17	2	6	40	32	65	140	44		

©Standard products without the inner-coolingholes; Insert needs to be purchased separately

		Intro										
				- Flat-mounted positive 2-flute insert - Large positive rake angle for smooth cutting - Tool holder designed for 90° main angle - Suitable for shoulder milling, corn milling, face milling, and other general milling applications with good versatility. -SML denotes chipbreaker slot type.								
Model	Edge Length	Dimension (mm)						Grade				
		d	ap	L	t	a	r	CT5320	CT5420	CT7420	CT8320	CT9080
APKT 170508-EM	17	10.7	16.1	18.5	5.56	2.26	0.8	●		●		
APKT 170508-M	17	10.7	16.1	18.5	5.56	2.26	0.8	●		●		
APKT 170516-EM	17	10.7	16.1	18.5	5.56	2.26	1.6	●	●			
				- Flat-mounted positive 2-flute insert - Large positive rake angle for smooth cutting - Tool holder designed for 90° main angle - Suitable for shoulder milling, corn milling, face milling, and other general milling applications with good versatility. -SML denotes chipbreaker slot type.								
Model	Edge Length	Dimension (mm)						Grade				
		INSL	W1	APMX	S	BS	RE	CT5320	CT5420	CT7420	CT8320	CT9080
APKT 1705PER-SML	17	18.5	10.7	16.0	5.56	2.26	0.8	●		●		

Spare Parts	Model	Screw	Wrench
	CCM90AP	CSC4090	CTS15W

AP17 Corn Milling : CCM90AP



Model		Teeth	Dimension (mm)				I/F Type	Kg	Insert
			D	L	ap	Da			
CCM90AP-2350H44A22R-17	2	6	50	60	44	22	A	0.5	APKT 1705
CCM90AP-3363H44A27R-17	3	9	63	63	44	27	A	0.9	
CCM90AP-4363H44A27R-17	4	12	63	63	44	27	A	0.9	
CCM90AP-4480H58A32R-17	4	16	80	75	58	32	A	1.9	
CCM90AP-56100H88A40R-17	5	30	100	110	88	40	A	4.8	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

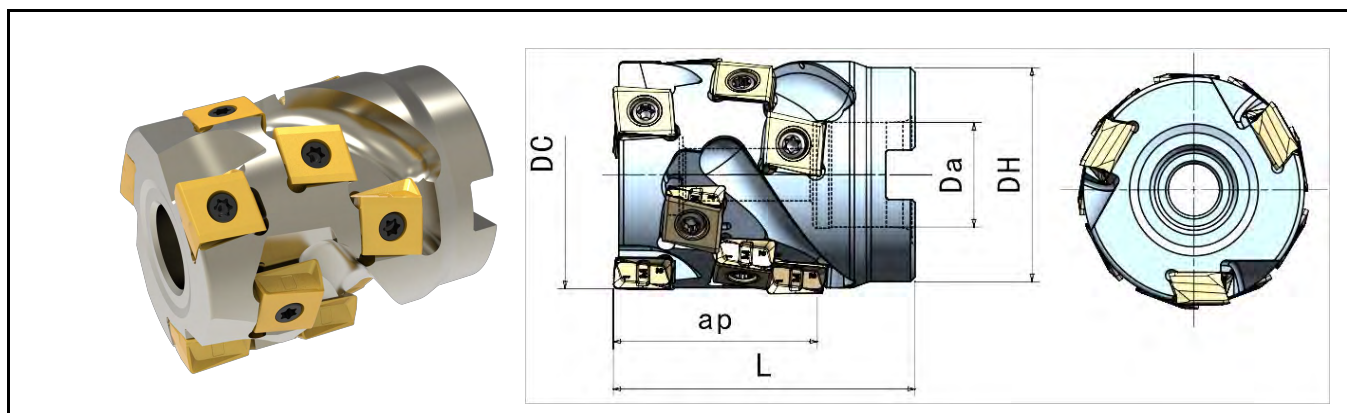
©Please refer to page B127 for details.

Spare Parts	Model	Screw	Wrench
	CCM90AP	CSC4090	CTS15W

LN: CCM490LN



Corn Milling Cutter, $K_r=90^\circ$



Model	kr		Teeth	Dimension (mm)					Insert
				DC	Da	DH	L	ap	
CCM490LN-3350A22R-12	90°		9	50	22	45	55	31.5	LNHU 1206
CCM490LN-3450A22R-12			12	50	22	45	65	42.0	
CCM490LN-4463A27R-12			16	63	27	58	70	42.0	
CCM490LN-4563A27R-12			20	63	27	58	80	52.5	
CCM490LN-5580A32R-12			25	80	32	74	85	52.5	
CCM490LN-54100A40R-16			20	100	40	94	90	57.0	LNHU 1608

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

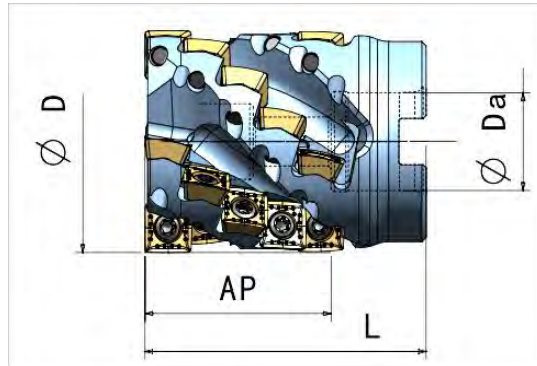
			Intro								
			• Four right-hand 90° cutting edges • The combination of spiral cutting edges and a large positive rake angle design enables smoother cutting • Face milling and double-sided insert tool holders can utilize all four cutting edges of the insert • Not suitable for use with three-edge inserts of the same hand orientation								
Model	Edge Length	Kr (°)	Dimension (mm)					Grade			
			L	H	S	R	AP _{max}	CT5320	CT7320	CT8320	CT101
LNHU 120608-M	12	90	12.7	13.0	6.75	0.8	11.5	●	●	●	
LNHU 120612-M	12		12.7	13.0	6.75	1.2	11.5			●	
LNHU 120608-AL	12		12.7	13.0	6.75	0.8	11.5				●
LNHU 160808-M	16		16.4	16.2	8.0	0.8	15.0	●	●	●	

Spare Parts	Model	Screw	Wrench
	CCM490LN-12	CSG4013-P	CTS15W-P
	CCM490LN-16	CSG5016	CTS20W

SV: CCM90SV

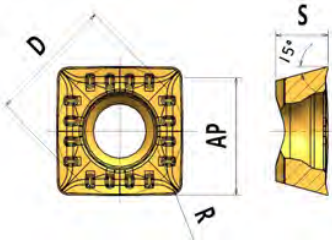


Corn Milling Cutter, $Kr=90^\circ$



Model	Kr		Teeth	Dimension (mm)					Insert
				D	AP	L	Da		
CCM90SV-3340A16R-11	90°	3	9	40	27	55	16	0.3	SVKT 1104
CCM90SV-4550A22R-11		4	20	50	43	65	22	0.6	
CCM90SV-4850A22R-11		4	32	50	69	90	22	0.8	
CCM90SV-4863A27R-11		4	32	63	69	93	27	1.3	
CCM90SV-5763A27R-11		5	35	63	60	85	27	1.2	
CCM90SV-5863A27R-11		5	40	63	69	93	27	1.4	
CCM90SV-4980A32R-11		4	36	80	76	100	32	2.4	
CCM90SV-6980A32R-11		6	54	80	76	100	32	2.6	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

						Intro			
						• Flat single-sided 4-edge inserts • Large positive rake angle for easy cutting			
Model	Edge Length	Dimension (mm)				Grade			
		D	S	AP	R	CT5320	CT7320	CT8320	CT9320
SVKT 110408-ML	11	11.0	4.5	10.0	0.8	●	●	●	

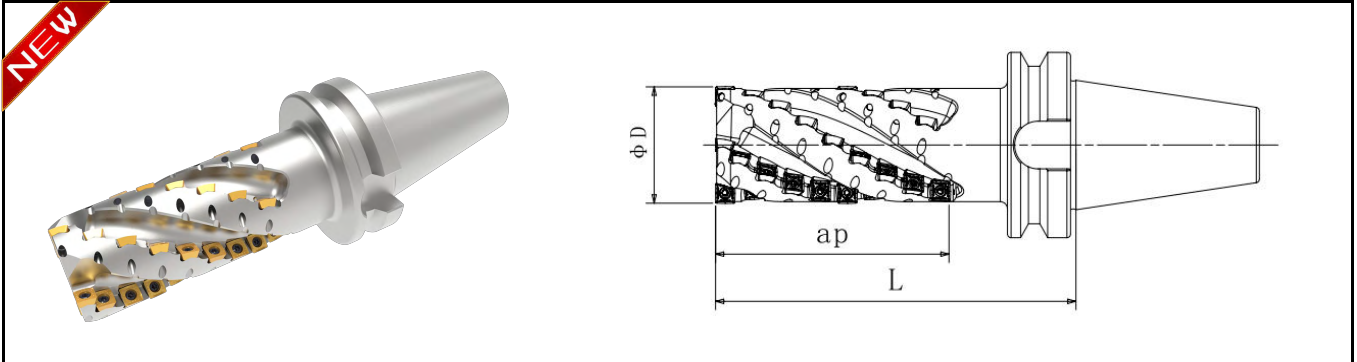
Spare Parts	Model	Screw	Wrench
	CCM90SV-**-11	CSD4010	CTS15W

SV: CCM90SV-T



Monolithic Corn Milling Tool; $K_r=90^\circ$

Half Power Monolithic Corn Milling Tool, $K_r=90^\circ$

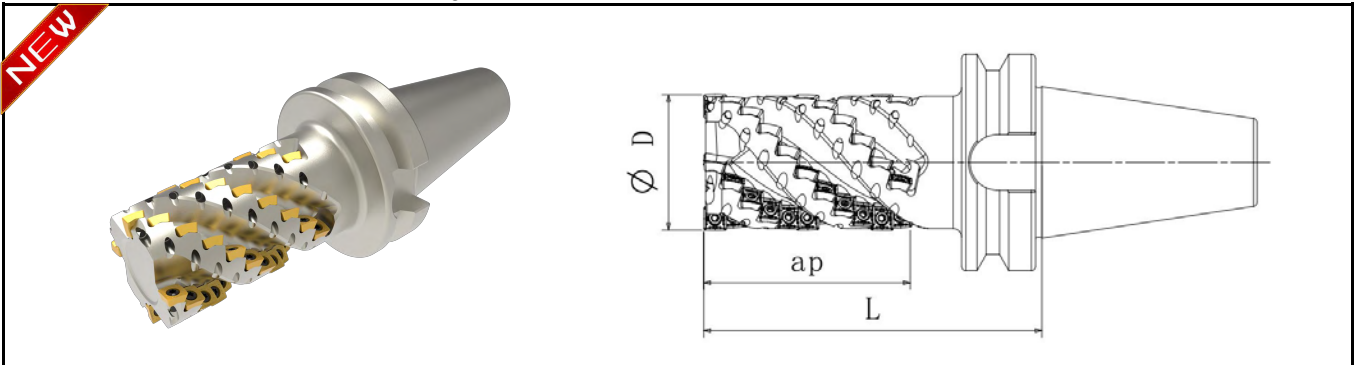


Model	Sets	Set/Teeth	Sum Teeth	Dimension (mm)			Shank Type	Insert
				D	ap	L		
CCM90SV-250H105BT50R-11	2	15	30	50	105	170	BT50	SV 1104
CCM90SV-263H126BT50R-11	2	18	36	63	126	200		
CCM90SV-280H160BT50R-11	2	22	44	80	160	240		

©Standard Tool Holder Without Internal Cooling; Inserts must be ordered separately.

©Number of sets: This corn mill has two rows of teeth, one above and one below, as a set

Full Power Monolithic Corn Milling Tool, $K_r=90^\circ$



Model	Sets	Set/Teeth	Sum Teeth	Dimension (mm)			Shank Type	Insert
				D	ap	L		
CCM90SV-350H75BT50R-11	3	9	27	50	75	140	BT50	SV 1104
CCM90SV-463H95BT50R-11	4	11	44	63	95	160		
CCM90SV-480H120BT50R-11	4	14	56	80	120	200		

©Standard Tool Holder Without Internal Cooling; Inserts must be ordered separately.

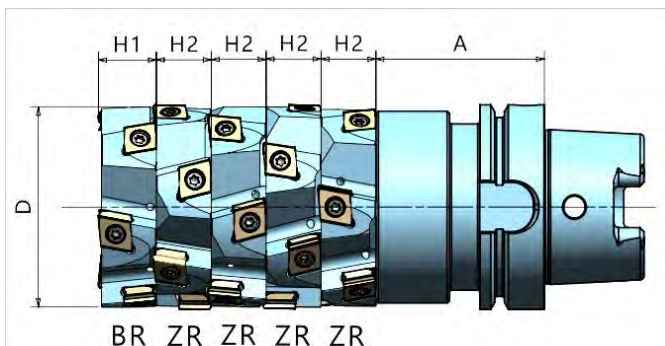
©Number of sets: This corn mill has a single row of teeth as a set.

EN: CCM90EN-H



Head Changeable Corn Milling Tool

©Different interface shanks can be selected BT/SK/HSK



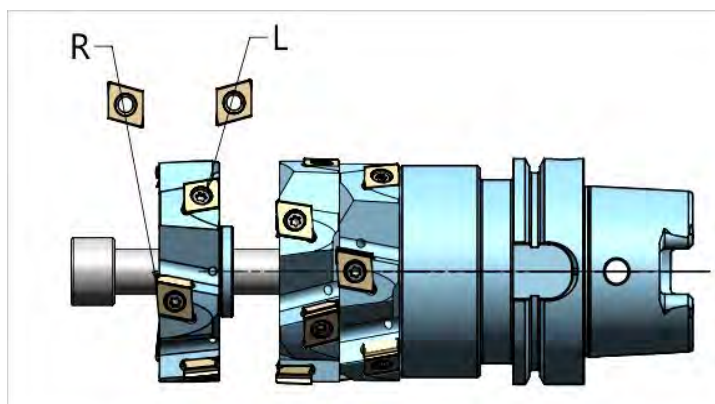
D	B R				Z R				Insert
	Model		Teeth	H1	Model		Teeth	H2	
63	CSM90EN-663BR25-09	3	6	17.1	CSM90EN-663ZR25-09	3	6	16	ENGX 0904
80	CSM90EN-680BR32-12	3	6	23.2	CSM90EN-680ZR32-12	3	6	22	ENGX 1206
100	CSM90EN-8100BR32-12	4	8	23.2	CSM90EN-8100ZR32-12	4	8	22	

©Standard products without the inner-coolingholes; Insert needs to be purchased separately

©The shank can be customized according to the requirements.

©Please note that this holder requires the installation of a left/right insert.

©For the selection of tool holder mounting screws, please refer to B133-New 2.

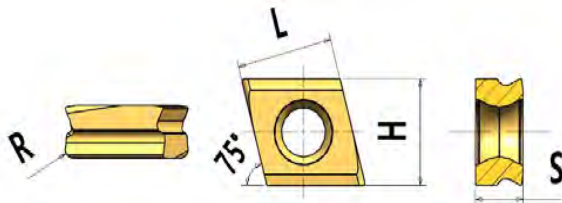


Cutter DIA	Screw	Wrench	Locating pin
63	CSC4090	CTS15W	CZY8024
80	CSG5012-P	CTS20W-P	CZY8024
100			CZY1025

EN: CCM90EN-H



Head Changeable Corn Milling Tool

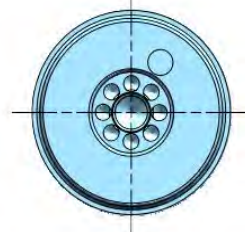
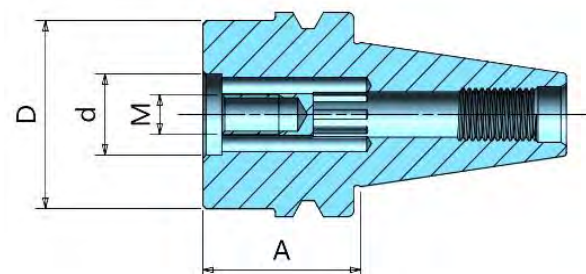
						Intro				
						• Vertical insert blade • left-hand and right-hand • Double-sided with a total of 4 cutting edges • When using three cutting edges, left-hand and right-hand blades must be used in combination • Face milling and double-sided blades of the same hand configuration can use all 4 cutting edges of the blade				
Figure -Right Insert										
Model	Hand Type	Edge Length	Dimension				Grade			
			S	H	L	R	CT5320	CT5420	CT7420	CT101
ENGX 090406R	Right	09	4.76	9.525	9.525	0.6	●	●	○	
ENGX 090408R						0.8		●	○	
ENGX 090406R-AL						0.6				●
ENGX 090408R-AL						0.8				●
ENGX 120608R		12	6.35	12.7	12.7	0.8	●	●	○	
ENGX 120610R						1.0		●	○	
ENGX 120608R-AL						0.8				●
ENGX 120610R-AL						1.0				●
ENGX 090406L	Left	09	4.76	9.525	9.525	0.6	●	●	○	
ENGX 090408L						0.8		●	○	
ENGX 090406L-AL						0.6				●
ENGX 090408L-AL						0.8				○
ENGX 120608L		12	6.35	12.7	12.7	0.8	●	●	○	
ENGX 120610L						1.0		○	○	
ENGX 120608L-AL						0.8				●
ENGX 120610L-AL						1.0				○

©The CT101 grade insert is designed for machining aluminum alloys.

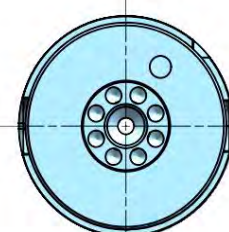
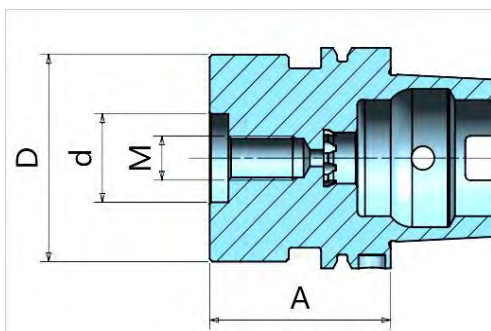
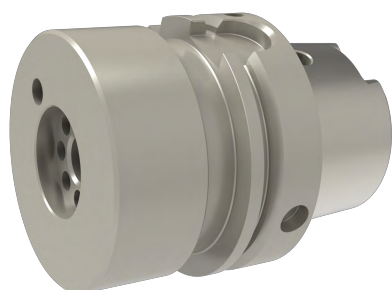
EN: CCM90EN-H



Head Changeable Corn Milling Tool



Model	Shank Type	Dimension			Model	Shank Type	Dimension		
		D	A	d			D	A	d
BT40-D25M12-L50	BT40	58	50	25	BT50-D25M12-L65	BT50	58	65	25
BT40-D25M12-L75	BT40	58	75	25	BT50-D25M12-L90	BT50	58	90	25
BT40-D25M12-L100	BT40	58	100	25	BT50-D25M12-L110	BT50	58	110	25
BT40-D32M16-L50	BT40	75	50	32	BT50-D32M16-L65	BT50	75	65	32
BT40-D32M16-L75	BT40	75	75	32	BT50-D32M16-L90	BT50	75	90	32
BT40-D32M16-L100	BT40	75	100	32	BT50-D32M16-L110	BT50	75	110	32

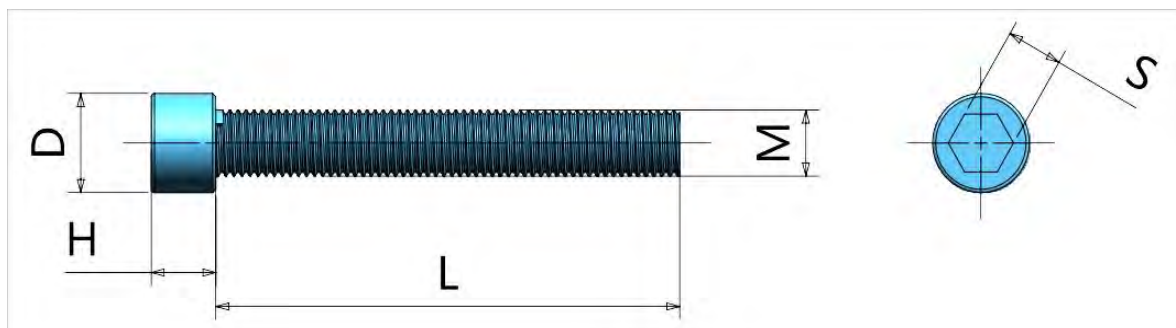


Model	Shank Type	Dimension			Model	Shank Type	Dimension		
		D	A	d			D	A	d
HSK63-D25M12-L70	HSK63	58	70	25	HSK100-D25M12-L70	HSK100	58	70	25
HSK63-D25M12-L110	HSK63	58	110	25	HSK100-D25M12-L110	HSK100	58	110	25
HSK63-D25M12-L130	HSK63	58	130	25	HSK100-D25M12-L130	HSK100	58	130	25
HSK63-D32M16-L70	HSK63	75	70	32	HSK100-D32M16-L70	HSK100	75	70	32
HSK63-D32M16-L110	HSK63	75	110	32	HSK100-D32M16-L110	HSK100	75	110	32
HSK63-D32M16-L130	HSK63	75	130	32	HSK100-D32M16-L130	HSK100	75	130	32

Overlay Corn Mill Installation Screw Selection



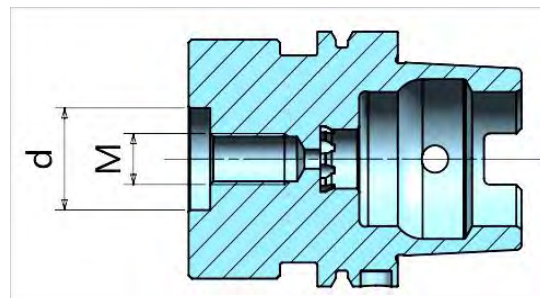
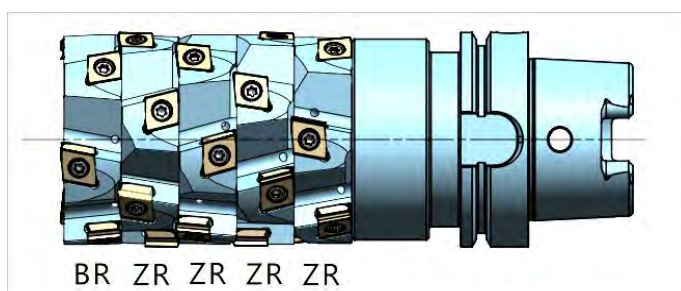
Screw



Cutter DIA	Tool Holder D /Thread M	BR No.Cutter	ZR No.Cutter	Screw Model	D	H	S	L
50 / 63	25 / M12	1	0	CLA12025175	18	12	10	25
		1	1	CLA12040175				40
		1	2	CLA12060175				60
		1	3	CLA12075175				75
		1	4	CLA12090175				90
80 / 100	32 / M16	1	0	CLA1603520	24	16	14	30
		1	1	CLA1605520				55
		1	2	CLA1607520				75
		1	3	CLA1610020				100
		1	4	CLA1612020				120

© Recommended Overlay Tool Disc Quantity: Up to 5 (1 BR + 4 ZR)

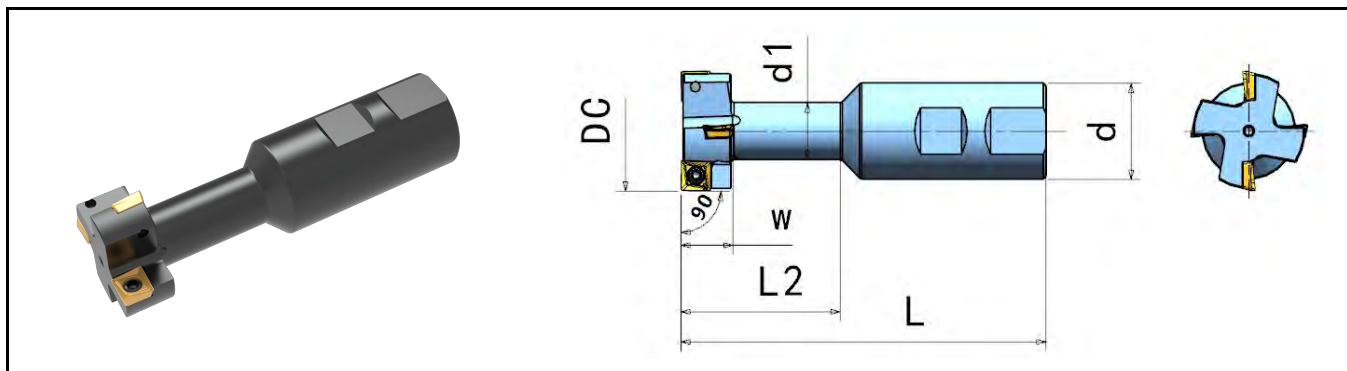
© If the overlay quantity exceeds 5, please consult our company for specific screw specifications.



T-type cutter : CSM90XO/CSM90XP/CSM90SD



T-slot milling cutter



Model	Sets Z	Sum Insert	Dimension (mm)						Weight (KG)	Insert
			DC	d	d1	W	L2	L		
CSM90XO-221W09L100Z25R-06	1	2	21	25	10	9	32	100	0.3	XO 06
CSM90XO-425W11L100Z25R-06	2	4	25	25	12	11	35	100	0.3	
CSM90XP-432W14L110Z32R-10	2	4	32	32	15	14	45	110	0.5	XP 10
CSM90XP-440W18L125Z32R-10	2	4	40	32	19	18	55	125	0.6	
CSM90SD-450W22L140Z40R-12	2	4	50	40	25	22	65	140	1.0	SD 12

©Standard Tool Holder Without Internal Cooling; Inserts must be ordered separately.

T-type cutter : CSM90XO/CSM90XP/CSM90SD



T-slot milling cutter

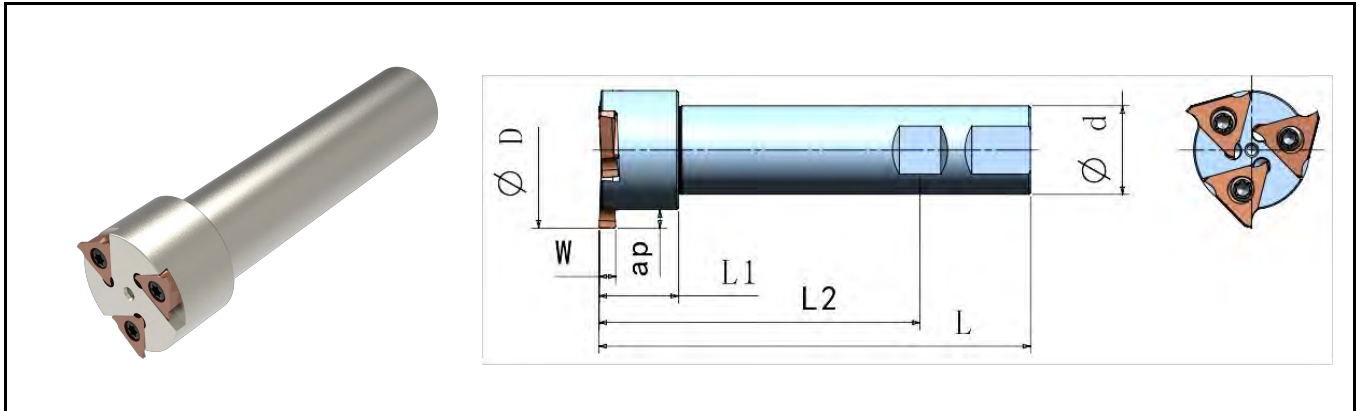
		Intro						
					• The blade has a sharp groove profile, allowing for smooth cutting. • Suitable for groove machining with three-edge and T-slot milling cutters. • Square inserts with 2 right-hand cutting edges and 2 left-hand cutting edges. • When using a three-edge blade, all 4 cutting edges can be utilized; for face milling with similar hand-type cutter heads, only 2 cutting edges can be used.			
	Dimension				Grade			Screw/Wrench
Model	D	L	S	R	CT5320	CT7320	CT8320	
XOMT 060304T-HQ	6.175	6.175	3.18	0.4	●	○	○	CSG2565-P / CTS08W-P
XPMT 100408-HQ	10.2	10.2	4.23	0.6	●	○	○	CSG4011-P / CTS15W-P

		Intro						
					• The blade features a sharp groove profile, facilitating smooth cutting. • Suitable for groove machining with three-edge and T-slot milling cutters. • Center-mounted inserts, compatible with both right-hand and left-hand cutting applications.			
Model	Dimension				Grade			Screw/Wrench
	D	L	S	R	CT5320	CT7320	CT8320	
SDKT 120408-M	12.7	12.7	4.76	0.8	●	○	○	CSG5012-P / CTS20W-P

3CGF : CE3CGF



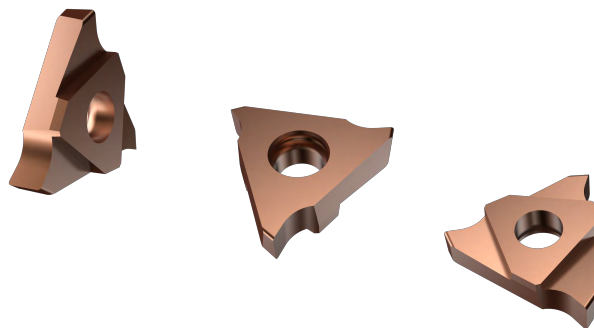
Shallow Groove Milling Holders



Model		Dimension (mm)					Groove Width W	Insert
		D	d	L1	L2	L		
CE3CGF -125L125Z25R-16	1	25	25	40	93	125	1.10~3.00	3CGF 16L110~300
CE3CGF -339L125Z25R-16	3	39	25	23	93	125	1.10~3.00	
CE3CGF -344L125Z25R-22	3	44	25	23	93	125	1.25~4.80	3CGF 22L125~480

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

©Note: Use right-hand tool holders with left-hand blades.



©Cutting Width Range: 1.1~4.8 mm

©Maximum Cutting Depth: 5.0 mm

©Insert Width Options: Diverse sizes available, suitable for various shallow grooves and snap ring groove processing.

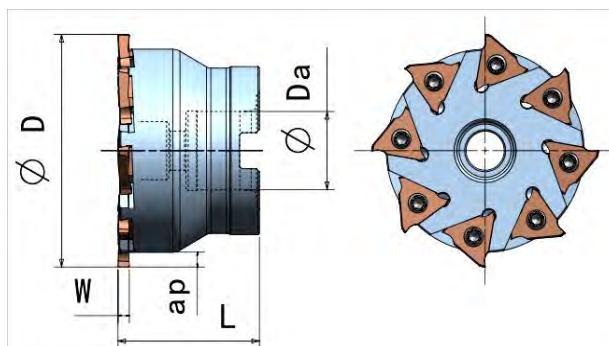
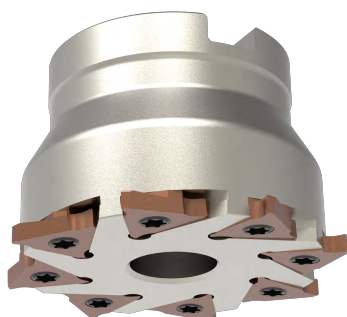
Spare Parts

Model	Screw	Wrench
CE3CGF -16	CSC4090	CTS15W
CE3CGF -22	CSG5016	CTS20W

3CGF : CSM3CGF



Shallow Groove Milling Holders



Model		Dimension (mm)				Hand Type	I/F Type	Insert
		D	Da	L	Groove Width W			
CSM3CGF -763A22R-16	7	63	22	40	1.10~3.00	Right	A	3CGF 16L110~300
CSM3CGF -980A27R-16	9	80	27	50			B	
CSM3CGF -11100B32R-16	11	100	32	50				
CSM3CGF -13125B40R-16	13	125	40	63				
CSM3CGF -763A22L-16	7	63	22	40		Left	A	3CGF 16R110~300
CSM3CGF -980A27L-16	9	80	27	50			B	
CSM3CGF -11100B32L-16	11	100	32	50				
CSM3CGF -13125B40L-16	13	125	40	63				
CSM3CGF -663A22R-22	6	63	22	40	1.25~4.80	Right	A	3CGF 22L125~480
CSM3CGF -880A27R-22	8	80	27	50			B	
CSM3CGF -10100B32R-22	10	100	32	50				
CSM3CGF -12125B40R-22	12	125	40	63				
CSM3CGF -663A22L-22	6	63	22	40		Left	A	3CGF 22R125~480
CSM3CGF -880A27L-22	8	80	27	50			B	
CSM3CGF -10100B32L-22	10	100	32	50				
CSM3CGF -12125B40L-22	12	125	40	63				

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

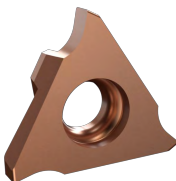
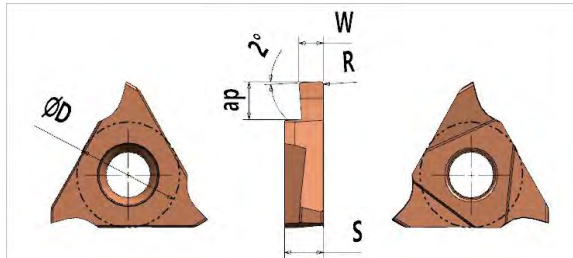
©Right-hand tool should be paired with left-hand blades. Left-hand tool should be paired with right-hand blades

Spare Parts

Model	Screw	Wrench
CE3CGF -16	CSC4090	CTS15W
CE3CGF -22	CSG5016	CTS20W

3CGF



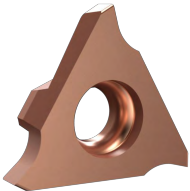
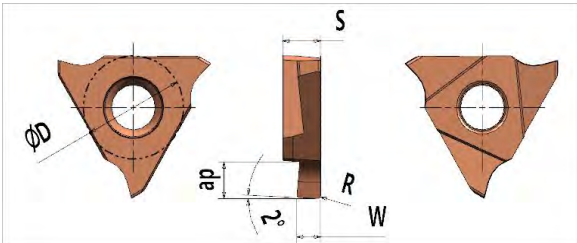
		Intro
 Fig. is left hand		• Fixed Insert • Shallow Grooving Insert • Figure is Left Insert

Model	Dimension (mm)					Grade
	W	ap	ØD	S	R	CT5520
3CGF 16L110-R01	1.10	2.0	9.525	3.18	0.1	●
3CGF 16L125-R02	1.25	2.0	9.525	3.18	0.2	●
3CGF 16L145-R02	1.45	2.0	9.525	3.18	0.2	●
3CGF 16L150-R02	1.50	2.0	9.525	3.18	0.2	●
3CGF 16L175-R02	1.75	2.0	9.525	3.18	0.2	●
3CGF 16L185-R02	1.85	2.5	9.525	3.18	0.2	●
3CGF 16L200-R02	2.00	2.5	9.525	3.18	0.2	●
3CGF 16L250-R02	2.50	2.5	9.525	3.18	0.2	●
3CGF 16L300-R02	3.00	3.0	9.525	3.18	0.2	●
3CGF 22L125-R02	1.25	2.0	12.7	3.18	0.2	●
3CGF 22L145-R02	1.45	2.0	12.7	3.18	0.2	●
3CGF 22L150-R02	1.50	3.5	12.7	4.76	0.2	●
3CGF 22L175-R02	1.75	3.5	12.7	4.76	0.2	●
3CGF 22L185-R02	1.85	3.5	12.7	4.76	0.2	●
3CGF 22L200-R02	2.00	3.5	12.7	4.76	0.2	●
3CGF 22L230-R02	2.30	3.5	12.7	4.76	0.2	●
3CGF 22L250-R03	2.50	4.0	12.7	4.76	0.3	●
3CGF 22L265-R03	2.65	4.0	12.7	4.76	0.3	●
3CGF 22L280-R03	2.80	4.0	12.7	4.76	0.3	●
3CGF 22L300-R03	3.00	4.0	12.7	4.76	0.3	●
3CGF 22L320-R03	3.20	4.0	12.7	4.76	0.3	●
3CGF 22L330-R03	3.30	4.0	12.7	4.76	0.3	●
3CGF 22L350-R03	3.50	5.0	12.7	4.76	0.3	●
3CGF 22L400-R04	4.0	5.0	12.7	4.76	0.4	●
3CGF 22L430-R04	4.3	5.0	12.7	4.76	0.4	●
3CGF 22L450-R04	4.5	5.0	12.7	4.76	0.4	●
3CGF 22L480-R04	4.8	5.0	12.7	5.06	0.4	●

Milling Insert



3CGF**16R/22R

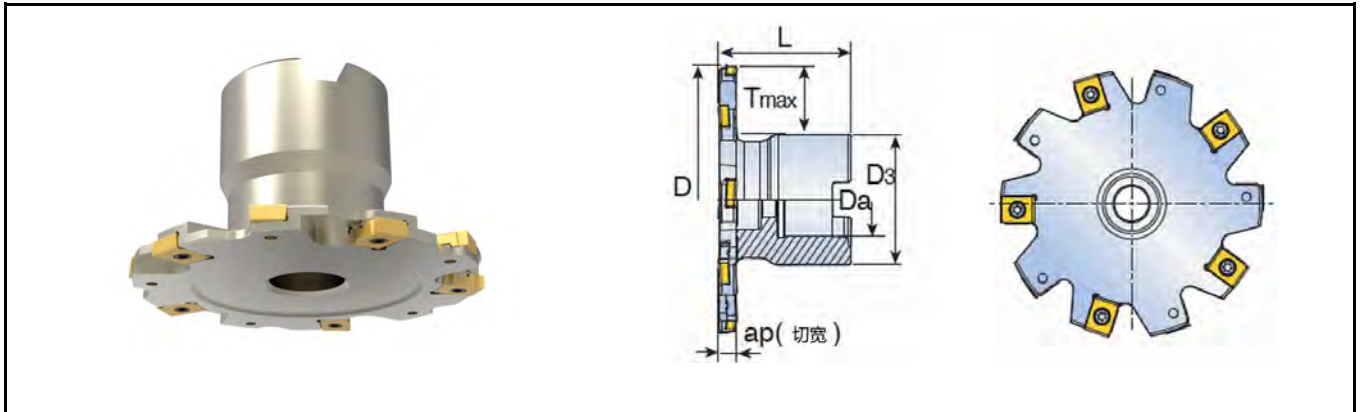
		Intro
 Fig. is Right hand		• Fixed Insert • Shallow Grooving Insert • Figure is Right Insert

Model	Dimension (mm)					Grade
	W	ap	øD	S	R	CT5520
3CGF 16R110-R01	1.10	2.0	9.525	3.18	0.1	●
3CGF 16R125-R02	1.25	2.0	9.525	3.18	0.2	●
3CGF 16R145-R02	1.45	2.0	9.525	3.18	0.2	●
3CGF 16R150-R02	1.50	2.0	9.525	3.18	0.2	●
3CGF 16R175-R02	1.75	2.0	9.525	3.18	0.2	●
3CGF 16R185-R02	1.85	2.5	9.525	3.18	0.2	●
3CGF 16R200-R02	2.00	2.5	9.525	3.18	0.2	●
3CGF 16R250-R02	2.50	2.5	9.525	3.18	0.2	●
3CGF 16R300-R02	3.00	3.0	9.525	3.18	0.2	●
3CGF 22R125-R02	1.25	2.0	12.7	3.18	0.2	●
3CGF 22R145-R02	1.45	2.0	12.7	3.18	0.2	●
3CGF 22R150-R02	1.50	3.5	12.7	4.76	0.2	●
3CGF 22R175-R02	1.75	3.5	12.7	4.76	0.2	●
3CGF 22R185-R02	1.85	3.5	12.7	4.76	0.2	●
3CGF 22R200-R02	2.00	3.5	12.7	4.76	0.2	●
3CGF 22R230-R02	2.30	3.5	12.7	4.76	0.2	●
3CGF 22R250-R03	2.50	4.0	12.7	4.76	0.3	●
3CGF 22R265-R03	2.65	4.0	12.7	4.76	0.3	●
3CGF 22R280-R03	2.80	4.0	12.7	4.76	0.3	●
3CGF 22R300-R03	3.00	4.0	12.7	4.76	0.3	●
3CGF 22R320-R03	3.20	4.0	12.7	4.76	0.3	●
3CGF 22R330-R03	3.30	4.0	12.7	4.76	0.3	●
3CGF 22R350-R03	3.50	5.0	12.7	4.76	0.3	●
3CGF 22R400-R04	4.0	5.0	12.7	4.76	0.4	●
3CGF 22R430-R04	4.3	5.0	12.7	4.76	0.4	●
3CGF 22R450-R04	4.5	5.0	12.7	4.76	0.4	●
3CGF 22R480-R04	4.8	5.0	12.7	5.06	0.4	●

ZN: CSMZN...R



Three side milling cutter: Fixed Flange Type



Model		a _p (mm)	Dimension (mm)					I/F Type	 Kg	Insert
			D	D _a	D ₃	L	T _{max}			
CSMZN-1080W04A22R-023	5+5	4	80	22	40	50	20.0	A	0.4	ZNHT 023
CSMZN-12100W04A27R-023	6+6	4	100	27	48	50	26.0	A	0.6	
CSMZN-1080W05A22R-028	5+5	5	80	22	40	50	20.0	A	0.5	ZNHT 028
CSMZN-12100W05A27R-028	6+6	5	100	27	48	50	26.0	A	0.7	
CSMZN-1080W06A22R-033	5+5	6	80	22	40	50	20.0	A	0.6	ZNHT 033
CSMZN-12100W06A27R-033	6+6	6	100	27	48	50	26.0	A	0.7	
CSMZN-14125W06B40R-033	7+7	6	125	40	70	50	25.0	B	1.2	
CSMZN-18160W06B40R-033	9+9	6	160	40	70	50	43.0	B	1.5	

©Standard products without the inner-cooling holes; Insert needs to be purchased separately

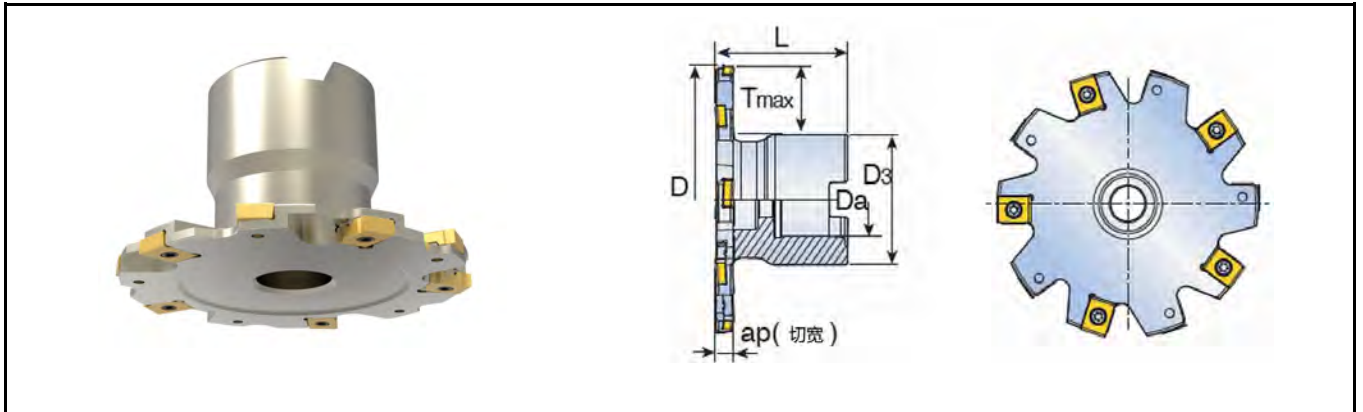
Spare Parts

Model	Screw	Wrench
		
CSMZN-023	CSX2531	CTS08W
CSMZN-028	CSX2542	CTS08W
CSMZN-033	CSX2553	CTS08W

ZN: CSMZN...R



Three side milling cutter: Fixed Flange Type



Model		ap (mm)	Dimension (mm)					I/F Type	Kg	Insert
			D	Da	D3	L	T _{max}			
CSMZN-880W07A22R-038	4+4	7	80	22	40	50	20.0	A	0.5	ZNHT 038
CSMZN-10100W07A27R-038	5+5	7	100	27	48	50	25.5	A	0.7	
CSMZN-12125W07B40R-038	6+6	7	125	40	70	50	24.5	B	1.2	
CSMZN-16160W07B40R-038	8+8	7	160	40	70	50	42.0	B	1.5	
CSMZN-880W08A22R-043	4+4	8	80	22	40	50	20.0	A	0.5	ZNHT 043
CSMZN-10100W08A27R-043	5+5	8	100	27	48	50	25.5	A	0.8	
CSMZN-12125W08B40R-043	6+6	8	125	40	70	50	24.5	B	1.2	
CSMZN-16160W08B40R-043	8+8	8	160	40	70	50	42.0	B	1.6	
CSMZN-10100W09A27R-048	5+5	9	100	27	48	50	26.0	A	0.8	ZNHT 048
CSMZN-12125W09B40R-048	6+6	9	125	40	70	50	24.5	B	1.3	
CSMZN-16160W09B40R-048	8+8	9	160	40	70	50	42.0	B	1.7	
CSMZN-10100W10A27R-053	5+5	10	100	27	48	50	26.0	A	0.8	ZNHT 053
CSMZN-12125W10B40R-053	6+6	10	125	40	70	50	24.5	B	1.4	
CSMZN-16160W10B40R-053	8+8	10	160	40	70	50	42.0	B	1.9	

©Standard products without the inner-cooling holes; Insert needs to be purchased separately

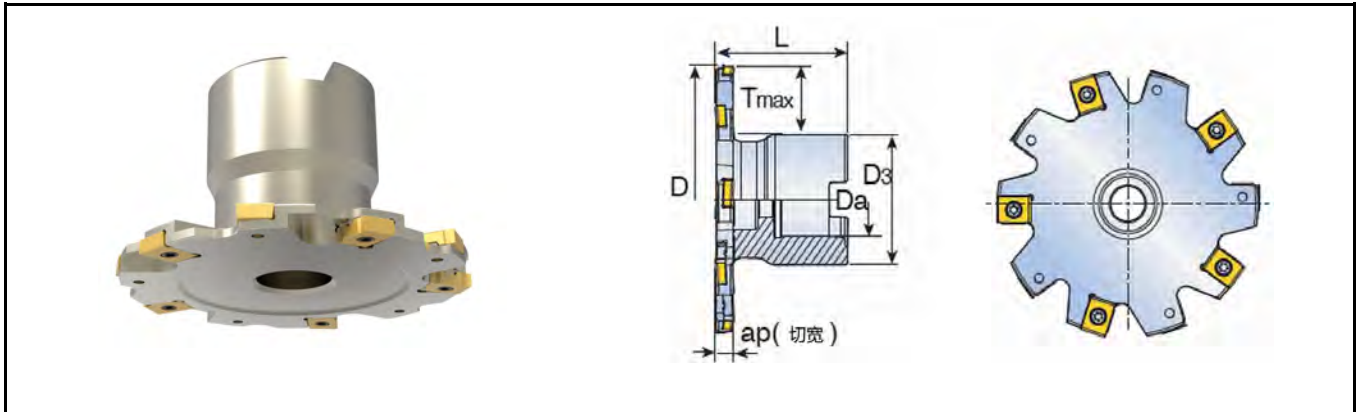
Spare Parts

Model	Screw	Wrench	Model	Screw	Wrench
CSMZN-038	CSX4051	CTS15W	CSMZN-048	CSX4070	CTS15W
CSMZN-043	CSX4061	CTS15W	CSMZN-053	CSX4080	CTS15W

ZN: CSMZN...R



Three side milling cutter: Fixed Flange Type



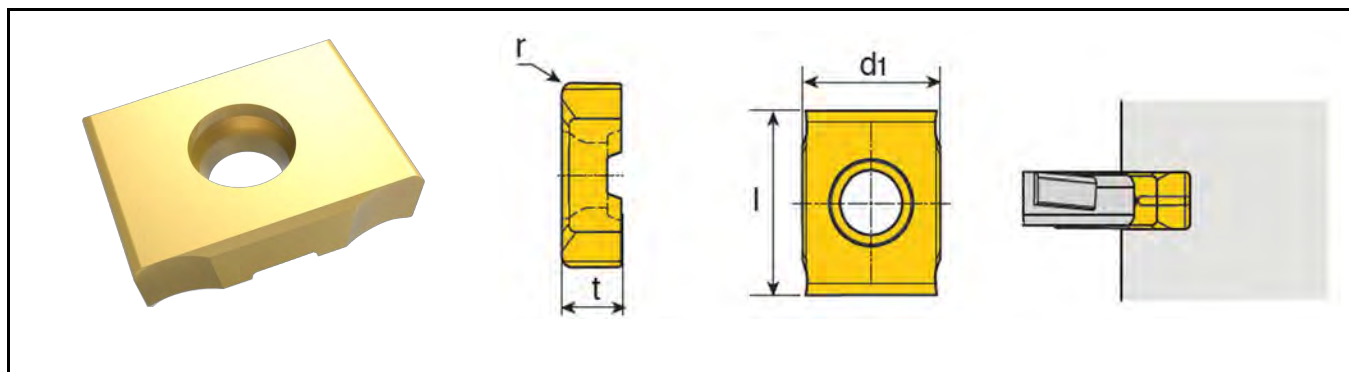
Model		ap (mm)	Dimension (mm)					I/F Type	 Kg	Insert
			D	Da	D3	L	Tmax			
CSMZN-8100W11A27R-058	4+4	11	100	27	48	50	26.0	A	0.8	ZNHT 058
CSMZN-10125W11B40R-058	5+5	11	125	40	70	50	24.5	B	1.4	
CSMZN-14160W11B40R-058	7+7	11	160	40	70	50	42.0	B	1.9	
CSMZN-8100W12A27R-063	4+4	12	100	27	48	50	26.0	A	0.8	ZNHT 063
CSMZN-10125W12B40R-063	5+5	12	125	40	70	50	24.5	B	1.4	
CSMZN-14160W12B40R-063	7+7	12	160	40	70	50	42.0	B	1.9	
CSMZN-8100W13A27R-068	4+4	13	100	27	48	50	26.0	A	0.8	ZNHT 068
CSMZN-10125W13B40R-068	5+5	13	125	40	70	50	24.5	B	1.4	
CSMZN-14160W13B40R-068	7+7	13	160	40	70	50	42.0	B	1.9	
CSMZN-8100W14A27R-073	4+4	14	100	27	48	50	26.0	A	0.8	ZNHT 073
CSMZN-10125W14B40R-073	5+5	14	125	40	70	50	24.5	B	1.4	
CSMZN-14160W14B40R-073	7+7	14	160	40	70	50	42.0	B	1.9	

©Standard products without the inner-cooling holes; Insert needs to be purchased separately

Spare Parts

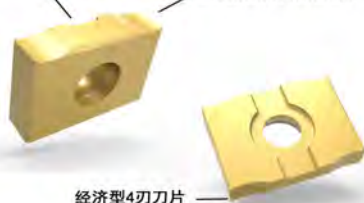
Model	Screw	Wrench	Model	Screw	Wrench
					
CSMZN-058	CSY5012	CTS20W	CSMZN-068	CSY5012	CTS20W
CSMZN-063	CSY5012	CTS20W	CSMZN-073	CSY5012	CTS20W

ZNHT



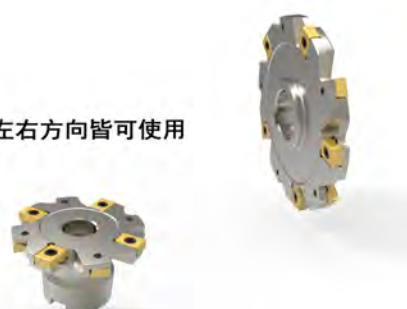
Model	Blade Length	Dimension (mm)				Feed	Grade
		l	d1	t	r	(mm/Teeth)	CT5320
ZNHT 023-04-ML	023	10	7.5	2.3	0.4	0.05~0.08	●
ZNHT 028-04-ML	028	10	7.5	2.8	0.4	0.05~0.08	●
ZNHT 033-04-ML	033	10	7.5	3.3	0.4	0.05~0.12	●
ZNHT 038-04-ML	038	13	10	3.8	0.4	0.05~0.12	●
ZNHT 043-04-ML	043	13	10	4.3	0.4	0.05~0.12	●
ZNHT 043-08-ML	043	13	10	4.3	0.8	0.05~0.12	●
ZNHT 048-04-ML	048	13	10	4.8	0.4	0.05~0.12	●
ZNHT 048-08-ML	048	13	10	4.8	0.8	0.05~0.12	●
ZNHT 053-04-ML	053	13	10	5.3	0.4	0.05~0.12	●
ZNHT 053-08-ML	053	13	10	5.3	0.8	0.05~0.12	●
ZNHT 058-04-ML	058	15	12	5.8	0.4	0.05~0.12	●
ZNHT 058-08-ML	058	15	12	5.8	0.8	0.05~0.12	●
ZNHT 063-04-ML	063	15	12	6.3	0.4	0.05~0.12	●
ZNHT 063-08-ML	063	15	12	6.3	0.8	0.05~0.12	●
ZNHT 068-08-ML	068	15	12	6.8	0.8	0.05~0.12	●
ZNHT 068-12-ML	068	15	12	6.8	1.2	0.05~0.12	●
ZNHT 073-08-ML	073	15	12	7.3	0.8	0.05~0.12	●
ZNHT 073-12-ML	073	15	12	7.3	1.2	0.05~0.12	●

桥形结构使夹紧力更强
正型前角使切削流畅



经济型4刃刀片

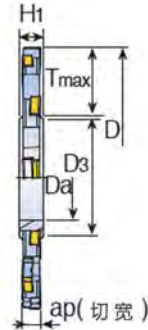
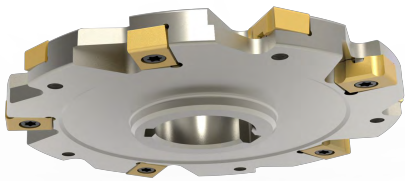
一款刀片左右方向皆可使用



ZN: CSMZN...H



Three Side Edge milling cutter: Fixed Single Insert Type



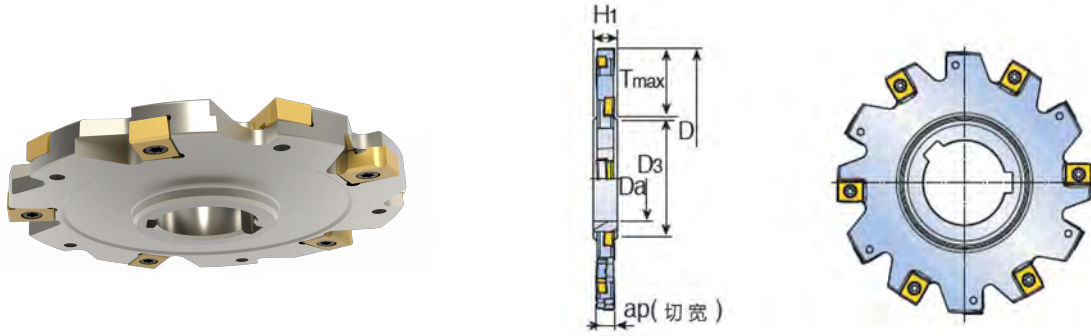
Model		ap (mm)	Dimension (mm)						Insert
			D	Da	D3	H1	Tmax		
CSMZN-863W04H22-023	4+4	4	63	22	34	8	12.0	0.1	ZNHT 023
CSMZN-1080W04H22-023	5+5	4	80	22	34	8	21.0	0.1	
CSMZN-12100W04H27-023	6+6	4	100	27	41	12	27.0	0.2	
CSMZN-14125W04H40-023	7+7	4	125	40	55	12	32.0	0.4	
CSMZN-863W05H22-028	4+4	5	63	22	34	8	13.0	0.1	ZNHT 028
CSMZN-1080W05H22-028	5+5	5	80	22	34	8	21.0	0.2	
CSMZN-12100W05H27-028	6+6	5	100	27	41	12	27.0	0.3	
CSMZN-14125W05H40-028	7+7	5	125	40	55	12	33.0	0.4	
CSMZN-18160W05H40-028	9+9	5	160	40	55	12	50.0	0.7	ZNHT 033
CSMZN-863W06H22-033	4+4	6	63	22	34	8	13.0	0.1	
CSMZN-1080W06H22-033	5+5	6	80	22	34	8	21.5	0.2	
CSMZN-12100W06H27-033	6+6	6	100	27	41	12	27.0	0.3	
CSMZN-14125W06H40-033	7+7	6	125	40	55	12	33.0	0.5	
CSMZN-18160W06H40-033	9+9	6	160	40	55	12	50.0	0.8	
CSMZN-20200W06H50-033	10+10	6	200	50	69	12	63.0	1.2	ZNHT 038
CSMZN-880W07H22-038	4+4	7	80	22	34	12	20.0	0.2	
CSMZN-10100W07H27-038	5+5	7	100	27	41	12	26.5	0.3	
CSMZN-12125W07H40-038	6+6	7	125	40	55	12	32.0	0.5	
CSMZN-16160W07H40-038	8+8	7	160	40	55	12	49.5	0.8	
CSMZN-18200W07H50-038	9+9	7	200	50	69	12	62.5	1.3	
CSMZN-24250W07H50-038	12+12	7	250	50	69	12	87.5	2.1	ZNHT 043
CSMZN-880W08H22-043	4+4	8	80	22	34	12	20.5	0.2	
CSMZN-10100W08H27-043	5+5	8	100	27	41	12	27.0	0.3	

©Standard products without the inner-cooling holes; Insert needs to be purchased separately

ZN: CSMZN...H



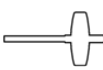
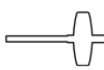
Three Side Edge milling cutter: Fixed Single Insert Type



Model		ap (mm)	Dimension (mm)					 Kg	Insert t
			D	Da	D3	H1	Tmax		
CSMZN-12125W08H40-043	6+6	8	125	40	55	12	32.5	0.9	ZNHT 043
CSMZN-16160W08H40-043	8+8	8	160	40	55	12	50.0	0.9	
CSMZN-18200W08H50-043	9+9	8	200	50	69	12	63.0	1.4	
CSMZN-24250W08H50-043	12+12	8	250	50	69	12	88.0	2.3	
CSMZN-10100W09H27-048	5+5	9	100	27	41	12	27.5	0.4	ZNHT 048
CSMZN-12125W09H40-048	6+6	9	125	40	55	12	33.0	0.6	
CSMZN-16160W09H40-048	8+8	9	160	40	55	12	50.5	1.0	
CSMZN-18200W09H50-048	9+9	9	200	50	69	12	63.5	1.6	
CSMZN-24250W09H50-048	12+12	9	250	50	69	12	88.5	2.6	
CSMZN-10100W10H27-053	5+5	10	100	27	41	12	28.0	0.4	ZNHT 053
CSMZN-12125W10H40-053	6+6	10	125	40	55	12	33.5	0.6	
CSMZN-16160W10H40-053	8+8	10	160	40	55	12	51.0	1.1	
CSMZN-18200W10H50-053	9+9	10	200	50	69	12	64.0	1.8	
CSMZN-24250W10H50-053	12+12	10	250	50	69	12	89.0	2.9	

©Standard products without the inner-cooling holes; Insert needs to be purchased separately

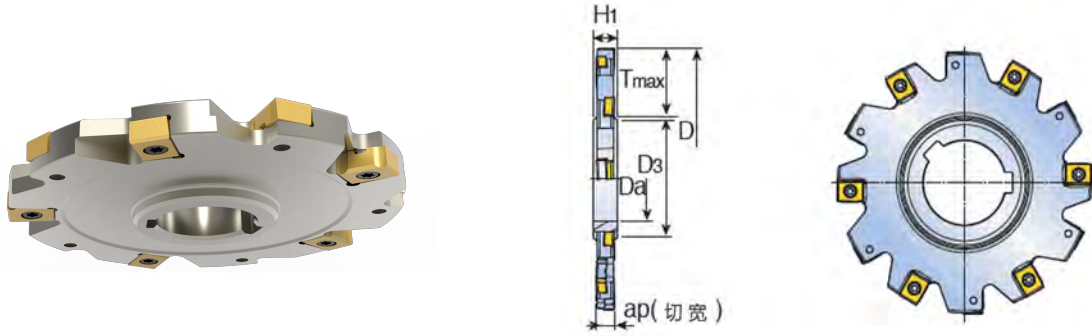
Spare Parts

Model	Screw	Wrench	Model	Screw	Wrench
					
CSMZN-023	CSX2531	CTS08W	CSMZN-038	CSX4051	CTS15W
CSMZN-028	CSX2542	CTS08W	CSMZN-043	CSX4061	CTS15W
CSMZN-033	CSX2553	CTS08W	CSMZN-048	CSX4070	CTS15W
			CSMZN-053	CSX4080	CTS15W

ZN: CSMZN...H



Three-Edge Milling Cutter: Fixed Single-Blade Type



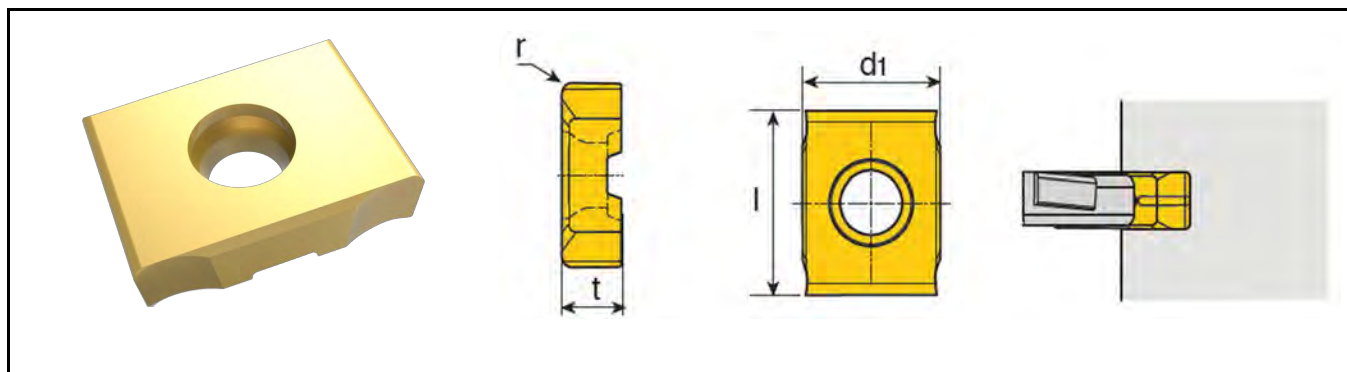
Model		ap (mm)	Dimension (mm)						Insert t
			D	Da	D3	H1	Tmax		
CSMZN-8100W11H27-058	4+4	11	100	27	41	16	28.0	0.4	ZNHT 058
CSMZN-10125W11H40-058	5+5	11	125	40	55	16	33.5	0.6	
CSMZN-14160W11H40-058	7+7	11	160	40	55	16	51.0	1.1	
CSMZN-16200W11H50-058	8+8	11	200	50	69	16	64.0	1.8	
CSMZN-22250W11H50-058	11+11	11	250	50	69	16	89.0	2.9	
CSMZN-8100W12H27-063	4+4	12	100	27	41	16	28.0	0.4	ZNHT 063
CSMZN-10125W12H40-063	5+5	12	125	40	55	16	33.5	0.6	
CSMZN-14160W12H40-063	7+7	12	160	40	55	16	51.0	1.1	
CSMZN-16200W12H50-063	8+8	12	200	50	69	16	64.0	1.8	
CSMZN-22250W12H50-063	11+11	12	250	50	69	16	89.0	2.9	
CSMZN-8100W13H27-068	4+4	13	100	27	41	16	28.0	0.4	ZNHT 068
CSMZN-10125W13H40-068	5+5	13	125	40	55	16	33.5	0.6	
CSMZN-14160W13H40-068	7+7	13	160	40	55	16	51.0	1.1	
CSMZN-16200W13H50-068	8+8	13	200	50	69	16	64.0	1.8	
CSMZN-22250W13H50-068	11+11	13	250	50	69	16	89.0	2.9	
CSMZN-8100W14H27-073	4+4	14	100	27	41	16	28.0	0.4	ZNHT 073
CSMZN-10125W14H40-073	5+5	14	125	40	55	16	33.5	0.6	
CSMZN-14160W14H40-073	7+7	14	160	40	55	16	51.0	1.1	
CSMZN-16200W14H50-073	8+8	14	200	50	69	16	64.0	1.8	
CSMZN-22250W14H50-073	11+11	14	250	50	69	16	89.0	2.9	

©Standard products without the inner-cooling holes; Insert needs to be purchased separately

Spare Parts

Model	Screw	Wrench
		
CSMZN-058/063	CSY5012	CTS20W
CSMZN-068/073		

ZNHT



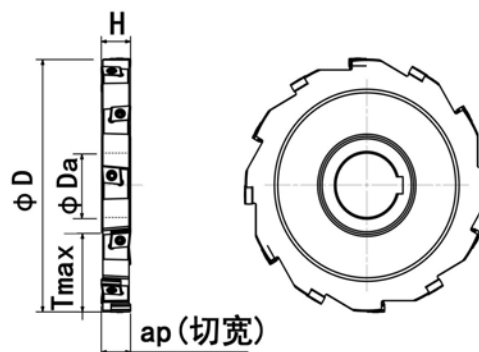
Model	Edge Length	Dimension (mm)				Feed	Grade
		l	d1	t	r	(mm/Teeth)	CT5320
ZNHT 023-04-ML	023	10	7.5	2.3	0.4	0.05~0.08	●
ZNHT 028-04-ML	028	10	7.5	2.8	0.4	0.05~0.08	●
ZNHT 033-04-ML	033	10	7.5	3.3	0.4	0.05~0.12	●
ZNHT 038-04-ML	038	13	10	3.8	0.4	0.05~0.12	●
ZNHT 043-04-ML	043	13	10	4.3	0.4	0.05~0.12	●
ZNHT 043-08-ML	043	13	10	4.3	0.8	0.05~0.12	●
ZNHT 048-04-ML	048	13	10	4.8	0.4	0.05~0.12	●
ZNHT 048-08-ML	048	13	10	4.8	0.8	0.05~0.12	●
ZNHT 053-04-ML	053	13	10	5.3	0.4	0.05~0.12	●
ZNHT 053-08-ML	053	13	10	5.3	0.8	0.05~0.12	●
ZNHT 058-04-ML	058	15	12	5.8	0.4	0.05~0.12	●
ZNHT 058-08-ML	058	15	12	5.8	0.8	0.05~0.12	●
ZNHT 063-04-ML	063	15	12	6.3	0.4	0.05~0.12	●
ZNHT 063-08-ML	063	15	12	6.3	0.8	0.05~0.12	●
ZNHT 068-08-ML	068	15	12	6.8	0.8	0.05~0.12	●
ZNHT 068-12-ML	068	15	12	6.8	1.2	0.05~0.12	●
ZNHT 073-08-ML	073	15	12	7.3	0.8	0.05~0.12	●
ZNHT 073-12-ML	073	15	12	7.3	1.2	0.05~0.12	●



CN: CSMCN-H



Single-Blade Three-Edge Milling Cutter



Model		Dimension (mm)					I/F Type	Insert
		ap	D	Da	H	T _{max}		
CSMCN-663W15H22N-10	6	15	63	22	15	15	HUB	CNHX 1005
CSMCN-880W15H22N-10	8	15	80	22	15	24	HUB	
CSMCN-10100W15H27N-10	10	15	100	27	15	30	HUB	
CSMCN-12125W15H32N-10	12	15	125	32	15	40	HUB	
CSMCN-14160W15H40N-10	14	15	160	40	15	52	HUB	
CSMCN-16200W15H50N-10	16	15	200	50	15	65	HUB	
CSMCN-18250W15H60N-10	18	15	250	60	15	80	HUB	
CSMCN-663W20H22N-13	6	20	63	22	20	15	HUB	CNHX 1311
CSMCN-880W20H22N-13	8	20	80	22	20	24	HUB	
CSMCN-10100W20H27N-13	10	20	100	27	20	30	HUB	
CSMCN-12125W20H32N-13	12	20	125	32	20	40	HUB	
CSMCN-14160W20H40N-13	14	20	160	40	20	52	HUB	
CSMCN-16200W20H50N-13	16	20	200	50	20	65	HUB	
CSMCN-18250W20H60N-13	18	20	250	60	20	80	HUB	
CSMCN-663W25H22N-16	6	25	63	22	25	15	HUB	CNHX 1606
CSMCN-880W25H22N-16	8	25	80	22	25	24	HUB	
CSMCN-10100W25H27N-16	10	25	100	27	25	30	HUB	
CSMCN-12125W25H32N-16	12	25	125	32	25	40	HUB	
CSMCN-14160W25H40N-16	14	25	160	40	25	52	HUB	
CSMCN-16200W25H50N-16	16	25	200	50	25	65	HUB	
CSMCN-18250W25H60N-16	18	25	250	60	25	80	HUB	

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

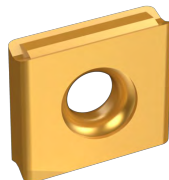
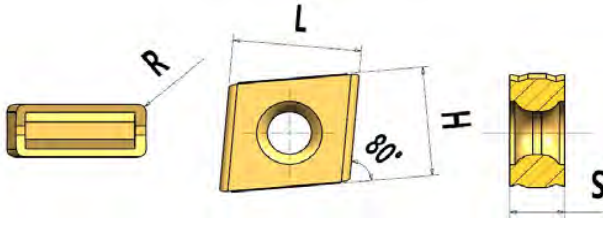
©This cutter body commonly uses three specifications of inserts: CN10, CN13, and CN16, which can be selected based on the required cutting width.

©The cutting width range of this cutter body is 14-30 mm, and the maximum diameter can reach $\phi 700$ mm. Customization is available upon request.

Milling Insert



CN**08/10/12/13/16

							Intro				
							• Vertical insert blade • Center insert, no hand type distinction • Double-sided with 4 edges • When using three edges, all 4 cutting edges of the blade can be utilized • Face milling and double-sided blades of the same hand type can use 2 cutting edges of the blade.				
Insert Model	Length	Dimension (mm)				Feed (mm/齿)	Grade				
		L	H	S	R		CT5320	CT5420	CT7320	CT7420	CT101
CNHX 100504-ML	10	10	10	5.4	0.4	0.1~0.3		○			
CNHX 100508-ML	10	10	10	5.4	0.8	0.1~0.3	●	●	○	○	
CNHX 100512-ML	10	10	10	5.4	1.2	0.1~0.3	○		○		
CNHX 100516-ML	10	10	10	5.4	1.6	0.1~0.3	○		○		
CNHX 120604	12	12	12	6.35	1.6	0.1~0.3		●			
CNHX 121116	12	12.46	11.15	5.12	1.6	0.1~0.3				○	
CNHX 121120	12	12.46	11.15	5.12	2.0	0.1~0.3				●	
CNHX 131104	13	12.7	11	5.4	0.4	0.1~0.35	○				
CNHX 131108	13	12.7	11	5.4	0.8	0.1~0.35	●		●	●	
CNHX 131112	13	12.7	11	5.4	0.4	0.1~0.35				○	
CNHX 131116	13	12.7	11	5.4	1.6	0.1~0.35	○				
CNHX 131120	13	12.7	11	5.4	2.0	0.1~0.35	●		●		
CNHX 131124-ML	13	12.7	11	5.4	2.4	0.1~0.35				○	
CNHX 131130-ML	13	12.7	11	5.4	3.0	0.1~0.35				○	
CNHX 160604-ML	16	16.0	12	6.4	0.4	0.1~0.4	○				
CNHX 160608-ML	16	16.0	12	6.4	0.8	0.1~0.4	●	○	●	●	
CNHX 160612-ML	16	16.0	12	6.4	1.2	0.1~0.4	○				
CNHX 160616-ML	16	16.0	12	6.4	1.6	0.1~0.4	○				
CNHX 160624-ML	16	16.0	12	6.4	2.4	0.1~0.4	○				
CNHX 160630-ML	16	16.0	12	6.4	3.0	0.1~0.4	○				

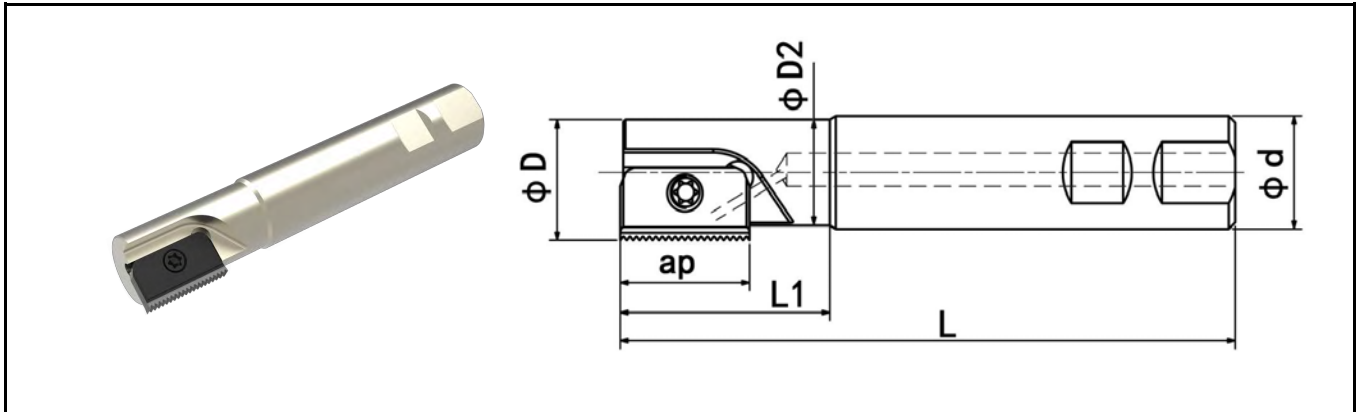
Spare Parts

Model	Screw	Wrench
		
CSMCN-10	CSG4013-P	CTS15W-P
CSMCN-13	CSG4013-P	CTS15W-P
CSMCN-16	CSG5016	CTS20W

Thread milling series : SR00



Thread Milling Shank (Single Insert)



Model		Dimension (mm)					Insert Dimension ap (mm)
		D	D2	L1	L	d	
SR0009H12	1	9.5	7.5	14	85	20	TMT12
SR0010H12	1	9.9	7.6	16	85	20	TMT12
SR0012F14	1	12.0	8.9	20	75	20	TMT14
SR0014H14	1	14.5	11.2	25	85	20	TMT14
SR0017H14	1	17.0	13.4	30	85	20	TMT14
SR0018H21	1	18.0	14.4	30	85	20	TMT21
SR0021H21	1	21.0	16.5	40	94	20	TMT21
SR0029J30	1	29.0	22.4	50	110	25	TMT30
SR0048M40	1	48.0	35.0	78	153	40	TMT40

©Standard Cutter with Internal Cooling

©Only Compatible with Insert : 12-18NPT, 12-18PTF, 12-19BSPT

©SR0018H21 not compatible with: 2113.5ISO, 2117UN, 2118UN 21-11BSPT, 21-11.5NPT, 21-11.5NPTF

©Inserts must be ordered separatel.Compatible with TAEGUTEC insert.

Spare Parts

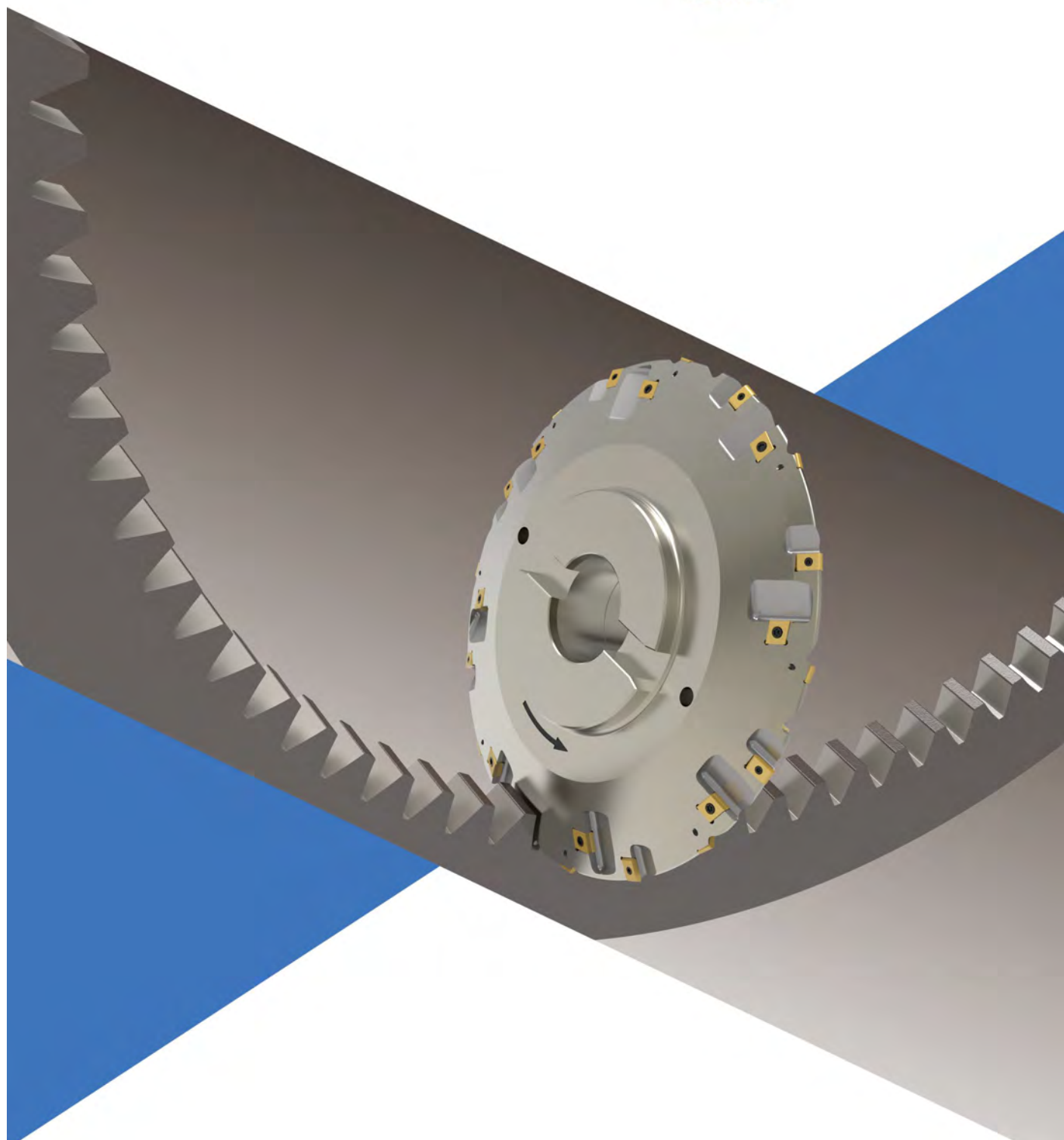
Model	Screw	Wrench
		
SR 12	S12	K12
SR 14	S14	K14
SR 21	S21	K21
SR 30	S30	K30
SR 40	S40	K40



GEAR MILLING CUTTER

齿轮铣系列

SERIES





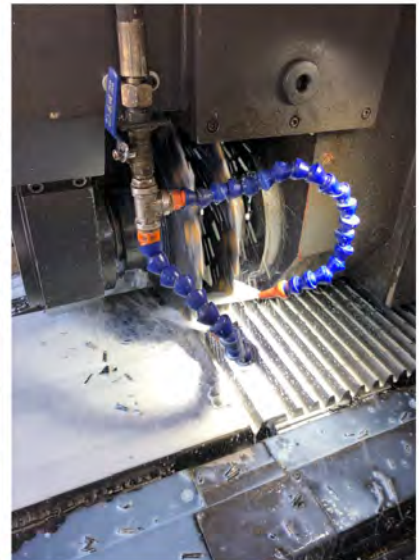
Industry Application 行业应用

刀片式齿轮铣刀主要适用于加工各种大中型传动齿圈及齿条，如风电、工程机械、机床、建筑等行业中的基础传动零部件。

超尔研发并生产的齿轮铣刀盘及刀片，做工精良，质量稳定，经过客户的实际使用及检验：性能优越、结构可靠，刀具寿命好、性价比高，是客户替代进口的首选。

针对客户差异化的需求，可量身定制非标刀盘及刀片，提高生产效率，有效降低客户的生产成本，实现降本增效的目的。

超尔与您共话产品差异创新、探讨产品配套方案、携手合作共赢！



Gear and rack processing case

齿轮齿条加工案例



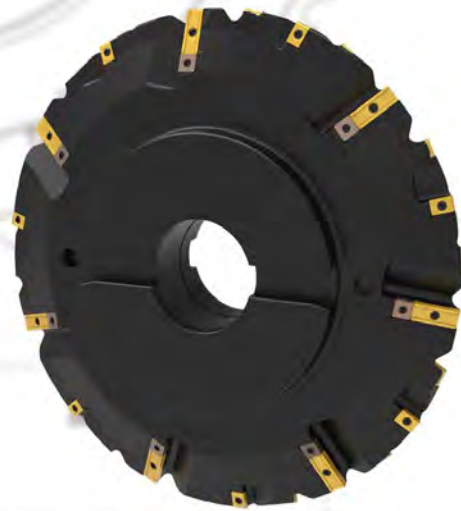
粗铣齿轮刀盘



齿条刀盘



精铣2工位刀盘



精铣4工位刀盘

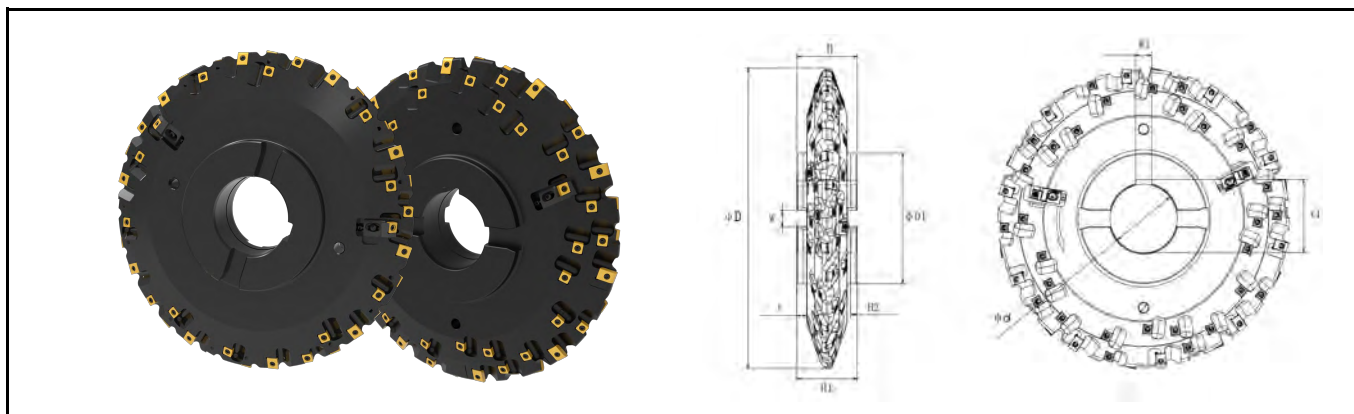
Chai Tools Gear and rack Series

超尔齿轮齿条系列



Gear Rough Milling : CSM...A

Gear Rough Milling Cutter



Model		Dimension (mm)					Module M	Insert
		D	d	H	zeff.	D1		
CSM-40400D90W80-M10A	40	400	90	80	8/4	190	10	16xC, 24xY/Z
CSM-56450D100W90-M10A	56	450	100	90	10/5	190		20xC, 36xY/Z
CSM-40400D90W80-M12A	40	400	90	80	8/4	190	12	16xD, 24xY/Z
CSM-56450D100W90-M12A	56	450	100	90	10/5	190		20xD, 36xY/Z
CSM-40400D90W80-M14A	40	400	90	80	8/4	190	14	16xE, 24xY/Z
CSM-56450D100W90-M14A	56	450	100	90	10/5	190		20xE, 36xY/Z
CSM-40400D90W80-M16A	40	400	90	80	8/4	190	16	16xF, 24xY/Z
CSM-56450D100W90-M16A	56	450	100	90	10/5	190		20xF, 36xY/Z
CSM-40400D90W80-M18A	40	400	90	80	8/4	190	18	16xG, 24xY/Z
CSM-56450D100W90-M18A	56	450	100	90	10/5	190		20xG, 36xY/Z
CSM-48400D90W80-M20A	48	400	90	80	8/4	190	20	16xH, 32xY/Z
CSM-60450D100W90-M20A	60	450	100	90	10/5	190		20xH, 40xY/Z
CSM-48400D90W80-M22A	48	400	90	80	8/4	190	22	16xI, 32xY/Z
CSM-60450D100W90-M22A	60	450	100	90	10/5	190		20xI, 40xY/Z
CSM-48400D90W80-M24A	48	400	90	80	8/4	190	24	16xJ, 32xY/Z
CSM-60450D100W90-M24A	60	450	100	90	10/5	190		20xJ, 40xY/Z

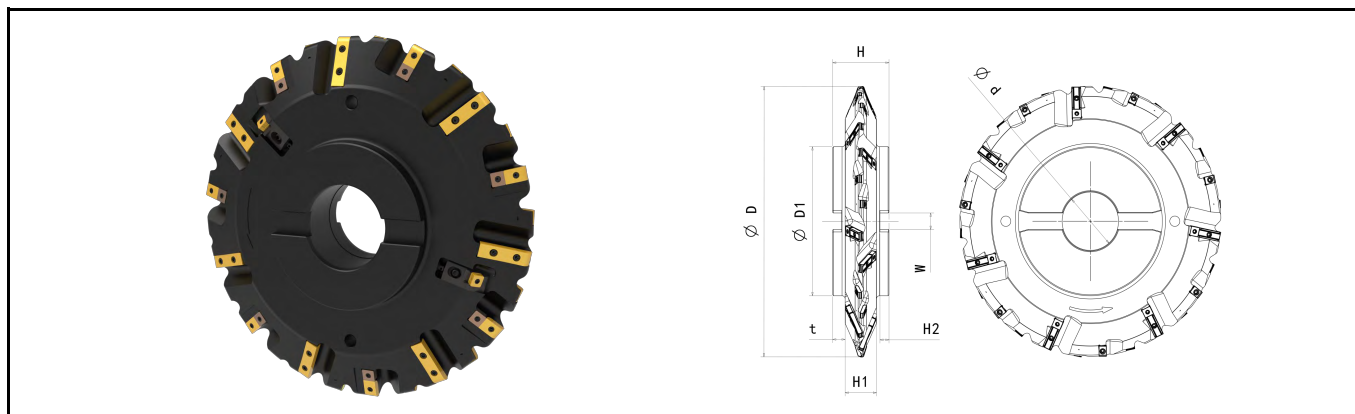
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©Standard cutter head without internal cooling; Inserts need to be ordered separately.

Gear two-station precision milling : CSM...B



Gear Two-Station Fine Milling Cutter

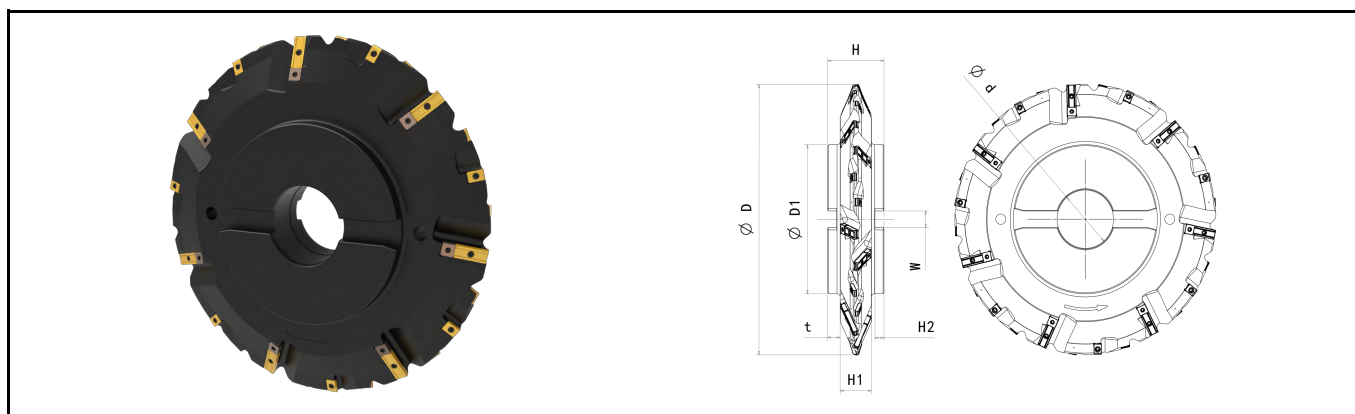


Model		Dimension (mm)					Module M	Insert
		D	d	H	zeff.	D1		
CSM-28400D100W90-M10B	28	400	100	90	7/7	190	10	14xA, 14xC
CSM-32450D100W90-M10B	32	450	100	90	8/8	190		16xA, 16xC
CSM-28400D100W90-M12B	28	400	100	90	7/7	190	12	14xA, 14xD
CSM-32450D100W90-M12B	32	450	100	90	8/8	190		16xA, 16xD
CSM-28400D100W90-M14B	28	400	100	90	7/7	190	14	14xA, 14xE
CSM-32450D100W90-M14B	32	450	100	90	8/8	190		16xA, 16xE
CSM-28400D100W90-M16B	28	400	100	90	7/7	190	16	14xA, 14xF
CSM-32450D100W90-M16B	32	450	100	90	8/8	190		16xA, 16xF
CSM-28400D100W90-M18B	28	400	100	90	7/7	190	18	14xA, 14xG
CSM-32450D100W90-M18B	32	450	100	90	8/8	190		16xA, 16xG
CSM-28400D100W90-M20B	28	400	100	90	7/7	190	20	14xB, 14xH
CSM-32450D100W90-M20B	32	450	100	90	8/8	190		16xB, 16xH
CSM-28400D100W90-M22B	28	400	100	90	7/7	190	22	14xB, 14xI
CSM-32450D100W90-M22B	32	450	100	90	8/8	190		16xB, 16xI
CSM-28400D100W90-M24B	28	400	100	90	7/7	190	24	14xB, 14xJ
CSM-32450D100W90-M24B	32	450	100	90	8/8	190		16xB, 16xJ

©The above data is for reference only and needs to be adjusted or customized based on the specific circumstances and gear parameters of the customer.

©Standard cutter head without internal cooling; Inserts need to be ordered separately.

Gear Four-Station Fine Milling Cutter



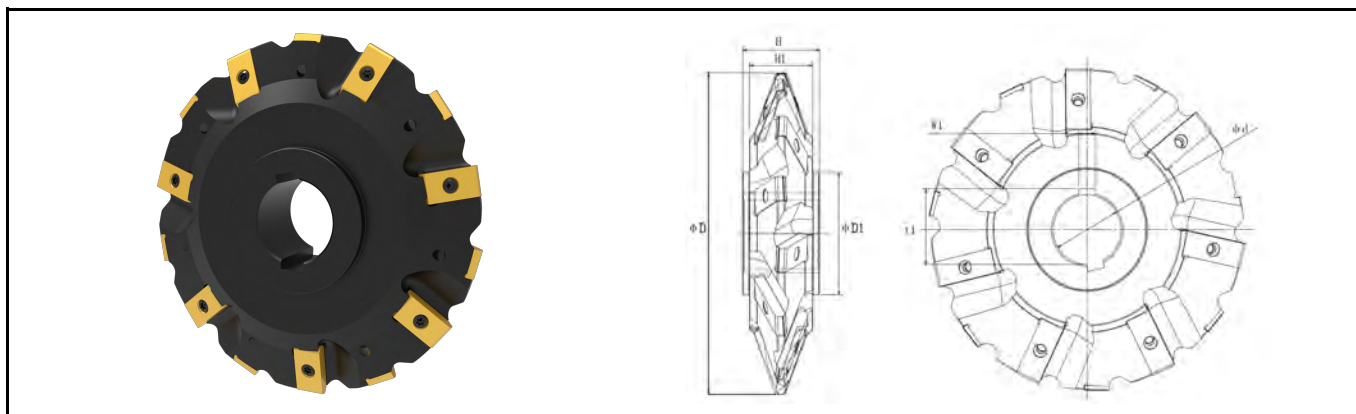
Model		Dimension (mm)					Module M	Insert
		D	d	H	zeff.	D1		
CSM-28400D100W90-M10C	28	400	100	90	7/7	190	10	14xA1, 14xC
CSM-32450D100W90-M10C	32	450	100	90	8/8	190		16xA1, 16xC
CSM-28400D100W90-M12C	28	400	100	90	7/7	190	12	14xA1, 14xD
CSM-32450D100W90-M12C	32	450	100	90	8/8	190		16xA1, 16xD
CSM-28400D100W90-M14C	28	400	100	90	7/7	190	14	14xA1, 14xE
CSM-32450D100W90-M14C	32	450	100	90	8/8	190		16xA1, 16xE
CSM-28400D100W90-M16C	28	400	100	90	7/7	190	16	14xA1, 14xF
CSM-32450D100W90-M16C	32	450	100	90	8/8	190		16xA1, 16xF
CSM-28400D100W90-M18C	28	400	100	90	7/7	190	18	14xA1, 14xG
CSM-32450D100W90-M18C	32	450	100	90	8/8	190		16xA1, 16xG

©The above data is for reference only and needs to be adjusted or customized based on the specific circumstances and gear parameters of the customer.
 ©Standard cutter head without internal cooling; Inserts need to be ordered separately.

Rack : CSMLN...



Rack Milling Cutter



Model		Dimension (mm)		Module M	Insert
		D	d		
CSMLN-14180D40-M8	14	180	40	8	CLX291406M08
CSMLN-22315D40-M8	22	315	40		
CSMLN-14180D40-M10	14	180	40	10	CLX291406M10
CSMLN-22315D40-M10	22	315	40		
CSMLN-14180D40-M12	14	180	40	12	CLX401406M12
CSMLN-22315D40-M12	22	315	40		
CSMLN-14180D40-M14	14	180	40	14	CLX401406M14
CSMLN-22315D40-M14	22	315	40		
CSMLN-14180D40-M16	14	180	40	16	CLX401406M16
CSMLN-22315D40-M16	22	315	40		
CSMLN-14180D40-M18	14	180	40	18	CLX401406M18
CSMLN-22315D40-M18	22	315	40		
CSMLN-14180D40-M20	14	180	40	20	CLX501406M20
CSMLN-22315D40-M20	22	315	40		
CSMLN-14180D40-M22	14	180	40	22	CLX601409M22
CSMLN-22315D40-M22	22	315	40		
CSMLN-14180D40-M24	14	180	40	24	CLX601409M24
CSMLN-22315D40-M24	22	315	40		

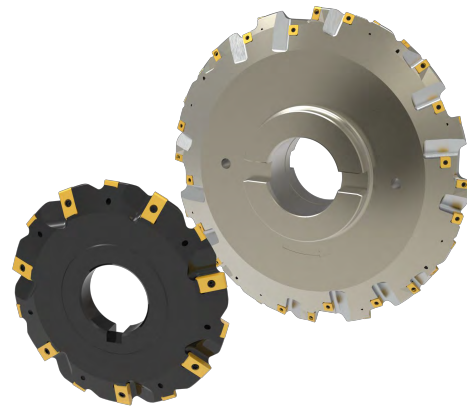
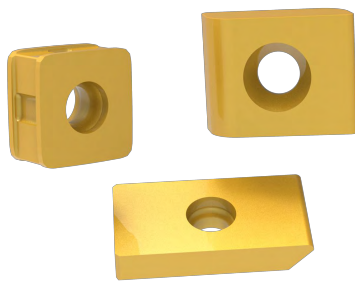
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©Standard cutter head without internal cooling; Inserts need to be ordered separately.

Gear Milling Series



Gear Milling Insert



		Insert Code	Module M	Dimension (mm)				
				L	H	W	R	C. Hole
		C	10	19.05	14.3	4.8	3.8	5.4
		D	12	19.05	14.3	6.35	4.56	5.4
		E	14	19.05	14.3	6.35	5.32	5.4
		F	16	19.05	14.3	7.14	6.08	5.4
		G	18	19.05	14.3	7.14	6.84	5.4
		H	20	25.4	14.3	7.98	7.6	5.5
		I	22	25.4	14.3	7.98	7.6	5.5
		J	24	25.4	14.3	7.98	7.6	5.5

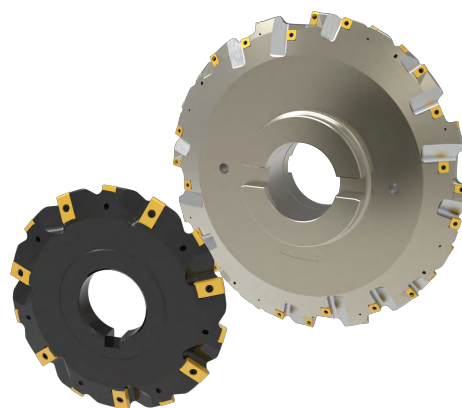
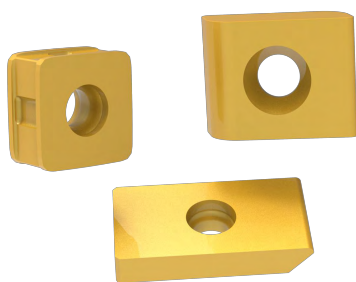
		Model	Insert Code	Dimension (mm)			
				L	H	W	Center Hole
		SNEA 1370	Y	13.02	13.02	7.0	4.4
		CLX121206	Z	12.7	12.7	6.35	4.5

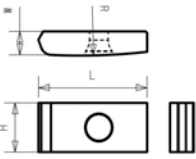
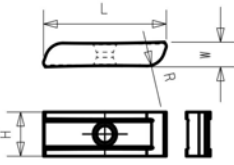
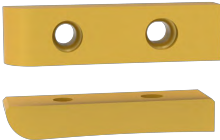
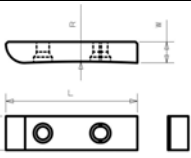
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Gear Milling Series



Gear Milling Insert



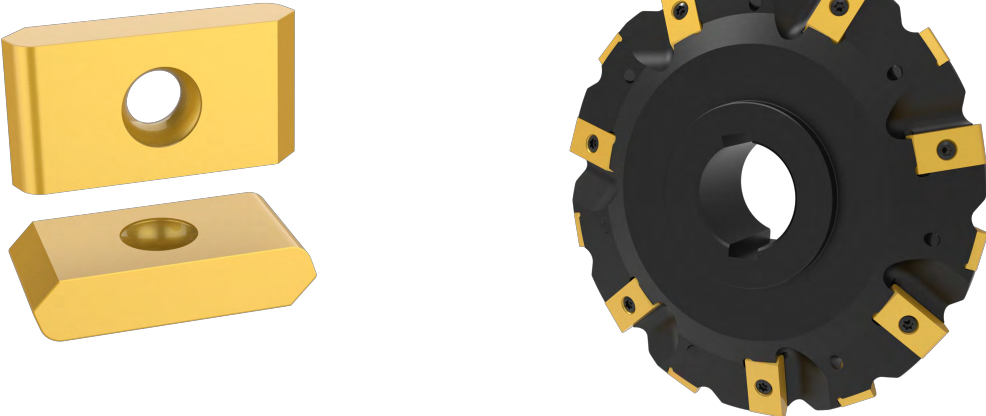
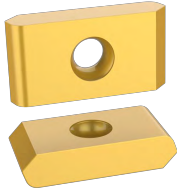
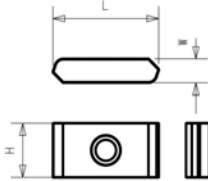
		Insert Code	Dimension (mm)			
			L	H	W	C. Hole
		A	25.4	6.4	14.3	5.5
			28.3	5.2	14.3	5.5
			32	7	14.3	5.5
			38	7	14.3	5.5
			40.7	8	14.3	5.5
			42	8.5	14.3	5.5
		A1	25.4	6.4	14.3	5.5
			28.3	5.2	14.3	5.5
			32	7	14.3	5.5
			38	7	14.3	5.5
			40.7	8	14.3	5.5
			42	8.5	14.3	5.5
		B	54	14.3	7.8	5.7双
			57	14.3	8.8	5.7双

©The above data is for reference only and needs to be adjusted or customized based on the gear parameters.

Gear Rack Series



Gear Rack Insert

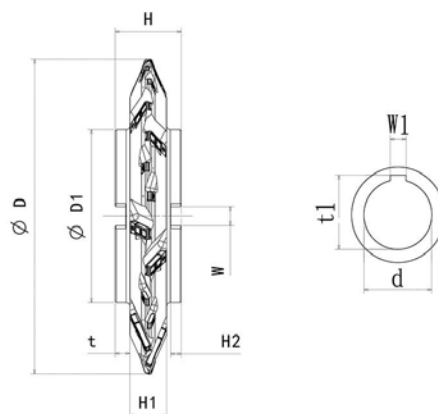
							
		Model	Module M	Reference Dimensions(mm)			
				L	H	W	C. Hole
		CLX301406	08/10	30	14.3	6	5.5
		CLX401406	12	40	14.3	6	5.5
		CLX501408	12/14/16/18	50	14.3	8	5.5D.
		CLX601409	22/24	60	14.3	9	5.5D.

©The above data is for reference only and needs to be adjusted or customized based on the gear parameters.
©D. is Double

可转位齿轮铣刀询价参数 ORDERING INFORMATION

刀具参数 TOOLS DATA

刀具外径/Outside diameter/D _____
 孔径/Bore diameter/d _____
 端面直径/Hub diameter/D1 _____
 刀盘厚度/Cutter width/H _____
 端面厚度/Hub width/H1 _____
 键宽/Radial keyway width/W _____
 键深/Radial keyway depth/t _____
 轴宽/Axial keyway width/W1 _____
 轴深/Axial keyway depth/t1 _____



齿轮参数 GEAR INFORMATION

齿轮类型/Gear Type _____ 内齿轮/Internal ☐ 外齿轮/External ☐ 齿条/Rack ☐
 模数/Module/M _____
 齿数/NO.of teeth/z _____
 压力角/Pressure angle/a _____
 螺旋角/Helix angle/ β _____
 齿顶变位系数/Addendum modification coefficient/Xn _____
 齿顶圆直径/Tip diameter/Da _____
 齿根圆直径/Root diameter/Df _____
 齿根圆角/Root radius/Rf _____
 成品公法线/Base tangent length over k/Wk _____
 跨齿数/Number of measuring teeth/k _____
 成品跨棒距/Dimension over balls/Md _____
 量棒直径/Ball diameter/d _____
 成品法向齿厚/Normal circular thickness of finishing/Sn _____
 精度等级/Gear quality class _____
 加工工艺/Process _____ 粗铣/Roughing ☐ 半精铣/Semi-finishing ☐ 精铣/Finishing ☐
 粗加工齿侧留量/Side stock for roughing _____
 粗加工齿顶留量/Tip stock for roughing _____

刀片要求(选填) INSERT REQUIREMENTS

长条刀片 (工位) /Long insert for side (No of Effective edge) _____
 顶齿刀片/Insert for tip _____
 侧齿刀片/Insert for side _____
 刀垫/Shim _____
 打标/Marking _____
 螺钉/Screw _____

SOLID CARBIDE ENDMILL



- 二刃平头铣刀
- 四刃平头铣刀
- 二刃球头铣刀
- 四刃球头铣刀

整体硬质合金铣刀

通用加工系列

- 高稳定性的刃口处理和高刚性结构设计，刀具能够获得更大的进给，极大的提高金属去除率和加工效率。
- 优秀的耐磨损性能，在高效率加工条件下，也能获得很好的刀具耐磨损和抗崩缺性能。



整体硬质合金铣刀

高强度钢加工系列

独特的刀具槽型设计,使得刀具切削性能更优秀。
特殊的表面处理,有效降低摩擦力,排屑更顺畅,加工表面质量更好。



二刃平头铣刀系列
四刃平头铣刀系列



二刃球头铣刀系列
四刃球头铣刀系列



适用于侧面加工

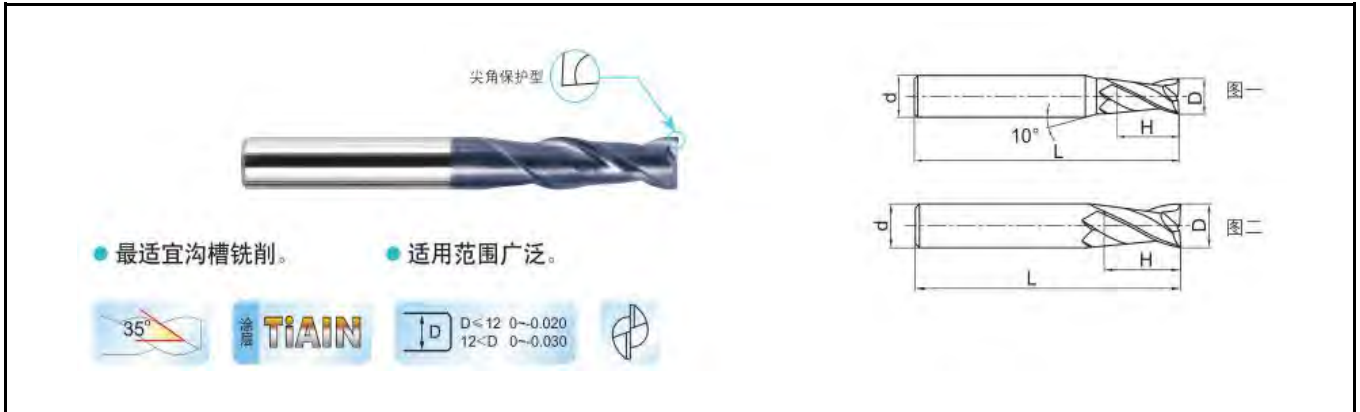
适用于台阶加工

适用于直角槽加工

CLF2



General purpose machining, two-flute straight shank flat head solid carbide end mill



Model	Teeth Z	Dimension (mm)				Figure
		D	d	H	L	
CLF2-D010H003L50-S	2	1.0	4	3	50	图一
CLF2-D015H004L50-S	2	1.5	4	4	50	图一
CLF2-D020H006L50-S	2	2.0	4	6	50	图一
CLF2-D025H008L50-S	2	2.5	4	8	50	图一
CLF2-D030H008L50-S	2	3.0	4	8	50	图一
CLF2-D040H011L50-S	2	4.0	4	11	50	图二
CLF2-D010H003L50	2	1.0	6	3	50	图一
CLF2-D015H004L50	2	1.5	6	4	50	图一
CLF2-D020H006L50	2	2.0	6	6	50	图一
CLF2-D025H008L50	2	2.5	6	8	50	图一
CLF2-D030H008L50	2	3.0	6	8	50	图一
CLF2-D035H010L50	2	3.5	6	10	50	图一
CLF2-D040H011L50	2	4.0	6	11	50	图一
CLF2-D045H011L50	2	4.5	6	11	50	图一
CLF2-D050H013L50	2	5.0	6	13	50	图一
CLF2-D055H016L50	2	5.5	6	16	50	图一

SUITABLE MATERIAL

◆Very Suitable

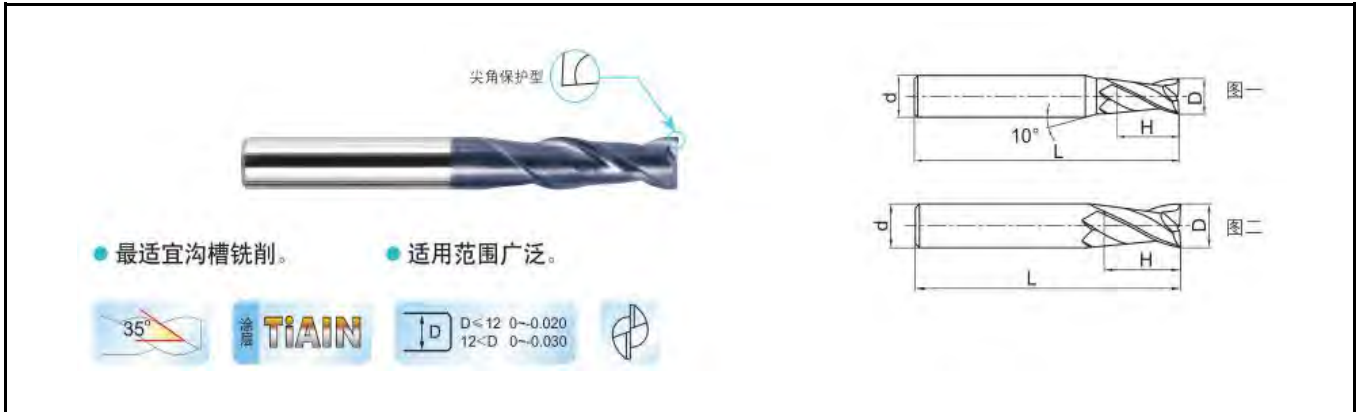
◇Suitable

Material										
Carbon Steel	Alloy	Pre-hardened steel, Quenched Steel			Stain-less Steel	Cast Iron Ductile Iron	Cooper Alloy	Alu Alloy	Titan Alloy	Heat res. Alloy
		~40HRC	~50HRC	~55HRC						
◆	◆	◆	◆	◆	◇	◆			◇	◇

CLF2



General Machining, Two-Flute Straight Shank Flat End Solid Carbide End Mill



Model	Teeth Z	Dimension (mm)				Figure
		D	d	H	L	
CLF2-D060H016L50	2	6.0	6	16	50	图二
CLF2-D070H020L60	2	7.0	8	20	60	图一
CLF2-D080H020L60	2	8.0	8	20	60	图二
CLF2-D090H022L75	2	9.0	10	22	75	图一
CLF2-D100H025L75	2	10.0	10	25	75	图二
CLF2-D110H026L75	2	11.0	12	26	75	图一
CLF2-D120H030L75	2	12.0	12	30	75	图二
CLF2-D140H032L75	2	14.0	14	32	75	图二
CLF2-D160H045L100	2	16.0	16	45	100	图二
CLF2-D180H045L100	2	18.0	18	45	100	图二
CLF2-D200H045L100	2	20.0	20	45	100	图二

SUITABLE MATERIAL

◆ Very Suitable

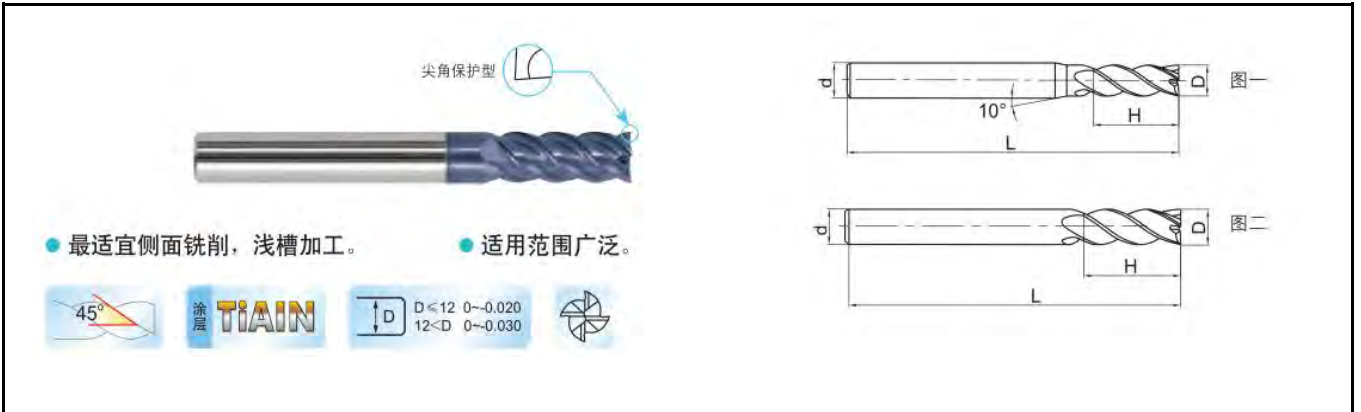
◇ Suitable

Material										
Carbon Steel	Alloy	Pre-hardened steel, Quenched Steel			Stain-less Steel	Cast Iron Ductile Iron	Cooper Alloy	Alu Alloy	Titan Alloy	Heat res. Alloy
		~40HRC	~50HRC	~55HRC						
◆	◆	◆	◆	◆	◇	◆			◇	◇

CLF4



General Machining, Four-Flute Straight Shank Flat End Solid Carbide End Mill



Model	Teeth Z	Dimension (mm)				Figure
		D	d	H	L	
CLF4-D010H003L50-S	4	1.0	4	3	50	图一
CLF4-D015H004L50-S	4	1.5	4	4	50	图一
CLF4-D020H006L50-S	4	2.0	4	6	50	图一
CLF4-D025H008L50-S	4	2.5	4	8	50	图一
CLF4-D030H008L50-S	4	3.0	4	8	50	图一
CLF4-D040H011L50-S	4	4.0	4	11	50	图二
CLF4-D010H003L50	4	1.0	6	3	50	图一
CLF4-D015H004L50	4	1.5	6	4	50	图一
CLF4-D020H006L50	4	2.0	6	6	50	图一
CLF4-D025H008L50	4	2.5	6	8	50	图一
CLF4-D030H008L50	4	3.0	6	8	50	图一
CLF4-D035H010L50	4	3.5	6	10	50	图一
CLF4-D040H011L50	4	4.0	6	11	50	图一
CLF4-D045H011L50	4	4.5	6	11	50	图一
CLF4-D050H013L50	4	5.0	6	13	50	图一
CLF4-D055H016L50	4	5.5	6	16	50	图一

SUITABLE MATERIAL

◆ Very Suitable

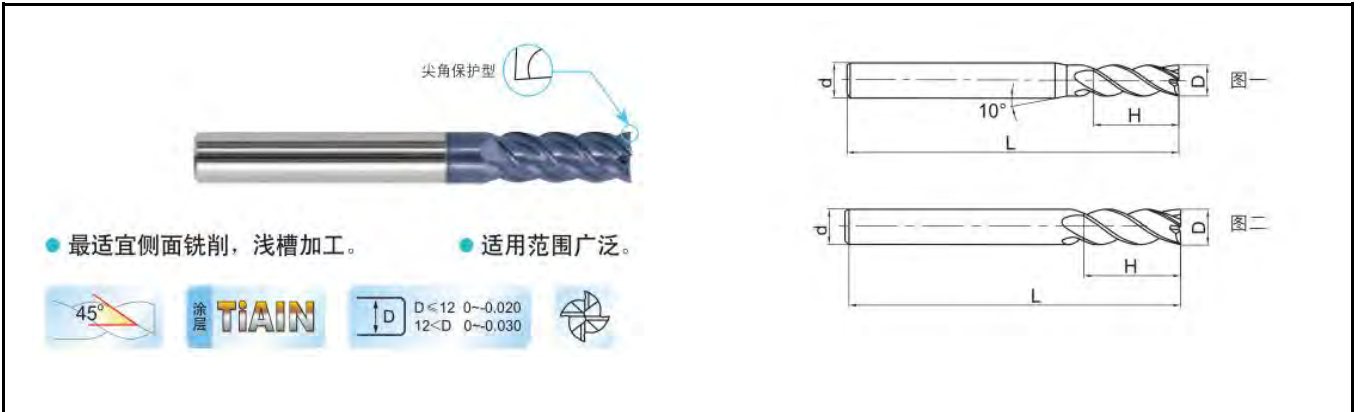
◇ Suitable

Material										
Carbon Steel	Alloy	Pre-hardened steel, Quenched Steel			Stain-less Steel	Cast Iron Ductile Iron	Cooper Alloy	Alu Alloy	Titan Alloy	Heat res. Alloy
		~40HRC	~50HRC	~55HRC						
◆	◆	◆	◆	◆	◇	◆			◇	◇

CLF4



General Machining, Four-Flute Straight Shank Flat End Solid Carbide End Mill



Model	Teeth Z	Dimension (mm)				Figure
		D	d	H	L	
CLF4-D060H016L50	4	6.0	6	16	50	图二
CLF4-D070H020L60	4	7.0	8	20	60	图一
CLF4-D080H020L60	4	8.0	8	20	60	图二
CLF4-D090H022L75	4	9.0	10	22	75	图一
CLF4-D100H025L75	4	10.0	10	25	75	图二
CLF4-D110H026L75	4	11.0	12	26	75	图一
CLF4-D120H030L75	4	12.0	12	30	75	图二
CLF4-D140H032L75	4	14.0	14	32	75	图二
CLF4-D160H045L100	4	16.0	16	45	100	图二
CLF4-D180H045L100	4	18.0	18	45	100	图二
CLF4-D200H045L100	4	20.0	20	45	100	图二

SUITABLE MATERIAL

◆ Very Suitable

◇ Suitable

Material										
Carbon Steel	Alloy	Pre-hardened steel, Quenched Steel			Stain-less Steel	Cast Iron Ductile Iron	Cooper Alloy	Alu Alloy	Titan Alloy	Heat res. Alloy
		~40HRC	~50HRC	~55HRC						
◆	◆	◆	◆	◆	◇	◆			◇	◇

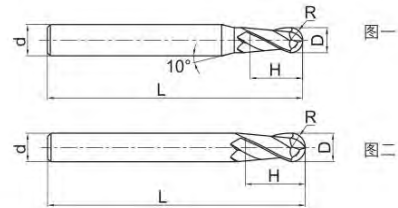
CLB2



General Machining, Two-Flute Straight Shank Ball Nose Solid Carbide End Mill



- 适用于仿形铣削，可作高速加工。
- 适用范围广泛。



Model	Teeth Z	Dimension (mm)					Figure
		D	R	d	H	L	
CLB2-D010H002L50-S	2	1.0	0.5	4	2	50	图一
CLB2-D015H003L50-S	2	1.5	0.75	4	3	50	图一
CLB2-D020H004L50-S	2	2.0	1.0	4	4	50	图一
CLB2-D025H005L50-S	2	2.5	1.25	4	5	50	图一
CLB2-D030H006L50-S	2	3.0	1.5	4	6	50	图一
CLB2-D040H008L50-S	2	4.0	2.0	4	8	50	图二
CLB2-D010H002L50	2	1.0	0.5	6	2	50	图一
CLB2-D015H003L50	2	1.5	0.75	6	3	50	图一
CLB2-D020H004L50	2	2.0	1.0	6	4	50	图一
CLB2-D025H005L50	2	2.5	1.25	6	5	50	图一
CLB2-D030H006L50	2	3.0	1.5	6	6	50	图一
CLB2-D035H008L50	2	3.5	1.75	6	8	50	图一
CLB2-D040H008L50	2	4.0	2.0	6	8	50	图一
CLB2-D050H010L50	2	5.0	2.5	6	10	50	图一
CLB2-D055H012L50	2	5.5	2.75	6	12	50	图一
CLB2-D060H012L50	2	6.0	3.0	6	12	50	图二

SUITABLE MATERIAL

◆ Very Suitable

◇ Suitable

Material										
Carbon Steel	Alloy	Pre-hardened steel, Quenched Steel			Stain-less Steel	Cast Iron Ductile Iron	Cooper Alloy	Alu Alloy	Titan Alloy	Heat res. Alloy
		~40HRC	~50HRC	~55HRC						
◆	◆	◆	◆	◆	◇	◆			◇	◇

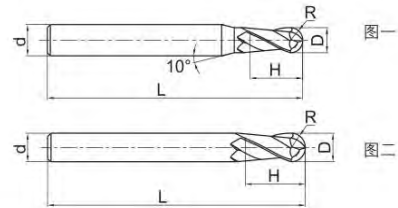
CLB2



General Machining, Two-Flute Straight Shank Ball Nose Solid Carbide End Mill



- 适用于仿形铣削，可作高速加工。
- 适用范围广泛。



Model	Teeth Z	Dimension (mm)					Figure
		D	R	d	H	L	
CLB2-D070H014L60	2	7.0	3.5	8	14	60	图一
CLB2-D080H016L60	2	8.0	4.0	8	16	60	图二
CLB2-D090H018L75	2	9.0	4.5	10	18	75	图一
CLB2-D100H020L75	2	10.0	5.0	10	20	75	图二
CLB2-D120H024L75	2	12.0	6.0	12	24	75	图二
CLB2-D140H028L75	2	14.0	7.0	14	28	75	图二
CLB2-D160H032L100	2	16.0	8.0	16	32	100	图二
CLB2-D200H040L100	2	20.0	10.0	20	40	100	图二

SUITABLE MATERIAL

◆ Very Suitable

◇ Suitable

Material										
Carbon Steel	Alloy	Pre-hardened steel, Quenched Steel			Stain-less Steel	Cast Iron Ductile Iron	Cooper Alloy	Alu Alloy	Titan Alloy	Heat res. Alloy
		~40HRC	~50HRC	~55HRC						
◆	◆	◆	◆	◆	◇	◆			◇	◇

CLB4



General Machining, Four-Flute Straight Shank Ball Nose Solid Carbide End Mill



Model	Teeth Z	Dimension (mm)					Figure
		D	R	d	H	L	
CLB4-D030H006L50	4	3.0	1.5	6	6	50	图一
CLB4-D040H008L50	4	4.0	2.0	6	8	50	图一
CLB4-D050H010L50	4	5.0	2.5	6	10	50	图一
CLB4-D060H012L50	4	6.0	3.0	6	12	50	图二
CLB4-D080H016L60	4	8.0	4.0	8	16	60	图二
CLB4-D100H020L75	4	10.0	5.0	10	20	75	图二
CLB4-D120H024L75	4	12.0	6.0	12	24	75	图二
CLB4-D140H028L75	4	14.0	7.0	14	28	75	图二
CLB4-D160H032L100	4	16.0	8.0	16	32	100	图二
CLB4-D180H036L100	4	18.0	9.0	18	36	100	图二
CLB4-D200H040L100	4	20.0	10.0	20	40	100	图二

SUITABLE MATERIAL

◆ Very Suitable

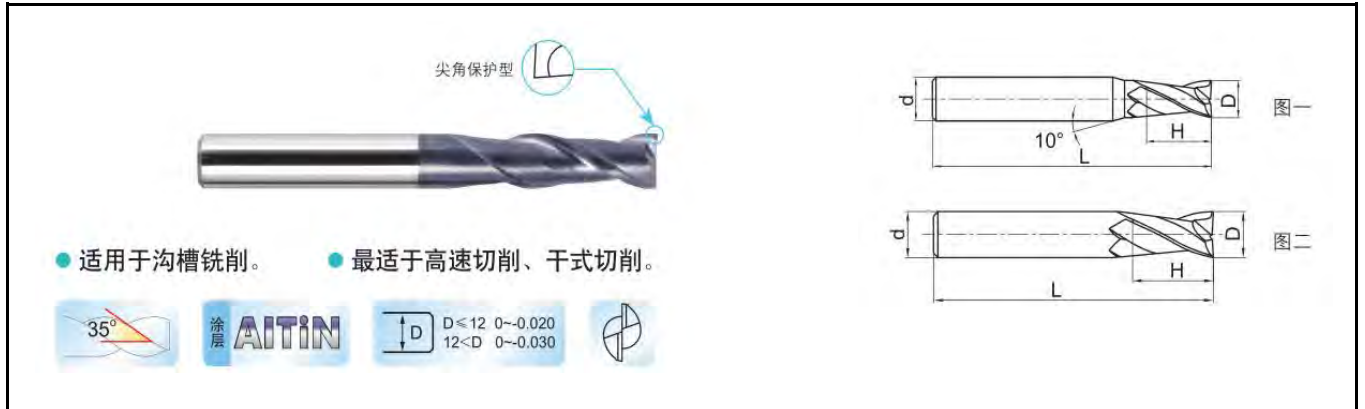
◇ Suitable

Material										
Carbon Steel	Alloy	Pre-hardened steel, Quenched Steel			Stain-less Steel	Cast Iron Ductile Iron	Cooper Alloy	Alu Alloy	Titan Alloy	Heat res. Alloy
		~40HRC	~50HRC	~55HRC						
◆	◆	◆	◆	◆	◇	◆			◇	◇

CHF2



High Hardness Steel Machining, Two-Flute Straight Shank Flat End Solid Carbide End Mill



Model	Teeth Z	Dimension (mm)				Figure
		D	d	H	L	
CHF2-D010H003L50-S	2	1.0	4	3	50	图一
CHF2-D015H004L50-S	2	1.5	4	4	50	图一
CHF2-D020H006L50-S	2	2.0	4	6	50	图一
CHF2-D025H008L50-S	2	2.5	4	8	50	图一
CHF2-D030H008L50-S	2	3.0	4	8	50	图一
CHF2-D040H011L50-S	2	4.0	4	11	50	图二
CHF2-D010H003L50	2	1.0	6	3	50	图一
CHF2-D015H004L50	2	1.5	6	4	50	图一
CHF2-D020H006L50	2	2.0	6	6	50	图一
CHF2-D025H008L50	2	2.5	6	8	50	图一
CHF2-D030H008L50	2	3.0	6	8	50	图一
CHF2-D035H010L50	2	3.5	6	10	50	图一
CHF2-D040H011L50	2	4.0	6	11	50	图一
CHF2-D045H011L50	2	4.5	6	11	50	图一
CHF2-D050H013L50	2	5.0	6	13	50	图一
CHF2-D055H016L50	2	5.5	6	16	50	图一

SUITABLE MATERIAL

◆Very Suitable

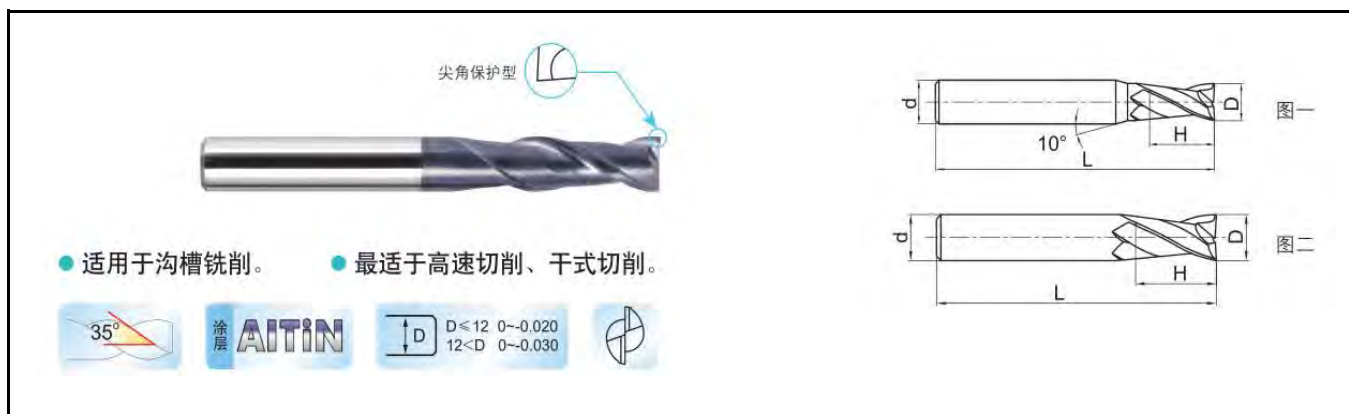
◇Suitable

Material										
Carbon Steel	Alloy	Pre-hardened steel, Quenched Steel			Stain-less Steel	Cast Iron Ductile Iron	Cooper Alloy	Alu Alloy	Titan Alloy	Heat res. Alloy
		~50HRC	~55HRC	~68HRC						
		◇	◆	◆		◇				

CHF2



High Hardness Steel Machining, Two-Flute Straight Shank
Flat End Solid Carbide End Mill



Model	Teeth Z	Dimension (mm)				Figure
		D	d	H	L	
CHF2-D060H016L50	2	6.0	6	16	50	图二
CHF2-D070H020L60	2	7.0	8	20	60	图一
CHF2-D080H020L60	2	8.0	8	20	60	图二
CHF2-D090H022L75	2	9.0	10	22	75	图一
CHF2-D100H025L75	2	10.0	10	25	75	图二
CHF2-D110H026L75	2	11.0	12	26	75	图一
CHF2-D120H030L75	2	12.0	12	30	75	图二
CHF2-D140H032L100	2	14.0	14	32	100	图二
CHF2-D160H045L100	2	16.0	16	45	100	图二
CHF2-D180H045L100	2	18.0	18	45	100	图二
CHF2-D200H045L100	2	20.0	20	45	100	图二

SUITABLE MATERIAL

◆ Very Suitable

◇ Suitable

Material										
Carbon Steel	Alloy	Pre-hardened steel, Quenched Steel			Stain-less Steel	Cast Iron Ductile Iron	Cooper Alloy	Alu Alloy	Titan Alloy	Heat res. Alloy
		~50HRC	~55HRC	~68HRC						
		◇	◆	◆		◇				

CHF4



High Hardness Steel Machining, Four-Flute Straight Shank Flat End Solid Carbide End Mill



Model	Teeth Z	Dimension (mm)				Figure
		D	d	H	L	
CHF4-D010H003L50-S	4	1.0	4	3	50	图一
CHF4-D015H004L50-S	4	1.5	4	4	50	图一
CHF4-D020H006L50-S	4	2.0	4	6	50	图一
CHF4-D025H008L50-S	4	2.5	4	8	50	图一
CHF4-D030H008L50-S	4	3.0	4	8	50	图一
CHF4-D040H011L50-S	4	4.0	4	11	50	图二
CHF4-D010H003L50	4	1.0	6	3	50	图一
CHF4-D015H004L50	4	1.5	6	4	50	图一
CHF4-D020H006L50	4	2.0	6	6	50	图一
CHF4-D025H008L50	4	2.5	6	8	50	图一
CHF4-D030H008L50	4	3.0	6	8	50	图一
CHF4-D035H010L50	4	3.5	6	10	50	图一
CHF4-D040H011L50	4	4.0	6	11	50	图一
CHF4-D045H011L50	4	4.5	6	11	50	图一
CHF4-D050H013L50	4	5.0	6	13	50	图一
CHF4-D055H016L50	4	5.5	6	16	50	图一

SUITABLE MATERIAL

◆ Very Suitable

◇ Suitable

Material										
Carbon Steel	Alloy	Pre-hardened steel, Quenched Steel			Stain-less Steel	Cast Iron Ductile Iron	Cooper Alloy	Alu Alloy	Titan Alloy	Heat res. Alloy
		~50HRC	~55HRC	~68HRC						
		◇	◆	◆		◇				

CHF4



High Hardness Steel Machining, Four-Flute Straight Shank Flat End Solid Carbide End Mill



Model	Teeth Z	Dimension (mm)				Figure
		D	d	H	L	
CHF4-D060H016L50	4	6.0	6	16	50	图二
CHF4-D070H020L60	4	7.0	8	20	60	图一
CHF4-D080H020L60	4	8.0	8	20	60	图二
CHF4-D090H022L75	4	9.0	10	22	75	图一
CHF4-D100H025L75	4	10.0	10	25	75	图二
CHF4-D110H026L75	4	11.0	12	26	75	图一
CHF4-D120H030L75	4	12.0	12	30	75	图二
CHF4-D140H032L75	4	14.0	14	32	75	图二
CHF4-D160H045L100	4	16.0	16	45	100	图二
CHF4-D180H045L100	4	18.0	18	45	100	图二
CHF4-D200H045L100	4	20.0	20	45	100	图二

SUITABLE MATERIAL

◆ Very Suitable

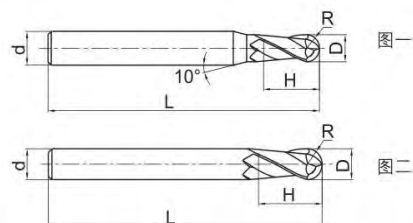
◇ Suitable

Material										
Carbon Steel	Alloy	Pre-hardened steel, Quenched Steel			Stain-less Stain	Cast Iron Ductile Iron	Cooper Alloy	Alu Alloy	Titan Alloy	Heat res. Alloy
		~50HRC	~55HRC	~68HRC						
		◇	◆	◆		◇				

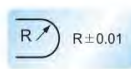
CHB2



High Hardness Steel Machining, Two-Flute Straight Shank Ball Nose Solid Carbide End Mill



- 适用于仿形铣削。
- 最适于高速切削、干式切削。



Model	Teeth Z	Dimension (mm)					Figure
		D	R	d	H	L	
CHB2-D010H002L50-S	2	1.0	0.5	4	2	50	图一
CHB2-D015H003L50-S	2	1.5	0.75	4	3	50	图一
CHB2-D020H004L50-S	2	2.0	1.0	4	4	50	图一
CHB2-D025H005L50-S	2	2.5	1.25	4	5	50	图一
CHB2-D030H006L50-S	2	3.0	1.5	4	6	50	图一
CHB2-D040H008L50-S	2	4.0	2.0	4	8	50	图二
CHB2-D010H002L50	2	1.0	0.5	6	2	50	图一
CHB2-D015H003L50	2	1.5	0.75	6	3	50	图一
CHB2-D020H004L50	2	2.0	1.0	6	4	50	图一
CHB2-D025H005L50	2	2.5	1.25	6	5	50	图一
CHB2-D030H006L50	2	3.0	1.5	6	6	50	图一
CHB2-D035H008L50	2	3.5	1.75	6	8	50	图一
CHB2-D040H008L50	2	4.0	2.0	6	8	50	图一
CHB2-D050H010L50	2	5.0	2.5	6	10	50	图一
CHB2-D055H012L50	2	5.5	2.75	6	12	50	图一
CHB2-D060H012L50	2	6.0	3.0	6	12	50	图二

SUITABLE MATERIAL

◆Very Suitable

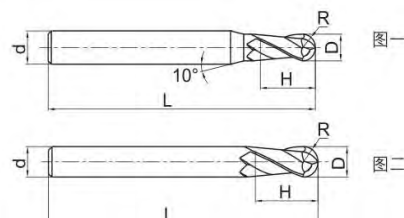
◇Suitable

Material										
Carbon Steel	Alloy	Pre-hardened steel, Quenched Steel			Stain-less Steel	Cast Iron Ductile Iron	Cooper Alloy	Alu Alloy	Titan Alloy	Heat res. Alloy
		~50HRC	~55HRC	~68HRC						
		◇	◆	◆		◇				

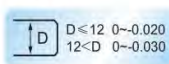
CHB2



High Hardness Steel Machining, Two-Flute Straight Shank Ball Nose Solid Carbide End Mill



- 适用于仿形铣削。
- 最适于高速切削、干式切削。



Model	Teeth Z	Dimension (mm)					Figure
		D	R	d	H	L	
CHB2-D070H014L60	2	7.0	3.5	8	14	60	图一
CHB2-D080H016L60	2	8.0	4.0	8	16	60	图二
CHB2-D090H018L75	2	9.0	4.5	10	18	75	图一
CHB2-D100H020L75	2	10.0	5.0	10	20	75	图二
CHB2-D120H024L75	2	12.0	6.0	12	24	75	图二
CHB2-D140H028L75	2	14.0	7.0	14	28	75	图二
CHB2-D160H032L100	2	16.0	8.0	16	32	100	图二
CHB2-D200H040L100	2	20.0	10.0	20	40	100	图二

SUITABLE MATERIAL

◆ Very Suitable

◇ Suitable

Material										
Carbon Steel	Alloy	Pre-hardened steel, Quenched Steel			Stain-less Steel	Cast Iron Ductile Iron	Cooper Alloy	Alu Alloy	Titan Alloy	Heat res. Alloy
		~50HRC	~55HRC	~68HRC						
		◇	◆	◆		◇				

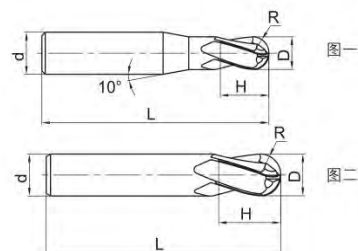
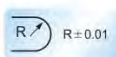
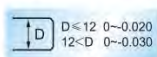
CHB4



High Hardness Steel Machining, Four-Flute Straight Shank Ball Nose Solid Carbide End Mill



- 四刃球头铣刀可实现较高的进给速度，提高加工效率，在高硬度材料加工中实现较长的使用寿命。



Model	Teeth Z	Dimension (mm)								Figure
		D	R	d	H	L				
CHB4-D030H006L50	4	3.0	1.5	6	6	50				图一
CHB4-D040H008L50	4	4.0	2.0	6	8	50				图一
CHB4-D050H010L50	4	5.0	2.5	6	10	50				图一
CHB4-D060H012L50	4	6.0	3.0	6	12	50				图二
CHB4-D080H016L60	4	8.0	4.0	8	16	60				图二
CHB4-D100H020L75	4	10.0	5.0	10	20	75				图二
CHB4-D120H024L75	4	12.0	6.0	12	24	75				图二
CHB4-D140H028L75	4	14.0	7.0	14	28	75				图二
CHB4-D160H032L100	4	16.0	8.0	16	32	100				图二
CHB4-D180H036L100	4	18.0	9.0	18	36	100				图二
CHB4-D200H040L100	4	20.0	10.0	20	40	100				图二

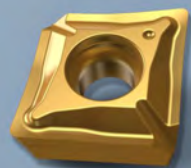
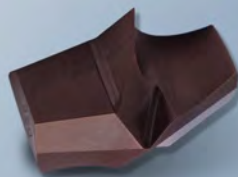
SUITABLE MATERIAL

◆ Very Suitable

◇ Suitable

Material										
Carbon Steel	Alloy	Pre-hardened steel, Quenched Steel			Stain-less Steel	Cast Iron Ductile Iron	Cooper Alloy	Alu Alloy	Titan Alloy	Heat res. Alloy
		~50HRC	~55HRC	~68HRC						
		◇	◆	◆		◇				

钻削系列



高
—
端
—
刀
—
具
—
国
—
产
—
化

孔加工系列

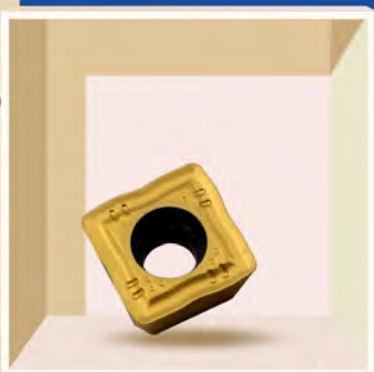
— HOLE MAKING SERIES —

精密硬质合金钻头

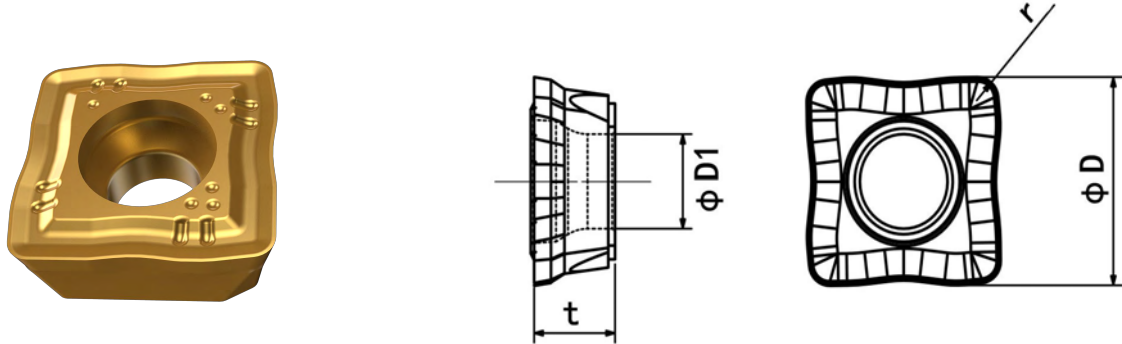
台阶钻头、非标定制等各类钻头
为你呈现孔加工的稳定和深度。

特色 U 钻系列

双螺旋内冷孔设计，冷却液精准喷射刀尖；
刀体硬度 HRC 52 以上；
刀片设计、材质俱佳，易切削、强耐磨；
螺旋槽空间增加 30%，排屑顺畅。



XOMX Insert

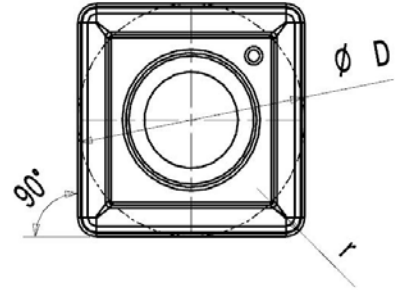
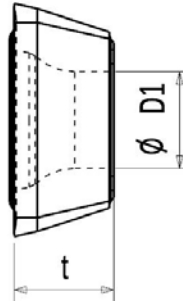


Model	Dimension (mm)				Grade					Screw
	D	t	r	D1	CT5320	CT5420	CT5520	CT8320	CT8520	
XOMX 050204	4.9	2.38	0.4	2.25	●	○			●	CSG2049-P
XOMX 060204	5.7	2.38	0.4	2.60	●			●	●	CSG2252-P
XOMX 070306	6.8	2.80	0.6	2.60	●				●	CSG2252-P
XOMX 08T306	7.9	3.97	0.6	2.85	●	○		●		CSG2565-P
XOMX 09T308	9.2	3.97	0.8	3.80	●	●				CSG3585-P
XOMX 11T308	11.0	3.97	0.8	3.80	●	●	●			CSG3585-P
XOMX 130408	12.8	4.40	0.8	4.40	●		○			CSG4011-P
XOMX 150510	15.0	4.80	1.0	5.40	●					CSG5012-P

SPMG

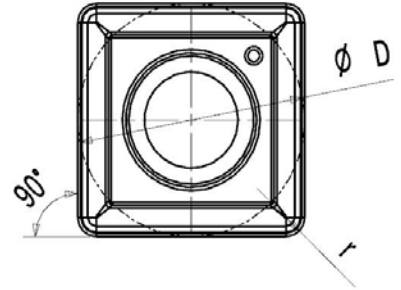
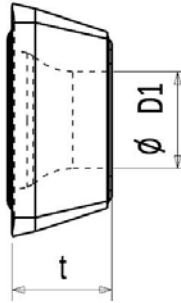


SPMG Insert



Model	Dimension (mm)				Screw	Grade
	D	t	r	D1		CT5420
SPMG 04T102-DG	3.97	1.85	0.2	1.97	CSG2049-P	●
SPMG 050204-DG	5.00	2.38	0.4	2.25	CSG2049-P	
SPMG 060204-DG	6.00	2.38	0.4	2.61	CSG2252-P	
SPMG 07T308-DG	7.94	3.97	0.8	2.85	CSG2565-P	
SPMG 090408-DG	9.80	4.30	0.8	4.05	CSG3585-P	
SPMG 110408-DG	11.5	4.80	0.8	4.45	CSG4011-P	
SPMG 140512-DG	14.3	5.20	1.2	5.75	CSG5012-P	

SPGG Aluminum Alloy insert

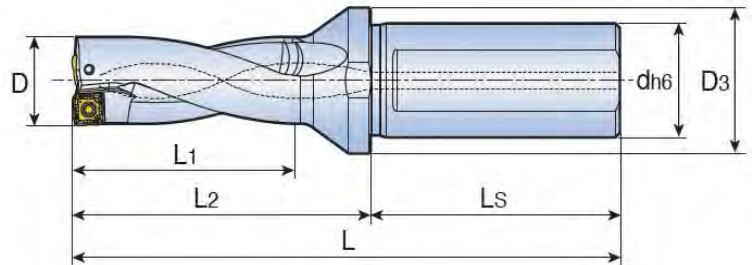
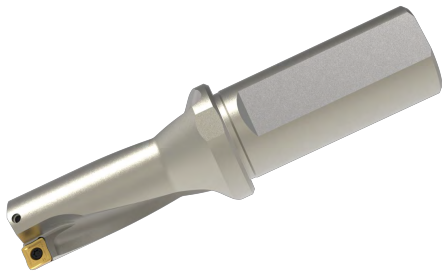


Model	Dimension (mm)				Screw	Grade
	D	t	r	D1		CT101
SPGG 050204-AL	5.00	2.38	0.4	2.25	CSG2049-P	●
SPGG 060204-AL	6.00	2.38	0.4	2.61	CSG2252-P	
SPGG 07T308-AL	7.94	3.97	0.8	2.85	CSG2565-P	
SPGG 090408-AL	9.80	4.30	0.8	4.05	CSG3585-P	
SPGG 110408-AL	11.5	4.80	0.8	4.45	CSG4011-P	
SPGG 140512-AL	14.3	5.20	1.2	5.75	CSG5012-P	

XOP 2. . -T2



Indexable Drill



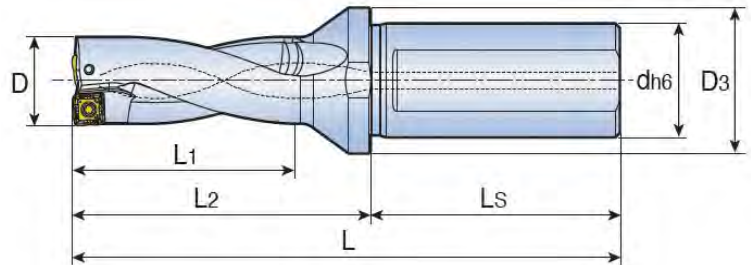
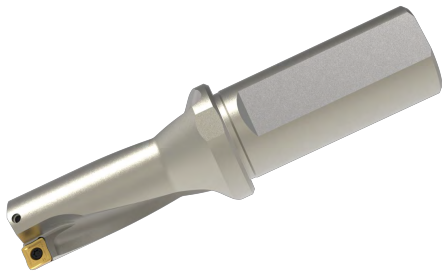
©Drilling depth : 2xD(diameter)

Model	Dimension (mm)							Insert
	D	d	D3	L	L1	L2	Ls	
XOP 2140-20T2-05	14.0	20	25	96	28	46	50	XOMX 05
XOP 2145-20T2-05	14.5	20	25	99	30	49	50	
XOP 2150-20T2-05	15.0	20	25	99	30	49	50	
XOP 2155-20T2-05	15.5	20	25	102	32	52	50	
XOP 2160-20T2-05	16.0	20	25	102	32	52	50	
XOP 2165-25T2-06	16.5	25	32	110	34	54	56	XOMX 06
XOP 2170-25T2-06	17.0	25	32	110	34	54	56	
XOP 2175-25T2-06	17.5	25	32	113	36	57	56	
XOP 2180-25T2-06	18.0	25	32	113	36	57	56	
XOP 2185-25T2-06	18.5	25	32	115	38	59	56	
XOP 2190-25T2-06	19.0	25	32	115	38	59	56	XOMX 07
XOP 2195-25T2-07	19.5	25	32	119	40	63	56	
XOP 2200-25T2-07	20.0	25	32	119	40	63	56	
XOP 2205-25T2-07	20.5	25	32	121	42	65	56	
XOP 2210-25T2-07	21.0	25	32	121	42	65	56	
XOP 2215-25T2-07	21.5	25	32	123	44	67	56	XOMX 08
XOP 2220-25T2-07	22.0	25	32	123	44	67	56	
XOP 2225-25T2-08	22.5	25	32	124	46	68	56	
XOP 2230-25T2-08	23.0	25	32	124	46	68	56	
XOP 2230-32T2-08	23.0	32	40	128	46	68	60	
XOP 2235-25T2-08	23.5	25	32	126	48	70	56	
XOP 2235-32T2-08	23.5	32	40	130	48	70	60	
XOP 2240-25T2-08	24.0	25	32	126	48	70	56	

XOP 2. . -T2



Indexable Drill



©Drilling depth : 2xD(diameter)

Model	Dimension (mm)							Insert
	D	d	D3	L	L1	L2	Ls	
XOP 2240-32T2-08	24.0	32	40	130	48	70	60	XOMX 08
XOP 2245-25T2-08	24.5	25	32	128	50	72	56	
XOP 2245-32T2-08	24.5	32	40	132	50	72	60	
XOP 2250-25T2-08	25.0	25	32	128	50	72	56	
XOP 2250-32T2-08	25.0	32	40	132	50	72	60	
XOP 2255-25T2-08	25.5	25	32	129	52	73	56	
XOP 2255-32T2-08	25.5	32	40	133	52	73	60	
XOP 2260-25T2-08	26.0	25	32	129	52	73	56	
XOP 2260-32T2-08	26.0	32	40	133	52	73	60	
XOP 2265-32T2-09	26.5	32	40	137	54	77	60	XOMX 09
XOP 2270-25T2-09	27.0	25	40	133	54	77	56	
XOP 2270-32T2-09	27.0	32	40	137	54	77	60	
XOP 2275-32T2-09	27.5	32	40	139	56	79	60	
XOP 2280-25T2-09	28.0	25	40	135	56	79	56	
XOP 2280-32T2-09	28.0	32	40	139	56	79	60	
XOP 2285-32T2-09	28.5	32	40	141	58	81	60	
XOP 2290-25T2-09	29.0	25	40	137	58	81	56	
XOP 2290-32T2-09	29.0	32	40	141	58	81	60	
XOP 2295-32T2-09	29.5	32	40	143	60	83	60	
XOP 2300-32T2-09	30.0	32	40	143	60	83	60	
XOP 2305-32T2-09	30.5	32	40	145	62	85	60	
XOP 2310-32T2-09	31.0	32	40	145	62	85	60	

©Standard product has the inner coolant holes; Insert needs to be purchased separately.

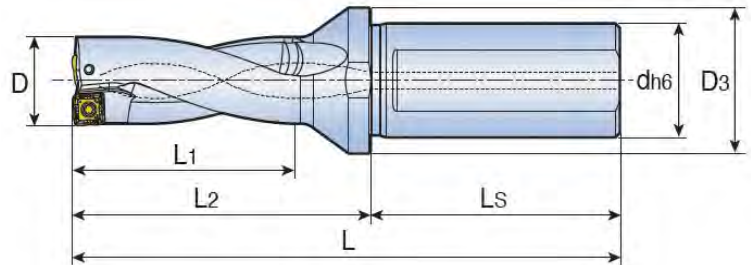
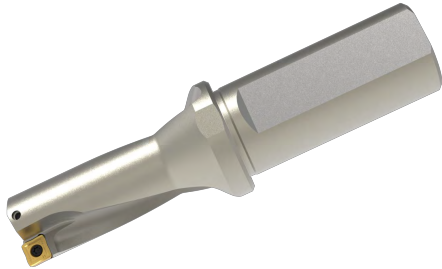
©The standard product does not have a threaded interface at the holder end. If required, can be made by order.

©Coolant blockage requires a separate order.

XOP 2. . -T2



Indexable Drill



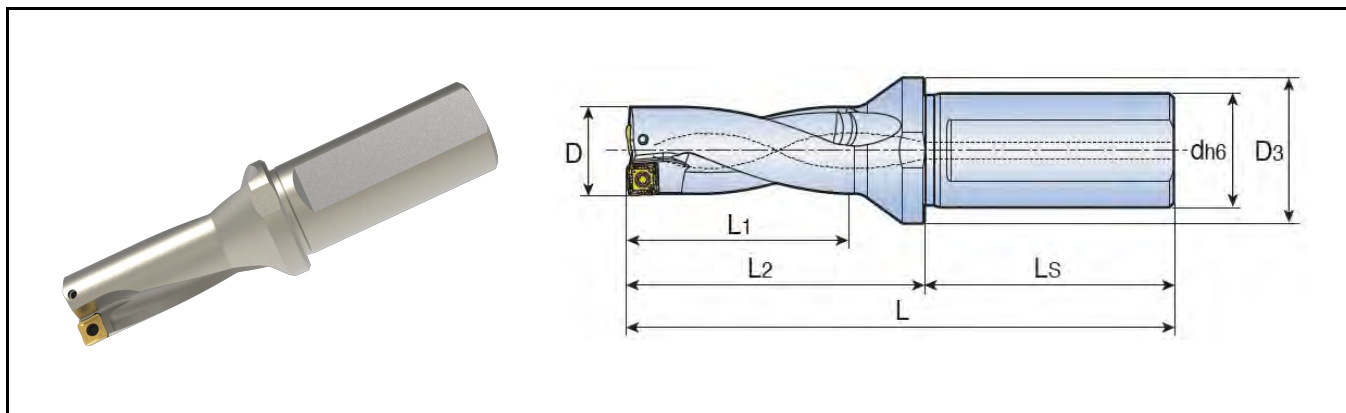
©Drilling depth : 2xD(diameter)

Model	Dimension (mm)							Insert
	D	d	D3	L	L1	L2	Ls	
XOP 2320-32T2-11	32.0	32	40	147	64	87	60	XOMX 11
XOP 2320-40T2-11	32.0	40	50	157	64	87	70	
XOP 2330-32T2-11	33.0	32	40	149	66	89	60	
XOP 2330-40T2-11	33.0	40	50	159	66	89	70	
XOP 2340-32T2-11	34.0	32	40	151	68	91	60	
XOP 2340-40T2-11	34.0	40	50	161	68	91	70	
XOP 2350-32T2-11	35.0	32	40	153	70	93	60	
XOP 2350-40T2-11	35.0	40	50	163	70	93	70	
XOP 2360-32T2-11	36.0	32	40	155	72	95	60	
XOP 2360-40T2-11	36.0	40	50	165	72	95	70	
XOP 2370-32T2-13	37.0	32	50	162	74	102	60	XOMX 13
XOP 2370-40T2-13	37.0	40	50	172	74	102	70	
XOP 2380-32T2-13	38.0	32	50	164	76	104	60	
XOP 2380-40T2-13	38.0	40	50	174	76	104	70	
XOP 2390-32T2-13	39.0	32	50	166	78	106	60	
XOP 2390-40T2-13	39.0	40	50	176	78	106	70	
XOP 2400-32T2-13	40.0	32	50	168	80	108	60	
XOP 2400-40T2-13	40.0	40	50	178	80	108	70	
XOP 2410-40T2-13	41.0	40	50	180	82	110	70	
XOP 2420-40T2-13	42.0	40	50	182	84	112	70	
XOP 2430-40T2-13	43.0	40	50	184	86	114	70	

XOP 2. . -T2



Indexable Drill



◎Drilling depth : 2xD(diameter)

Model	Dimension (mm)							Insert
	D	d	D3	L	L1	L2	Ls	
XOP 2440-40T2-15	44.0	40	60	193	88	123	70	XOMX 15
XOP 2450-40T2-15	45.0	40	60	195	90	125	70	
XOP 2460-40T2-15	46.0	40	60	197	92	127	70	
XOP 2470-40T2-15	47.0	40	60	199	94	129	70	
XOP 2480-40T2-15	48.0	40	60	201	96	131	70	
XOP 2490-40T2-15	49.0	40	60	203	98	133	70	
XOP 2500-40T2-15	50.0	40	60	205	100	135	70	

◎Standard product has the inner coolant holes; Insert needs to be purchased separately.

◎The standard product does not have a threaded interface at the holder end. If required, can be made by order.

◎Coolant blockage requires a separate order.

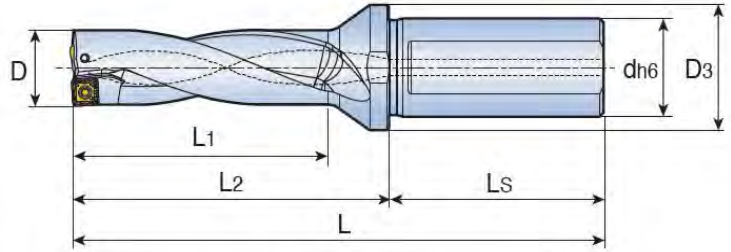
Spare Parts

Model	Screw	Wrench	Coolant plug*	Note
XOP 2140-2160	CSG2049-P	CTS06W-P	CSL 20	◎*Coolinghole plug for Pull Pin should be ordered separately. ◎Order example: Plug for shank diameter 25.0mm: SL 25M
XOP 2165-2220	CSG2252-P	CTS07W-P	CSL 25	
XOP 2225-2260	CSG2565-P	CTS08W-P	CSL 25/CSL 32	
XOP 2265-2360	CSG3585-P	CTS10W-P	CSL 25/CSL 32	
XOP 2370-2430	CSG4011-P	CTS15W-P	CSL 32/CSL 40	
XOP 2440-2550	CSG5012-P	CTS20W-P	CSL 32/CSL 40	

XOP 3. . -T2



Indexable Drill



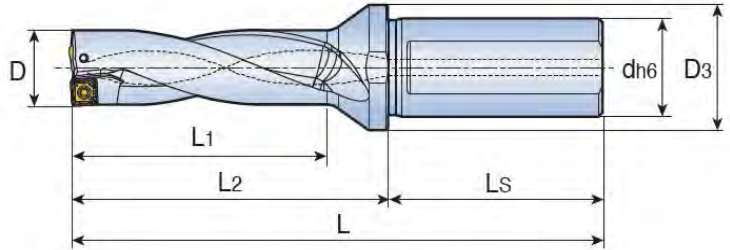
©Drilling depth : 3xD(diameter)

Model	Dimension (mm)							Insert
	D	d	D3	L	L1	L2	Ls	
XOP 3140-20T2-05	14.0	20	25	110	42	60	50	XOMX 05
XOP 3145-20T2-05	14.5	20	25	114	45	64	50	
XOP 3150-20T2-05	15.0	20	25	114	45	64	50	
XOP 3155-20T2-05	15.5	20	25	118	48	68	50	
XOP 3160-20T2-05	16.0	20	25	118	48	68	50	
XOP 3165-25T2-06	16.5	25	32	127	51	71	56	XOMX 06
XOP 3167-25T2-06 *	16.7	25	32	127	50.1	71	56	
XOP 3170-25T2-06	17.0	25	32	131	51	71	56	
XOP 3175-25T2-06	17.5	25	32	131	54	75	56	
XOP 3180-25T2-06	18.0	25	32	134	54	75	56	
XOP 3185-25T2-06	18.5	25	32	134	57	78	56	
XOP 3190-25T2-06	19.0	25	32	139	57	78	56	
XOP 3195-25T2-07	19.5	25	32	139	60	83	56	XOMX 07
XOP 3200-25T2-07	20.0	25	32	142	60	83	56	
XOP 3205-25T2-07	20.5	25	32	142	63	86	56	
XOP 3210-25T2-07	21.0	25	32	145	63	86	56	
XOP 3215-25T2-07	21.5	25	32	145	66	89	56	
XOP 3220-25T2-07	22.0	25	32	145	66	89	56	
XOP 3222-25T2-07 *	22.2	25	32	147	66.6	89	56	
XOP 3225-25T2-08	22.5	25	32	147	69	91	56	XOMX 08
XOP 3230-25T2-08	23.0	25	32	151	69	91	56	
XOP 3230-32T2-08	23.0	32	40	150	69	91	60	

XOP 3. . -T2



Indexable Drill



◎Drilling depth : 3xD(diameter)

Model	Dimension (mm)							Insert
	D	d	D3	L	L1	L2	Ls	
XOP 3235-25T2-08	23.5	25	32	150	72	94	56	XOMX 08
XOP 3235-32T2-08	23.5	32	40	150	72	94	60	
XOP 3240-25T2-08	24.0	25	32	150	72	94	56	
XOP 3240-32T2-08	24.0	32	40	154	72	94	60	
XOP 3245-25T2-08	24.5	25	32	153	75	97	56	
XOP 3245-32T2-08	24.5	32	40	157	75	97	60	
XOP 3250-25T2-08	25.0	25	32	153	75	97	56	
XOP 3250-32T2-08	25.0	32	40	157	75	97	60	
XOP 3254-25T2-08 *	25.4	25	32	153	76.2	97	56	
XOP 3255-25T2-08	25.5	25	32	155	78	99	56	
XOP 3255-32T2-08	25.5	32	40	159	78	99	60	
XOP 3260-25T2-08	26.0	25	32	155	78	99	56	
XOP 3260-32T2-08	26.0	32	32	159	78	99	60	
XOP 3265-25T2-09	26.5	25	40	160	81	104	56	XOMX 09
XOP 3265-32T2-09	26.5	32	40	164	81	104	60	
XOP 3270-25T2-09	27.0	25	40	160	81	104	56	
XOP 3270-32T2-09	27.0	32	40	164	81	104	60	
XOP 3275-25T2-09	27.5	25	40	163	84	107	56	
XOP 3275-32T2-09	27.5	32	40	167	84	107	60	
XOP 3280-25T2-09	28.0	25	40	163	84	107	56	
XOP 3280-32T2-09	28.0	32	40	167	84	107	60	
XOP 3285-25T2-09	28.5	25	40	166	87	110	56	

◎Standard product has the inner coolant holes; Insert needs to be purchased separately.

◎ “*” indicates in imperial measurements.

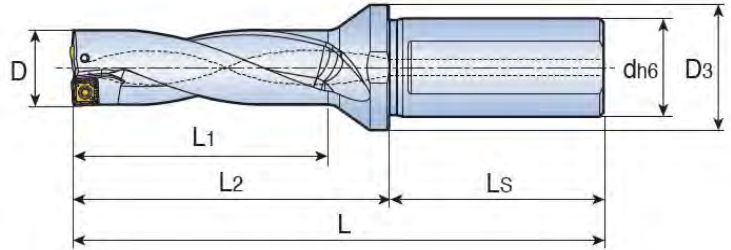
◎The standard product does not have a threaded interface at the holder end. If required, can be made by order.

◎Coolant blockage requires a separate order.

XOP 3. . -T2



Indexable Drill



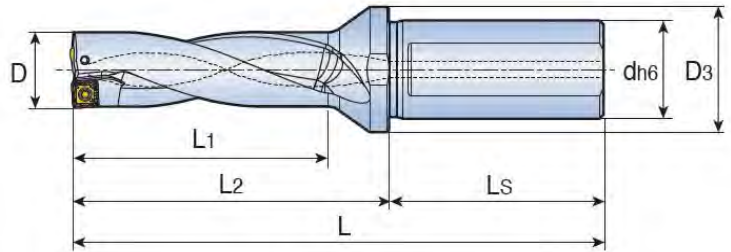
©Drilling depth : 3xD(diameter)

Model	Dimension (mm)							Insert
	D	d	D3	L	L1	L2	Ls	
XOP 3285-32T2-09	28.5	32	40	170	87	110	60	XOMX 09
XOP 3290-25T2-09	29.0	25	40	166	87	110	56	
XOP 3290-32T2-09	29.0	32	40	170	87	110	60	
XOP 3295-32T2-09	29.5	32	40	173	90	113	60	
XOP 3300-32T2-09	30.0	32	40	173	90	113	60	
XOP 3305-32T2-09	30.5	32	40	176	93	116	60	
XOP 3310-32T2-09	31.0	32	40	176	93	116	60	
XOP 3320-32T2-11	32.0	32	40	179	96	119	60	XOMX 11
XOP 3320-40T2-11	32.0	40	50	189	96	119	70	
XOP 3330-32T2-11	33.0	32	40	182	99	122	60	
XOP 3330-40T2-11	33.0	40	50	192	99	122	70	
XOP 3340-32T2-11	34.0	32	40	185	102	125	60	
XOP 3340-40T2-11	34.0	40	50	195	102	125	70	
XOP 3350-32T2-11	35.0	32	40	188	105	128	60	
XOP 3350-40T2-11	35.0	40	50	198	105	128	70	
XOP 3360-32T2-11	36.0	32	40	191	108	131	60	
XOP 3360-40T2-11	36.0	40	50	201	108	131	70	
XOP 3370-32T2-13	37.0	32	50	199	111	139	60	XOMX 13
XOP 3370-40T2-13	37.0	40	50	209	111	139	70	
XOP 3380-32T2-13	38.0	32	50	202	114	142	60	
XOP 3380-40T2-13	38.0	40	50	212	114	142	70	
XOP 3390-32T2-13	39.0	32	50	205	117	145	60	
XOP 3390-40T2-13	39.0	40	50	215	117	145	70	
XOP 3400-32T2-13	40.0	32	50	208	120	148	60	
XOP 3400-40T2-13	40.0	40	40	218	120	148	70	

XOP 3. . -T2



Indexable Drill



©Drilling depth : 3xD(diameter)

Model	Dimension (mm)							Insert
	D	d	D3	L	L1	L2	Ls	
XOP 3410-40T2-13	41.0	40	50	221	123	151	70	XOMX 13
XOP 3420-40T2-13	42.0	40	50	224	126	154	70	
XOP 3430-40T2-13	43.0	40	50	227	129	157	70	
XOP 3440-40T2-15	44.0	40	60	237	132	167	70	XOMX 15
XOP 3450-40T2-15	45.0	40	60	240	135	170	70	
XOP 3460-40T2-15	46.0	40	60	243	138	173	70	
XOP 3470-40T2-15	47.0	40	60	246	141	176	70	
XOP 3480-40T2-15	48.0	40	60	249	144	179	70	
XOP 3490-40T2-15	49.0	40	60	252	147	182	70	
XOP 3500-40T2-15	50.0	40	60	255	150	185	70	

©Standard product has the inner coolant holes; Insert needs to be purchased separately.

©The standard product does not have a threaded interface at the holder end. If required, can be made by order.

©Coolant blockage requires a separate order.

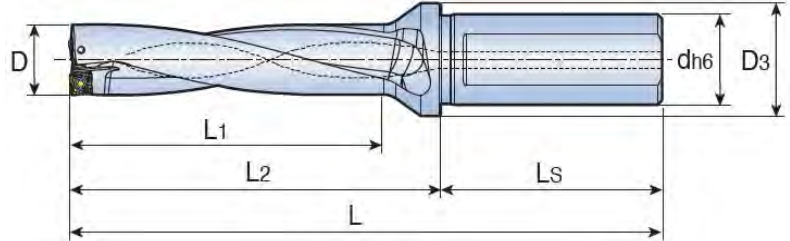
Spare Parts

Model	Screw	Wrench	Coolant plug*	Note
XOP 3140-4160	CSG2049-P	CTS06W-P	CSL 20	©*Coolinghole plug for Pull Pin should be ordered separately. ©Order example: Plug for shank diameter 32.0mm: SL 32M
XOP 3165-4220	CSG2252-P	CTS07W-P	CSL 25	
XOP 3225-4260	CSG2565-P	CTS08W-P	CSL 25/CSL 32	
XOP 3265-4360	CSG3585-P	CTS10W-P	CSL 25/CSL 32	
XOP 3370-4430	CSG4011-P	CTS15W-P	CSL 32/CSL 40	
XOP 3440-4508	CSG5012-P	CTS20W-P	CSL 32/CSL 40	

XOP 4. . -T2



Indexable Drill



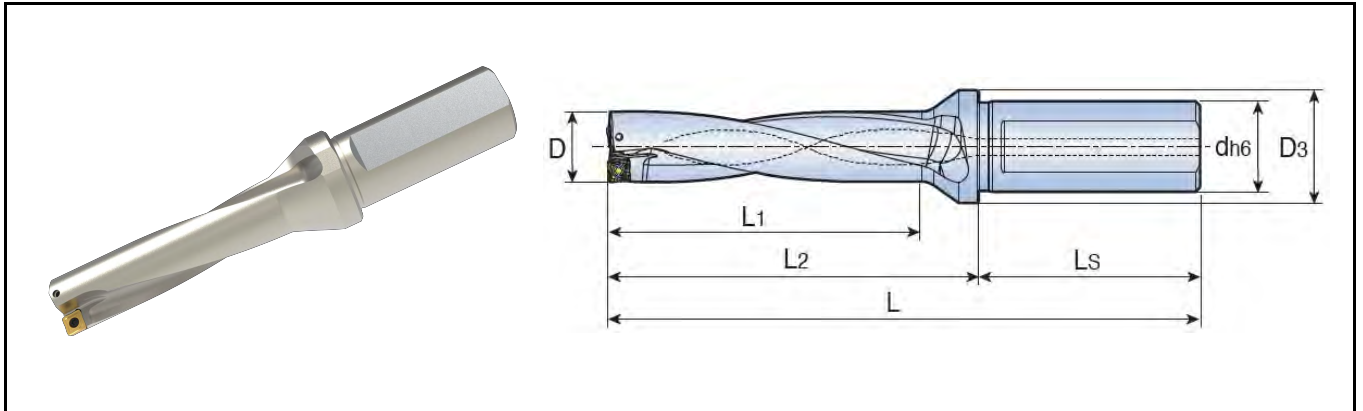
©Drilling depth : 4xD(diameter)

Model	Dimension (mm)							Insert
	D	d	D3	L	L1	L2	Ls	
XOP 4140-20T2-05	14.0	20	25	124	56	74	50	XOMX 05
XOP 4145-20T2-05	14.5	20	25	129	60	79	50	
XOP 4150-20T2-05	15.0	20	25	129	60	79	50	
XOP 4155-20T2-05	15.5	20	25	134	64	84	50	
XOP 4160-20T2-05	16.0	20	25	134	64	84	50	
XOP 4165-25T2-06	16.5	25	32	144	68	88	56	XOMX 06
XOP 4170-25T2-06	17.0	25	32	144	68	88	56	
XOP 4175-25T2-06	17.5	25	32	149	72	93	56	
XOP 4180-25T2-06	18.0	25	32	149	72	93	56	
XOP 4185-25T2-06	18.5	25	32	153	76	97	56	
XOP 4190-25T2-06	19.0	25	32	153	76	97	56	XOMX 07
XOP 4195-25T2-07	19.5	25	32	159	80	103	56	
XOP 4200-25T2-07	20.0	25	32	159	80	103	56	
XOP 4205-25T2-07	20.5	25	32	163	84	107	56	
XOP 4210-25T2-07	21.0	25	32	163	84	107	56	
XOP 4215-25T2-07	21.5	25	32	167	88	111	56	XOMX 08
XOP 4220-25T2-07	22.0	25	32	167	88	111	56	
XOP 4225-25T2-08	22.5	25	32	170	92	114	56	
XOP 4230-25T2-08	23.0	25	32	170	92	114	56	
XOP 4230-32T2-08	23.0	32	40	174	92	114	60	
XOP 4235-25T2-08	23.5	25	32	174	96	118	56	
XOP 4235-32T2-08	23.5	32	40	178	96	118	60	
XOP 4240-25T2-08	24.0	25	32	174	96	118	56	
XOP 4240-32T2-08	24.0	32	40	178	96	118	60	
XOP 4245-25T2-08	24.5	25	32	178	100	122	56	

XOP 4. . -T2



Indexable Drill



◎Drilling depth : 4xD(diameter)

Model	Dimension (mm)							Insert
	D	d	D3	L	L1	L2	Ls	
XOP 4245-32T2-08	24.5	32	40	182	100	122	60	XOMX 08
XOP 4250-25T2-08	25.0	25	32	178	100	122	56	
XOP 4250-32T2-08	25.0	32	40	182	100	122	60	
XOP 4254-25T2-08 *	25.4	25	32	178	101.6	122	56	
XOP 4255-25T2-08	25.5	25	32	181	104	125	56	
XOP 4255-32T2-08	25.5	32	40	185	104	125	60	
XOP 4260-25T2-08	26.0	25	32	181	104	125	56	
XOP 4260-32T2-08	26.0	32	40	185	104	125	60	
XOP 4265-25T2-09	26.5	25	40	187	108	131	56	XOMX 09
XOP 4265-32T2-09	26.5	32	40	191	108	131	60	
XOP 4270-25T2-09	27.0	25	40	187	108	131	56	
XOP 4270-32T2-09	27.0	32	40	191	108	131	60	
XOP 4275-25T2-09	27.5	25	40	191	112	135	56	
XOP 4275-32T2-09	27.5	32	40	195	112	135	60	
XOP 4280-25T2-09	28.0	25	40	191	112	135	56	
XOP 4280-32T2-09	28.0	32	40	195	112	135	60	
XOP 4285-25T2-09	28.5	25	40	195	116	139	56	
XOP 4285-32T2-09	28.5	32	40	199	116	139	60	
XOP 4286-32T2-09 *	28.6	32	40	199	114.4	139	60	
XOP 4290-25T2-09	29.0	25	40	195	116	139	56	
XOP 4290-32T2-09	29.0	32	40	199	116	139	60	

◎Standard product has the inner coolant holes; Insert needs to be purchased separately.

◎“*” indicates in imperial measurements.

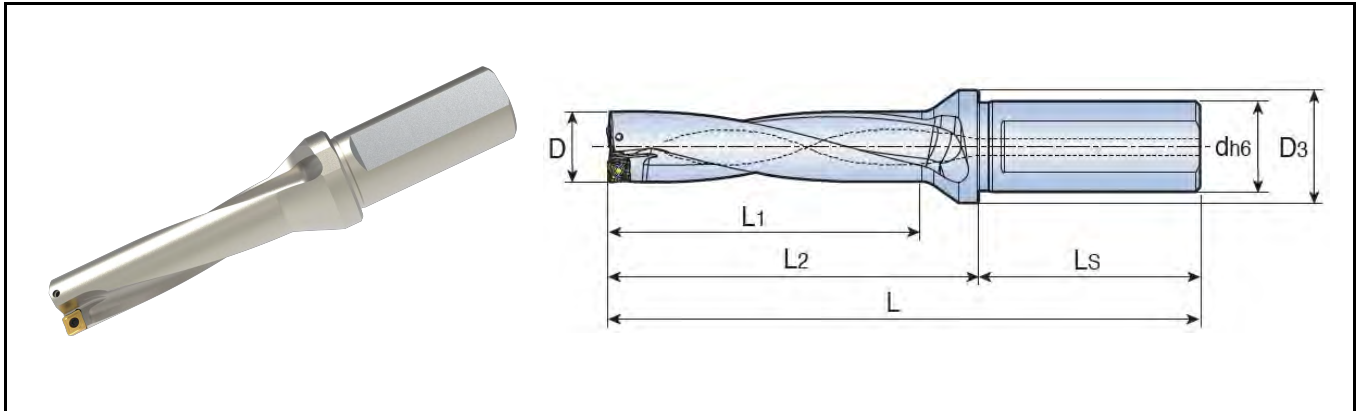
◎The standard product does not have a threaded interface at the holder end. If required, can be made by order.

◎Coolant blockage requires a separate order.

XOP 4. . -T2



Indexable Drill



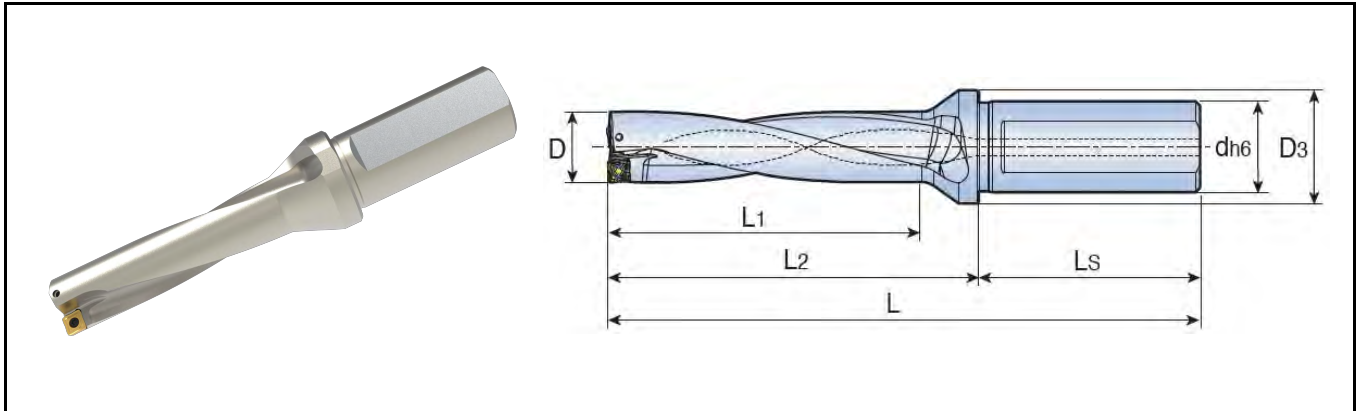
©Drilling depth : 4xD(diameter)

Model	Dimension (mm)							Insert
	D	d	D3	L	L1	L2	Ls	
XOP 4295-32T2-09	29.5	32	40	203	120	143	60	XOMX 09
XOP 4300-32T2-09	30.0	32	40	203	120	143	60	
XOP 4305-32T2-09	30.5	32	40	207	124	147	60	
XOP 4310-32T2-09	31.0	32	40	207	124	147	60	
XOP 4318-32T2-11 *	31.8	32	40	211	127.2	151	60	XOMX 11
XOP 4320-32T2-11	32.0	32	40	211	128	151	60	
XOP 4320-40T2-11	32.0	40	50	221	128	151	70	
XOP 4330-32T2-11	33.0	32	40	215	132	155	60	
XOP 4330-40T2-11	33.0	40	50	225	132	155	70	
XOP 4340-32T2-11	34.0	32	40	219	136	159	60	
XOP 4340-40T2-11	34.0	40	50	229	136	159	70	
XOP 4349-40T2-11 *	34.9	40	50	233	139.6	163	70	
XOP 4350-32T2-11	35.0	32	40	223	140	163	60	
XOP 4350-40T2-11	35.0	40	50	233	140	163	70	
XOP 4360-32T2-11	36.0	32	40	227	144	167	60	
XOP 4360-40T2-11	36.0	40	50	237	144	167	70	
XOP 4370-32T2-13	37.0	32	50	236	148	176	60	XOMX 13
XOP 4370-40T2-13	37.0	40	50	246	148	176	70	
XOP 4371-40T2-13 *	37.1	40	50	246	148.4	176	70	
XOP 4380-32T2-13	38.0	32	50	240	152	180	60	
XOP 4380-40T2-13	38.0	40	50	250	152	180	70	
XOP 4381-40T2-13 *	38.1	40	50	250	152.4	180	70	
XOP 4390-32T2-13	39.0	32	50	244	156	184	60	

XOP 4. . -T2



Indexable Drill



◎Drilling depth : 4xD(diameter))

Model	Dimension (mm)							Insert
	D	d	D3	L	L1	L2	Ls	
XOP 4390-40T2-13	39.0	40	50	254	156	184	70	XOMX 13
XOP 4400-32T2-13	40.0	32	50	248	160	188	60	
XOP 4400-40T2-13	40.0	40	50	258	160	188	70	
XOP 4410-40T2-13	41.0	40	50	262	164	192	70	
XOP 4413-40T2-13 *	41.3	40	50	262	165.2	192	70	
XOP 4420-40T2-13	42.0	40	50	266	168	196	70	
XOP 4429-40T2-13	42.9	40	50	270	171.6	200	70	
XOP 4430-40T2-13	43.0	40	50	270	172	200	70	
XOP 4440-40T2-13	44.0	40	50	281	176	211	70	XOMX 15
XOP 4445-40T2-15	44.5	40	60	285	178	215	70	
XOP 4450-40T2-15	45.0	40	60	285	180	215	70	
XOP 4460-40T2-15	46.0	40	60	289	184	219	70	
XOP 4470-40T2-15	47.0	40	60	293	188	223	70	
XOP 4476-40T2-15 *	47.6	40	60	297	190.4	227	70	
XOP 4480-40T2-15	48.0	40	60	297	192	227	70	
XOP 4490-40T2-15	49.0	40	60	301	196	231	70	
XOP 4500-40T2-15	50.0	40	60	305	200	235	70	
XOP 4508-40T2-15 *	50.8	40	60	309	203.2	239	70	

◎Standard product has the inner coolant holes; Insert needs to be purchased separately.

◎“*” indicates in imperial measurements.

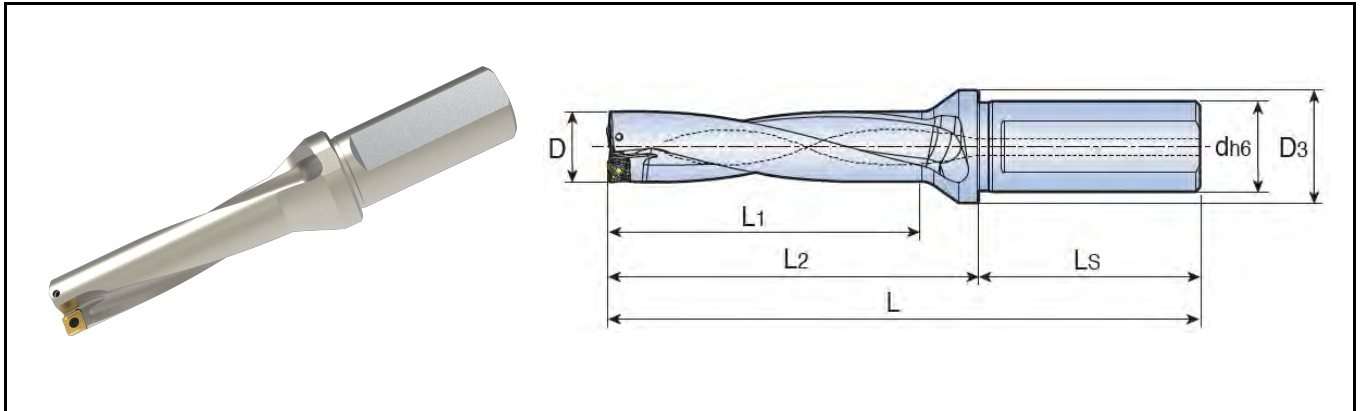
◎The standard product does not have a threaded interface at the holder end. If required, can be made by order.

◎Coolant blockage requires a separate order.

XOP 4. . -T2



Indexable Drill



◎Drilling depth : 4xD(diameter)

Spare Parts

Model	Screw	Wrench	Coolant plog*
			
XOP 4140-4160	CSG2049-P	CTS06W-P	CSL 20
XOP 4165-4220	CSG2252-P	CTS07W-P	CSL 25
XOP 4225-4260	CSG2565-P	CTS08W-P	CSL 25/CSL 32
XOP 4265-4360	CSG3585-P	CTS10W-P	CSL 25/CSL 32
XOP 4370-4430	CSG4011-P	CTS15W-P	CSL 32/CSL 40
XOP 4440-4508	CSG5012-P	CTS20W-P	CSL 32/CSL 40

◎Coolant blockage requires a separate order.

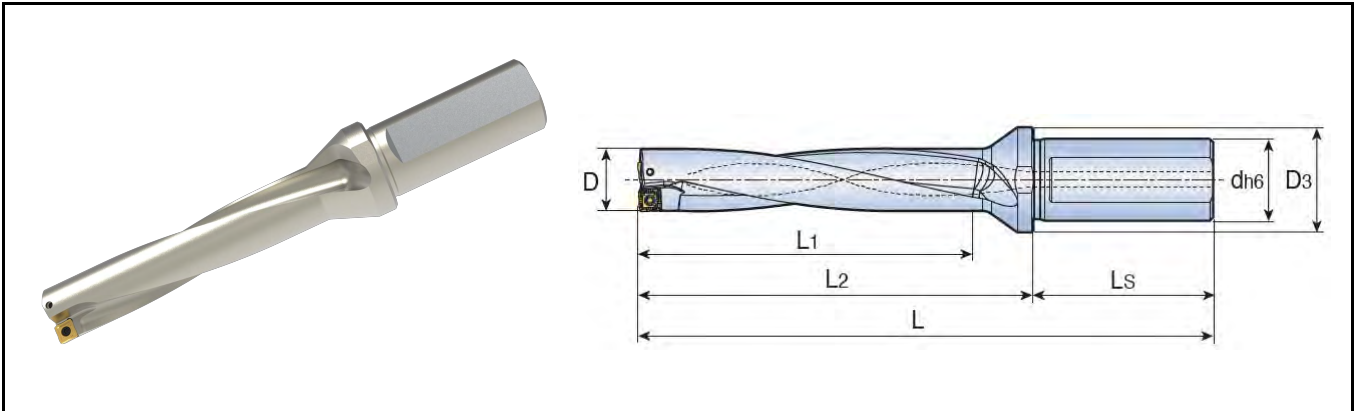
◎The model for coolant blockage is selected based on the diameter of the handle.



XOP 5. . -T2



Indexable Drill



©Drilling depth : 5xD(diameter)

Model	Dimension (mm)							Insert
	D	d	D3	L	L1	L2	Ls	
XOP 5140-20T2-05	14.0	20	25	138	70	88	50	XOMX 05
XOP 5145-20T2-05	14.5	20	25	144	75	94	50	
XOP 5150-20T2-05	15.0	20	25	144	75	94	50	
XOP 5155-20T2-05	15.5	20	25	150	80	100	50	
XOP 5160-20T2-05	16.0	20	25	150	80	100	50	
XOP 5165-25T2-06	16.5	25	32	161	85	105	56	XOMX 06
XOP 5170-25T2-06	17.0	25	32	161	85	105	56	
XOP 5175-25T2-06	17.5	25	32	167	90	111	56	
XOP 5180-25T2-06	18.0	25	32	167	90	111	56	
XOP 5185-25T2-06	18.5	25	32	172	95	116	56	
XOP 5190-25T2-06	19.0	25	32	172	95	116	56	XOMX 07
XOP 5195-25T2-07	19.5	25	32	179	100	123	56	
XOP 5200-25T2-07	20.0	25	32	179	100	123	56	
XOP 5205-25T2-07	20.5	25	32	184	105	128	56	
XOP 5210-25T2-07	21.0	25	32	184	105	128	56	
XOP 5215-25T2-07	21.5	25	32	189	110	133	56	
XOP 5220-25T2-07	22.0	25	32	189	110	133	56	
XOP 5222-25T2-07 *	22.2	25	32	189	111	133	56	XOMX 08
XOP 5225-25T2-08	22.5	25	32	193	115	137	56	
XOP 5230-25T2-08	23.0	25	32	193	115	137	56	
XOP 5230-32T2-08	23.0	32	40	197	115	137	60	
XOP 5235-25T2-08	23.5	25	32	198	120	142	56	

© Standard product has the inner coolant holes; Insert needs to be purchased separately.

© “*” indicates in imperial measurements.

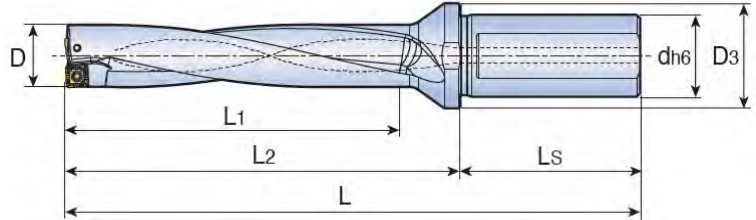
©The standard product does not have a threaded interface at the holder end. If required, can be made by order

©Coolant blockage requires a separate order.

XOP 5. . -T2



Indexable Drill



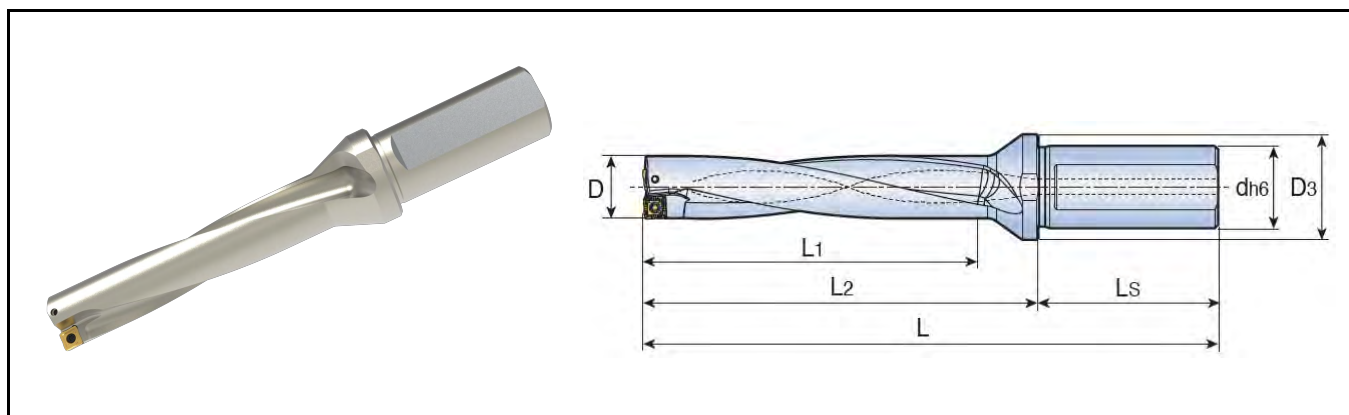
©Drilling depth : 5xD(diameter)

Model	Dimension (mm)							Insert
	D	d	D3	L	L1	L2	Ls	
XOP 5235-32T2-08	23.5	32	40	202	120	142	60	XOMX 08
XOP 5240-25T2-08	24.0	25	32	198	120	142	56	
XOP 5240-32T2-08	24.0	32	40	202	120	142	60	
XOP 5245-25T2-08	24.5	25	32	203	125	147	56	
XOP 5245-32T2-08	24.5	32	40	207	125	147	60	
XOP 5250-25T2-08	25.0	25	32	203	125	147	56	
XOP 5250-32T2-08	25.0	32	40	207	125	147	60	
XOP 5255-25T2-08	25.5	25	32	207	130	151	56	
XOP 5255-32T2-08	25.5	32	40	211	130	151	60	
XOP 5260-25T2-08	26.0	25	32	207	130	151	56	
XOP 5260-32T2-08	26.0	32	40	211	130	151	60	XOMX 09
XOP 5265-32T2-09	26.5	32	40	218	135	158	60	
XOP 5270-25T2-09	27.0	25	40	214	135	158	56	
XOP 5270-32T2-09	27.0	32	40	218	135	158	60	
XOP 5275-32T2-09	27.5	32	40	223	140	163	60	
XOP 5280-25T2-09	28.0	25	40	219	140	163	56	
XOP 5280-32T2-09	28.0	32	40	223	140	163	60	
XOP 5282-32T2-09 *	28.2	32	40	223	141	163	60	
XOP 5285-32T2-09	28.5	32	40	228	145	168	60	
XOP 5290-25T2-09	29.0	25	40	224	145	168	56	
XOP 5290-32T2-09	29.0	32	40	228	145	168	60	
XOP 5295-32T2-09	29.5	32	40	233	150	173	60	
XOP 5300-32T2-09	30.0	32	40	233	150	173	60	
XOP 5305-32T2-09	30.5	32	40	238	155	178	60	
XOP 5310-32T2-09	31.0	32	40	238	155	178	60	

XOP 5. . -T2



Indexable Drill



©Drilling depth : 5xD(diameter)

Model	Dimension (mm)							Insert
	D	d	D3	L	L1	L2	Ls	
XOP 5320-32T2-11	32.0	32	40	243	160	183	60	XOMX 11
XOP 5320-40T2-11	32.0	40	50	253	160	183	70	
XOP 5330-32T2-11	33.0	32	40	248	165	188	60	
XOP 5330-40T2-11	33.0	40	50	258	165	188	70	
XOP 5340-32T2-11	34.0	32	40	253	170	193	60	
XOP 5340-40T2-11	34.0	40	50	263	170	193	70	
XOP 5350-32T2-11	35.0	32	40	258	175	198	60	
XOP 5350-40T2-11	35.0	40	50	268	175	198	70	
XOP 5360-32T2-11	36.0	32	40	263	180	203	60	
XOP 5360-40T2-11	36.0	40	50	273	180	203	70	
XOP 5370-32T2-13	37.0	32	50	273	185	213	60	XOMX 13
XOP 5370-40T2-13	37.0	40	50	283	185	213	70	
XOP 5380-32T2-13	38.0	32	50	278	190	218	60	
XOP 5380-40T2-13	38.0	40	50	288	190	218	70	
XOP 5390-32T2-13	39.0	32	50	283	195	223	60	
XOP 5390-40T2-13	39.0	40	50	293	195	223	70	
XOP 5400-32T2-13	40.0	32	50	288	200	228	60	
XOP 5400-40T2-13	40.0	40	50	298	200	228	70	
XOP 5410-40T2-13	41.0	40	50	303	205	233	70	
XOP 5420-40T2-13	42.0	40	50	308	210	238	70	
XOP 5430-40T2-13	43.0	40	50	313	215	243	70	XOMX 15
XOP 5440-40T2-15	44.0	40	60	325	220	255	70	
XOP 5450-40T2-15	45.0	40	60	330	225	260	70	

© Standard product has the inner coolant holes; Insert needs to be purchased separately.

© “*” indicates in imperial measurements.

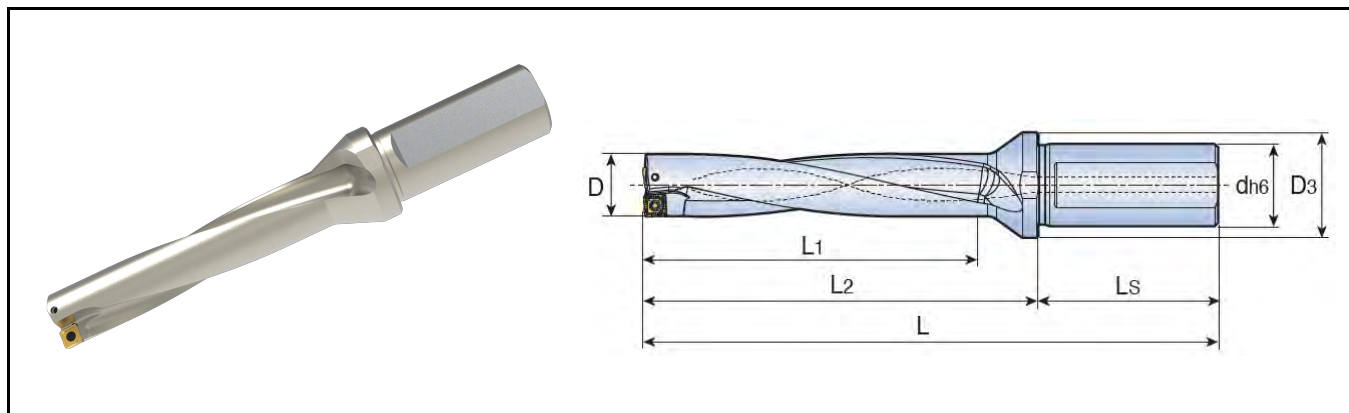
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©Coolant blockage requires a separate order.

XOP 5. . -T2



Indexable Drill



◎Drilling depth : 5xD(diameter)

Model	Dimension (mm)							Insert
	D	d	D3	L	L1	L2	Ls	
XOP 5460-40T2-15	46.0	40	60	335	230	265	70	XOMX 15
XOP 5470-40T2-15	47.0	40	60	340	235	270	70	
XOP 5480-40T2-15	48.0	40	60	345	240	275	70	
XOP 5490-40T2-15	49.0	40	60	350	245	280	70	
XOP 5500-40T2-15	50.0	40	60	355	250	285	70	

◎ Standard product has the inner coolant holes; Insert needs to be purchased separately.

◎ “*” indicates in imperial measurements.

◎ The standard product does not have a threaded interface at the holder end. If required, can be made by order.

◎ Coolant blockage requires a separate order.

Spare Parts

Model	Screw	Wrench	Coolant plug*
XOP 5140-5160	CSG2049-P	CTS06W-P	CSL 20
XOP 5165-5220	CSG2252-P	CTS07W-P	CSL 25
XOP 5225-5260	CSG2565-P	CTS08W-P	CSL 25/CSL 32
XOP 5265-5360	CSG3585-P	CTS10W-P	CSL 25/CSL 32
XOP 5370-5430	CSG4011-P	CTS15W-P	CSL 32/CSL 40
XOP 5440-5500	CSG5012-P	CTS20W-P	CSL 32/CSL 40

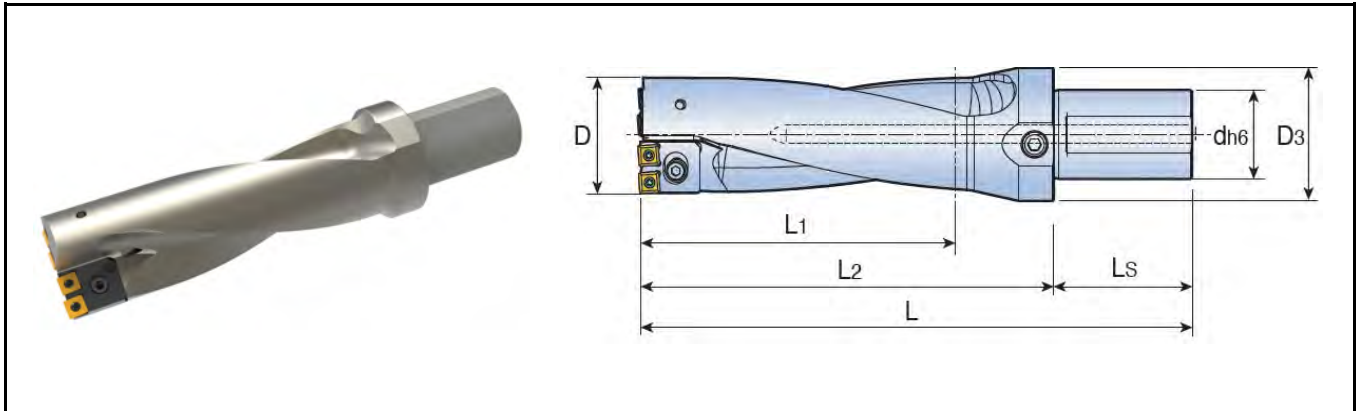
◎Coolant blockage requires a separate order.

◎The model for coolant blockage is selected based on the diameter of the handle.

CDR25. . -T2



INDEXABLE DRILL HOLDER



©Drilling depth: 2.5xD(Diameter)

Model	Dimension (mm)							Setting Plate	Insert
	D	d	D3	L	L1	L2	Ls		
CDR 2551-53-50T2-07CA-T	51	50	75	250	133	170	80		SPMG 07
	52	50	75	250	133	170	80	CDP-0701	
	53	50	75	250	133	170	80	CDP-0702	
CDR 2554-56-50T2-07CA-T	54	50	75	260	140	180	80		SPMG 07
	55	50	75	260	140	180	80	CDP-0701	
	56	50	75	260	140	180	80	CDP-0702	
CDR 2557-62-50T2-09CA-T	57	50	75	281	155	201	80		SPMG 09
	58	50	75	281	155	201	80	CDP-0901	
	59	50	75	281	155	201	80	CDP-0902	
	60	50	75	281	155	201	80	CDP-0903	
	61	50	75	281	155	201	80	CDP-0904	
	62	50	75	281	155	201	80	CDP-0905	
CDR 2563-66-50T2-09CA-T	63	50	75	295	165	215	80		SPMG 09
	64	50	75	295	165	215	80	CDP-0901	
	65	50	75	295	165	215	80	CDP-0902	
	66	50	75	295	165	215	80	CDP-0903	
CDR 2567-73-50T2-11CA-T	67	50	75	320	183	240	80		SPMG 11
	68	50	75	320	183	240	80	CDP-1101	
	69	50	75	320	183	240	80	CDP-1102	
	70	50	75	320	183	240	80	CDP-1103	
	71	50	75	320	183	240	80	CDP-1104	
	72	50	75	320	183	240	80	CDP-1105	
	73	50	75	320	183	240	80	CDP-1106	

©Standard product has the inner coolant holes; Insert needs to be purchased separately.

CDR25. . -T2



INDEXABLE CARTRIDGE DRILL

Spare Parts Spare Parts

Cartridge	Clamping Screw	Washer	Setting plate screw	Wrench
CDR 07CA-P1-T	CLA0401607	CQP4380	CSS2005	CTS06W
CDR 07CA-C1-T	CLA0401607	CQP4380		
CDR 07CA-P2-T	CLA0401607	CQP4380	CSS2005	CTS06W
CDR 07CA-C2-T	CLA0401607	CQP4380		
CDR 09CA-P1-T	CLA0501608	CQP5510	CSC3080	CTS10W
CDR 09CA-C1-T	CLA0501608	CQP5510		
CDR 09CA-P2-T	CLA0501608	CQP5510	CSC3080	CTS10W
CDR 09CA-C2-T	CLA0501608	CQP5510		
CDR 11CA-P1-T	CLA0602010	CQP6412	CSC3080	CTS10W
CDR 11CA-C1-T	CLA0602010	CQP6412		

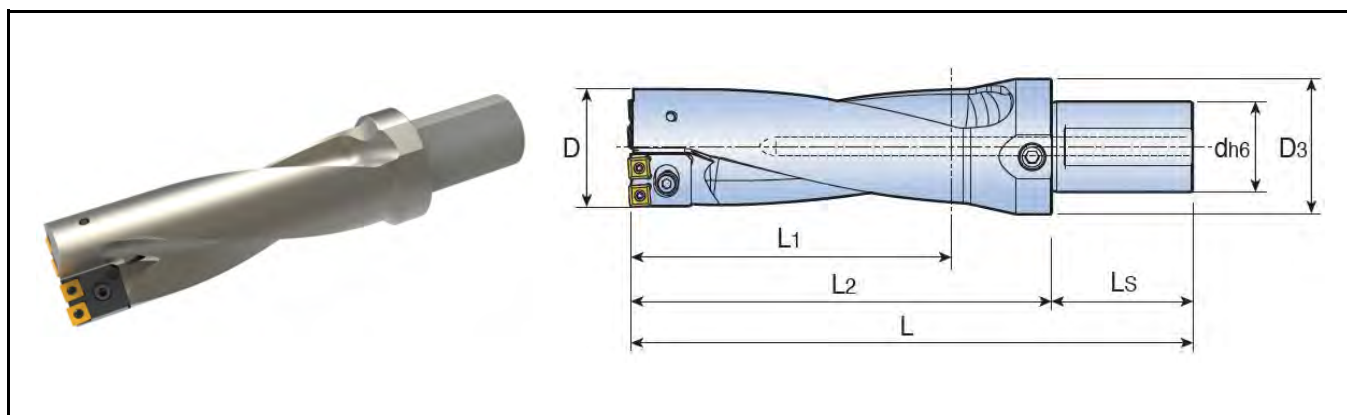
Spare Parts

Model	Screw	Wrench	Carte. Peripheral	Carteidge for Center
				
CDR 2551	CSG2565-P	CTS08W-P	CDR 07CA-P1-T	CDR 07CA-C1-T
CDR 2554	CSG2565-P	CTS08W-P	CDR 07CA-P2-T	CDR 07CA-C2-T
CDR 2557	CSG3585-P	CTS10W-P	CDR 09CA-P1-T	CDR 09CA-C1-T
CDR 2563	CSG3585-P	CTS10W-P	CDR 09CA-P2-T	CDR 09CA-C2-T
CDR 2567	CSG4011-P	CTS15W-P	CDR 11CA-P1-T	CDR 11CA-C1-T

CDR35. . -T2



Indexable Tool Holder for Drill Bits



©Drilling depth: 3.5xD(Diameter)

Model	Dimension (mm)							Setting Plate	Insert
	D	d	D3	L	L1	L2	Ls		
CDR 3551-53-50T2-07CA-T	51	50	75	303	186	223	80		SPMG 07
	52	50	75	303	186	223	80	CDP-0701	
	53	50	75	303	186	223	80	CDP-0702	
CDR 3554-56-50T2-07CA-T	54	50	75	316	196	236	80		SPMG 07
	55	50	75	316	196	236	80	CDP-0701	
	56	50	75	316	196	236	80	CDP-0702	
CDR 3557-62-50T2-09CA-T	57	50	75	343	217	263	80		SPMG 09
	58	50	75	343	217	263	80	CDP-0901	
	59	50	75	343	217	263	80	CDP-0902	
	60	50	75	343	217	263	80	CDP-0903	
	61	50	75	343	217	263	80	CDP-0904	
	62	50	75	343	217	263	80	CDP-0905	
CDR 3563-66-50T2-09CA-T	63	50	75	361	231	281	80		SPMG 09
	64	50	75	361	231	281	80	CDP-0901	
	65	50	75	361	231	281	80	CDP-0902	
	66	50	75	361	231	281	80	CDP-0903	
CDR 3567-73-50T2-11CA-T	67	50	75	393	256	313	80		SPMG 11
	68	50	75	393	256	313	80	CDP-1101	
	69	50	75	393	256	313	80	CDP-1102	
	70	50	75	393	256	313	80	CDP-1103	
	71	50	75	393	256	313	80	CDP-1104	
	72	50	75	393	256	313	80	CDP-1105	
	73	50	75	393	256	313	80	CDP-1106	

©Standard product has the inner coolant holes; Insert needs to be purchased separately.

CDR35. . -T2



INDEXABLE CARTRIDGE DRILL

Spare parts for Cartridges

Cartridge	Clamping screw	Washer	Setting plate screw	Wrench
CDR 07CA-P1-T	CLA0401607	CQP4380	CSS2005	CTS06W
CDR 07CA-C1-T	CLA0401607	CQP4380		
CDR 07CA-P2-T	CLA0401607	CQP4380	CSS2005	CTS06W
CDR 07CA-C2-T	CLA0401607	CQP4380		
CDR 09CA-P1-T	CLA0501608	CQP5510	CSC3080	CTS10W
CDR 09CA-C1-T	CLA0501608	CQP5510		
CDR 09CA-P2-T	CLA0501608	CQP5510	CSC3080	CTS10W
CDR 09CA-C2-T	CLA0501608	CQP5510		
CDR 11CA-P1-T	CLA0602010	CQP6412	CSC3080	CTS10W
CDR 11CA-C1-T	CLA0602010	CQP6412		

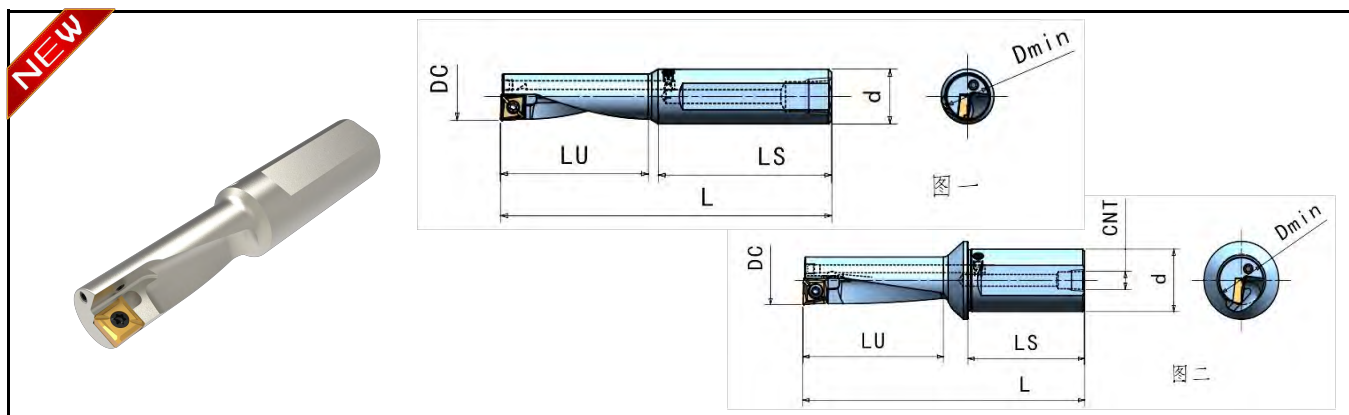
Spare Parts

Model	Screw	Wrench	Peripheral	Center
				
CDR 3551	CSG2565-P	CTS08W-P	CDR 07CA-P1-T	CDR 07CA-C1-T
CDR 3554	CSG2565-P	CTS08W-P	CDR 07CA-P2-T	CDR 07CA-C2-T
CDR 3557	CSG3585-P	CTS10W-P	CDR 09CA-P1-T	CDR 09CA-C1-T
CDR 3563	CSG3585-P	CTS10W-P	CDR 09CA-P2-T	CDR 09CA-C2-T
CDR 3567	CSG4011-P	CTS15W-P	CDR 11CA-P1-T	CDR 11CA-C1-T

XCP . . -T1



MULTI-FUNCTION HOLDER



©Drilling depth : 3xD(diameter)

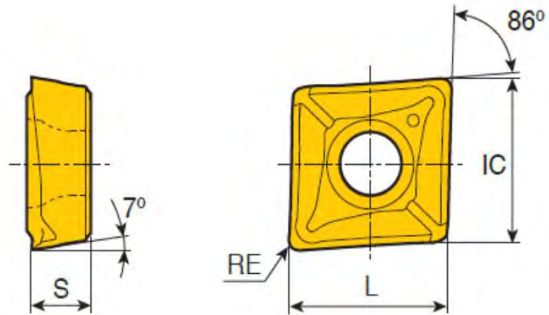
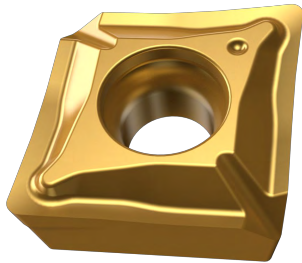
Model	Dimension (mm)							Fig.	Insert
	DC	d	LU	LS	L	Dmin	CNT		
XCP 3120-16T1-06	12	16	36.0	55	95	14.5	G1/8	一	XCMT 06
XCP 3140-16T1-07	14	16	42.0	52	100	16.5	G1/8	一	XCMT 07
XCP 3160-20T1-08	16	20	48.0	56	110	19.0	G1/8	一	XCMT 08
XCP 3200-25T1-10	20	25	60.0	67	130	23.5	G1/8	一	XCMT 10
XCP 3250-32T1-13	25	32	75.0	62	150	29.0	G1/8	二	XCMT 13
XCP 3320-40T1-17	32	40	96.0	75	185	36.5	G1/8	二	XCMT 17

©Standard product has the inner coolant holes; Insert needs to be purchased separately.

Spare Parts

Model	Screw	Wrench	
XCP 3120	CSG2252-P	CTS07W-P	
XCP 3140	CSG2565-P	CTS08W-P	
XCP 3160	CSG3085-P	CTS10W-P	
XCP 3200	CSG3585-P	CTS10W-P	
XCP 3250	CSC4511	CTS15W	
XCP 3320	CSG5012-P	CTS20W-P	

NEW



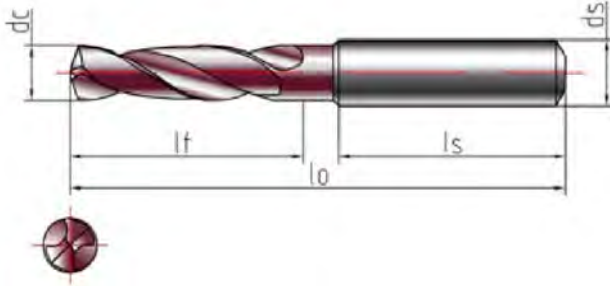
Insert Model	Dimension (mm)				Turning		Drilling	Grade
	IC	L	S	RE	ap mm	Feed mm/rev	Feed mm/rev	CT5320
XCMT 040104R	4.4	6.4	1.70	0.4	0.2-1.8	0.02-0.15	0.02-0.09	●
XCMT 040104L	4.4	6.4	1.70	0.4	0.2-1.8	0.02-0.15	0.02-0.09	
XCMT 050204	5.6	5.6	2.10	0.4	0.2-2.2	0.03-0.18	0.02-0.11	
XCMT 060204	6.4	6.4	2.38	0.4	0.3-2.5	0.03-0.20	0.03-0.12	
XCMT 070304	7.5	7.5	3.18	0.4	0.4-2.8	0.05-0.22	0.03-0.13	
XCMT 080304	8.4	8.4	3.18	0.4	0.4-3.2	0.06-0.25		
XCMT 10T304	10.5	10.5	3.97	0.4	0.5-3.5	0.06-0.30		
XCMT 10T308				0.8				
XCMT 130404	13.4	13.4	4.76	0.4	0.6-4.3	0.08-0.33		
XCMT 130408				0.8				
XCMT 170508	17.4	17.4	5.56	0.8	0.7-5.3	0.10-0.38		

超尔整硬钻

专业更高效



Solid Carbide Twist Drill



Features:

- Suitable for machining common materials such as structural steel, alloy steel, and stainless steel.
- Strong centering capabilities, allowing for stable dimensional accuracy and good surface quality.
- Ideal for machining applications with excellent system rigidity.

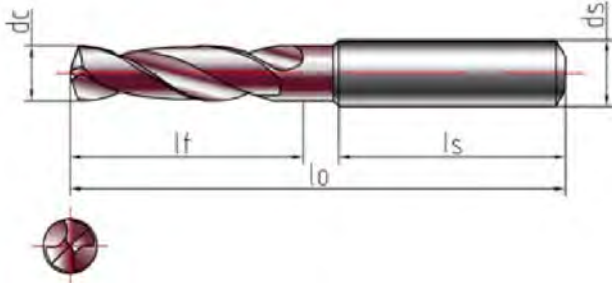
◎Drilling depth : 3xD(diameter); Primary Cutting Edge Angle: 140°

Model	Dimension (mm)					Threaded Bottom Hole	
	dc	lf	ds	ls	lo	Cutting Tap	Forming Tap
CH-D033-3D	3.3	20	6	36	62	M4x0.7	—
CH-D034-3D	3.4	20	6	36	62	NO. 8-32UNC	—
CH-D035-3D	3.5	20	6	36	62	M4x0.5 NO. 8-36UNC	—
CH-D036-3D	3.6	20	6	36	62	—	—
CH-D037-3D	3.7	20	6	36	62	—	M4x0.7
CH-D038-3D	3.8	24	6	36	66	—	M4x0.5
CH-D039-3D	3.9	24	6	36	66	NO. 10-24UNC	—
CH-D040-3D	4.0	24	6	36	66	—	—
CH-D041-3D	4.1	24	6	36	66	NO. 10-32UNF	—
CH-D042-3D	4.2	24	6	36	66	M5x0.8	—
CH-D043-3D	4.3	24	6	36	66	—	—
CH-D044-3D	4.4	24	6	36	66	—	—
CH-D045-3D	4.5	24	6	36	66	M5x0.5 NO. 12-24UNC	—
CH-D046-3D	4.6	24	6	36	66	NO. 12-28UNF	M5x0.8
CH-D047-3D	4.7	24	6	36	66	NO. 12-32UNEF	—
CH-D048-3D	4.8	28	6	36	66	—	—
CH-D049-3D	4.9	28	6	36	66	—	—
CH-D050-3D	5.0	28	6	36	66	M6x1	—
CH-D051-3D	5.1	28	6	36	66	1/4-20UNC	—
CH-D052-3D	5.2	28	6	36	66	—	—
CH-D053-3D	5.3	28	6	36	66	M6x0.75	—

◎Standard Drill Bit without Internal Cooling

CH...3D

Solid Carbide Twist Drill



Features:

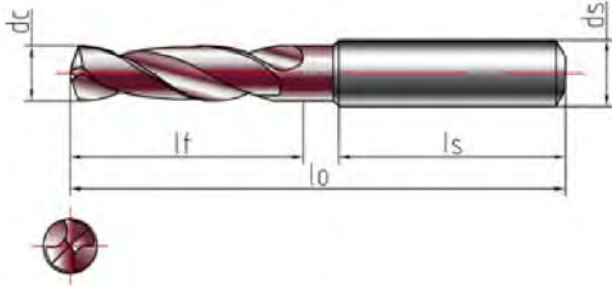
- Suitable for machining common materials such as structural steel, alloy steel, and stainless steel.
- Strong centering capabilities, allowing for stable dimensional accuracy and good surface quality.
- Ideal for machining applications with excellent system rigidity.

◎Drilling depth : 3xD(diameter); Primary Cutting Edge Angle: 140°

Model	Dimension (mm)					Threaded Bottom Hole	
	dc	lf	ds	ls	lo	Cutting Tap	Forming Tap
CH-D054-3D	5.4	28	6	36	66	—	—
CH-D055-3D	5.5	28	6	36	66	1/4-28UNF	M6x1
CH-D056-3D	5.6	28	6	36	66	1/4-32UNEF	—
CH-D057-3D	5.7	28	6	36	66	—	—
CH-D058-3D	5.8	28	6	36	66	—	—
CH-D059-3D	5.9	28	6	36	66	—	—
CH-D060-3D	6.0	28	6	36	66	—	—
CH-D061-3D	6.1	34	8	36	79	—	—
CH-D062-3D	6.2	34	8	36	79	—	—
CH-D063-3D	6.3	34	8	36	79	—	—
CH-D064-3D	6.4	34	8	36	79	—	—
CH-D065-3D	6.5	34	8	36	79	—	—
CH-D066-3D	6.6	34	8	36	79	5/16-18UNC	—
CH-D067-3D	6.7	34	8	36	79	—	—
CH-D068-3D	6.8	34	8	36	79	M8x1.25	—
CH-D069-3D	6.9	34	8	36	79	5/16-24UNF	—
CH-D070-3D	7.0	34	8	36	79	M8x1	—
CH-D071-3D	7.1	41	8	36	79	5/16-32UNEF	—
CH-D072-3D	7.2	41	8	36	79	—	—
CH-D073-3D	7.3	41	8	36	79	M8x0.75	—
CH-D074-3D	7.4	41	8	36	79	—	M8x1.25
CH-D075-3D	7.5	41	8	36	79	—	—

◎Standard Drill Bit without Internal Cooling

Solid Carbide Twist Drill



Features:

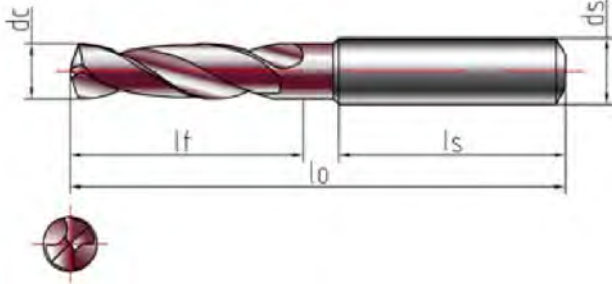
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- Ideal for machining applications with excellent system rigidity.

◎Drilling depth : 3xD(diameter); Primary Cutting Edge Angle: 140°

Model	Dimension (mm)					Threaded Bottom Hole	
	dc	lf	ds	ls	lo	Cutting Tap	Forming Tap
CH-D076-3D	7.6	41	8	36	79	—	—
CH-D077-3D	7.7	41	8	36	79	—	—
CH-D078-3D	7.8	41	8	36	79	—	—
CH-D079-3D	7.9	41	8	36	79	—	—
CH-D080-3D	8.0	41	8	36	79	3/8-16UNC	—
CH-D081-3D	8.1	47	10	40	89	—	—
CH-D082-3D	8.2	47	10	40	89	—	—
CH-D083-3D	8.3	47	10	40	89	—	—
CH-D084-3D	8.4	47	10	40	89	—	—
CH-D085-3D	8.5	47	10	40	89	M10x1.5 3/8-24UNF	—
CH-D086-3D	8.6	47	10	40	89	—	—
CH-D087-3D	8.7	47	10	40	89	3/8-32UNEF	—
CH-D088-3D	8.8	47	10	40	89	M10x1.25	—
CH-D089-3D	8.9	47	10	40	89	—	—
CH-D090-3D	9.0	47	10	40	89	M10x1	—
CH-D091-3D	9.1	47	10	40	89	—	—
CH-D092-3D	9.2	47	10	40	89	—	—
CH-D093-3D	9.3	47	10	40	89	M10x0.75	M10x1.5
CH-D094-3D	9.4	47	10	40	89	7/16-14UNC	—
CH-D095-3D	9.5	47	10	40	89	—	—
CH-D097-3D	9.7	47	10	40	89	—	—
CH-D098-3D	9.8	47	10	40	89	—	—

◎Standard Drill Bit without Internal Cooling

Solid Carbide Twist Drill



Features:

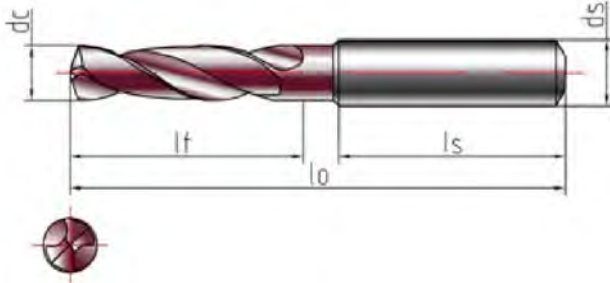
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- Strong centering capabilities, allowing for stable dimensional accuracy and good surface quality.
- Ideal for machining applications with excellent system rigidity.

©Drilling depth : 3xD(diameter); Primary Cutting Edge Angle : 140°

Model	Dimension (mm)					Threaded Bottom Hole	
	dc	lf	ds	ls	lo	Cutting Tap	Forming Tap
CH-D099-3D	9.9	47	10	40	89	7/16-20UNF	—
CH-D100-3D	10.0	47	10	40	89	—	—
CH-D101-3D	10.1	55	12	45	102	—	—
CH-D102-3D	10.2	55	12	45	102	7/16-28UNEF	—
CH-D103-3D	10.3	55	12	45	102	M12x1.75	—
CH-D104-3D	10.4	55	12	45	102	—	—
CH-D105-3D	10.5	55	12	45	102	—	—
CH-D106-3D	10.6	55	12	45	102	—	—
CH-D107-3D	10.7	55	12	45	102	—	—
CH-D108-3D	10.8	55	12	45	102	—	—
CH-D109-3D	10.9	55	12	45	102	1/2-13UNC	—
CH-D110-3D	11.0	55	12	45	102	M12x1	—
CH-D111-3D	11.1	55	12	45	102	—	—
CH-D112-3D	11.2	55	12	45	102	—	M12x1.75
CH-D113-3D	11.3	55	12	45	102	—	—
CH-D114-3D	11.4	55	12	45	102	—	—
CH-D115-3D	11.5	55	12	45	102	1/2-20UNF	—
CH-D116-3D	11.6	55	12	45	102	—	—
CH-D117-3D	11.7	55	12	45	102	—	—
CH-D118-3D	11.8	55	12	45	102	1/2-28UNEF	—
CH-D119-3D	11.9	55	12	45	102	—	—
CH-D120-3D	12.0	55	12	45	102	M14x2	—

©Standard Drill Bit without Internal Cooling

Solid Carbide Twist Drill



Features:

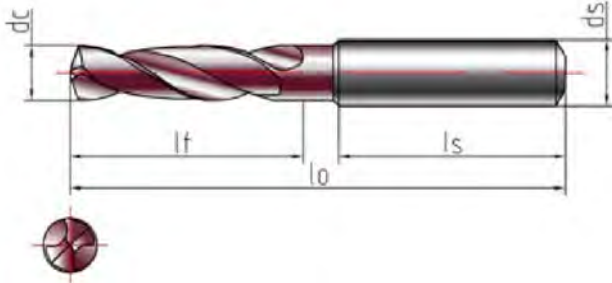
- Suitable for machining common materials such as structural steel, alloy steel, and stainless steel.
- Strong centering capabilities, allowing for stable dimensional accuracy and good surface quality.
- Ideal for machining applications with excellent system rigidity.

◎Drilling depth : 3xD(diameter); Primary Cutting Edge Angle: 140°

Model	Dimension (mm)					Threaded Bottom Hole	
	dc	lf	ds	ls	lo	Cutting Tap	Forming Tap
CH-D121-3D	12.1	60	14	45	107	—	—
CH-D122-3D	12.2	60	14	45	107	9/16-12UNC	—
CH-D123-3D	12.3	60	14	45	107	—	—
CH-D124-3D	12.4	60	14	45	107	—	—
CH-D125-3D	12.5	60	14	45	107	M14x1.5	—
CH-D126-3D	12.6	60	14	45	107	—	—
CH-D127-3D	12.7	60	14	45	107	—	—
CH-D128-3D	12.8	60	14	45	107	—	—
CH-D129-3D	12.9	60	14	45	107	9/16-18UNF	—
CH-D130-3D	13.0	60	14	45	107	M14x1	M14x2
CH-D131-3D	13.1	60	14	45	107	—	—
CH-D132-3D	13.2	60	14	45	107	9/16-24UNEF	—
CH-D133-3D	13.3	60	14	45	107	—	—
CH-D134-3D	13.4	60	14	45	107	—	—
CH-D135-3D	13.5	60	14	45	107	—	—
CH-D136-3D	13.6	60	14	45	107	5/8-11UNC	—
CH-D137-3D	13.7	60	14	45	107	—	—
CH-D138-3D	13.8	60	14	45	107	—	—
CH-D139-3D	13.9	60	14	45	107	—	—
CH-D140-3D	14.0	60	14	45	107	M16x2	—
CH-D141-3D	14.1	65	16	48	115	—	—
CH-D142-3D	14.2	65	16	48	115	—	—
CH-D143-3D	14.3	65	16	48	115	—	—

◎Standard Drill Bit without Internal Cooling

Solid Carbide Twist Drill



Features:

- Suitable for machining common materials such as structural steel, alloy steel, and stainless steel.
- Strong centering capabilities, allowing for stable dimensional accuracy and good surface quality.
- Ideal for machining applications with excellent system rigidity.

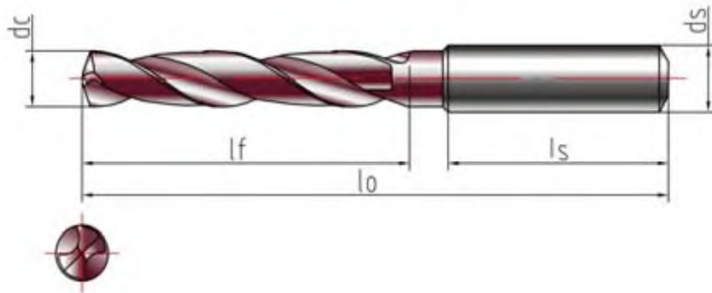
◎Drilling depth : 3xD(diameter); Primary Cutting Edge Angle : 140°

Model	Dimension (mm)					Threaded Bottom Hole	
	dc	lf	ds	ls	lo	Cutting Tap	Forming Tap
CH-D144-3D	14.4	65	16	48	115	—	—
CH-D145-3D	14.5	65	16	48	115	M16x1.5	—
CH-D145-3D	14.5	65	16	48	115	5/8-18UNF	—
CH-D146-3D	14.6	65	16	48	115	—	—
CH-D147-3D	14.7	65	16	48	115	—	—
CH-D148-3D	14.8	65	16	48	115	5/8-24UNEF	—
CH-D149-3D	14.9	65	16	48	115	—	—
CH-D150-3D	15.0	65	16	48	115	M16x1	M16x2
CH-D151-3D	15.1	65	16	48	115	—	—
CH-D152-3D	15.2	65	16	48	115	—	—
CH-D153-3D	15.3	65	16	48	115	—	—
CH-D154-3D	15.4	65	16	48	115	—	—
CH-D155-3D	15.5	65	16	48	115	M18x2.5	—
CH-D156-3D	15.6	65	16	48	115	—	—
CH-D157-3D	15.7	65	16	48	115	—	—
CH-D158-3D	15.8	65	16	48	115	—	—
CH-D159-3D	15.9	65	16	48	115	—	—
CH-D160-3D	16.0	65	16	48	115	M18x2	—

◎Standard Drill Bit without Internal Cooling

CH...5D

Solid Carbide Twist Drill



Features:

- Suitable for machining common materials such as structural steel, alloy steel, and stainless steel.
- Strong centering capabilities, allowing for stable dimensional accuracy and good surface quality.
- Ideal for machining applications with excellent system rigidity.

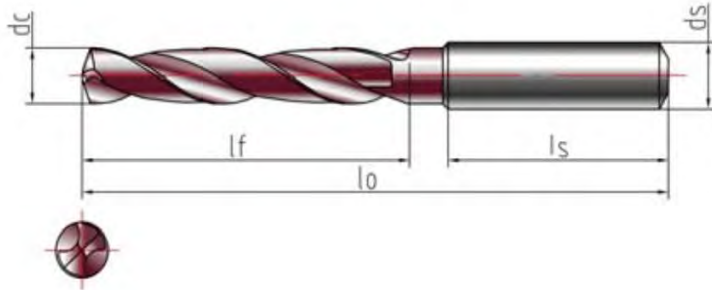
©Drilling depth : 5xD(diameter); Primary Cutting Edge Angle : 140°

Model	Dimension (mm)					Threaded Bottom Hole	
	dc	lf	ds	ls	lo	Cutting Tap	Forming Tap
CH-D033-5D	3.3	28	6	36	66	M4×0.7	—
CH-D034-5D	3.4	28	6	36	66	No. 8-32UNC	—
CH-D035-5D	3.5	28	6	36	66	M4×0.5 No. 8-36UNF	—
CH-D036-5D	3.6	28	6	36	66	—	—
CH-D037-5D	3.7	28	6	36	66	—	M4×0.7
CH-D038-5D	3.8	36	6	36	74	—	M4×0.5
CH-D039-5D	3.9	36	6	36	74	No. 10-24UNC	—
CH-D040-5D	4.0	36	6	36	74	—	—
CH-D041-5D	4.1	36	6	36	74	No. 10-32UNF	—
CH-D042-5D	4.2	36	6	36	74	M5×0.8	—
CH-D043-5D	4.3	36	6	36	74	—	—
CH-D044-5D	4.4	36	6	36	74	—	—
CH-D045-5D	4.5	36	6	36	74	M5×0.5 No. 12-24UNC	—
CH-D046-5D	4.6	36	6	36	74	No. 12-28UNF	M5×0.8
CH-D047-5D	4.7	36	6	36	74	No. 12-32UNEF	—
CH-D048-5D	4.8	44	6	36	82	—	—
CH-D049-5D	4.9	44	6	36	82	—	—
CH-D050-5D	5.0	44	6	36	82	M6×1	—
CH-D051-5D	5.1	44	6	36	82	1/4-20UNC	—
CH-D052-5D	5.2	44	6	36	82	—	—
CH-D053-5D	5.3	44	6	36	82	M6×0.75	—

©Standard Drill Bit without Internal Cooling

CH...5D

Solid Carbide Twist Drill



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©Drilling depth : 5xD(diameter); Primary Cutting Edge Angle : 140°

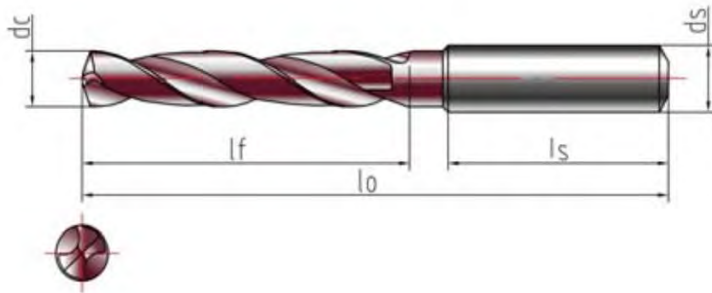
Model	Dimension (mm)					Threaded Bottom Hole	
	dc	lf	ds	ls	lo	Cutting Tap	Forming Tap
CH-D054-5D	5.4	44	6	36	82	—	—
CH-D055-5D	5.5	44	6	36	82	1/4-28UNF	M6×1
CH-D056-5D	5.6	44	6	36	82	1/4-32UNEF	—
CH-D057-5D	5.7	44	6	36	82	—	—
CH-D058-5D	5.8	44	6	36	82	—	—
CH-D059-5D	5.9	44	6	36	82	—	—
CH-D060-5D	6.0	44	6	36	82	—	—
CH-D061-5D	6.1	53	8	36	91	—	—
CH-D062-5D	6.2	53	8	36	91	—	—
CH-D063-5D	6.3	53	8	36	91	—	—
CH-D064-5D	6.4	53	8	36	91	—	—
CH-D065-5D	6.5	53	8	36	91	—	—
CH-D066-5D	6.6	53	8	36	91	5/16-18UNC	—
CH-D067-5D	6.7	53	8	36	91	—	—
CH-D068-5D	6.8	53	8	36	91	M8×1.25	—
CH-D069-5D	6.9	53	8	36	91	5/16-24UNEF	—
CH-D070-5D	7.0	53	8	36	91	M8×1	—
CH-D071-5D	7.1	53	8	36	91	5/16-32UNEF	—
CH-D072-5D	7.2	53	8	36	91	—	—
CH-D073-5D	7.3	53	8	36	91	M8×0.75	—
CH-D074-5D	7.4	53	8	36	91	—	M8×1.25
CH-D075-5D	7.5	53	8	36	91	—	—
CH-D076-5D	7.6	53	8	36	91	—	—

©Standard Drill Bit without Internal Cooling

CH...5D



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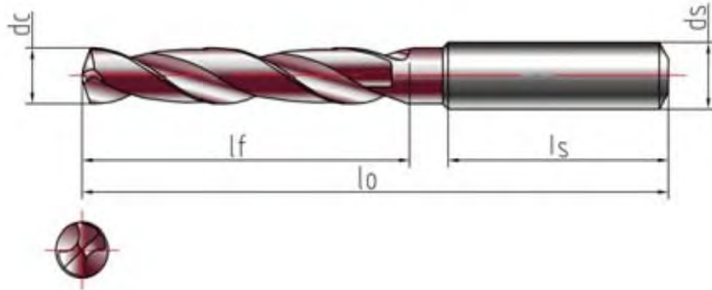
©Drilling depth : 5xD(diameter); Primary Cutting Edge Angle : 140°

Model	Dimension (mm)					Threaded Bottom Hole	
	dc	lf	ds	ls	lo	Cutting Tap	Forming Tap
CH-D077-5D	7.7	53	8	36	91	—	—
CH-D078-5D	7.8	53	8	36	91	—	—
CH-D079-5D	7.9	53	8	36	91	—	—
CH-D080-5D	8.0	53	8	36	91	3/8-16UNC	—
CH-D081-5D	8.1	61	10	40	103	—	—
CH-D082-5D	8.2	61	10	40	103	—	—
CH-D083-5D	8.3	61	10	40	103	—	—
CH-D084-5D	8.4	61	10	40	103	—	—
CH-D085-5D	8.5	61	10	40	103	M10×1.5 3/8-24UNF	—
CH-D086-5D	8.6	61	10	40	103	—	—
CH-D087-5D	8.7	61	10	40	103	3/8-32UNEF	—
CH-D088-5D	8.8	61	10	40	103	M10×1.25	—
CH-D089-5D	8.9	61	10	40	103	—	—
CH-D090-5D	9.0	61	10	40	103	M10×1	—
CH-D091-5D	9.1	61	10	40	103	—	—
CH-D092-5D	9.2	61	10	40	103	—	—
CH-D093-5D	9.3	61	10	40	103	M10×0.75	M10×1.5
CH-D094-5D	9.4	61	10	40	103	7/16-14UNC	—
CH-D095-5D	9.5	61	10	40	103	—	—
CH-D096-5D	9.6	61	10	40	103	—	—
CH-D097-5D	9.7	61	10	40	103	—	—
CH-D098-5D	9.8	61	10	40	103	—	—
CH-D099-5D	9.9	61	10	40	103	7/16-20UNF	—

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CH...5D

Solid Carbide Twist Drill



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©Drilling depth : 5xD(diameter); Primary Cutting Edge Angle : 140°

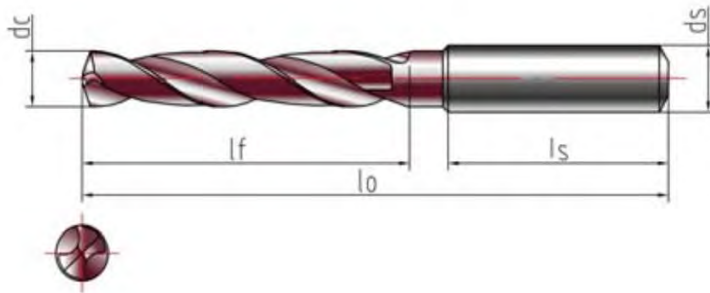
Model	Dimension (mm)					Threaded Bottom Hole	
	dc	lf	ds	ls	lo	Cutting Tap	Forming Tap
CH-D100-5D	10.0	61	10	40	103	—	—
CH-D101-5D	10.1	71	12	45	118	—	—
CH-D102-5D	10.2	71	12	45	118	7/16-28UNEF	—
CH-D103-5D	10.3	71	12	45	118	M12×1.75	—
CH-D104-5D	10.4	71	12	45	118	—	—
CH-D105-5D	10.5	71	12	45	118	—	—
CH-D106-5D	10.6	71	12	45	118	—	—
CH-D107-5D	10.7	71	12	45	118	—	—
CH-D108-5D	10.8	71	12	45	118	—	—
CH-D109-5D	10.9	71	12	45	118	1/2-13UNC	—
CH-D110-5D	11.0	71	12	45	118	M12×1	—
CH-D111-5D	11.1	71	12	45	118	—	—
CH-D112-5D	11.2	71	12	45	118	—	M12×1.75
CH-D113-5D	11.3	71	12	45	118	—	—
CH-D114-5D	11.4	71	12	45	118	—	—
CH-D115-5D	11.5	71	12	45	118	1/2-20UNF	—
CH-D116-5D	11.6	71	12	45	118	—	—
CH-D117-5D	11.7	71	12	45	118	—	—
CH-D118-5D	11.8	71	12	45	118	1/2-28UNEF	—
CH-D119-5D	11.9	71	12	45	118	—	—
CH-D120-5D	12.0	71	12	45	118	M14×2	—
CH-D121-5D	12.1	77	14	45	124	—	—
CH-D122-5D	12.2	77	14	45	124	9/16-12UNC	—

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CH...5D



Solid Carbide Twist Drill



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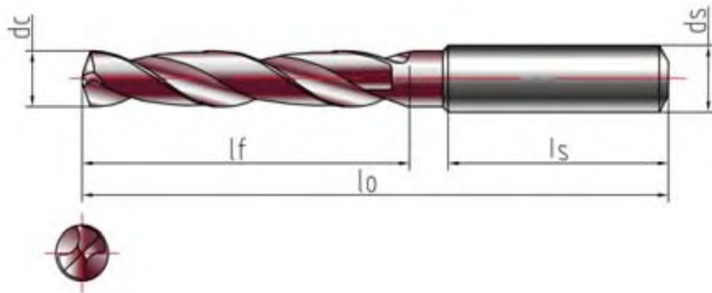
©Drilling depth : 5xD(diameter); Primary Cutting Edge Angle : 140°

Model	Dimension (mm)					Threaded Bottom Hole	
	dc	lf	ds	ls	lo	Cutting Tap	Forming Tap
CH-D123-5D	12.3	77	14	45	124	—	—
CH-D124-5D	12.4	77	14	45	124	—	—
CH-D125-5D	12.5	77	14	45	124	M14×1.5	—
CH-D126-5D	12.6	77	14	45	124	—	—
CH-D127-5D	12.7	77	14	45	124	—	—
CH-D128-5D	12.8	77	14	45	124	—	—
CH-D129-5D	12.9	77	14	45	124	9/16-18UNF	—
CH-D130-5D	13.0	77	14	45	124	M14×1	M14×2
CH-D131-5D	13.1	77	14	45	124	—	—
CH-D132-5D	13.2	77	14	45	124	9/16-24UNEF	—
CH-D133-5D	13.3	77	14	45	124	—	—
CH-D134-5D	13.4	77	14	45	124	—	—
CH-D135-5D	13.5	77	14	45	124	—	—
CH-D136-5D	13.6	77	14	45	124	5/8-11UNC	—
CH-D137-5D	13.7	77	14	45	124	—	—
CH-D138-5D	13.8	77	14	45	124	—	—
CH-D139-5D	13.9	77	14	45	124	—	—
CH-D140-5D	14.0	77	14	45	124	M16×2	—
CH-D141-5D	14.1	83	16	48	133	—	—
CH-D142-5D	14.2	83	16	48	133	—	—
CH-D143-5D	14.3	83	16	48	133	—	—
CH-D144-5D	14.4	83	16	48	133	—	—
CH-D145-5D	14.5	83	16	48	133	M16×1.5	—
CH-D145-5D	14.5	83	16	48	133	5/8-18UNF	—

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CH...5D

Solid Carbide Twist Drill



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©Drilling depth : 5xD(diameter)); Primary Cutting Edge Angle : 140°

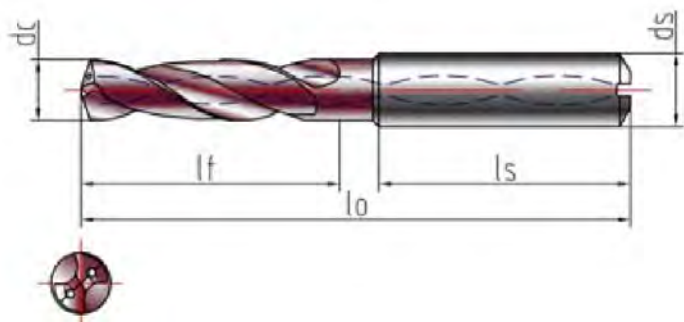
Model	Dimension (mm)					Threaded Bottom Hole	
	dc	lf	ds	ls	lo	Cutting Tap	Forming Tap
CH-D146-5D	14.6	83	16	48	133	—	—
CH-D147-5D	14.7	83	16	48	133	—	—
CH-D148-5D	14.8	83	16	48	133	5/8-24UNEF	—
CH-D149-5D	14.9	83	16	48	133	—	—
CH-D150-5D	15.0	83	16	48	133	M16×1	M16×2
CH-D151-5D	15.1	83	16	48	133	—	—
CH-D152-5D	15.2	83	16	48	133	—	—
CH-D153-5D	15.3	83	16	48	133	—	—
CH-D154-5D	15.4	83	16	48	133	—	—
CH-D155-5D	15.5	83	16	48	133	M18×2.5	—
CH-D156-5D	15.6	83	16	48	133	—	—
CH-D157-5D	15.7	83	16	48	133	—	—
CH-D158-5D	15.8	83	16	48	133	—	—
CH-D159-5D	15.9	83	16	48	133	—	—
CH-D160-5D	16.0	83	16	48	133	M18×2	—

©Standard Drill Bit without Internal Cooling

CH...3D-C



Solid Side Internal Cooling Twist Drill



Features:

- Suitable for machining common materials such as structural steel, alloy steel, and stainless steel.
- Strong centering capabilities, allowing for stable dimensional accuracy and good surface quality.
- Ideal for machining applications with excellent system rigidity.

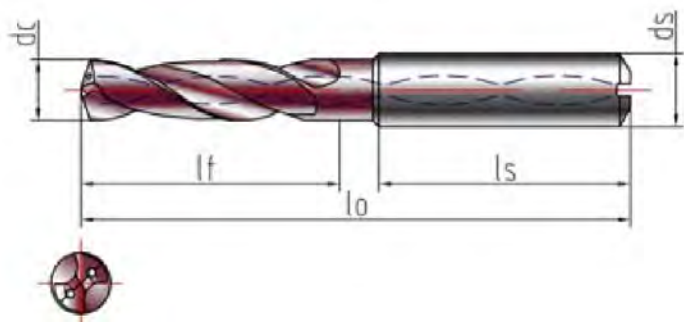
©Drilling depth : 3xD(diameter); Primary Cutting Edge Angle : 140°

Model	Dimension (mm)					Threaded Bottom Hole	
	dc	lf	ds	ls	lo	Cutting Tap	Forming Tap
CH-D033-3D-C	3.3	20	4	28	54	M4x0.7	—
CH-D034-3D-C	3.4	20	4	28	54	NO. 8-32UNC	—
CH-D035-3D-C	3.5	20	4	28	54	M4x0.5 NO. 8-36UNC	—
CH-D036-3D-C	3.6	20	4	28	54	—	—
CH-D037-3D-C	3.7	20	4	28	54	—	M4x0.7
CH-D038-3D-C	3.8	24	4	28	58	—	M4x0.5
CH-D039-3D-C	3.9	24	4	28	58	NO. 10-24UNC	—
CH-D040-3D-C	4.0	24	4	28	58	—	—
CH-D041-3D-C	4.1	24	6	36	66	NO. 10-32UNF	—
CH-D042-3D-C	4.2	24	6	36	66	M5x0.8	—
CH-D043-3D-C	4.3	24	6	36	66	—	—
CH-D044-3D-C	4.4	24	6	36	66	—	—
CH-D045-3D-C	4.5	24	6	36	66	M5x0.5 NO. 12-24UNC	—
CH-D046-3D-C	4.6	24	6	36	66	NO. 12-28UNF	M5x0.8
CH-D047-3D-C	4.7	24	6	36	66	NO. 12-32UNEF	—
CH-D048-3D-C	4.8	28	6	36	66	—	—
CH-D049-3D-C	4.9	28	6	36	66	—	—
CH-D050-3D-C	5.0	28	6	36	66	M6x1	—
CH-D051-3D-C	5.1	28	6	36	66	1/4-20UNC	—
CH-D052-3D-C	5.2	28	6	36	66	—	—
CH-D053-3D-C	5.3	28	6	36	66	M6x0.75	—

©Standard Drill Bit with Internal Cooling

CH...3D-C

Solid Side Internal Cooling Twist Drill



Features:

- Suitable for machining common materials such as structural steel, alloy steel, and stainless steel.
- Strong centering capabilities, allowing for stable dimensional accuracy and good surface quality.
- Ideal for machining applications with excellent system rigidity.

◎Drilling depth : 3xD(diameter); Primary Cutting Edge Angle : 140°

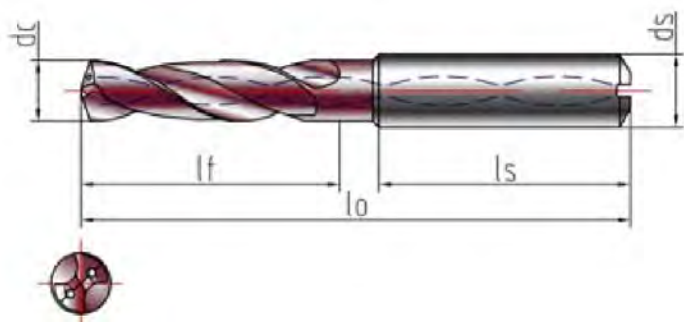
Model	Dimension (mm)					Threaded Bottom Hole	
	dc	lf	ds	ls	lo	Cutting Tap	Forming Tap
CH-D054-3D-C	5.4	28	6	36	66	—	—
CH-D055-3D-C	5.5	28	6	36	66	1/4-28UNF	M6x1
CH-D056-3D-C	5.6	28	6	36	66	1/4-32UNEF	—
CH-D057-3D-C	5.7	28	6	36	66	—	—
CH-D058-3D-C	5.8	28	6	36	66	—	—
CH-D059-3D-C	5.9	28	6	36	66	—	—
CH-D060-3D-C	6.0	28	6	36	66	—	—
CH-D061-3D-C	6.1	34	8	36	79	—	—
CH-D062-3D-C	6.2	34	8	36	79	—	—
CH-D063-3D-C	6.3	34	8	36	79	—	—
CH-D064-3D-C	6.4	34	8	36	79	—	—
CH-D065-3D-C	6.5	34	8	36	79	—	—
CH-D066-3D-C	6.6	34	8	36	79	5/16-18UNC	—
CH-D067-3D-C	6.7	34	8	36	79	—	—
CH-D068-3D-C	6.8	34	8	36	79	M8x1.25	—
CH-D069-3D-C	6.9	34	8	36	79	5/16-24UNF	—
CH-D070-3D-C	7.0	34	8	36	79	M8x1	—
CH-D071-3D-C	7.1	41	8	36	79	5/16-32UNEF	—
CH-D072-3D-C	7.2	41	8	36	79	—	—
CH-D073-3D-C	7.3	41	8	36	79	M8x0.75	—
CH-D074-3D-C	7.4	41	8	36	79	—	M8x1.25
CH-D075-3D-C	7.5	41	8	36	79	—	—

◎Standard Drill Bit with Internal Cooling

CH...3D-C



Solid Side Internal Cooling Twist Drill



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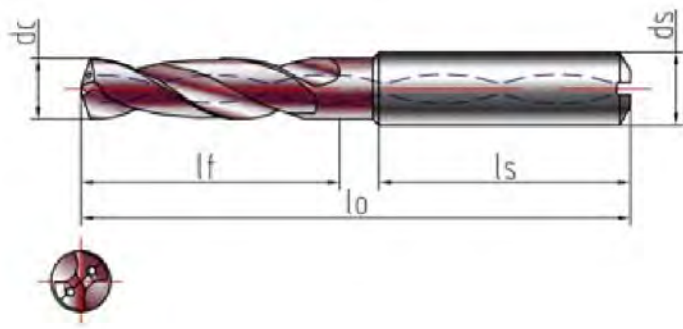
©Drilling depth : 3xD(diameter); Primary Cutting Edge Angle : 140°

Model	Dimension (mm)					Threaded Bottom Hole	
	dc	lf	ds	ls	lo	Cutting Tap	Forming Tap
CH-D076-3D-C	7.6	41	8	36	79	—	—
CH-D077-3D-C	7.7	41	8	36	79	—	—
CH-D078-3D-C	7.8	41	8	36	79	—	—
CH-D079-3D-C	7.9	41	8	36	79	—	—
CH-D080-3D-C	8.0	41	8	36	79	3/8-16UNC	—
CH-D081-3D-C	8.1	47	10	40	89	—	—
CH-D082-3D-C	8.2	47	10	40	89	—	—
CH-D083-3D-C	8.3	47	10	40	89	—	—
CH-D084-3D-C	8.4	47	10	40	89	—	—
CH-D085-3D-C	8.5	47	10	40	89	M10x1.5 3/8-24UNF	—
CH-D086-3D-C	8.6	47	10	40	89	—	—
CH-D087-3D-C	8.7	47	10	40	89	3/8-32UNEF	—
CH-D088-3D-C	8.8	47	10	40	89	M10x1.25	—
CH-D089-3D-C	8.9	47	10	40	89	—	—
CH-D090-3D-C	9.0	47	10	40	89	M10x1	—
CH-D091-3D-C	9.1	47	10	40	89	—	—
CH-D092-3D-C	9.2	47	10	40	89	—	—
CH-D093-3D-C	9.3	47	10	40	89	M10x0.75	M10x1.5
CH-D094-3D-C	9.4	47	10	40	89	7/16-14UNC	—
CH-D095-3D-C	9.5	47	10	40	89	—	—
CH-D097-3D-C	9.7	47	10	40	89	—	—
CH-D098-3D-C	9.8	47	10	40	89	—	—

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CH...3D-C

Solid Side Internal Cooling Twist Drill



Features:

- Suitable for machining common materials such as structural steel, alloy steel, and stainless steel.
- Strong centering capabilities, allowing for stable dimensional accuracy and good surface quality.
- Ideal for machining applications with excellent system rigidity.

©Drilling depth : 3xD(diameter); Primary Cutting Edge Angle : 140°

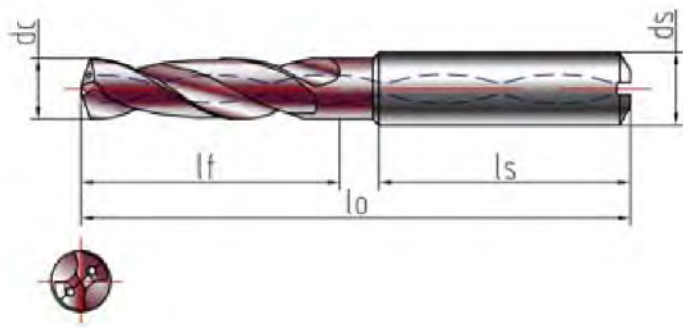
Model	Dimension (mm)					Threaded Bottom Hole	
	dc	lf	ds	ls	lo	Cutting Tap	Forming Tap
CH-D099-3D-C	9.9	47	10	40	89	7/16-20UNF	—
CH-D100-3D-C	10.0	47	10	40	89	—	—
CH-D101-3D-C	10.1	55	12	45	102	—	—
CH-D102-3D-C	10.2	55	12	45	102	7/16-28UNEF	—
CH-D103-3D-C	10.3	55	12	45	102	M12x1.75	—
CH-D104-3D-C	10.4	55	12	45	102	—	—
CH-D105-3D-C	10.5	55	12	45	102	—	—
CH-D106-3D-C	10.6	55	12	45	102	—	—
CH-D107-3D-C	10.7	55	12	45	102	—	—
CH-D108-3D-C	10.8	55	12	45	102	—	—
CH-D109-3D-C	10.9	55	12	45	102	1/2-13UNC	—
CH-D110-3D-C	11.0	55	12	45	102	M12x1	—
CH-D111-3D-C	11.1	55	12	45	102	—	—
CH-D112-3D-C	11.2	55	12	45	102	—	M12x1.75
CH-D113-3D-C	11.3	55	12	45	102	—	—
CH-D114-3D-C	11.4	55	12	45	102	—	—
CH-D115-3D-C	11.5	55	12	45	102	1/2-20UNF	—
CH-D116-3D-C	11.6	55	12	45	102	—	—
CH-D117-3D-C	11.7	55	12	45	102	—	—
CH-D118-3D-C	11.8	55	12	45	102	1/2-28UNEF	—
CH-D119-3D-C	11.9	55	12	45	102	—	—
CH-D120-3D-C	12.0	55	12	45	102	M14x2	—

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CH...3D-C



Solid Side Internal Cooling Twist Drill



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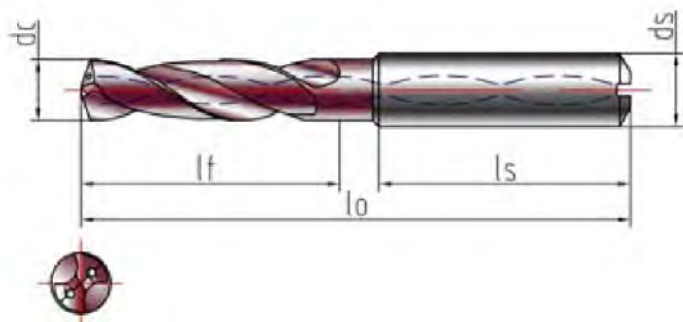
©Drilling depth : 3xD(diameter); Primary Cutting Edge Angle : 140°

Model	Dimension (mm)					Threaded Bottom Hole	
	dc	lf	ds	ls	lo	Cutting Tap	Forming Tap
CH-D121-3D-C	12.1	60	14	45	107	—	—
CH-D122-3D-C	12.2	60	14	45	107	9/16-12UNC	—
CH-D123-3D-C	12.3	60	14	45	107	—	—
CH-D124-3D-C	12.4	60	14	45	107	—	—
CH-D125-3D-C	12.5	60	14	45	107	M14x1.5	—
CH-D126-3D-C	12.6	60	14	45	107	—	—
CH-D127-3D-C	12.7	60	14	45	107	—	—
CH-D128-3D-C	12.8	60	14	45	107	—	—
CH-D129-3D-C	12.9	60	14	45	107	9/16-18UNF	—
CH-D130-3D-C	13.0	60	14	45	107	M14x1	M14x2
CH-D131-3D-C	13.1	60	14	45	107	—	—
CH-D132-3D-C	13.2	60	14	45	107	9/16-24UNEF	—
CH-D133-3D-C	13.3	60	14	45	107	—	—
CH-D134-3D-C	13.4	60	14	45	107	—	—
CH-D135-3D-C	13.5	60	14	45	107	—	—
CH-D136-3D-C	13.6	60	14	45	107	5/8-11UNC	—
CH-D137-3D-C	13.7	60	14	45	107	—	—
CH-D138-3D-C	13.8	60	14	45	107	—	—
CH-D139-3D-C	13.9	60	14	45	107	—	—
CH-D140-3D-C	14.0	60	14	45	107	M16x2	—
CH-D141-3D-C	14.1	65	16	48	115	—	—
CH-D142-3D-C	14.2	65	16	48	115	—	—
CH-D143-3D-C	14.3	65	16	48	115	—	—

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CH...3D-C

Solid Side Internal Cooling Twist Drill



Features:

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©Drilling depth : 3xD(diameter); Primary Cutting Edge Angle : 140°

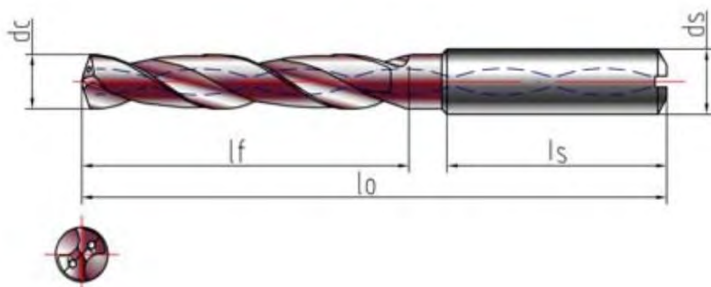
Model	Dimension (mm)					Threaded Bottom Hole	
	dc	lf	ds	ls	lo	Cutting Tap	Forming Tap
CH-D144-3D-C	14.4	65	16	48	115	—	—
CH-D145-3D-C	14.5	65	16	48	115	M16x1.5	—
CH-D145-3D-C	14.5	65	16	48	115	5/8-18UNF	—
CH-D146-3D-C	14.6	65	16	48	115	—	—
CH-D147-3D-C	14.7	65	16	48	115	—	—
CH-D148-3D-C	14.8	65	16	48	115	5/8-24UNEF	—
CH-D149-3D-C	14.9	65	16	48	115	—	—
CH-D150-3D-C	15.0	65	16	48	115	M16x1	M16x2
CH-D151-3D-C	15.1	65	16	48	115	—	—
CH-D152-3D-C	15.2	65	16	48	115	—	—
CH-D153-3D-C	15.3	65	16	48	115	—	—
CH-D154-3D-C	15.4	65	16	48	115	—	—
CH-D155-3D-C	15.5	65	16	48	115	M18x2.5	—
CH-D156-3D-C	15.6	65	16	48	115	—	—
CH-D157-3D-C	15.7	65	16	48	115	—	—
CH-D158-3D-C	15.8	65	16	48	115	—	—
CH-D159-3D-C	15.9	65	16	48	115	—	—
CH-D160-3D-C	16.0	65	16	48	115	M18x2	—

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CH...5D-C



Solid Side Internal Cooling Twist Drill



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©Drilling depth : 5xD(diameter); Primary Cutting Edge Angle : 140°

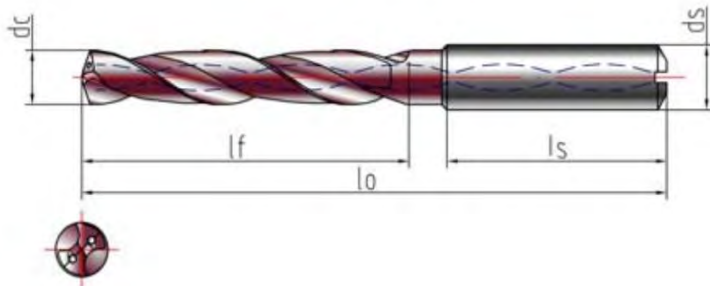
Model	Dimension (mm)					Threaded Bottom Hole	
	dc	lf	ds	ls	lo	Cutting Tap	Forming Tap
CH-D033-5D-C	3.3	28	4	28	58	M4×0.7	—
CH-D034-5D-C	3.4	28	4	28	58	No. 8-32UNC	—
CH-D035-5D-C	3.5	28	4	28	58	M4×0.5 No. 8-36UNF	—
CH-D036-5D-C	3.6	28	4	28	58	—	—
CH-D037-5D-C	3.7	28	4	28	58	—	M4×0.7
CH-D038-5D-C	3.8	36	4	28	66	—	M4×0.5
CH-D039-5D-C	3.9	36	4	28	66	No. 10-24UNC	—
CH-D040-5D-C	4.0	36	4	28	66	—	—
CH-D041-5D-C	4.1	36	6	36	74	No. 10-32UNF	—
CH-D042-5D-C	4.2	36	6	36	74	M5×0.8	—
CH-D043-5D-C	4.3	36	6	36	74	—	—
CH-D044-5D-C	4.4	36	6	36	74	—	—
CH-D045-5D-C	4.5	36	6	36	74	M5×0.5 No. 12-24UNC	—
CH-D046-5D-C	4.6	36	6	36	74	No. 12-28UNF	M5×0.8
CH-D047-5D-C	4.7	36	6	36	74	No. 12-32UNEF	—
CH-D048-5D-C	4.8	44	6	36	82	—	—
CH-D049-5D-C	4.9	44	6	36	82	—	—
CH-D050-5D-C	5.0	44	6	36	82	M6×1	—
CH-D051-5D-C	5.1	44	6	36	82	1/4-20UNC	—
CH-D052-5D-C	5.2	44	6	36	82	—	—
CH-D053-5D-C	5.3	44	6	36	82	M6×0.75	—

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CH...5D-C



Solid Side Internal Cooling Twist Drill



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©Drilling depth : 5xD(diameter); Primary Cutting Edge Angle : 140°

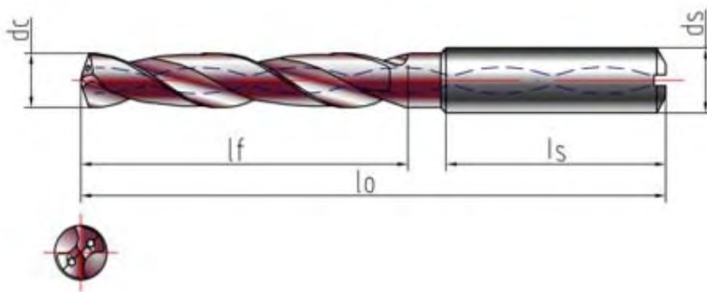
Model	Dimension (mm)					Threaded Bottom Hole	
	dc	lf	ds	ls	lo	Cutting Tap	Forming Tap
CH-D054-5D-C	5.4	44	6	36	82	—	—
CH-D055-5D-C	5.5	44	6	36	82	1/4-28UNF	M6×1
CH-D056-5D-C	5.6	44	6	36	82	1/4-32UNEF	—
CH-D057-5D-C	5.7	44	6	36	82	—	—
CH-D058-5D-C	5.8	44	6	36	82	—	—
CH-D059-5D-C	5.9	44	6	36	82	—	—
CH-D060-5D-C	6.0	44	6	36	82	—	—
CH-D061-5D-C	6.1	53	8	36	91	—	—
CH-D062-5D-C	6.2	53	8	36	91	—	—
CH-D063-5D-C	6.3	53	8	36	91	—	—
CH-D064-5D-C	6.4	53	8	36	91	—	—
CH-D065-5D-C	6.5	53	8	36	91	—	—
CH-D066-5D-C	6.6	53	8	36	91	5/16-18UNC	—
CH-D067-5D-C	6.7	53	8	36	91	—	—
CH-D068-5D-C	6.8	53	8	36	91	M8×1.25	—
CH-D069-5D-C	6.9	53	8	36	91	5/16-24UNEF	—
CH-D070-5D-C	7.0	53	8	36	91	M8×1	—
CH-D071-5D-C	7.1	53	8	36	91	5/16-32UNEF	—
CH-D072-5D-C	7.2	53	8	36	91	—	—
CH-D073-5D-C	7.3	53	8	36	91	M8×0.75	—
CH-D074-5D-C	7.4	53	8	36	91	—	M8×1.25
CH-D075-5D-C	7.5	53	8	36	91	—	—
CH-D076-5D-C	7.6	53	8	36	91	—	—

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CH...5D-C



Solid Side Internal Cooling Twist Drill



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©Drilling depth : 5xD(diameter); Primary Cutting Edge Angle : 140°

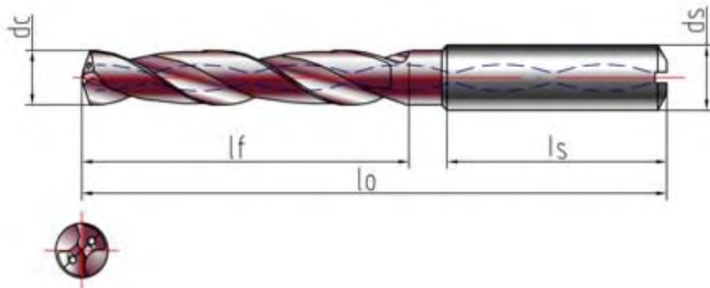
Model	Dimension (mm)					Threaded Bottom Hole	
	dc	lf	ds	ls	lo	Cutting Tap	Forming Tap
CH-D077-5D-C	7.7	53	8	36	91	—	—
CH-D078-5D-C	7.8	53	8	36	91	—	—
CH-D079-5D-C	7.9	53	8	36	91	—	—
CH-D080-5D-C	8.0	53	8	36	91	3/8-16UNC	—
CH-D081-5D-C	8.1	61	10	40	103	—	—
CH-D082-5D-C	8.2	61	10	40	103	—	—
CH-D083-5D-C	8.3	61	10	40	103	—	—
CH-D084-5D-C	8.4	61	10	40	103	—	—
CH-D085-5D-C	8.5	61	10	40	103	M10×1.5 3/8-24UNF	—
CH-D086-5D-C	8.6	61	10	40	103	—	—
CH-D087-5D-C	8.7	61	10	40	103	3/8-32UNEF	—
CH-D088-5D-C	8.8	61	10	40	103	M10×1.25	—
CH-D089-5D-C	8.9	61	10	40	103	—	—
CH-D090-5D-C	9.0	61	10	40	103	M10×1	—
CH-D091-5D-C	9.1	61	10	40	103	—	—
CH-D092-5D-C	9.2	61	10	40	103	—	—
CH-D093-5D-C	9.3	61	10	40	103	M10×0.75	M10×1.5
CH-D094-5D-C	9.4	61	10	40	103	7/16-14UNC	—
CH-D095-5D-C	9.5	61	10	40	103	—	—
CH-D096-5D-C	9.6	61	10	40	103	—	—
CH-D097-5D-C	9.7	61	10	40	103	—	—
CH-D098-5D-C	9.8	61	10	40	103	—	—
CH-D099-5D-C	9.9	61	10	40	103	7/16-20UNF	—

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CH...5D-C



Solid Side Internal Cooling Twist Drill



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©Drilling depth : 5xD(diameter); Primary Cutting Edge Angle : 140°

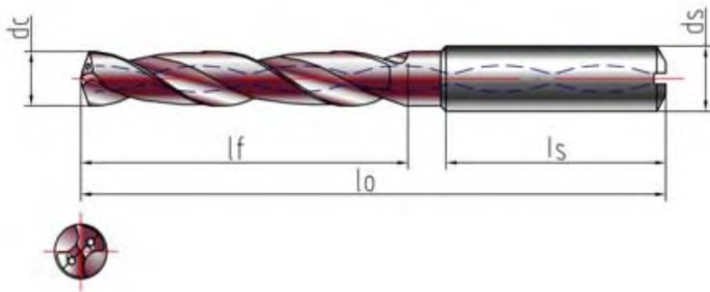
Model	Dimension (mm)					Threaded Bottom Hole	
	dc	lf	ds	ls	lo	Cutting Tap	Forming Tap
CH-D100-5D-C	10.0	61	10	40	103	—	—
CH-D101-5D-C	10.1	71	12	45	118	—	—
CH-D102-5D-C	10.2	71	12	45	118	7/16-28UNEF	—
CH-D103-5D-C	10.3	71	12	45	118	M12×1.75	—
CH-D104-5D-C	10.4	71	12	45	118	—	—
CH-D105-5D-C	10.5	71	12	45	118	—	—
CH-D106-5D-C	10.6	71	12	45	118	—	—
CH-D107-5D-C	10.7	71	12	45	118	—	—
CH-D108-5D-C	10.8	71	12	45	118	—	—
CH-D109-5D-C	10.9	71	12	45	118	1/2-13UNC	—
CH-D110-5D-C	11.0	71	12	45	118	M12×1	—
CH-D111-5D-C	11.1	71	12	45	118	—	—
CH-D112-5D-C	11.2	71	12	45	118	—	M12×1.75
CH-D113-5D-C	11.3	71	12	45	118	—	—
CH-D114-5D-C	11.4	71	12	45	118	—	—
CH-D115-5D-C	11.5	71	12	45	118	1/2-20UNF	—
CH-D116-5D-C	11.6	71	12	45	118	—	—
CH-D117-5D-C	11.7	71	12	45	118	—	—
CH-D118-5D-C	11.8	71	12	45	118	1/2-28UNEF	—
CH-D119-5D-C	11.9	71	12	45	118	—	—
CH-D120-5D-C	12.0	71	12	45	118	M14×2	—
CH-D121-5D-C	12.1	77	14	45	124	—	—
CH-D122-5D-C	12.2	77	14	45	124	9/16-12UNC	—

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CH...5D-C



Solid Side Internal Cooling Twist Drill



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©Drilling depth : 5xD(diameter); Primary Cutting Edge Angle : 140°

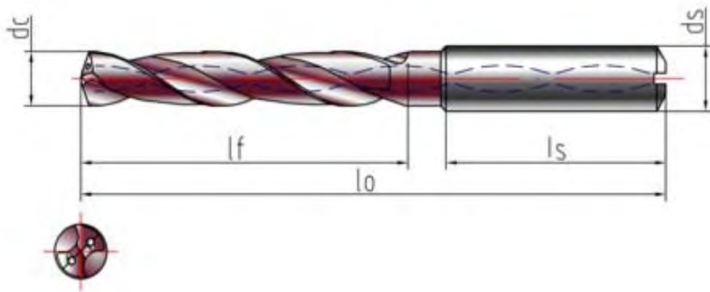
Model	Dimension (mm)					Threaded Bottom Hole	
	dc	lf	ds	ls	lo	Cutting Tap	Forming Tap
CH-D123-5D-C	12.3	77	14	45	124	—	—
CH-D124-5D-C	12.4	77	14	45	124	—	—
CH-D125-5D-C	12.5	77	14	45	124	M14×1.5	—
CH-D126-5D-C	12.6	77	14	45	124	—	—
CH-D127-5D-C	12.7	77	14	45	124	—	—
CH-D128-5D-C	12.8	77	14	45	124	—	—
CH-D129-5D-C	12.9	77	14	45	124	9/16-18UNF	—
CH-D130-5D-C	13.0	77	14	45	124	M14×1	M14×2
CH-D131-5D-C	13.1	77	14	45	124	—	—
CH-D132-5D-C	13.2	77	14	45	124	9/16-24UNEF	—
CH-D133-5D-C	13.3	77	14	45	124	—	—
CH-D134-5D-C	13.4	77	14	45	124	—	—
CH-D135-5D-C	13.5	77	14	45	124	—	—
CH-D136-5D-C	13.6	77	14	45	124	5/8-11UNC	—
CH-D137-5D-C	13.7	77	14	45	124	—	—
CH-D138-5D-C	13.8	77	14	45	124	—	—
CH-D139-5D-C	13.9	77	14	45	124	—	—
CH-D140-5D-C	14.0	77	14	45	124	M16×2	—
CH-D141-5D-C	14.1	83	16	48	133	—	—
CH-D142-5D-C	14.2	83	16	48	133	—	—
CH-D143-5D-C	14.3	83	16	48	133	—	—
CH-D144-5D-C	14.4	83	16	48	133	—	—
CH-D145-5D-C	14.5	83	16	48	133	M16×1.5	—
CH-D145-5D-C	14.5	83	16	48	133	5/8-18UNF	—

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CH...5D-C



Solid Side Internal Cooling Twist Drill



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©Drilling depth : 5xD(diameter); Primary Cutting Edge Angle : 140°

Model	Dimension (mm)					Threaded Bottom Hole	
	dc	lf	ds	ls	lo	Cutting Tap	Forming Tap
CH-D146-5D-C	14.6	83	16	48	133	—	—
CH-D147-5D-C	14.7	83	16	48	133	—	—
CH-D148-5D-C	14.8	83	16	48	133	5/8-24UNEF	—
CH-D149-5D-C	14.9	83	16	48	133	—	—
CH-D150-5D-C	15.0	83	16	48	133	M16×1	M16×2
CH-D151-5D-C	15.1	83	16	48	133	—	—
CH-D152-5D-C	15.2	83	16	48	133	—	—
CH-D153-5D-C	15.3	83	16	48	133	—	—
CH-D154-5D-C	15.4	83	16	48	133	—	—
CH-D155-5D-C	15.5	83	16	48	133	M18×2.5	—
CH-D156-5D-C	15.6	83	16	48	133	—	—
CH-D157-5D-C	15.7	83	16	48	133	—	—
CH-D158-5D-C	15.8	83	16	48	133	—	—
CH-D159-5D-C	15.9	83	16	48	133	—	—
CH-D160-5D-C	16.0	83	16	48	133	M18×2	—

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超尔皇冠钻



HEAD CHANGEABLE DRILL

Drill Head

Chip-breaker Description

Code		Intro
RC		RC : Low cutting force, good centering performance. Enhance edge, high anti-chipping edge, excellent chip control ability, effectively prolong the tool life.
SE		SE: The head has a self-setting core and a strong SE type cross edge to avoid core hardening to improve feed rate. The inverted edge has excellent chip control and long tool life, even in long chip material processing. Suitable for processing steel, stainless steel, cast iron.

Grade Description

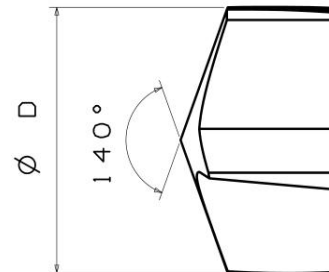
Grade Code	Intro
CT5520	Adopt a kind of fine grain hard alloy material and PVD composite coating with TiAlN matrix. It has high wear-resistance and can be used extremely high cutting speed parameters under stable operating conditions
CT8420	The cutting edge is especially suitable for processing alloy steel and high alloy steel.
CT5420	The cutting edge can be used as an alternative for machining cast iron materials

CDH-RC



HEAD CHANGABLE DRILL INSERTS

NEW



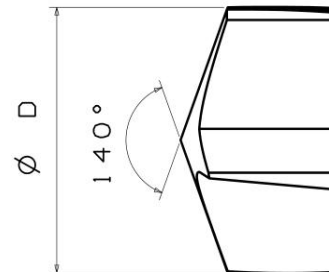
Model	Dimension (mm)			Tolerance-K7 (In metric)
	D		Seat Size	
	mm	In		
CDH1250RC	12. 50	0. 4921	C	+0. 001 /+0. 019
CDH1300RC	13. 00	0. 5118	C	
CDH1350RC	13. 50	0. 531	C	
CDH1351RC	13. 51	0. 5319	B	
CDH1400RC	14. 00	0. 5512	B	
CDH1450RC	14. 50	0. 5709	B	
CDH1451RC	14. 51	0. 5713	A	
CDH1500RC	15. 00	0. 5906	A	
CDH1550RC	15. 50	0. 6102	A	
CDH1600RC	16. 00	0. 6299	1	
CDH1650RC	16. 50	0. 6496	1	
CDH1700RC	17. 00	0. 6693	1	
CDH1750RC	17. 50	0. 689	1	
CDH1800RC	18. 00	0. 7087	1	
CDH1801RC	18. 01	0. 7087	2	+0. 002 /+0. 023
CDH1850RC	18. 50	0. 7283	2	
CDH1900RC	19. 00	0. 748	2	
CDH1950RC	19. 50	0. 7677	2	
CDH2000RC	20. 00	0. 7874	3	
CDH2050RC	20. 50	0. 8071	3	
CDH2100RC	21. 00	0. 8268	3	
CDH2150RC	21. 50	0. 8460	3	
CDH2200RC	22. 00	0. 8661	3	
CDH2201RC	22. 01	0. 8665	4	

CDH-RC



HEAD CHANGABLE DRILL INSERTS

NEW



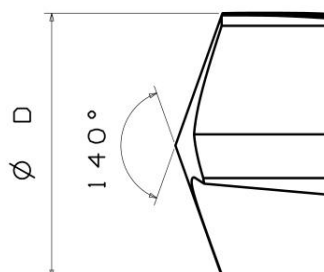
Model	Dimension (mm)			Tolerance-K7 (In metric)
	D		Seat Size	
	mm	In		
CDH2250RC	22. 50	0. 8858	4	+0. 002 /+0. 023
CDH2300RC	23. 00	0. 9055	4	
CDH2350RC	23. 50	0. 9252	4	
CDH2400RC	24. 00	0. 9449	4	
CDH2401RC	24. 01	0. 9453	5	
CDH2450RC	24. 50	0. 9646	5	
CDH2500RC	25. 00	0. 9843	5	
CDH2550RC	25. 50	1. 0039	5	
CDH2600RC	26. 00	1. 0236	5	
CDH2601RC	26. 01	1. 0240	6	
CDH2650RC	26. 50	1. 0433	6	
CDH2700RC	27. 00	1. 0630	6	
CDH2750RC	27. 50	1. 0827	6	
CDH2800RC	28. 00	1. 1024	6	
CDH2801RC	28. 016	1. 1030	7	
CDH2850RC	28. 50	1. 1220	7	
CDH2900RC	29. 00	1. 1417	7	
CDH2950RC	29. 50	1. 1614	7	
CDH3000RC	30. 00	1. 1811	7	
CDH3001RC	30. 01	1. 1815	8	+0. 002 /+0. 027
CDH3050RC	30. 50	1. 2008	8	
CDH3100RC	31. 00	1. 2205	8	
CDH3150RC	31. 50	1. 2402	8	
CDH3200RC	32. 00	1. 2598	8	

CDH-SE



HEAD CHANGABLE DRILL INSERTS

NEW



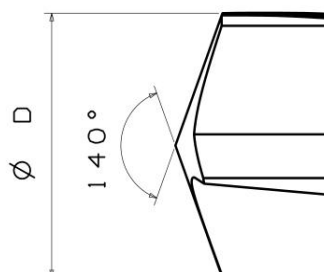
Model	Dimension (mm)			Tolerance-K7 (In metric)
	D		Seat Size	
	mm	In		
CDH1250SE	12.50	0.4921	C	+0.001 /+0.019
CDH1300SE	13.00	0.5118	C	
CDH1350SE	13.50	0.531	C	
CDH1351SE	13.51	0.5319	B	
CDH1400SE	14.00	0.5512	B	
CDH1450SE	14.50	0.5709	B	
CDH1451SE	14.51	0.5713	A	
CDH1500SE	15.00	0.5906	A	
CDH1550SE	15.50	0.6102	A	
CDH1600SE	16.00	0.6299	1	
CDH1650SE	16.50	0.6496	1	
CDH1700SE	17.00	0.6693	1	
CDH1750SE	17.50	0.689	1	
CDH1800SE	18.00	0.7087	1	
CDH1801SE	18.01	0.7087	2	+0.002 /+0.023
CDH1850SE	18.50	0.7283	2	
CDH1900SE	19.00	0.748	2	
CDH1950SE	19.50	0.7677	2	
CDH2000SE	20.00	0.7874	3	
CDH2050SE	20.50	0.8071	3	
CDH2100SE	21.00	0.8268	3	
CDH2150SE	21.50	0.8460	3	
CDH2200SE	22.00	0.8661	3	
CDH2201SE	22.01	0.8665	4	

CDH-SE



HEAD CHANGABLE DRILL INSERTS

NEW

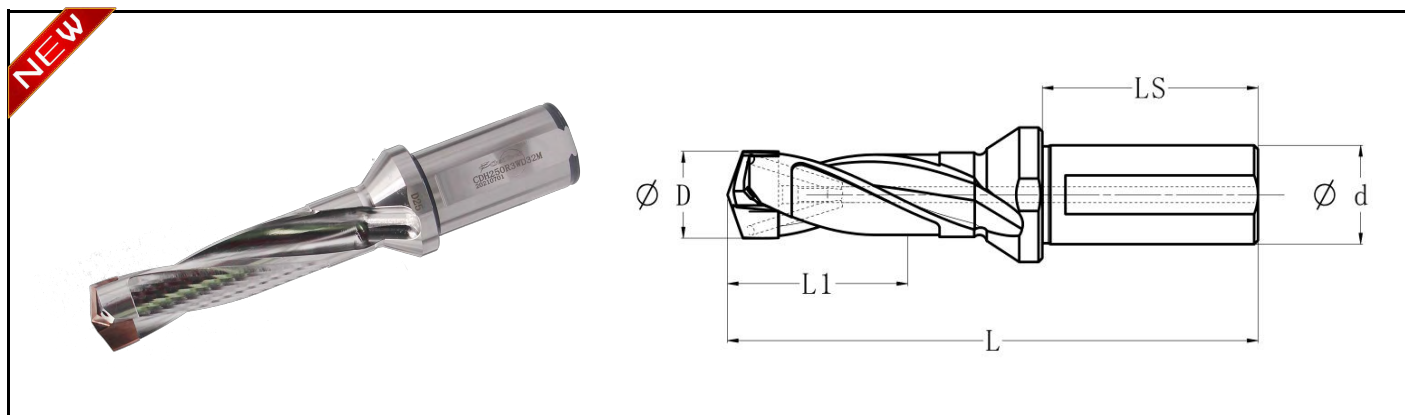


Model	Dimension (mm)			Tolerance-K7 (In metric)
	D		Seat Size	
	mm	In		
CDH2250SE	22.50	0.8858	4	+0.002 /+0.023
CDH2300SE	23.00	0.9055	4	
CDH2350SE	23.50	0.9252	4	
CDH2400SE	24.00	0.9449	4	
CDH2401SE	24.01	0.9453	5	
CDH2450SE	24.50	0.9646	5	
CDH2500SE	25.00	0.9843	5	
CDH2550SE	25.50	1.0039	5	
CDH2600SE	26.00	1.0236	5	
CDH2601SE	26.01	1.0240	6	
CDH2650SE	26.50	1.0433	6	
CDH2700SE	27.00	1.0630	6	
CDH2750SE	27.50	1.0827	6	
CDH2800SE	28.00	1.1024	6	
CDH2801SE	28.016	1.1030	7	
CDH2850SE	28.50	1.1220	7	
CDH2900SE	29.00	1.1417	7	
CDH2950SE	29.50	1.1614	7	
CDH3000SE	30.00	1.1811	7	
CDH3001SE	30.01	1.1815	8	
CDH3050SE	30.50	1.2008	8	
CDH3100SE	31.00	1.2205	8	
CDH3150SE	31.50	1.2402	8	
CDH3200SE	32.00	1.2598	8	

CDH-R1.5



HEAD CHANGABLE DRILL HOLDER



• CDH • 1.5 x D • Metric

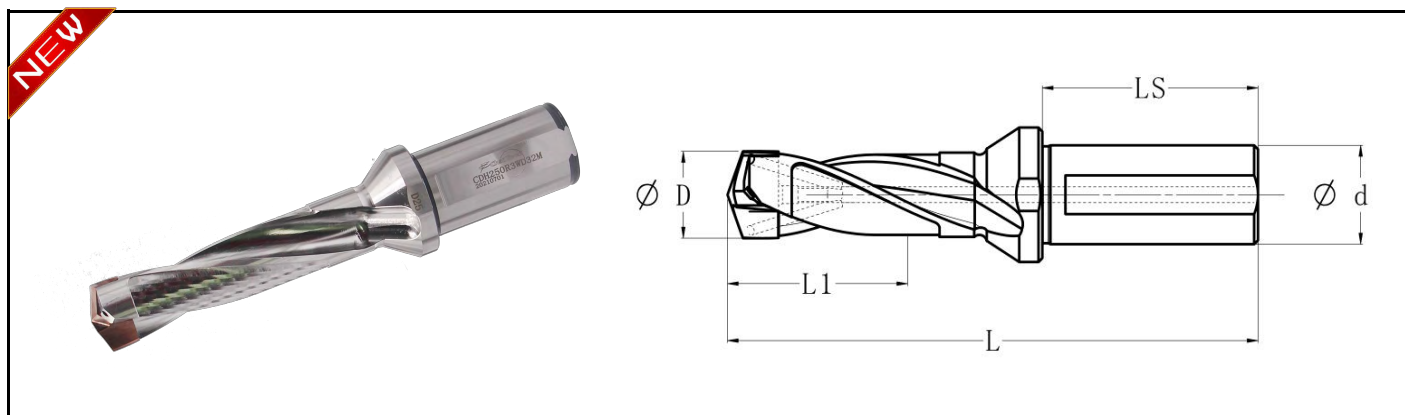
Model	Dimension (mm)								
	D		Dmax		L1	LS	d	L	Seat Size
	mm	in	mm	in					
1.5 x D	mm	in	mm	in					
CDH100R1.5WD16M	10.000	0.3937	10.500	0.4133	15	45	16	85	c
CDH140R1.5WD16M	14.000	0.5511	14.500	0.5708	21	45	16	81	B
CDH150R1.5WD20M	15.000	0.5905	15.500	0.6102	22.5	50	20	85	A
CDH160R1.5WD20M	16.000	0.6299	16.500	0.6496	24	50	20	104	1
CDH170R1.5WD20M	17.000	0.6692	17.500	0.7142	25.5	50	20	106.5	2
CDH190R1.5WD25M	19.000	0.7480	19.500	0.7677	28.5	56	25	120	3
CDH200R1.5WD25M	20.000	0.7874	20.500	0.8070	30	56	25	123	4
CDH210R1.5WD25M	21.000	0.8267	21.500	0.8464	31.5	56	25	126	5
CDH220R1.5WD25M	22.000	0.8979	22.500	0.8858	33	56	25	129	6
CDH250R1.5WD32M	25.000	0.9842	25.500	1.0039	37.5	60	32	142	7
CDH260R1.5WD32M	26.000	1.0236	26.500	1.0433	39	60	32	145	8

- Standard product has the inner coolant holes.
- Tool bodies must match the corresponding seat size inserts.
- Inserts must be ordered separately.
- For information on compatible screw wrenches, see page C61; for usage instructions, see page C62.

CDH-R3/R5



HEAD CHANGABLE DRILL HOLDER



• CDH • 3 x D / 5 x D • Metric

Model	Model	Dimension (mm)								Seat Size
		D		Dmax		L1		LS	d	
3 x D	5 x D	mm	in	mm	in	3XD	5XD			
CDH125R3WD16M	CDH125R5WD16M	12.500	0.4921	13.000	0.5118	42	70	48	16	C
CDH130R3WD16M	CDH130R5WD16M	13.000	0.5118	13.500	0.5314	42	70	48	16	C
CDH135R3WD16M	CDH135R5WD16M	13.500	0.5315	13.500	0.5314	42	70	48	16	C
CDH136R3WD16M	CDH136R5WD16M	13.510	0.5319	14.000	0.5512	42	70	48	16	B
CDH140R3WD16M	CDH140R5WD16M	14.000	0.5512	14.500	0.5708	42	70	48	16	B
CDH145R3WD20M	CDH145R5WD20M	14.500	0.5709	14.500	0.5708	48	80	50	20	B
CDH146R3WD20M	CDH146R5WD20M	14.510	0.5713	15.000	0.5906	48	80	50	20	A
CDH150R3WD20M	CDH150R5WD20M	15.000	0.5906	15.500	0.6102	48	80	50	20	A
CDH155R3WD20M	CDH155R5WD20M	15.500	0.6102	15.874	0.6249	48	80	50	20	A
CDH160R3WD20M	CDH160R5WD20M	16.000	0.6299	16.500	0.6496	48	80	50	20	1
CDH165R3WD20M	CDH165R5WD20M	16.500	0.6496	17.000	0.6693	54	90	50	20	1
CDH170R3WD20M	CDH170R5WD20M	17.000	0.6693	17.500	0.6890	54	90	50	20	1
CDH175R3WD20M	CDH175R5WD20M	17.500	0.6890	18.000	0.7086	54	90	50	20	1
CDH180R3WD20M	CDH180R5WD20M	18.000	0.7087	18.000	0.7086	54	90	50	20	1
—	CDH181R5WD25M	18.010	0.7091	18.500	0.7283	—	100	56	25	2
CDH185R3WD25M	CDH185R5WD25M	18.500	0.7283	19.000	0.7480	60	100	56	25	2
CDH190R3WD25M	CDH190R5WD25M	19.000	0.7480	19.500	0.7677	60	100	56	25	2
CDH195R3WD25M	CDH195R5WD25M	19.500	0.7677	19.999	0.7873	60	100	56	25	2
CDH200R3WD25M	CDH200R5WD25M	20.000	0.7874	20.500	0.8071	60	100	56	25	3
CDH205R3WD25M	CDH205R5WD25M	20.500	0.8071	21.000	0.8268	66	110	56	25	3
CDH210R3WD25M	CDH210R5WD25M	21.000	0.8268	21.500	0.8465	66	110	56	25	3
CDH215R3WD25M	CDH215R5WD25M	21.500	0.8465	22.000	0.8661	66	110	56	25	3
CDH220R3WD25M	CDH220R5WD25M	22.000	0.8661	22.000	0.8661	66	110	56	25	3
—	CDH221R5WD25M	22.010	0.8665	22.500	0.8858	—	120	56	25	4

• Standard product has the inner coolant holes.

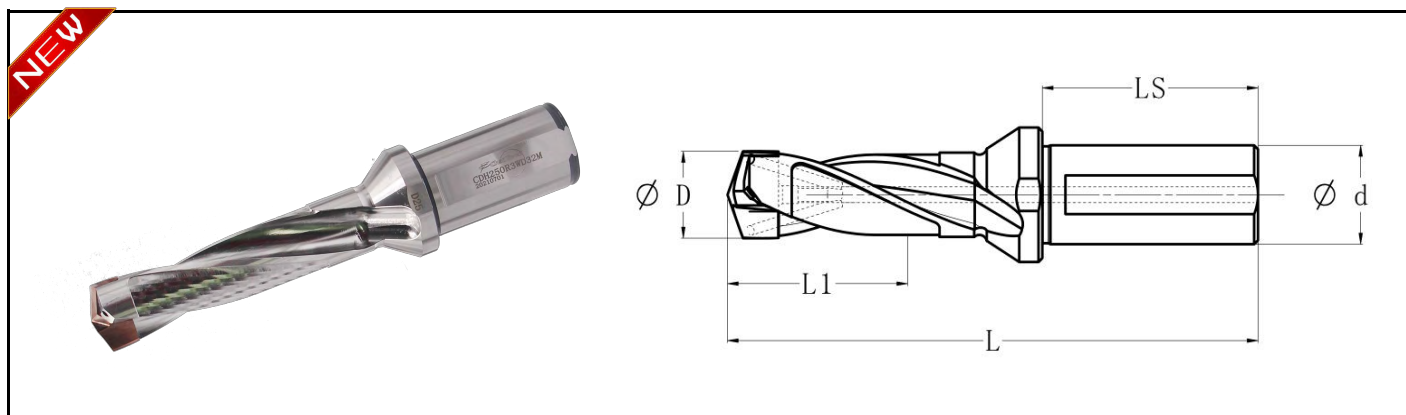
• Tool bodies must match the corresponding seat size inserts., Inserts must be ordered separately.

• For information on compatible screw wrenches, see page C61; for usage instructions, see page C62.

CDH-R3/R5



HEAD CHANGABLE DRILL HOLDER



• CDH • 3 x D / 5 x D • Metric

Model I	Model I	Dimension (mm)								
		D		Dmax		L1		LS	d	Seat Size
3 x D	5 x D	mm	in	mm	in	3XD	5XD			
CDH225R3WD25M	CDH225R5WD25M	22.500	0.8858	23.000	0.9055	72	120	56	25	4
CDH230R3WD25M	CDH230R5WD25M	23.000	0.9055	23.500	0.9252	72	120	56	25	4
CDH235R3WD25M	CDH235R5WD25M	23.500	0.9252	24.000	0.9448	72	120	56	25	4
CDH240R3WD25M	CDH240R5WD25M	24.000	0.9449	24.000	0.9448	72	120	56	25	4
—	CDH241R5WD32M	24.010	0.9453	24.500	0.9646	—	130	60	32	5
CDH245R3WD32M	CDH245R5WD32M	24.500	0.9646	25.000	0.9843	78	130	60	32	5
CDH250R3WD32M	CDH250R5WD32M	25.000	0.9843	25.500	1.0039	78	130	60	32	5
CDH255R3WD32M	CDH255R5WD32M	25.500	1.0039	26.000	1.0236	78	130	60	32	5
CDH260R3WD32M	CDH260R5WD32M	26.000	1.0236	26.000	1.0236	78	130	60	32	5
—	CDH261R5WD32M	26.010	1.0240	26.500	1.0433	—	140	60	32	6
CDH265R3WD32M	CDH265R5WD32M	26.500	1.0433	27.000	1.0630	84	140	60	32	6
CDH270R3WD32M	CDH270R5WD32M	27.000	1.0630	27.500	1.0827	84	140	60	32	6
CDH275R3WD32M	CDH275R5WD32M	27.500	1.0827	28.000	1.1023	84	140	60	32	6
CDH280R3WD32M	CDH280R5WD32M	28.000	1.1024	28.000	1.1023	84	140	60	32	6
—	CDH281R5WD32M	28.016	1.1030	28.500	1.1220	—	150	60	32	7
CDH285R3WD32M	CDH285R5WD32M	28.500	1.1220	29.000	1.1417	90	150	60	32	7
CDH290R3WD32M	CDH290R5WD32M	29.000	1.1417	29.500	1.1614	90	150	60	32	7
CDH295R3WD32M	CDH295R5WD32M	29.500	1.1614	30.000	1.1811	90	150	60	32	7
CDH300R3WD32M	CDH300R5WD32M	30.000	1.1811	30.000	1.1811	90	150	60	32	7
—	CDH301R5WD32M	30.010	1.1815	30.500	1.2008	—	160	60	32	8
CDH305R3WD32M	CDH305R5WD32M	30.500	1.2008	31.000	1.2205	96	160	60	32	8
CDH310R3WD32M	CDH310R5WD32M	31.000	1.2205	31.500	1.2402	96	160	60	32	8
CDH315R3WD32M	CDH315R5WD32M	31.500	1.2402	32.000	1.2598	96	160	60	32	8
CDH320R3WD32M	CDH320R5WD32M	32.000	1.2598	32.000	1.2598	96	160	60	32	8

• Standard product has the inner coolant holes.

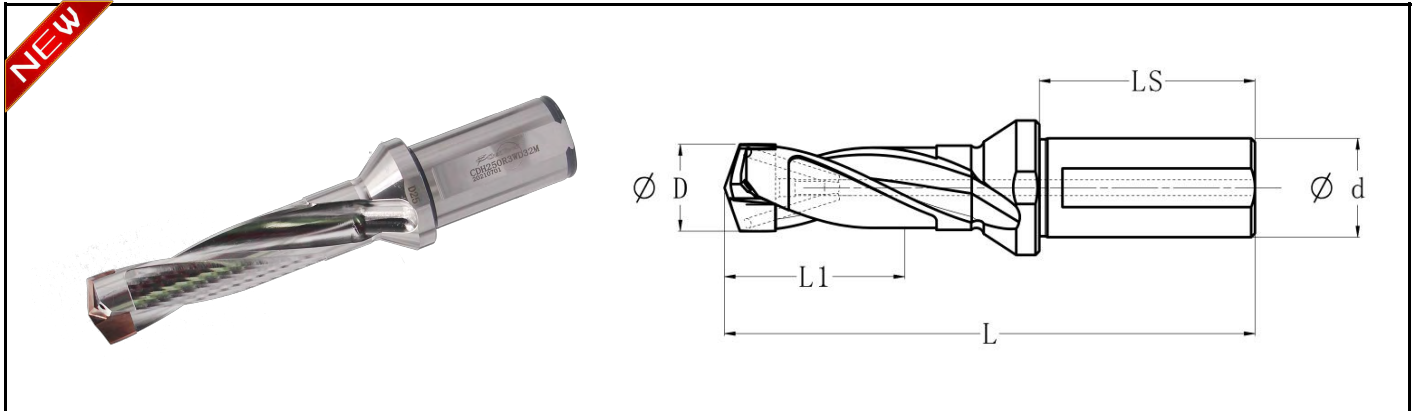
C58

• Tool bodies must match the corresponding seat size inserts., Inserts must be ordered separately.

• For information on compatible screw wrenches, see page C61; for usage instructions, see page C62.

CDH-R7/R10

HEAD CHANGABLE DRILL HOLDER



• CDH • 7 x D / 10 x D • Metric

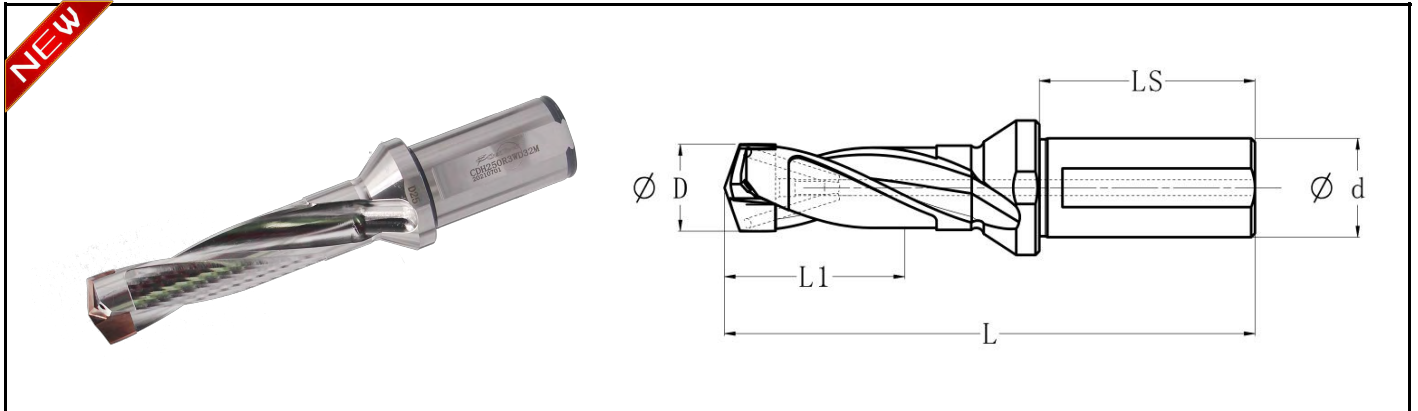
Model		Dimension (mm)								
		D		Dmax		L1		LS	d	Seat Size
		mm	in	mm	in	7XD	10XD			
7 x D	10 x D									
CDH125R7WD16M	CDH125R10WD16M	12.500	0.4921	13.000	0.5118	98	125	48	16	C
CDH130R7WD16M	CDH130R10WD16M	13.000	0.5118	13.500	0.5314	98	130	48	16	C
CDH135R7WD16M	CDH135R10WD16M	13.500	0.5315	13.500	0.5314	98	135	48	16	C
CDH136R7WD16M	CDH136R10WD16M	13.510	0.5319	14.000	0.5512	98	135	48	16	B
CDH140R7WD16M	CDH140R10WD16M	14.000	0.5512	14.500	0.5708	98	140	48	16	B
CDH145R7WD20M	CDH145R10WD20M	14.500	0.5709	14.500	0.5708	112	145	50	20	B
CDH146R7WD20M	CDH146R10WD20M	14.510	0.5713	15.000	0.5906	112	145	50	20	A
CDH150R7WD20M	CDH150R10WD20M	15.000	0.5906	15.500	0.6102	112	150	50	20	A
CDH155R7WD20M	CDH155R10WD20M	15.500	0.6102	15.874	0.6249	112	155	50	20	A
CDH160R7WD20M	CDH160R10WD20M	16.000	0.6299	16.500	0.6496	112	160	50	20	1
CDH165R7WD20M	CDH165R10WD20M	16.500	0.6496	17.000	0.6693	126	165	50	20	1
CDH170R7WD20M	CDH170R10WD20M	17.000	0.6693	17.500	0.6890	126	170	50	20	1
CDH175R7WD20M	CDH175R10WD20M	17.500	0.6890	18.000	0.7086	126	175	50	20	1
CDH180R7WD20M	CDH180R10WD20M	18.000	0.7087	18.000	0.7086	126	180	50	20	1
—	CDH181R10WD25M	18.010	0.7091	18.500	0.7283	—	185	56	25	2
CDH185R7WD25M	CDH185R10WD25M	18.500	0.7283	19.000	0.7480	140	185	56	25	2
CDH190R7WD25M	CDH190R10WD25M	19.000	0.7480	19.500	0.7677	140	190	56	25	2
CDH195R7WD25M	CDH195R10WD25M	19.500	0.7677	19.999	0.7873	140	195	56	25	2
CDH200R7WD25M	CDH200R10WD25M	20.000	0.7874	20.500	0.8071	140	200	56	25	3
CDH205R7WD25M	CDH205R10WD25M	20.500	0.8071	21.000	0.8268	154	205	56	25	3
CDH210R7WD25M	CDH210R10WD25M	21.000	0.8268	21.500	0.8465	154	210	56	25	3
CDH215R7WD25M	CDH215R10WD25M	21.500	0.8465	22.000	0.8661	154	215	56	25	3
CDH220R7WD25M	CDH220R10WD25M	22.000	0.8661	22.000	0.8661	154	220	56	25	3
—	CDH221R10WD25M	22.010	0.8665	22.500	0.8858	—	225	56	25	4

- Standard product has the inner coolant holes.
- Tool bodies must match the corresponding seat size inserts., Inserts must be ordered separately.
- For information on compatible screw wrenches, see page C61; for usage instructions, see page C62.

CDH-R7/R10



HEAD CHANGABLE DRILL HOLDER



• CDH • 7 x D / 10 x D • Metric

Model I	Model I	Dimension (mm)								
		D		Dmax		L1		LS	d	Seat Size
7 x D	10 x D	mm	in	mm	in	7XD	10XD			
CDH225R7WD25M	CDH225R10WD25M	22.500	0.8858	23.000	0.9055	168	225	56	25	4
CDH230R7WD25M	CDH230R10WD25M	23.000	0.9055	23.500	0.9252	168	230	56	25	4
CDH235R7WD25M	CDH235R10WD25M	23.500	0.9252	24.000	0.9448	168	235	56	25	4
CDH240R7WD25M	CDH240R10WD25M	24.000	0.9449	24.000	0.9448	168	240	56	25	4
—	CDH241R10WD32M	24.010	0.9453	24.500	0.9646	—	245	60	32	5
CDH245R7WD32M	CDH245R10WD32M	24.500	0.9646	25.000	0.9843	182	245	60	32	5
CDH250R7WD32M	CDH250R10WD32M	25.000	0.9843	25.500	1.0039	182	250	60	32	5
CDH255R7WD32M	CDH255R10WD32M	25.500	1.0039	26.000	1.0236	182	255	60	32	5
CDH260R7WD32M	CDH260R10WD32M	26.000	1.0236	26.000	1.0236	182	260	60	32	5
—	CDH261R10WD32M	26.010	1.0240	26.500	1.0433	—	265	60	32	6
CDH265R7WD32M	CDH265R10WD32M	26.500	1.0433	27.000	1.0630	196	265	60	32	6
CDH270R7WD32M	CDH270R10WD32M	27.000	1.0630	27.500	1.0827	196	270	60	32	6
CDH275R7WD32M	CDH275R10WD32M	27.500	1.0827	28.000	1.1023	196	275	60	32	6
CDH280R7WD32M	CDH280R10WD32M	28.000	1.1024	28.000	1.1023	196	280	60	32	6
—	CDH281R10WD32M	28.016	1.1030	28.500	1.1220	—	285	60	32	7
CDH285R7WD32M	CDH285R10WD32M	28.500	1.1220	29.000	1.1417	210	285	60	32	7
CDH290R7WD32M	CDH290R10WD32M	29.000	1.1417	29.500	1.1614	211	290	60	32	7
CDH295R7WD32M	CDH295R10WD32M	29.500	1.1614	30.000	1.1811	212	295	60	32	7
CDH300R7WD32M	CDH300R10WD32M	30.000	1.1811	30.000	1.8110	213	300	60	32	7
—	CDH301R10WD32M	30.010	1.1815	30.500	1.2008	—	305	60	32	8
CDH305R7WD32M	—	30.500	1.2008	31.000	1.2205	224	—	60	32	8
CDH310R7WD32M	CDH310R10WD32M	31.000	1.2205	31.500	1.2402	224	310	60	32	8
CDH315R7WD32M	—	31.500	1.2402	32.000	1.2598	224	—	60	32	8
CDH320R7WD32M	CDH320R10WD32M	32.000	1.2598	32.000	1.2598	224	320	60	32	8

• Tool bodies must match the corresponding seat size inserts., Inserts must be ordered separately.

C60

• Standard product has the inner coolant holes.

• For information on compatible screw wrenches, see page C61; for usage instructions, see page C62.

CDH

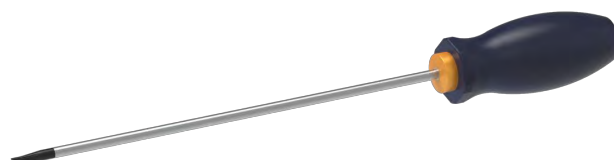


Spare Parts

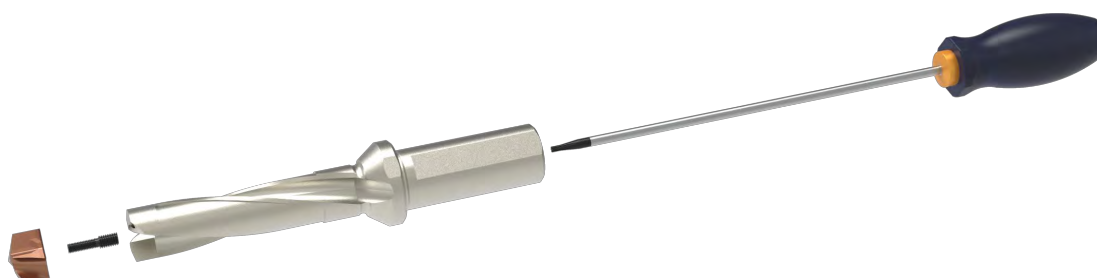
Screw

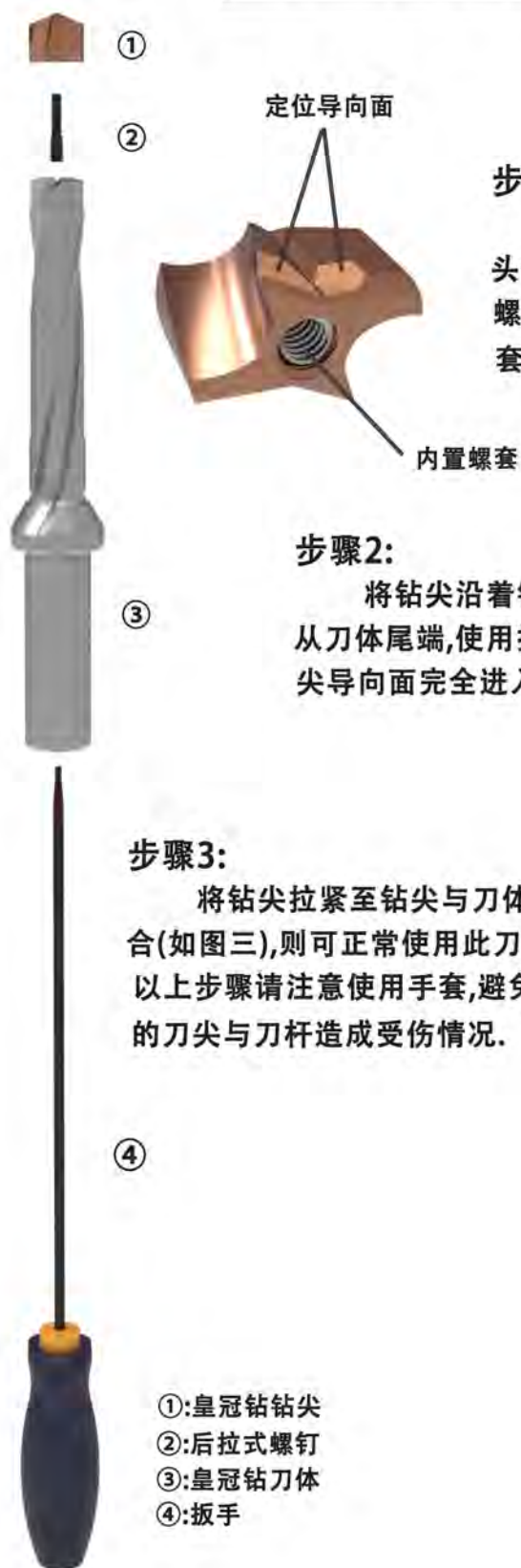


Wrench



DIA	Seat Size	Screw	Wrench (Diameter Ratio)				
			1XD	3XD	5XD	7XD	10XD
12.50 - 13.50	C	CLD02502513	CBLT5156	CBLT5156	CBLT5156	CBLT5188	CBLT5290
13.51 - 14.50	B	CLD0250316	CBLT6156	CBLT6156	CBLT6156	CBLT6188	CBLT6290
14.51 - 15.87	A	CLD0250316	CBLT6156	CBLT6156	CBLT6156	CBLT6188	CBLT6290
15.88 - 18.00	1	CLD02503516	CBL015185	CBL015185	CBL015185	CBL015225	CBL015297
18.01 - 19.99	2	CLD02503516	CBL015185	CBL015185	CBL015185	CBL015225	CBL015297
20.00 - 22.00	3	CLD030419	CBL020210	CBL020210	CBL020210	CBL020260	CBL020260
22.01 - 24.00	4	CLD030419	CBL020210	CBL020210	CBL020210	CBL020260	CBL020260
24.01 - 26.00	5	CLD040523	CBL025240	CBL025240	CBL025240	CBL025240	CBL025295
26.01 - 28.00	6	CLD040523	CBL025240	CBL025240	CBL025240	CBL025240	CBL025295
28.01 - 30.00	7	CLD050628	CBL030265	CBL030265	CBL030265	CBL030265	CBL030265
30.01 - 32.00	8	CLD050628	CBL030265	CBL030265	CBL030265	CBL030265	CBL030265





步骤1:

将后拉式螺钉②从头部锁入刀体中,直至螺钉头部与刀体齐平(如图一)后,再安装钻头,请注意,若螺钉未与刀体安装齐平,则容易造成钻头内置的螺套脱落,导致无法正确安装钻头.

步骤2:

将钻头沿着钻头定位导向面,放置在刀槽口部位置,从刀体尾端,使用扳手,将头部螺钉轻轻拧入钻头,直至钻头导向面完全进入刀体后再开始往下拧紧螺钉(如图二).

步骤3:

将钻头拉紧至钻头与刀体完全贴合(如图三),则可正常使用此刀杆.操作以上步骤请注意使用手套,避免因锋利的刀尖与刀杆造成受伤情况.



镗削系列



POWER

微调刀夹

• 调节精度：半径0.005/div



精镗单元

镗单元

• 调节精度：半径0.01/div



• 专业设计，可非标应用
• 适用于精度要求较高的孔加工

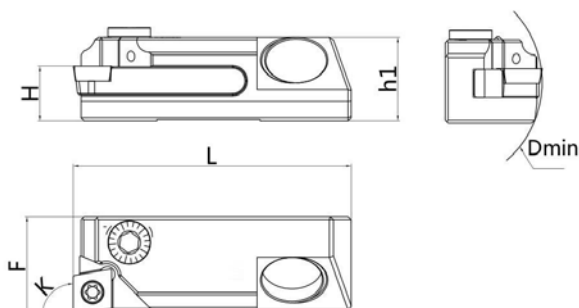


Chai Tools

CDJ



Precision Boring Series: Fine Adjustment Tool Holder



The image shows a right-hand fine adjustment tool holder.

Model	Type	Dimension (mm)							Insert	Insert Screw	Wrench
		K	Dmin	H	F	L	h1	R			
CDJ90_L16_	Right Hand	90°	28	8.5	16	45.8	13.5	0.4	CC...0602	CSC2560	CTS08W
CC06RCDJ95_L16_		95°	28	8.5	16	45.8	13.5	0.4			
CC06RCDJ90_L22_		90°	36	10.5	22	48.3	15.5	0.4	CC...09T3	CSC4090	CTS15W
CC09RCDJ95_L22_		95°	36	10.5	22	48.3	15.5	0.4			
CC09RCDJ90_L16_		90°	28	8.5	16	45.8	13.5	0.4	TP...0902	CSC2560	CTS08W
TP09RCDJ95_L16_		95°	28	8.5	16	45.8	13.5	0.4			
TP09RCDJ90_L16_		90°	28	8.5	16	45.8	13.5	0.4	TC...0902	CSC2250	CTS07W
TC09RCDJ95_L16_		95°	28	8.5	16	45.8	13.5	0.4			
TC09RCDJ90_L20_		90°	36	8.5	20	45.8	13.5	0.4	TC...1102	CSC2560	CTS08W
TC11RCDJ95_L20_		95°	36	8.5	20	45.8	13.5	0.4			
TC11RCDJ90_L20_		90°	36	9.3	20	45.8	13.5	0.4	TP...1103	CSC3060	CTS10W
TP11RCDJ95_L20_		95°	36	9.3	20	45.8	13.5	0.4			
TP11RCDJ90_L16_	Left Hand	90°	28	8.5	16	45.8	13.5	0.4	CC...0602	CSC2560	CTS08W
CC06LCDJ95_L16_		95°	28	8.5	16	45.8	13.5	0.4			
CC06LCDJ90_L22_		90°	36	10.5	22	48.3	15.5	0.4	CC...09T3	CSC4090	CTS15W
CC09LCDJ95_L22_		95°	36	10.5	22	48.3	15.5	0.4			
CC09LCDJ90_L16_		90°	28	8.5	16	45.8	13.5	0.4	TP...0902	CSC2560	CTS08W
TP09LCDJ95_L16_		95°	28	8.5	16	45.8	13.5	0.4			
TP09LCDJ90_L16_		90°	28	8.5	16	45.8	13.5	0.4	TC...0902	CSC2250	CTS07W
TC09LCDJ95_L16_		95°	28	8.5	16	45.8	13.5	0.4			
TC09LCDJ90_L20_		90°	36	8.5	20	45.8	13.5	0.4	TC...1102	CSC2560	CTS08W
TC11LCDJ95_L20_		95°	36	8.5	20	45.8	13.5	0.4			
TC11LCDJ90_L20_		90°	36	9.3	20	45.8	13.5	0.4	TP...1103	CSC3060	CTS10W
TP11LCDJ95_L20_		95°	36	9.3	20	45.8	13.5	0.4			

©The cutting insert need to be ordered separately; fine adjustment accuracy is 0.01/div; maximum radial adjustment is 1 mm in diameter, and axial adjustment is 1 mm. .

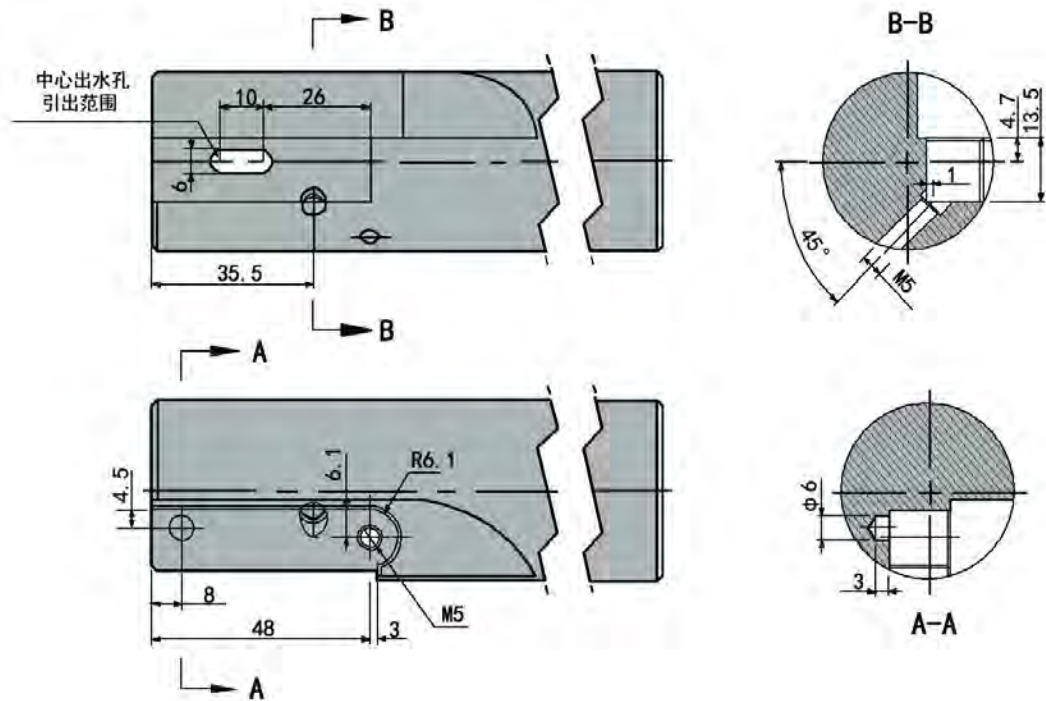
Spare Parts

Model	Locking Screw	Axial Adj. Screw	Axial Adj. Ring	Wrench	Wrench
CDJ	CLA0502008	CLY0502008	CDJ12	CBL40	CBL30

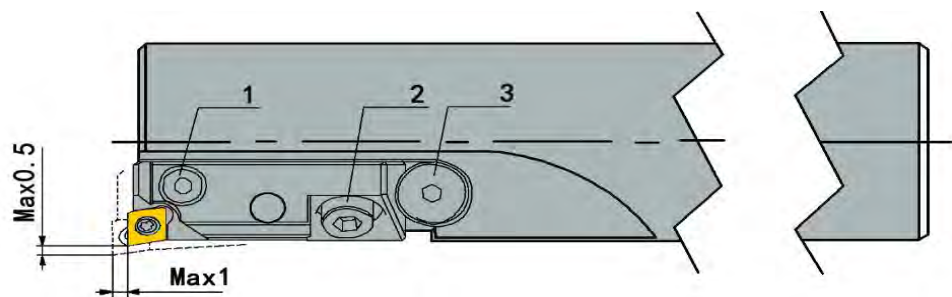
Precision Boring Series: Fine Adjustment Tool Holder

Tool Holder Mounting Dimensions

• The illustration shows the directional setup for a right-hand tool holder. If using a left-hand tool holder, please set it up in a mirrored manner.



Tool Holder Adjustment Method



Axial Adjustment Method

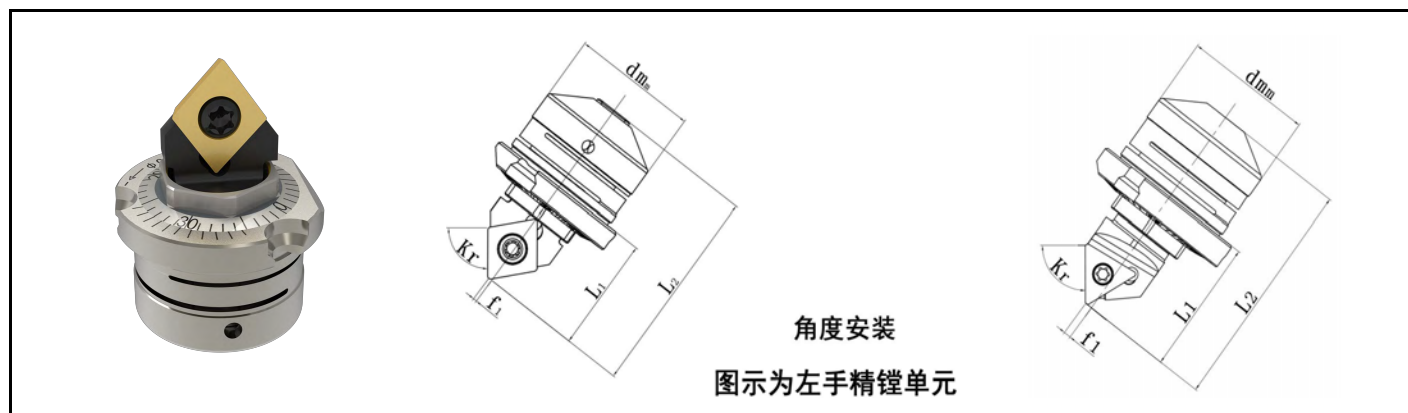
1. Slightly loosen the tool holder locking screw (2).
2. Rotate the axial adjustment screw (3) clockwise.
3. Move the tool holder forward to the required dimension.
4. Tighten the tool holder locking screw (2).

Note: If the tool holder needs to be adjusted backward, loosen the tool holder locking screw and move the tool holder to the rear. Then gradually adjust it forward to the required dimension.

Radial Diameter Adjustment Method

1. Rotate the radial adjustment screw (1) clockwise to gradually increase the machining diameter.
2. Rotate the radial adjustment screw (1) counterclockwise to gradually decrease the machining diameter.
3. Each increment of the radial fine adjustment screw results in a change of 0.01 mm in the tooling machining diameter.

Precision Boring Series: Precision Boring Unit



Model	Type	Mounting Type	Dimension (mm)							Insert		
			Kr	Dmin	L1	L2	dmm	f1	λ			
RCR-31-CC06	Right Hand	Angle Mounting	90°	25.5	14.3	25.15	16	0.45	-3°	CC...0602		
RCR-31-TC06				24.8	14.3	25.0	16	0.2	0°	TC...06T1		
RCR-32-TC09				32.5	19.1	33.7	20	0.9	0°	TC...0902		
RCR-32-TP09				32.5	19.1	33.7	20	0.9	0°	TP...0902		
RCR-33-TC11				42.0	23.0	45.3	22	1.1	0°	TC...1102		
RCR-33-TP11				42.0	23.0	45.3	22	1.1	0°	TP...1103		
RCR-34-TC16				59.4	33.3	62.3	32	1.2	0°	TC...16T3		
RCR-34-TP16				59.4	33.3	62.3	32	1.2	0°	TP...16T3		
LCR-31-CC06	Left Hand			Angle Mounting	90°	25.5	14.3	25.15	16	0.45	-3°	CC...0602
LCR-31-TC06						24.8	14.3	25.0	16	0.2	0°	TC...06T1
LCR-32-TC09						32.5	19.1	33.7	20	0.9	0°	TC...0902
LCR-32-TP09						32.5	19.1	33.7	20	0.9	0°	TP...0902
LCR-33-TC11						42.0	23.0	45.3	22	1.1	0°	TC...1102
LCR-33-TP11						42.0	23.0	45.3	22	1.1	0°	TP...1103
LCR-34-TC16						59.4	33.3	62.3	32	1.2	0°	TC...16T3
LCR-34-TP16						59.4	33.3	62.3	32	1.2	0°	TP...16T3

◎ λ : Cutting Angle

◎ The tool adjustment precision is 0.02/div for diameter and 0.01/div for radius.

◎ Inserts must be ordered separately.

◎ For conventional boring, a left-hand precision boring unit must be ordered.

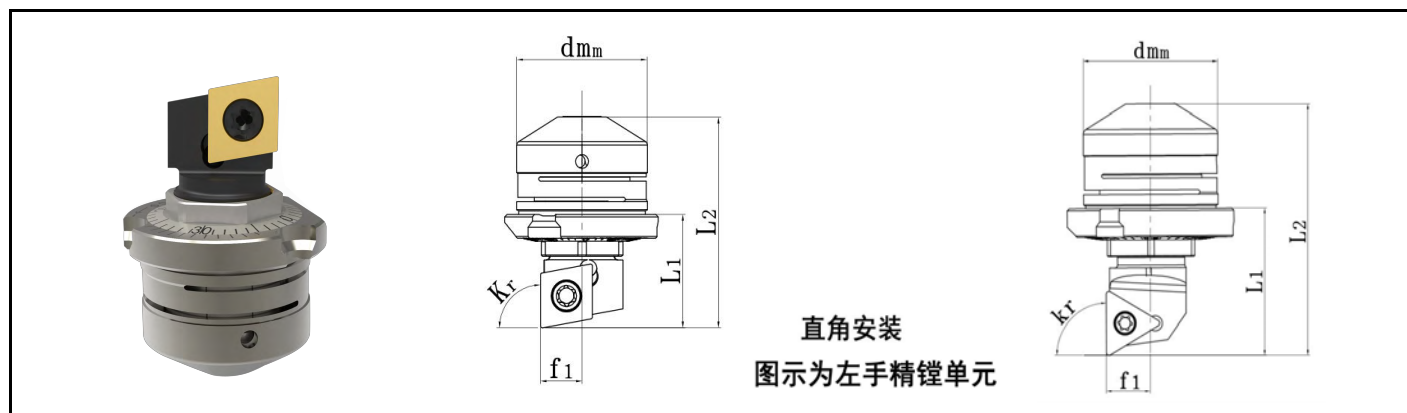
◎ f1: Used to achieve a sharp corner with $r=0$, and the screw is tightened in the tool holder.

◎ Dmin: Minimum hole diameter calculated based on the maximum cutting edge radius.

R/LCR



Precision Boring Series: Precision Boring Unit

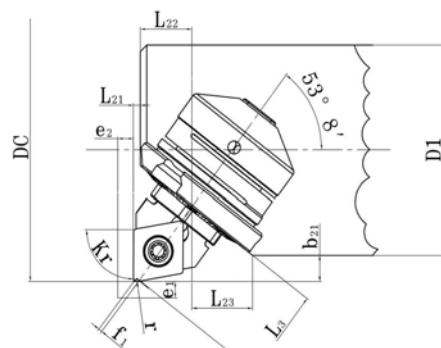


Model	Type		Dimension (mm)							Insert t		
			Kr	Dmin	L1	L2	dmm	f1	λ			
RCR-11-CC06	Right	Right Angle Mounting	90°	27.0	13.3	24.1	16	5.1	-3°	CC...0602		
RCR-12-TC09				36.5	18.3	32.9	20	6.3	0°	TC...0902		
RCR-12-TP09				36.5	18.3	32.9	20	6.3	0°	TP...0902		
RCR-13-TC11				48.5	22.1	44.3	22	7.2	0°	TC...1102		
RCR-13-TP11				48.5	22.1	44.3	22	7.2	0°	TP...1103		
RCR-14-TC16				68.4	32.0	62.7	32	10.3	0°	TC...16T3		
RCR-14-TP16				68.4	32.0	62.7	32	10.3	0°	TP...16T3		
LCR-11-CC06	Left					27.0	13.3	24.1	16	5.1	-3°	CC...0602
LCR-12-TC09						36.5	18.3	32.9	20	6.3	0°	TC...0902
LCR-12-TP09						36.5	18.3	32.9	20	6.3	0°	TP...0902
LCR-13-TC11						48.5	22.1	44.3	22	7.2	0°	TC...1102
LCR-13-TP11						48.5	22.1	44.3	22	7.2	0°	TP...1103
LCR-14-TC16						68.4	32.0	62.7	32	10.3	0°	TC...16T3
LCR-14-TP16						68.4	32.0	62.7	32	10.3	0°	TP...16T3

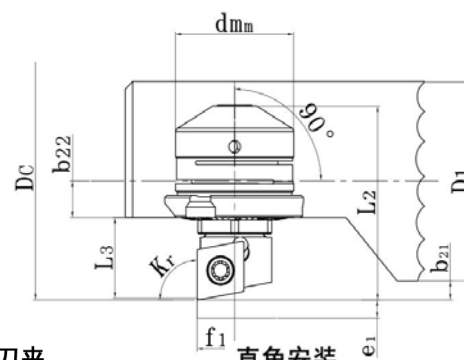
Spare Parts

Insert Model	Insert Screw	Wrench	Lock.Screw	Wrench
CC...0602	CSC2560	CTS08W	CSC3080	CTS10W
TC...06T1	CSS2005	CTS06W	CSC3080	CTS10W
TC...0902	CSC2250	CTS07W	CSC3080	CTS10W
TP...0902	CSC2560	CTS08W	CSC3080	CTS10W
TC...1102	CSC2560	CTS08W	CSC4090	CTS15W
TP...1103	CSC3080	CTS10W	CSC4090	CTS15W
TC...16T3	CSC4090	CTS15W	CSC5012	CTS20W
TP...16T3	CSC4090	CTS15W	CSC5012	CTS20W

Precision Boring Series: Precision Boring Unit



角度安装 图示为左手刀夹

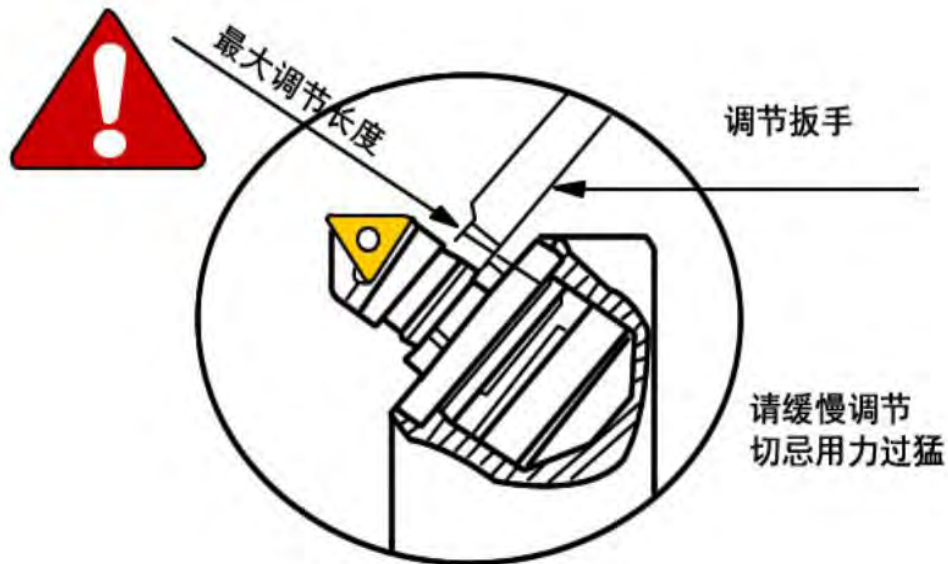


直角安装

Mounting Type	Insert	Dimension (mm)											
		r	Dc min	D1	b21 min	e1	e2	b22	L3 min	L21	L22	L23	f1
Right Angle Mounting Kr=90°	C/T...06	0.2	27.9	26.0	0.6	2.5	—	3.6	9.8	—	—	—	5.1
		0.4	27.6		0.55				9.6				
		0.8	27.0		0.5				9.1				
	T...0902	0.2	37.4	34.5	1.45	3.5	—	4.55	13.95	—	—	—	6.3
		0.4	37.1		1.3				13.6				
		0.8	36.5		1.0				12.9				
	T...11	0.2	49.4	46.5	1.45	6	—	7.75	16.75	—	—	—	7.2
		0.4	49.1		1.3				16.4				
		0.8	48.5		1.0				15.7				
	T...16T3	0.4	69.6	67.0	1.3	10	—	9.4	25.0	—	—	—	10.3
		0.8	69.0		1.0				24.3				
		1.2	68.4		0.7				23.6				
Angle Mounting Kr=90°	C...0602	0.2	26.2	22.0	1.7	2	1.5	—	11.0	0.5	6.6	9.55	0.4
		0.4	25.9		1.65				10.7				0.4
		0.8	25.3		1.6				10.1				0.45
	T...06T1	0.2	25.7	22.0	1.5	2	1.5	—	10.9	0.5	6.6	9.55	0.4
		0.4	25.4		1.45				10.6				0.4
		0.8	24.8		1.4				10.0				0.45
	T...0902	0.2	33.4	28.5	2.45	2.8	2.1	—	14.9	0.5	9.4	12.15	0.95
		0.4	33.1		2.3				14.5				1.0
		0.8	32.5		2.0				13.7				1.1
	T...11	0.2	42.9	38.0	2.45	4.8	3.6	—	17.6	0.5	11.2	14.85	1.15
		0.4	42.6		2.3				17.2				1.2
		0.8	42.0		2.0				16.4				1.3
	T...16T3	0.4	60.6	55.0	2.8	8	6	—	26.2	0.5	16.65	23.7	1.3
		0.8	60.0		2.5				25.4				1.4
		1.2	59.4		2.2				24.6				1.5

Precision Boring Series: Precision Boring Unit

Fine Adjustment Precision Boring Unit



© The fine adjustment boring head is a precision micro-adjustment module within the custom non-standard tooling system, suitable for precision machining applications in boring processes.

© Its structured design, high precision, and high reliability significantly enhance the design of modular boring tools, improving production efficiency and reducing tooling lead times.

© The non-standard tools equipped with the fine adjustment boring head module allow for convenient adjustments during precision boring, featuring simple operation and a self-locking structure that effectively minimizes damage caused by improper handling.

Features

© Radial mounting with a compact axial spacing, particularly advantageous for smaller diameter tools.

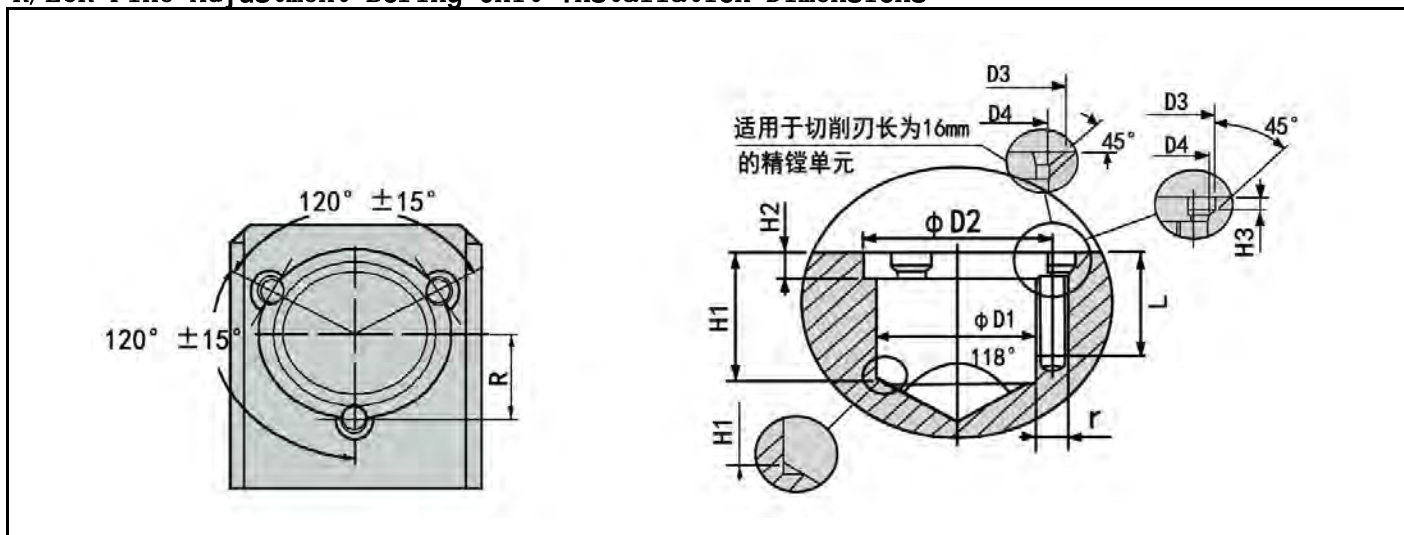
© The fine adjustment dial is located at the front of the module, allowing for convenient adjustments from an optimal angle.

© The fine adjustment unit features a self-locking design, requiring no additional actions before making adjustments, and does not need to be locked after adjustments.

© The entire fine adjustment unit is installed within a blind hole, effectively preventing the ingress of cutting fluids, dust, and other contaminants, significantly enhancing service life and dimensional stability.

Precision Boring Series: Precision Boring Unit

R/LCR Fine Adjustment Boring Unit Installation Dimensions

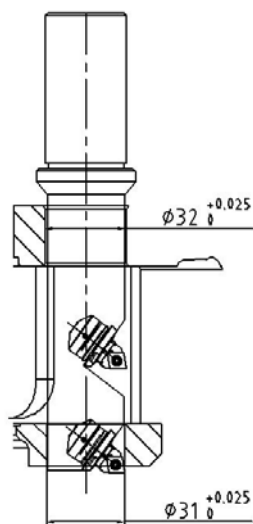


Installation Dimensions

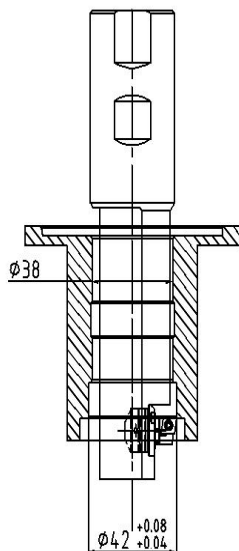
DIA	D1 (H7)	D2	D3	D4	H1	H2	H3	L	R	T
16	16	19	4.6	3.2	11.5	2.8	1.6	9	9.65 ± 0.02	M3
20	20	25	4.6	3.2	15.5	4	1.6	9	12.5 ± 0.05	M3
22	22	30	6.5	4.3	24	5	1.8	13	15.4 ± 0.05	M4
32	32	46	11.9	5.4	33	6.3	—	16	23 ± 0.05	M5

Examples of Fine Boring Unit Applications

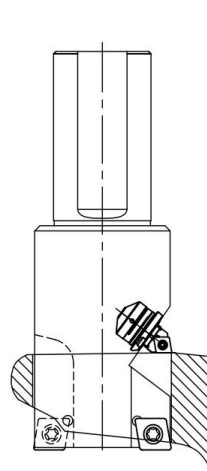
Machining High-Precision Composite Holes



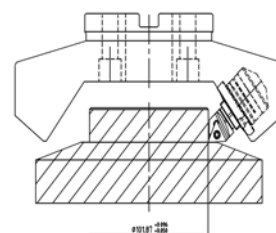
Reaming High-Precision Holes in Through Holes



Rough-Fine Integrated Boring Tool



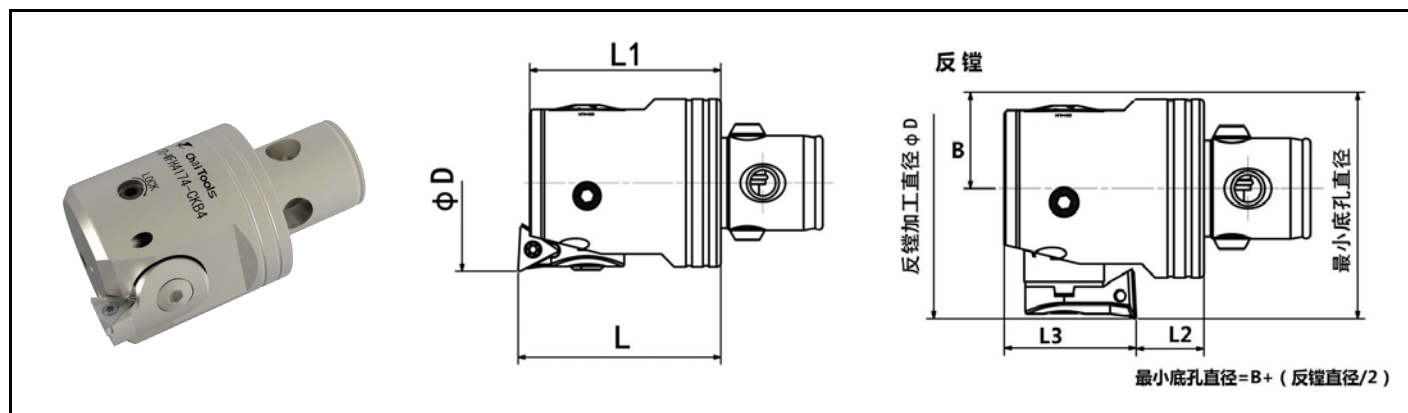
Sleeve Boring of High-Precision Outer Cylindrical Surfaces



CTD-WFH



Fine Boring Series: Fine Boring Body



Model	I/F Type	Tool Clamp Model	Boring (Straight Boring)				Back Boring				 Kg	Ins ert		
			Range øD	L	L1	D1	Mach. RangeøD	L2	L3	B				
CTD-WFH2036-CKB1	CK1	WFH1-1**	20~26	32.5	30.5	19	-	10.5	20	10	0.07	TP 0802		
		WFH1-2**	25~31				30~31							
		WFH1-3**	30~36				30~36							
CTD-WFH2547-CKB2	CK2	WFH2-1**	25~33	35.5	33	24	-	11.5	21.5	12.5	0.12		TP 0802	
		WFH2-2**	32~40				36~40							
		WFH2-3**	39~47				39~47							
CTD-WFH3260-CKB3	CK3	WFH3-1**	32~42	40	37	31	-	10	27	16	0.22			TP 0802
		WFH3-2**	41~51				46~51							
		WFH3-3**	50~60				50~60							
CTD-WFH4174-CKB4	CK4	WFH4-1**	41~54	47	43	40	-	12	31	20	0.42	TC 1102		
		WFH4-2**	50~63				53~63							
		WFH4-3**	61~74				61~74							
CTD-WFH5395-CKB5	CK5	WFH5-1**	53~70	57	52	50	62~70	15	37	25.5	0.85		TC 1102	
		WFH5-2**	65~82				65~82							
		WFH5-3**	78~95				78~95							
CTD-WFH68150-CKB6	CK6	WFH6-1**	68~100	71	67	64	80~100	23	44	32.5	1.85			TC 1102
		WFH6-2**	94~126				94~126							
		WFH6-3**	118~150				118~150							
CTD-WFH100203-CKB6	CK6	WFH6-1**	100~153	71	67	64	112~153	23	44	46.5	2.70	TC 1102		
		WFH6-2**	126~179				126~179							
		WFH6-3**	150~203				150~203							
CTD-WFH100203-CKB7	CK7	WFH6-1**	100~153	87	83	90	112~153	39	44	46.5	4.05		TC 1102	
		WFH6-2**	126~179				126~179							
		WFH6-3**	150~203				150~203							

© Inserts must be ordered separately. Standard tool heads come with internal cooling.

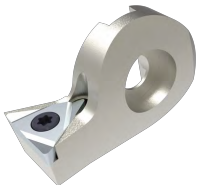
© This product includes a standard tool holder; for details on standard and optional tool holders, please see pages D09-D12.

© For details on compatible tool shanks, please see pages F54-F63.

WFH



Precision Boring Series: Precision Boring Main Tool Holder

	Kr	Model	Boring Heads	Machining Range	Insert	Insert Screw& Wrench
 	92°	WFH1-1	CTD-WFH2036-CKB1	/	TP 0802	CSS2005 / CTS06W
		WFH1-2				
		WFH1-3				
		WFH2-1	CTD-WFH2547-CKB2			
		WFH2-2				
		WFH2-3				
		WFH3-1	CTD-WFH3260-CKB3			
		WFH3-2				
		WFH3-3				
		WFH4-1	CTD-WFH4174-CKB4	/	TC 1102	CSC2560 / CTS08W
		WFH4-2				
		WFH4-3				
		WFH5-1	CTD-WFH5395-CKB5			
		WFH5-2				
		WFH5-3				
		WFH6-1	CTD-WFH68150-CKB6 CTD-WFH100203-CKB6 CTD-WFH100203-CKB7			
		WFH6-2				
		WFH6-3				

© Inserts must be ordered separately.

© The highlighted WFH-0-1 tool holder is the standard tool holder for the corresponding main body. If WFH-0-2 or WFH-0-3 tool holders are needed, please order separately. For other optional tool holders, please see pages D09-D12

© The tool holder comes with a set of corresponding screws and a wrench as spare parts.

Metallic Ceramic Inserts	
	
Model	Grade
TPGH 080202L-F	CT4100
TPGH 080204L-F	CT4100
TCGT 110204L-F	CT4100

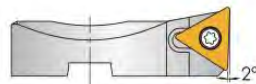
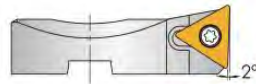


© Compatible with Tungaloy Inserts and Kyocera Inserts

WFH



Precision Boring Series: Precision Boring Main Tool Holder

	Kr	Model	Boring Heads	Machining Range	Insert	Insert Screw & Wrench
	92°	WFH1-1K2 (TC06)	CTD-WFH2036-CKB1	20~26	TC 06T1	CSS2005 / CTS06W
		WFH1-2K2 (TC06)		25~31		
		WFH1-3K2 (TC06)		30~36		
		WFH2-1K2 (TC06)	CTD-WFH2547-CKB2	25~33		
		WFH2-2K2 (TC06)		32~40		
		WFH2-3K2 (TC06)		39~47		
		WFH3-1K2 (TC06)	CTD-WFH3260-CKB3	32~42	TP 0902	CSC2560 / CTS08W
		WFH3-2K2 (TC06)		41~51		
		WFH3-3K2 (TC06)		50~60		
		WFH4-1K2 (TP09)	CTD-WFH4174-CKB4	41~54		
		WFH4-2K2 (TP09)		50~63		
		WFH4-3K2 (TP09)		61~74		
		WFH5-1K2 (TP09)	CTD-WFH5395-CKB5	53~70		
		WFH5-2K2 (TP09)		65~82		
		WFH5-3K2 (TP09)		78~95		
		WFH6-1K2 (TP09)	CTD-WFH68150-CKB6 CTD-WFH100203-CKB6 CTD-WFH100203-CKB7	68~100/100-153		
		WFH6-2K2 (TP09)		94~126/126-179		
		WFH6-3K2 (TP09)		118~150/150-203		
	92°	WFH4-1K2 (TC1103)	CTD-WFH4174-CKB4	41~54	TC 1103	CSC2560 / CTS08W
		WFH4-2K2 (TC1103)		50~63		
		WFH4-3K2 (TC1103)		61~74		
		WFH5-1K2 (TC1103)	CTD-WFH5395-CKB5	53~70		
		WFH5-2K2 (TC1103)		65~82		
		WFH5-3K2 (TC1103)		78~95		
		WFH6-1K2 (TC1103)	CTD-WFH68150-CKB6 CTD-WFH100203-CKB6 CTD-WFH100203-CKB7	68~100/100-153		
		WFH6-2K2 (TC1103)		94~126/126-179		
		WFH6-3K2 (TC1103)		118~150/150-203		
	92°	WFH4-1K2 (TP1103)	CTD-WFH4174-CKB4	41~54	TP 1103	CSC3080 / CTS10W
		WFH4-2K2 (TP1103)		50~63		
		WFH4-3K2 (TP1103)		61~74		
		WFH5-1K2 (TP1103)	CTD-WFH5395-CKB5	53~70		
		WFH5-2K2 (TP1103)		65~82		
		WFH5-3K2 (TP1103)		78~95		
		WFH6-1K2 (TP1103)	CTD-WFH68150-CKB6 CTD-WFH100203-CKB6 CTD-WFH100203-CKB7	68~100/100-153		
		WFH6-2K2 (TP1103)		94~126/126-179		
		WFH6-3K2 (TP1103)		118~150/150-203		

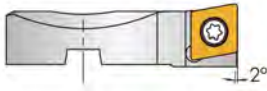
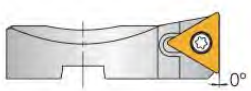
© Inserts must be ordered separately.

© This table lists are optional tool holders; please order separately.

WFH



Precision Boring Series: Precision Boring Main Tool Holder

	Kr	Model	Boring Heads	Machining Range	Insert	Insert Screw & Wrench
	92°	WFH2-1K2 (CC06)	CTD-WFH2547-CKB2	25~33	CC 0602	CSS2005 / CTS06W
		WFH2-2K2 (CC06)		32~40		
		WFH2-3K2 (CC06)		39~47		
		WFH3-1K2 (CC06)	CTD-WFH3260-CKB3	32~42		
		WFH3-2K2 (CC06)		41~51		
		WFH3-3K2 (CC06)		50~60		
		WFH4-1K2 (CC06)	CTD-WFH4174-CKB4	41~54		
		WFH4-2K2 (CC06)		50~63		
		WFH4-3K2 (CC06)		61~74		
		WFH5-1K2 (CC06)	CTD-WFH5395-CKB5	53~70		
		WFH5-2K2 (CC06)		65~82		
		WFH5-3K2 (CC06)		78~95		
		WFH6-1K2 (CC09)	CTD-WFH68150-CKB6 CTD-WFH100203-CKB6 CTD-WFH100203-CKB7	68~100/100-153	CC 09T3	CSC4090 / CTS15W
		WFH6-2K2 (CC09)		94~126/126-179		
		WFH6-3K2 (CC09)		118~150/150-203		
	90°	WFH1-1K0 (TP08)	CTD-WFH2036-CKB1	20~26	TP 0802	CSS2005 / CTS06W
		WFH2-2K0 (TP08)	CTD-WFH2547-CKB2	25~33		
		WFH3-1K0 (TP08)	CTD-WFH3260-CKB3	32~42		
		WFH3-2K0 (TP08)		41~51		
		WFH3-3K0 (TP08)		50~60		
		WFH4-1K0 (TC1102)	CTD-WFH4174-CKB4	41~54	TC 1102	CSC2560 / CTS08W
		WFH4-2K0 (TC1102)		50~63		
		WFH4-3K0 (TC1102)		61~74		
		WFH5-1K0 (TC1102)	CTD-WFH5395-CKB5	53~70		
		WFH5-2K0 (TC1102)		65~82		
		WFH5-3K0 (TC1102)		78~95		
		WFH6-1K0 (TC1102)	CTD-WFH68150-CKB6 CTD-WFH100203-CKB6 CTD-WFH100203-CKB7	68~100/100-153		
		WFH6-2K0 (TC1102)		94~126/126-179		
		WFH6-3K0 (TC1102)		118~150/150-203		

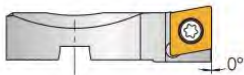
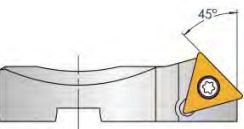
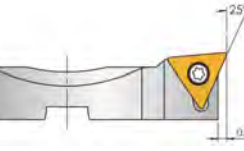
© Inserts must be ordered separately.

© This table lists are optional tool holders; please order separately.

WFH



Precision Boring Series: Precision Boring Main Tool Holder

	Kr	Model	Boring Heads	Machining Range	Insert	Insert Screw & Wrench
	90°	WFH4-1K0 (CC06)	CTD-WFH4174-CKB4	41~54	CC 0602	CSC2560 / CTS08W
		WFH4-2K0 (CC06)		50~63		
		WFH4-3K0 (CC06)		61~74		
		WFH5-1K0 (CC06)	CTD-WFH5395-CKB5	53~70		
		WFH5-2K0 (CC06)		65~82		
		WFH5-3K0 (CC06)		78~95		
		WFH6-1K0 (CC09)	CTD-WFH68150-CKB6 CTD-WFH100203-CKB6 CTD-WFH100203-CKB7	68~100/100-153	CC 09T3	CSC4090 / CTS15W
		WFH6-2K0 (CC09)		94~126/126-179		
	30°	WFH3-1K30 (DC07)	CTD-WFH3260-CKB3	37~42	DC 0702	CSC2560 / CTS08W
		WFH3-2K30 (DC07)		41~51		
		WFH3-3K30 (DC07)		50~60		
		WFH4-1K30 (DC07)	CTD-WFH4174-CKB4	44~54		
		WFH4-2K30 (DC07)		50~63		
		WFH4-3K30 (DC07)		61~74		
		WFH5-1K30 (DC07)	CTD-WFH5395-CKB5	53~70		
		WFH5-2K30 (DC07)		65~82		
		WFH5-3K30 (DC07)		78~95		
		WFH6-1K30 (DC07)	CTD-WFH68150-CKB6 CTD-WFH100203-CKB6 CTD-WFH100203-CKB7	68~100/100-153		
		WFH6-2K30 (DC07)		94~126/126-179		
		WFH6-3K30 (DC07)		118~150/150-203		
	45°	WFH4-1K30 (TC1102)	CTD-WFH4174-CKB4	41~54	TC 1102	CSC2560 / CTS08W
		WFH5-1K30 (TC1102)	CTD-WFH5395-CKB5	53~70		
		WFH6-1K30 (TC1102)	CTD-WFH68150-CKB6	68~100		
			CTD-WFH100203-CKB6	100-153		
	25°	WFH3-1K25 (TP08)	CTD-WFH3260-CKB3	32~42	TP 0802	CSS2005 / CTS06W
		WFH4-1K25 (TP08)	CTD-WFH4174-CKB4	41~54		
		WFH5-1K25 (TP08)	CTD-WFH5395-CKB5	53~70		
		WFH6-1K25 (TC11)	CTD-WFH68150-CKB6	68~100	TC 1102	CSC2560 / CTS08W
			CTD-WFH100203-CKB6	100-153		

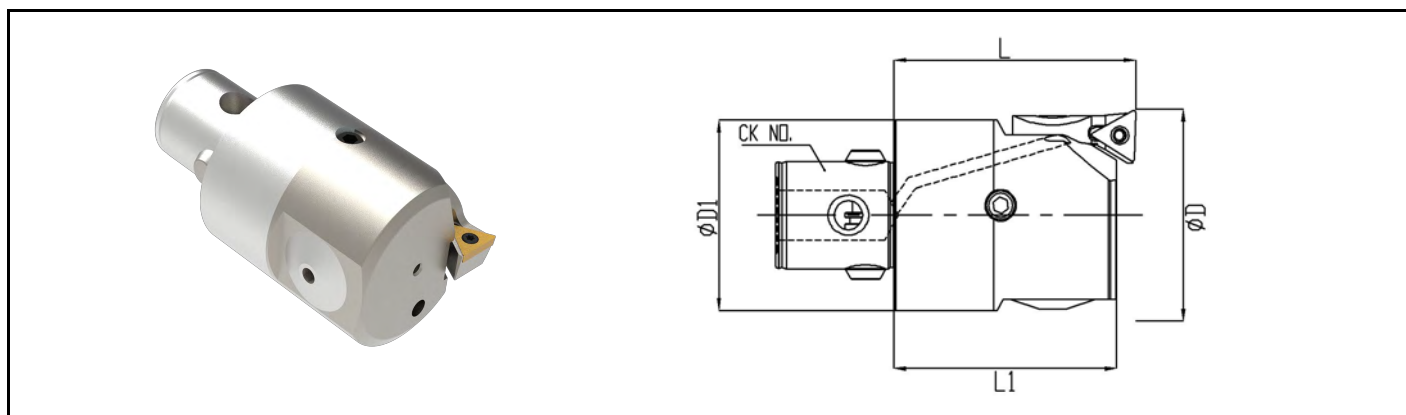
© Inserts must be ordered separately.

© This table lists are optional tool holders; please order separately.

CTD-WFB



Precision Boring Series: Self-Balancing Precision Boring Body



Model	I/F Type	Model	Boring (Straight Boring))				Kg	Insert
			Range ϕD	L	L1	D1		
CTD-WFB3242-CKB3	CK3	WFH3-1	32~42	45	37	31	0.25	TP 0802
CTD-WFB4154-CKB4	CK4	WFH4-1	41~54	51	43	40	0.45	TC 1102
CTD-WFB5370-CKB5	CK5	WFH5-1	53~70	65	52	50	0.86	
CTD-WFB6888-CKB6	CK6	WFH6-1	68~88	79	67	64	1.85	
CTD-WFB85105-CKB6		WFH6-2	85~105				1.96	

© Inserts must be ordered separately.

© Standard tool head with internal cooling

© The machining range refers to the blade tip radius of R0.2 and the value of the TC11 tip radius R0.4

© Built-in self-balancing compensation mechanism, suitable for high-speed machining fields to achieve stable processing

© Minimum adjustment scale of $\phi 0.01\text{mm}$ for precision boring heads

© This product comes with a standard tool holder

© For details on compatible tool holders, please refer to F54-F63

Details of the Standard Tool Holder

	Kr	Model	Insert	Insert Screw	Wrench
	92°	WFH3-1	TP 0802	CSS2005	CTS06W
		WFH4-1	TC 1102	CSC2560	CTS08W
		WFH5-1			
		WFH6-1			
		WFH6-2			

© It is not recommended to use other types of tool holders, as it may affect the flatness and leveling performance.

使用步骤

准备工作：须先确认刀片安装是否匹配，刀片座紧固螺丝是否锁紧

步骤一：松开微调锁紧螺丝（逆时针旋转）图

步骤二：旋转微调刻度盘（图）顺时针旋转使加工直径增大，逆时针旋转加工直径缩小（刻度盘每格为直径0.01mm）

步骤三：调整尺寸加工时，请按照同方向旋转结束，以确保微调精度

步骤四：以适当力度拧紧微调锁紧螺钉（顺时针旋转）图完成调整

操作示意图



产品结构

- ① 镗头柄部
- ② 镗头本体
- ③ 微调刻度盘
- ④ 微调锁紧螺钉
- ⑤ 注油孔
- ⑥ 刀片座锁紧螺钉
- ⑦ 刀片座



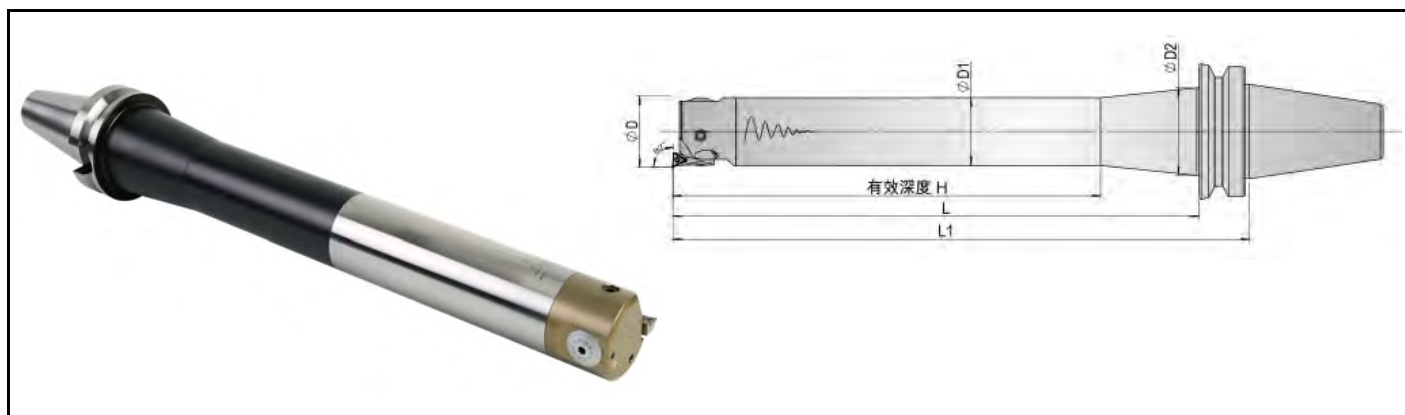
使用者注意事项

1. 请在调整范围内加工使用。
2. 调整微调刻度盘前，必须松开微调锁紧螺钉，否则会对内部微调结构造成损坏。
3. 本产品是由调整微调刻度盘带动精密螺杆旋转，来实现刀片座移动公。
在阻力过大或无法转动时，请立即停止调整，并确认以下事项：
A. 微调锁紧螺钉是否松开；
B. 是否超出调整范围。
4. 试用反镗功能时，主轴必须反转。
5. 用户须注入润滑脂（图），润滑脂的注入量以从刻度盘周围渗出为止，润滑脂的作用不但起到润滑的作用，还可以清除渗入的冷却液和杂质；为了防止长时间不使用而使润滑脂硬化，请定期转动刻度盘。
6. 请客户不要自行拆开镗头。

BBT50-WFH



Precision Boring Series: Damped Vibration-Resistant Precision Boring Head



Model	Tool Clamper Model	Machining Range ϕD	Tool Holder Type	D1	D2	Effective DepthH	L	L1	 Kg	Insert
BBT50-WFH41-71KH280	WFH4-1**	41~54	BBT50	40	55	280	320	358	7.4	TC11
	WFH4-2**	50~63								
	WFH4-3**	61~71								
BBT50-WFH53-95KH350	WFH5-1**	53~70		50	65	350	400	438	11	
	WFH5-2**	65~82								
	WFH5-3**	78~95								
BBT50-WFH68-150KH450	WFH6-1**	68~100		64	80	450	512	550	18.9	
	WFH6-2**	94~126								
	WFH6-3**	118~150								
BBT50-WFH100-203KH525	WFH6-1**	100~153		70	85	525	525	563	23.5	
	WFH6-2**	126~179								
	WFH6-3**	150~203								

© Inserts must be ordered separately.

©The product will be shipped as a complete set, including the standard tool clamper, as shown in the diagram.

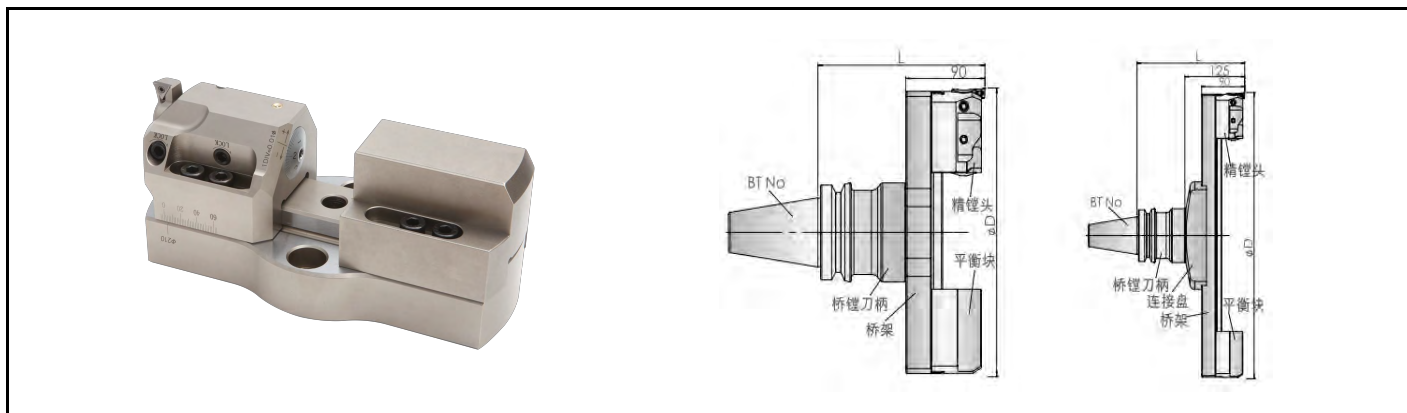
Standard Tool Clamper Details	Kr	Standard Tool Clamper Model	Insert	Insert Screw	Wrench
	92°	WFH4-1	TC 1102	CSC2560	CTS08W
		WFH4-2			
		WFH4-3			
		WFH5-1			
		WFH5-2			
		WFH5-3			
		WFH6-1			
		WFH6-2			
		WFH6-3			

© If you need to change the type of standard tool clamper, please consult our company; otherwise, it may affect the machining's vibration resistance performance.

CLF



Precision Boring Series: Steel Bridge Precision Boring Tool (Large Diameter)



Product Combination Model	Machining Range Φ D (mm)	Set / Wei ght	 连接盘		 钢制桥架		 精镗微调滑块		 精镗平衡块		Tool Clamper
			Model	W. kg	Model	W. kg	Model	W. kg	Model	W. kg	
CLF 150-210	150-210	6.2	/	/	CL 150-210	2.5	LP 150	1.6 一个	LM150	1.05	WFH6-**
CLF 210-290	210-290	7.5			CL 210-290	3.7			LM200	1.6 一个	
CLF 290-370	290-370	8.5			CL 290-370	5.05					
CLF 370-450	370-450	10.2			CL 370-450	6.8					
CLF 450-530	450-530	11.6			CL 450-530	8.4					
CLF 530-610	530-610	17.5	CL40 -200	4.7	CL 530-610	9.5					
CLF 610-690	610-690	19.0			CL 610-690	11.0					
CLF 690-770	690-770	20.8			CL 690-770	12.7					
CLF 770-850	770-850	23.0			CL 770-850	15.0					

© Inserts must be ordered separately. This tool does not have internal cooling.

© The combined model shipment includes one corresponding connection disc, one bridge, one precision boring fine-tuning slider (which includes one standard tool clamper), and one precision boring balancing block.

© The bridge, slider, and balancing block are all made of steel.

© For details on compatible tool holders, please refer to F64.

Standard Tool Clamper Details

	Kr	Tool Clamper Model	Insert	Insert Screw	Wrench
	92°	WFH6-1	TC 1102	CSC2560	CTS08W

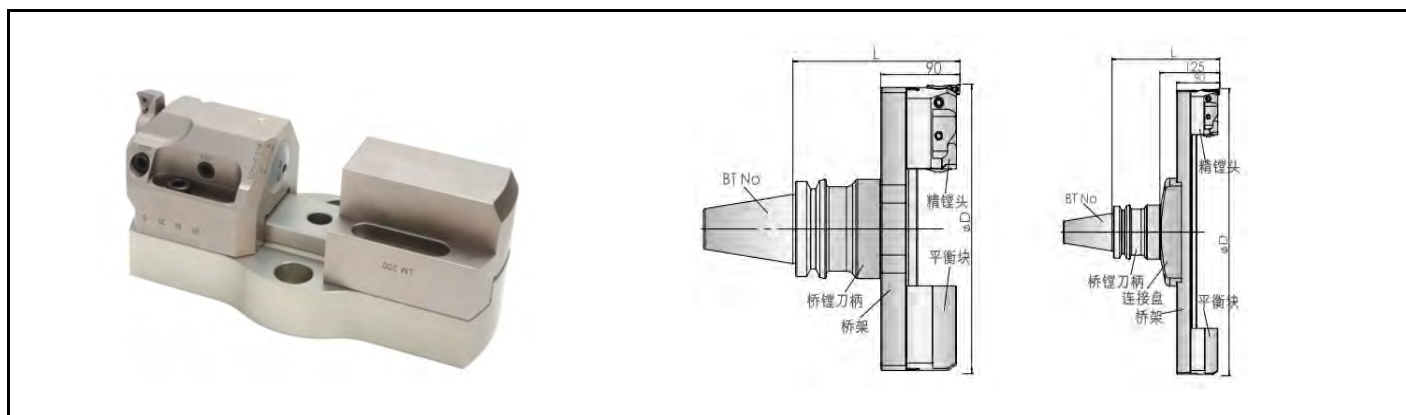
© Inserts must be ordered separately.

© For information on other compatible tool clampers, please refer to pages D09-D12.

CLF-AL



Precision Boring Series: Lightweight Aluminum Bridge Precision Boring Tool (Large Diameter)



Product Combination Model	Machining Range φ D (mm)	Set / Weight	 铝制桥架			 精镗微调滑块		 精镗平衡块		Tool Clamper	
			Model	I / F	Weight	Model	Weight	Model	Weight		
CLF 150-210 AL	150-210	4.6	CL 150-210 AL	CT40	0.9	LP 150	1.6	LM150	1.05	WFH6-**	
CLF 210-290 AL	210-290	5.1	CL 210-290 AL		1.3			LM200	1.6		
CLF 290-370 AL	290-370	5.5	CL 290-370 AL		2.0						
CLF 370-450 AL	370-450	5.9	CL 370-450 AL		2.5						
CLF 450-530 AL	450-530	6.2	CL 450-530 AL		3.0						

◎ Inserts must be ordered separately. This tool does not have internal cooling.

◎ The direction of the tool tip and the direction of rotation are in phase.

◎ The combined model shipment includes the corresponding bridge, one precision boring fine-tuning slider (which contains one standard tool clamper), and one precision boring balancing block.

◎ The bridge is made of aluminum, while the slider and balancing block are made of steel.

◎ For details on compatible tool holders, please refer to F64.

Standard Tool Clamper Details

	Kr	Tool Clamper Model	Insert	Insert Screw	Wrench
	92°	WFH6-1	TC 1102	CSC2560	CTS08W

◎ Inserts must be ordered separately.

◎ For information on other compatible tool clampers, please refer to pages D09-D12.

LF150



Extended Functions of the LF150 Precision Boring Head

- © Expand the machining range of the boring head by exchanging the blade holder.
- © Reverse the blade holder for back-boring operations, improving processing efficiency and accuracy.

Machining Range of the Exchangeable Blade Holder

Insert Holder Model	Machining Range and Corresponding Bridge Frame		Machining Range and Corresponding Bridge Frame		Machining Range and Corresponding Bridge Frame	
	ϕD (mm)	Bridge Frame Model	ϕD (mm)	Bridge Frame Model	ϕD (mm)	Bridge Frame Model
WFH6-1**	150-210	CL 150-210	370-450	CL 370-450	610-690	CL 610-690
WFH6-2**	176-236		396-476		636-716	
WFH6-3**	200-260		420-500		660-740	
WFH6-1**	210-290	CL 210-290	450-530	CL 450-530	610-770	CL 690-770
WFH6-2**	236-315		476-556		716-746	
WFH6-3**	260-340		500-580		740-820	
WFH6-1**	290-370	CL 290-370	530-610	CL 530-610	770-850	CL 770-850
WFH6-2**	316-396		556-636		796-876	
WFH6-3**	340-420		580-660		820-900	

CNP-AL



Precision Boring Series: Internal Cooling Large Diameter Precision Boring Tool
(Complete Series of Aluminum-Based Bridge Frames)



Product Combination Model	Machining Range ϕD (mm)	Set / Weight	I/F D1	Height H	铝制桥架 Model I W.kg		精镗微调滑块 Model I W.kg		精镗平衡块 Model I W.kg		Standard Tool Holder
					Model I	W.kg	Model I	W.kg	Model I	W.kg	
CNP 200-280AL	200-280	6.3	CT40	115	NL 200-280AL	2.8	LNP 200	1.75 1个	LNM 200	1.75 1个	WFH6-1
CNP 280-360AL	280-360	7.55	FMB60	115	NL 280-360AL	4.1					
CNP 360-440AL	360-440	9.7		125	NL 360-440AL	6.2					
CNP 440-520AL	440-520	11.2		125	NL 440-520AL	7.7					
CNP 520-600AL	520-600	13.2		135	NL 520-600AL	9.7					
CNP 600-680AL	600-680	14.7		135	NL 600-680AL	11.2					
CNP 680-760AL	680-760	17.5		145	NL 680-760AL	14.1					
CNP 760-840AL	760-840	18.8		145	NL 760-840AL	15.4					

© Standard product has the inner coolant holes.

© Inserts must be ordered separately

© The combination model shipment includes the corresponding bridge frame, one precision boring fine-tuning slider (which includes one standard tool holder), and one precision boring balancing block.

© The bridge frame is made of aluminum, while the slider and balancing block are made of steel.

© For CT40 interface compatible tool holder information, please see page F64; for FMB60 interface compatible tool holder information, please see pages F12-F17.

Standard Tool Clamper Details

	Kr	Tool Holder Model	Insert	Insert Screw	Wrench
	92°	WFH6-1	TC 1102	CSC2560	CTS08W

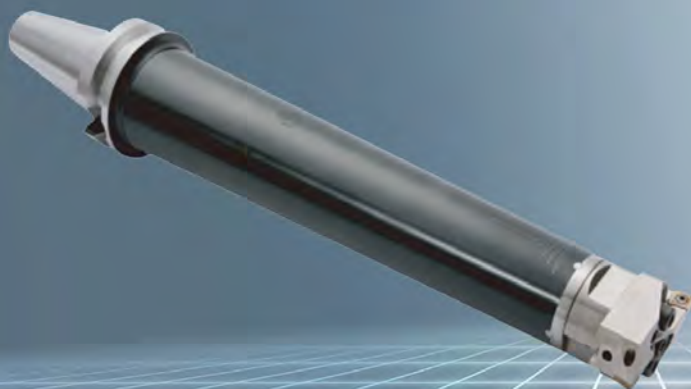
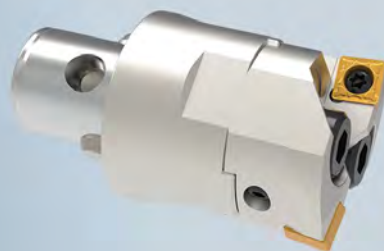
© Inserts must be ordered separately

© For other compatible tool holders, please see pages D09-D12 for detailed information.

POWER

粗镗系列

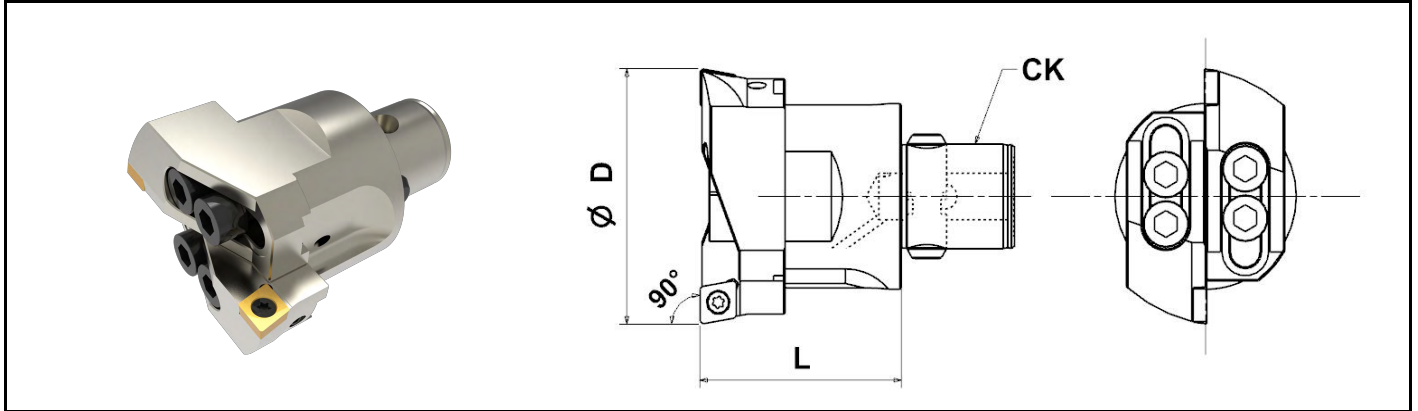
- 粗镗头/反镗粗镗头
- 阻尼防震粗镗头
- 桥架式粗镗刀 (钢制/铝制)



Chai Tools

CTD-WRH

Rough Boring Series: Rough Boring Head



Product Model	Range ϕD (mm)	Tool Body Model	Cutting Insert Holder Model	I/F Type	L	 Kg	Insert
CTD-WRH2026-CKB1	20~26	CDB-WRH20-26-CK1	WRH-2026-CC06	CK1	32.5	0.1	CC...06
CTD-WRH2533-CKB2	25~33	CDB-WRH25-33-CK2	WRH-2533-CC06	CK2	35.5	0.2	
CTD-WRH3242-CKB3	32~42	CDB-WRH32-42-CK3	WRH-3242-CC09	CK3	40	0.3	CC...09
CTD-WRH4154-CKB4	41~54	CDB-WRH41-54-CK4	WRH-4154-CC09	CK4	47	0.5	
CTD-WRH5370-CKB5	53~70	CDB-WRH53-70-CK5	WRH-5370-CC12	CK5	57	0.8	CC...12
CTD-WRH6890-CKB6	68~90	CDB-WRH68-90-CK6	WRH-6890-CC12	CK6	71	1.6	
CTD-WRH88110-CKB6	88~110	CDB-WRH88-110-CK6	WRH-88110-CC12			1.8	
CTD-WRH98126-CKB6	98~126	CDB-WRH98-126-CK6	WRH-98126-CC12			2.8	
CTD-WRH125153-CKB6	125~153	CDB-WRH125-153-CK6	WRH-125153-CC12			3.0	
CTD-WRH98126-CKB7	98~126	CDB-WRH98-126-CK7	WRH-98126-CC12	CK7	87	3.8	
CTD-WRH125153-CKB7	125~153	CDB-WRH125-153-CK7	WRH-125153-CC12			4.1	
CTD-WRH148176-CKB6	148~176	CDB-WRH148-176-CK6	WRH-148176-CC12	CK6	71	3.6	
CTD-WRH175203-CKB6	175~203	CDB-WRH175-203-CK6	WRH-175203-CC12			3.8	
CTD-WRH148176-CKB7	148~176	CDB-WRH148-176-CK7	WRH-148176-CC12	CK7	117	6.4	
CTD-WRH175203-CKB7	175~203	CDB-WRH175-203-CK7	WRH-175203-CC12			6.6	

©Standard tool heads come with internal cooling

©The combination model shipment includes one corresponding tool body and a set of tool insert holders (two per set).

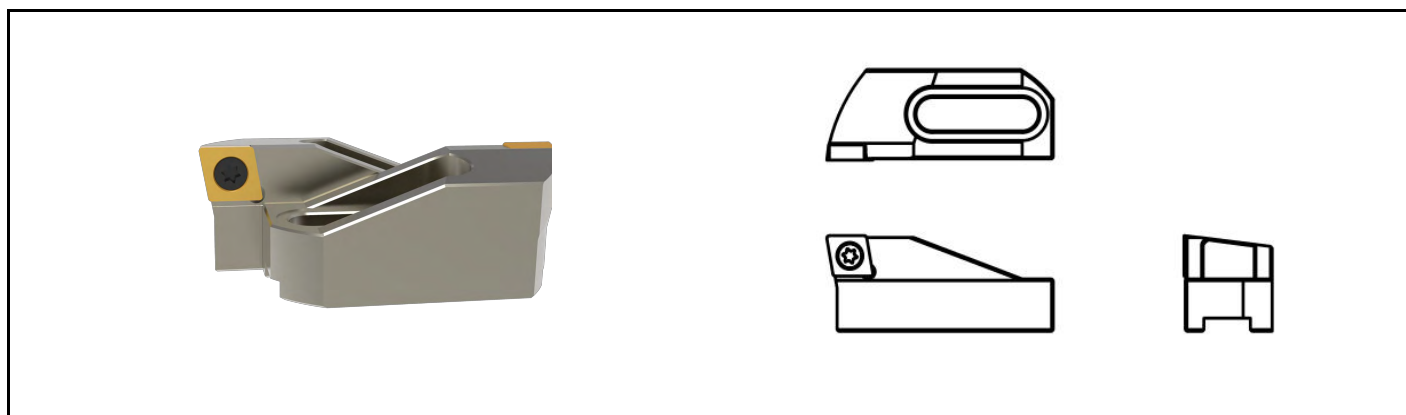
©Inserts must be ordered separately.

©For details on compatible tool holders, please see pages F54-F63.

WRH



Rough Boring Series: Rough Boring Tool Holder



Insert Holder Model	Range ϕD (mm)	Kr	Insert	Screw	Wrench
WRH-2026-CC06	20~26	90°	CC 0602	CSG2565-P	CTS08W-P
WRH-2533-CC06	25~33				
WRH-3242-CC09	32~42		CC 09T3	CSG4011-P	CTS15W-P
WRH-4154-CC09	41~54				
WRH-5370-CC12	53~70		CC 1204	CSG5012-P	CTS20W-P
WRH-6890-CC12	68~90				
WRH-88110-CC12	88~110				
WRH-98126-CC12	98~126				
WRH-125153-CC12	125~153				
WRH-148176-CC12	148~176				
WRH-175203-CC12	175~203				

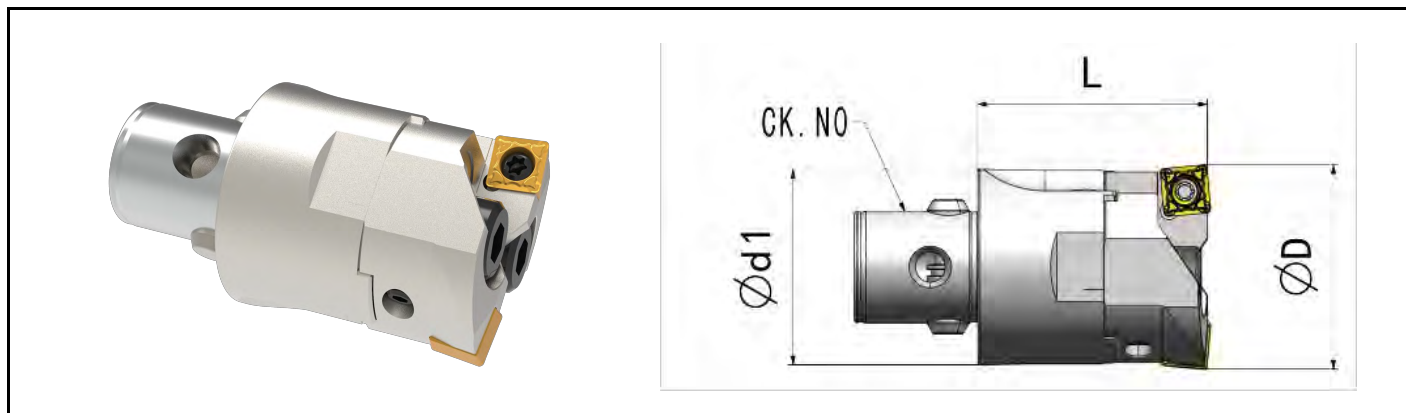
© Inserts must be ordered separately.



CTD-WRH-SC



Rough Boring Series: Through Hole Type Rough Boring Head



Combination Order Model	Range ϕD (mm)	I/F Type	Tool Body Model	Insert Holder Model	d1	L	Kg	Insert
CTD-WRH2026-CKB1-SC	20~26	CK1	CDB-WRH20-26-CK1	WRH-2026-SC06	18.7	32.5	0.06	SC...06
CTD-WRH2533-CKB2-SC	25~33	CK2	CDB-WRH25-33-CK2	WRH-2533-SC06	23.5	35.5	0.11	
CTD-WRH3242-CKB3-SC	32~42	CK3	CDB-WRH32-42-CK3	WRH-3242-SC09	30.5	40	0.19	
CTD-WRH4154-CKB4-SC	41~54	CK4	CDB-WRH41-54-CK4	WRH-4154-SC09	38.5	47	0.38	SC...09
CTD-WRH5370-CKB5-SC	53~70	CK5	CDB-WRH53-70-CK5	WRH-5370-SC12	49.5	57	0.75	
CTD-WRH6890-CKB6-SC	68~90	CK6	CDB-WRH68-110-CK6	WRH-6890-SC12	64	71	1.60	
CTD-WRH88110-CKB6-SC	88~110			WRH-88110-SC12			1.73	SC...12
CTD-WRH98126-CKB6-SC	98~126	CK6	CDB-WRH98-153-CK6	WRH-98126-SC12	93	71	2.32	
CTD-WRH125153-CKB6-SC	125~153			WRH-125153-SC12			2.58	
CTD-WRH98126-CKB7-SC	98~126	CK7	CDB-WRH98-153-CK7	WRH-98126-SC12	93	87	3.85	
CTD-WRH125153-CKB7-SC	125~153			WRH-125153-SC12			4.11	
CTD-WRH148176-CKB6-SC	148~176	CK6	CDB-WRH148-203-CK6	WRH-98126-SC12	138	71	2.90	
CTD-WRH175203-CKB6-SC	175~203			WRH-125153-SC12			3.15	

©Inserts must be ordered separately.

©Standard Tool Holder with Internal Cooling

©The combined model shipment includes 1 corresponding tool body and a set of insert holders (2 per set).

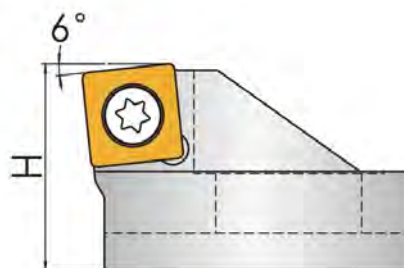
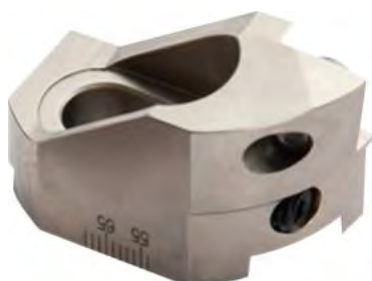
©For details on the insert holders, see page D24.

©For details on the compatible tool holders, please see pages F54-F63.

WRH-SC



Rough Boring Series: Insert Holders



Insert Holder Model	Range ϕD (mm)	H	Compatible Tool Body Model	Tool Holder Screws & Wrench	Insert Model	Insert Screws & Wrench
WRH-2026-SC06	20~26	13.6	CDB-WRH2026-CK1	CLA0401607/CBL30	SC**06	CSG2565-P CTS08W-P
WRH-2533-SC06	25~33	14.6	CDB-WRH2533-CK2	CLA0502008/CBL40		
WRH-3242-SC09	32~42	20.5	CDB-WRH3242-CK3	CLA0602010/CBL50	SC**09	CSG4011-P CTS15W-P
WRH-4154-SC09	41~54	22.5	CDB-WRH4154-CK4	CLA08025125/CBL60		
WRH-5370-SC12	53~70	27.7	CDB-WRH5370-CK5	CLA1003015/CBL80	SC**12	CSG5012-P CTS20W-P
WRH-6890-SC12	68~90	30.3	CDB-WRH68110-CK6	CLA1003515/CBL80		
WRH-88110-SC12	88~110					
WRH-98126-SC12	98~126	30.3	CDB-WRH98-153-CK6 CDB-WRH98-153-CK7 CDB-WRH148-203-CK6	CLA12040175/CBL100		
WRH-125153-SC12	125~153					

© Inserts must be ordered separately.

© Insert holder models include insert screws and wrench.

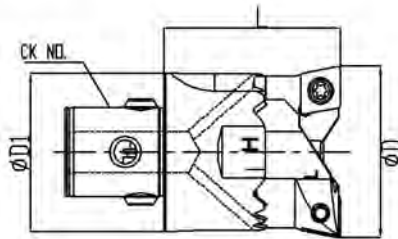
© Tool body models include tool holder installation screws, washers, and wrench.

© This insert holder model is for a single insert holder, as shown in the diagram above.

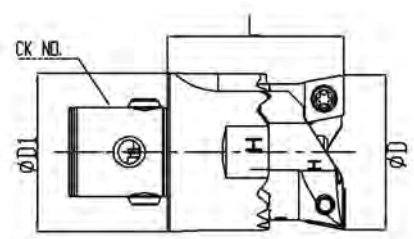
CTD-WRH-CC-T



Rough Boring Series: Stepped Rough Boring Head



平衡切削: HL/LH



段差切削: HH/LL

Combination Order Model	Range ϕD (mm)	I/F Type	Tool Body Model	Insert Holder Model	D1	L	T	Kg	Ins ert
CTD-WRH2026-CKB1-CC-T	20~26	CK1	CDB-WRH20-26-CK1-T	WRH-2026-CC06-T	18.7	32.5	0.2	0.08	CC06
CTD-WRH2533-CKB2-CC-T	25~33	CK2	CDB-WRH25-33-CK2-T	WRH-2533-CC06-T	23.5	35.5	0.2	0.12	
CTD-WRH3242-CKB3-CC-T	32~42	CK3	CDB-WRH32-42-CK3-T	WRH-3242-CC09-T	30.5	40	0.2	0.22	CC09
CTD-WRH4154-CKB4-CC-T	41~54	CK4	CDB-WRH41-54-CK4-T	WRH-4154-CC09-T	38.5	47	0.4	0.42	
CTD-WRH5370-CKB5-CC-T	53~70	CK5	CDB-WRH53-70-CK5-T	WRH-5370-CC12-T	49.5	57	0.4	0.80	CC12
CTD-WRH6890-CKB6-CC-T	68~90	CK6	CDB-WRH68-110-CK6-T	WRH-6890-CC12-T	64	71	0.4	1.75	
CTD-WRH88110-CKB6-CC-T	88~110			WRH-88110-CC12-T				1.85	
CTD-WRH98126-CKB6-CC-T	98~126	CK6	CDB-WRH98-153-CK6-T	WRH-98126-CC12-T	93	71	0.4	2.90	
CTD-WRH125153-CKB6-CC-T	125~153			WRH-125153-CC12-T				3.15	

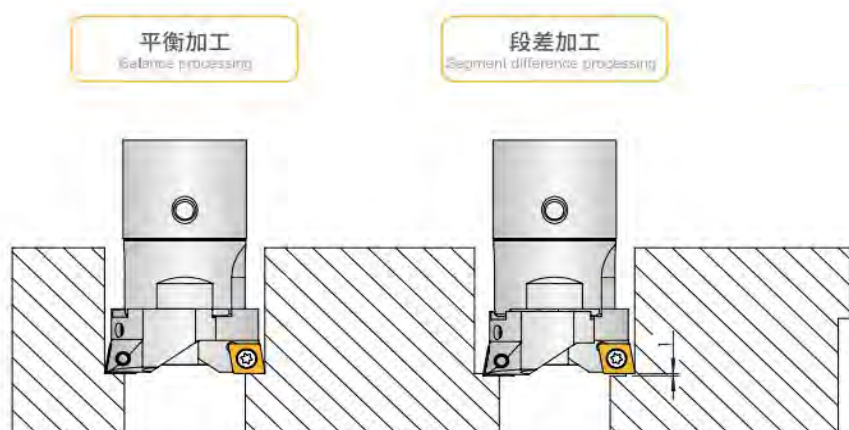
©Standard Tool Holder with Internal Cooling, Inserts must be ordered separately.

©The combined model shipment includes 1 corresponding tool body and a set of insert holders (2 per set).

©Balanced cutting and stepped cutting can be achieved simply by swapping the holders on both sides.

©For details on the insert holders, see page D26

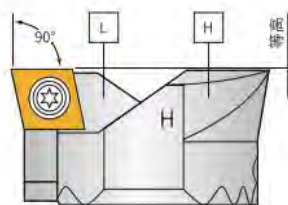
©For details on the compatible tool holders, please see pages F54-F63



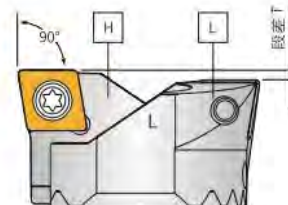
WRH-CC-T



Rough Boring Series: Stepped Rough Boring Head Holder



平衡切削



段差切削

Combination Order Model	Range φ D (mm)	Tool Body Model	Tool Holder Screws & Wrench	Insert Model	InSert Screws & Wrench
WRH-2026-CC06-T	20～26	CDB-WRH2026-CK1-T	CLA0401607/CBL30	.CC**06	CSG2565-P CTS08W-P
WRH-2533-CC06-T	25～33	CDB-WRH2533-CK2-T	CLA0502008/CBL40		
WRH-3242-CC09-T	32～42	CDB-WRH3242-CK3-T	CLA0602010/CBL50	CC**09	CSG4011-P CTS15W-P
WRH-4154-CC09-T	41～54	CDB-WRH4154-CK4-T	CLA08025125/CBL60		
WRH-5370-CC12-T	53～70	CDB-WRH5370-CK5-T	CLA1003015/CBL80	CC**12	CSG5012-P CTS20W-P
WRH-6890-CC12-T	68～90	CDB-WRH68110-CK6-T	CLA08030125/CBL60		
WRH-88110-CC12-T	88～110				
WRH-98126-CC12-T	98～126	CDB-WRH98-153-CK6-T	CLA12040175/CBL100		
WRH-125153-CC12-T	125～153				

◎Balanced cutting and stepped cutting can be achieved simply by swapping the holders on both sides.

◎Inserts must be ordered separately.

◎Insert holder models include insert screws and wrench.

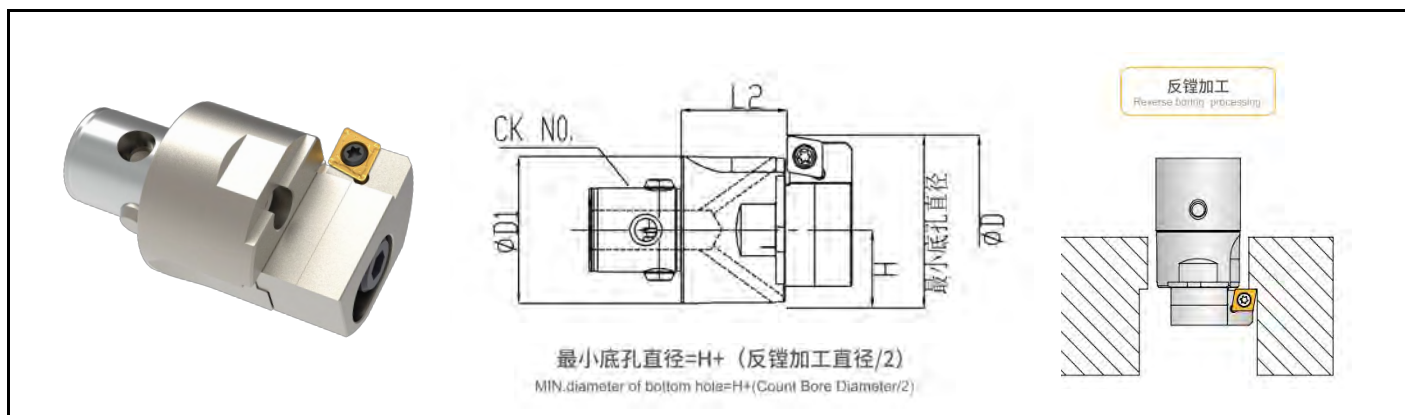
◎Tool body models include tool holder installation screws, washers, and wrench.

◎This insert holder model is a combined model of a set of holders (that is, two matching insert holders), as shown in the diagram above.

CFT-WRH-CC



Rough Boring Series: Back Boring Head



Combination Order Model	Range φ D (mm)	I/F Type	Tool Body Model	Insert Holder Model	D1	L2	H	Kg	Ins ert
CFT-WRH2531-CKB1-CC	25~31	CK1	CDB-WRH20-26-CK1	CFT-2531-CC06	18.7	21.5	10	0.06	CC06
CFT-WRH3035-CKB1-CC	30~35			CFT-3035-CC06				0.06	
CFT-WRH3240-CKB2-CC	32~40	CK2	CDB-WRH25-33-CK2	CFT-3240-CC06	23.5	23.5	125	0.11	
CFT-WRH3947-CKB2-CC	39~47			CFT-3947-CC06				0.11	
CFT-WRH4151-CKB3-CC	41~51	CK3	CDB-WRH32-42-CK3	CFT-4151-CC09	30.5	23.5	16	0.18	CC09
CFT-WRH5060-CKB3-CC	50~60			CFT-5060-CC09				0.19	
CFT-WRH5063-CKB4-CC	50~63	CK4	CDB-WRH41-54-CK4	CFT-5063-CC09	38.5	28.5	20	0.36	
CFT-WRH6174-CKB4-CC	61~74			CFT-6174-CC09				0.38	
CFT-WRH6582-CKB5-CC	65~82	CK5	CDB-WRH53-70-CK5	CFT-6582-CC12	49.5	33.5	25.5	0.70	CC12
CFT-WRH7895-CKB5-CC	78~95			CFT-7895-CC12				0.75	
CFT-WRH80102-CKB6-CC	80~102	CK6	CDB-WRH68-110-CK6	CFT-80102-CC12	63	45.5	32.5	1.50	
CFT-WRH100122-CKB6-CC	100~122			CFT-100122-CC12				1.60	
CFT-WRH98126-CKB6-CC	98~126	CK6	CDB-WRH98-153-CK6	CFT-98126-CC12	93	45.5	46.5	2.25	CC12
CFT-WRH125153-CKB6-CC	125~153			CFT-125153-CC12				2.45	

©Standard Tool Holder with Internal Cooling

©The combined model is shipped with one corresponding tool body and one insert holder.

©Inserts must be ordered separately.

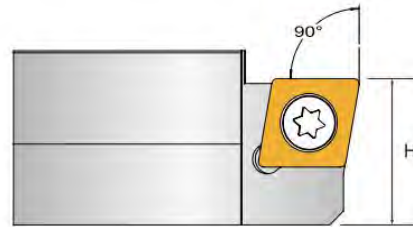
©For details on the insert holders, see page D28

©For details on the compatible tool holders, please see pages F54-F63

CFT-CC



Rough Boring Series: Back Boring Insert Holder



Reverse Boring Insert Holder Model	Range φ D (mm)	H	Tool Body Model	Tool Holder Screws & Wrench	Insert Model	Screws & Wrench
CFT-2531-CC06	25～31	9.5	CDB-WRH20-26-CK1	CLA0401607/CBL30	CC**06	CSG2565-P CTS08W-P
CFT-3035-CC06	30～35					
CFT-3240-CC06	32～40	11	CDB-WRH25-33-CK2	CLA0502008/CBL40		
CFT-3947-CC06	39～47					
CFT-4151-CC09	41～51	13.5	CDB-WRH32-42-CK3	CLA0602010/CBL50	CC**09	CSG4011-P CTS15W-P
CFT-5060-CC09	50～60					
CFT-5063-CC09	50～63	17.5	CDB-WRH41-54-CK4	CLA08025125/CBL60		
CFT-6174-CC09	61～74					
CFT-6582-CC12	65～82	20.5	CDB-WRH53-70-CK5	CLA1003015/CBL80	CC**12	CSG5012-P CTS20W-P
CFT-7895-CC12	78～95					
CFT-80102-CC12	80～102	22.5	CDB-WRH68-110-CK6	CLA1003515/CBL80		
CFT-100122-CC12	100～122					
CFT-98126-CC12	98～126	25.0	CDB-WRH98-153-CK6	CLA12040175/CBL100		
CFT-125153-CC12	125～153					

© Inserts must be ordered separately.

© Insert holder models include insert screws and wrench.

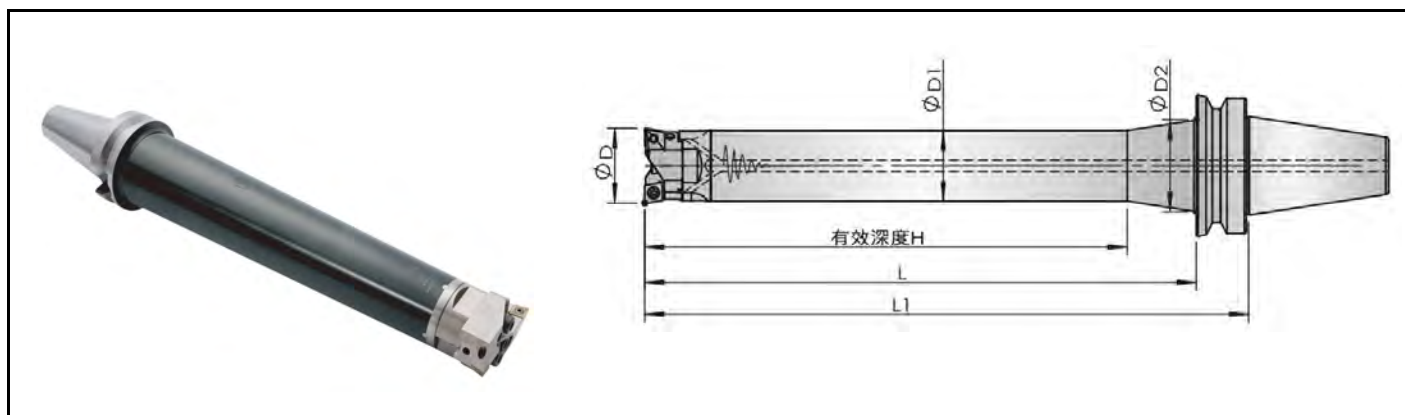
© Tool body models include tool holder installation screws, washers, and wrench.

© This insert holder model is for a single insert holder, as shown in the diagram above.

BBT50-WRH



Rough Boring Series: Damping Shockproof Rough Boring Head



Model	Insert Holder Model	Range ϕD	Tool Holder Type	D1	D2	H	L	L1	Kg	Insert
BBT50-WRH41-54KH280	WRH-4154-CC09	41~54	BBT50	40	55	280	320	358	7.9	CC09
BBT50-WRH53-70KH350	WRH-5370-CC12	53~70		50	65	350	400	438	11.8	CC12
BBT50-WRH68-110KH450	WRH-6890-CC12	68~90		64	80	450	512	550	19.8	
	WRH-88110-CC12	88~110								
BBT50-WRH98-153KH525	WRH-98126-CC12	98~126		70	85	525	525	563	24.9	
	WRH-125153-CC12	126~153								
BBT50-WRH148-203KH525	WRH-148176-CC12	148~176		70	85	525	525	563	26.8	
	WRH-175203-CC12	175~203								

© Inserts must be ordered separately.

©The product is shipped as a complete set, including a standard pair of insert holders (2 per set), as shown in the diagram.

Details of the Standard Insert Holder

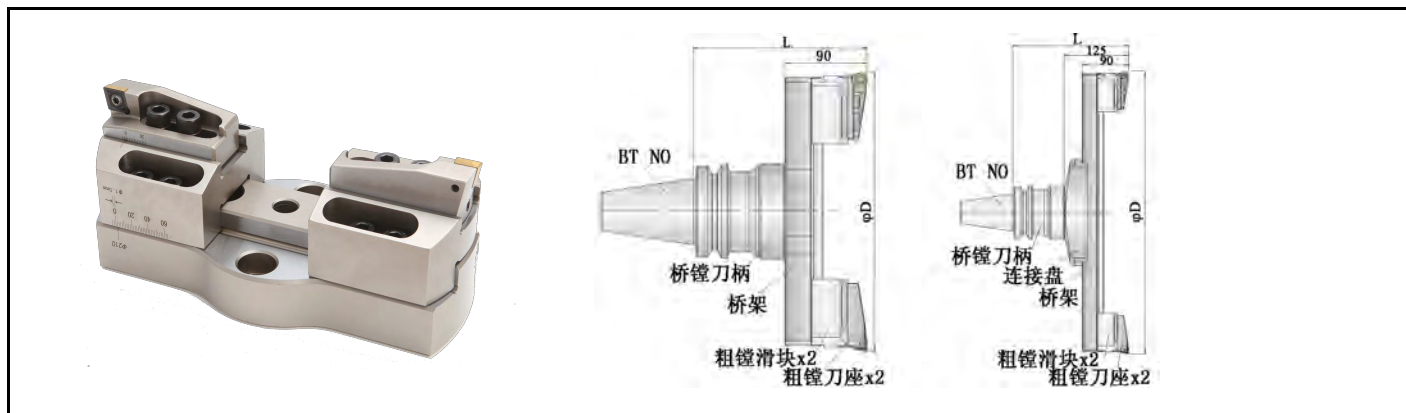
	Insert Holder Model	Range ϕD (mm)	Kr	Insert	Insert Screw	Wrench
	WRH-4154-CC09	41~54	90°	CC 09T3	CSG4011-P	CTS15W-P
	WRH-5370-CC12	53~70		CC 1204	CSG5012-P	CTS20W-P
	WRH-6890-CC12	68~90				
	WRH-88110-CC12	88~110				
	WRH-98126-CC12	98~126				
	WRH-125153-CC12	125~153				
	WRH-148176-CC12	148~176				
	WRH-175203-CC12	175~203				

©If you need to change the standard insert holder type, please consult our company; otherwise, it may affect the machining shock resistance.

CLR



Rough Boring Series: Standard Steel Bridge-Type Rough Boring Tool



Product Model	DIA	Set / Weight	连接盘 Model		钢制桥架 Model I / F W. kg			粗镗滑块 Model W. kg		刀片座 Model W. kg		Insert
			Model	W. kg	Model	I / F	W. kg	Model	W. kg	Model	W. kg	
CLR 150-210	150-210	5.5	/	/	CL 150-210	CT40	2.5	LR 150	1.9 Set	RS 150	0.6 Set	CC 1204
CLR 210-290	210-290	6.7			CL 210-290		3.7					
CLR 290-370	290-370	8.05			CL 290-370		5.05					
CLR 370-450	370-450	9.8			CL 370-450		6.8					
CLR 450-530	450-530	11.4			CL 450-530		8.4					
CLR 530-610	530-610	17.2	CL40 -200	4.7	CL 530-610		9.5					
CLR 610-690	610-690	18.7			CL 610-690		11.0					
CLR 690-770	690-770	20.4			CL 690-770		12.7					
CLR 770-850	770-850	22.7			CL 770-850		15.0					

© Inserts must be ordered separately. This tool has no internal cooling.

© The direction of the tool tip and the direction of rotation are in phase.

© Each component can also be sold separately. A wider range of customization is available.

© Combined models are shipped with one corresponding connecting plate, one steel bridge frame, a set of rough boring sliders (2 per set), and a set of insert holders (2 per set).

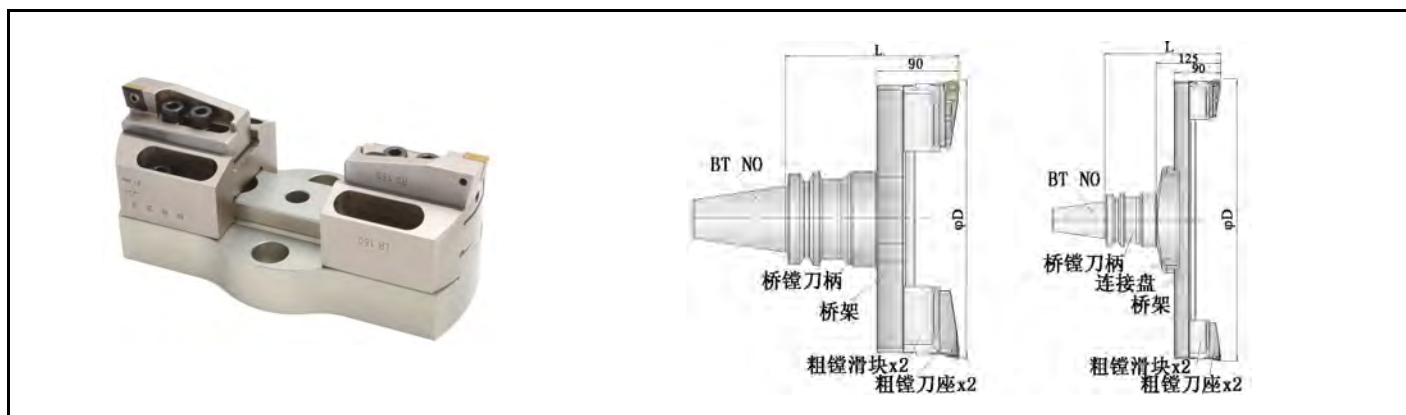
© The bridge frame, sliders, and insert holders are all made of a steel base.

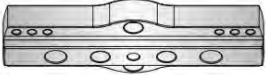
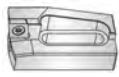
© For details on the compatible tool holders, please see pages F64.

CLR-AL



Rough Boring Series: Lightweight Aluminum Bridge-Type Rough Boring Tool



Product Model	DIA	Set / Weight	铝制桥架 			粗镗滑块 		刀片座 		Insert
			Model	I/F	W.kg	Model	W.kg	Model	W.kg	
CLR 150-210 AL	150-210	3.9	CL 150-210 AL	CT40	0.9	LR 150	1.9 Set	RS 150	0.6 Set	CC 1204
CLR 210-290 AL	210-290	4.3	CL 210-290 AL		1.3					
CLR 290-370 AL	290-370	5.0	CL 290-370 AL		2.0					
CLR 370-450 AL	370-450	5.5	CL 370-450 AL		2.5					
CLR 450-530 AL	450-530	6.0	CL 450-530 AL		3.0					

© Inserts must be ordered separately.

© The direction of the tool tip and the direction of rotation are in phase.

© Each component can also be sold separately. A wider range of customization is available.

© Combined models are shipped with one corresponding connecting plate, one steel bridge frame, a set of rough boring sliders (2 per set), and a set of insert holders (2 per set).

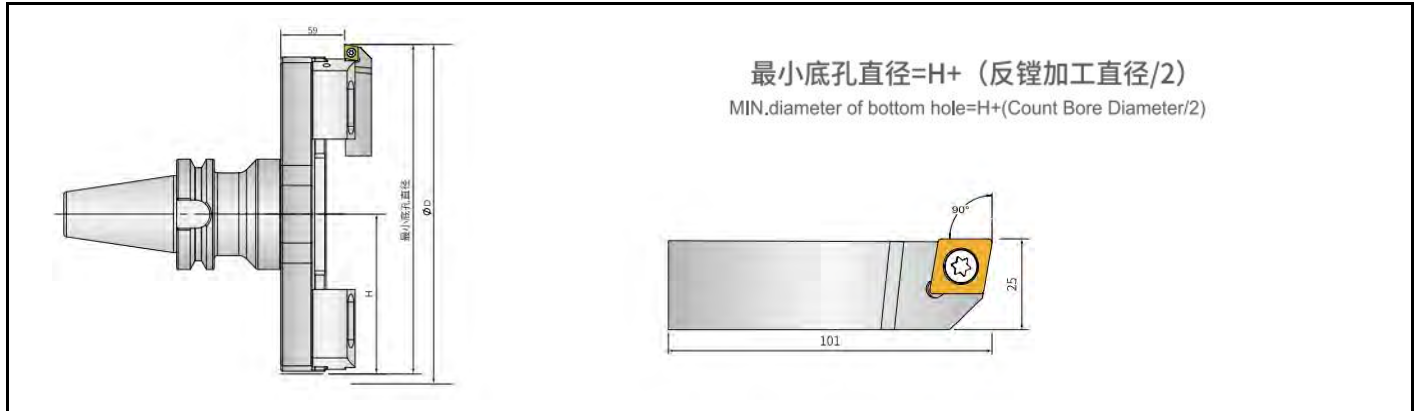
© The bridge frame is made of an aluminum base, while the sliders and insert holders are made of a steel base.

© For details on the compatible tool holders, please see pages F64

CLR-FT



Rough Boring Series: Steel Bridge-Type Reverse Boring Tool



Product Model	DIA	Set / Weight	H	钢制桥架			粗镗滑块(2个一组)		反粗镗刀片座(1个)		Insert
				Model	I / F	W.kg	Model	W.kg	Model	W.kg	
CLR 165-205-FT	165-205	5.0	75	CL 150-210	CT40	2.5	LR 150	1.9 Set	RSC-F150-A	0.6 single	CC 1204
CLR 225-265-FT	225-265	6.2	105	CL 210-290		3.7					
CLR 305-345-FT	305-345	7.55	145	CL 290-370		5.05					
CLR 385-425-FT	385-425	9.3	185	CL 370-450		6.8					
CLR 465-505-FT	465-505	10.9	225	CL 450-530		8.4					

- ◎ This tool has no internal cooling.
- ◎ Inserts must be ordered separately.
- ◎ Combined models are shipped with one corresponding connecting plate, one steel bridge frame, a set of rough boring sliders (2 per set), and a set of insert holders (2 per set).
- ◎ For details on the compatible tool holders, please see pages F64
- ◎ The bridge frame, sliders, and insert holders are all made of a steel base.



Rough Boring Insert Holder	Insert
RNC 200H	CC 1204

Step Difference Rough Boring Tool Holder

◎ Used when encountering large excess material removal, in conjunction with the standard RNC200 tool holder, it can achieve step processing with a height difference of 0.4 mm.

CNR-AL



Rough Boring Series: Internal Cooling Large Diameter Rough Boring Tool
(Complete Series with Aluminum Base Bridge Frame)



Product Model	DIA	Set / weight	I/F D1	H	 铝制桥架		 粗镗滑块(2个一组)		 刀片座(2个一组)		Insert
					Model	W. kg	Model	W. kg	Mo	W. kg	
CNR 200-280AL	200-280	6. 9	CT40	115	NL 200-280AL	2. 8	NR200	3. 2 Set	RNC 200	0. 9 Set	CC 1204
CNR 280-360AL	280-360	8. 1	FMB 60	115	NL 280-360AL	4. 1					
CNR 360-440AL	360-440	10. 3		125	NL 360-440AL	6. 2					
CNR 440-520AL	440-520	11. 8		125	NL 440-520AL	7. 7					
CNR 520-600AL	520-600	13. 8		135	NL 520-600AL	9. 7					
CNR 600-680AL	600-680	15. 3		135	NL 600-680AL	11. 2					
CNR 680-760AL	680-760	18. 2		145	NL 680-760AL	14. 1					
CNR 760-840AL	760-840	19. 5		145	NL 760-840AL	15. 4					

- © Standard product has the inner coolant holes. Inserts must be ordered separately.
- © Combined models are shipped with one corresponding connecting plate, one steel bridge frame, a set of rough boring sliders (2 per set), and a set of insert holders (2 per set).
- © The bridge frame is made of an aluminum base, while the sliders and insert holders are made of a steel base.
- © For information on tool holders compatible with the CT40 interface, please see page F64. For information on tool holders compatible with the FMB60 interface, please see pages F12-F17.



Rough Boring Insert Holder	Insert
RNC 200H	CC 1204

Step Difference Rough Boring Tool Holder

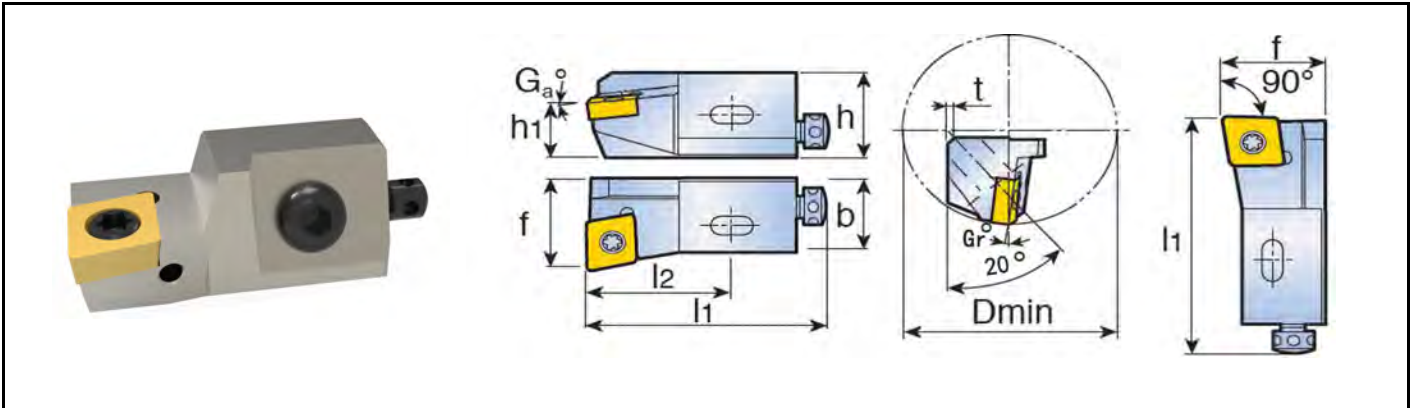
- © Used when encountering large excess material removal, in conjunction with the standard RNC200 tool holder, it can achieve step processing with a height difference of 0.4 mm.

SCFCR/L



Boring Tool Clamp

SCFCR/L, 90°

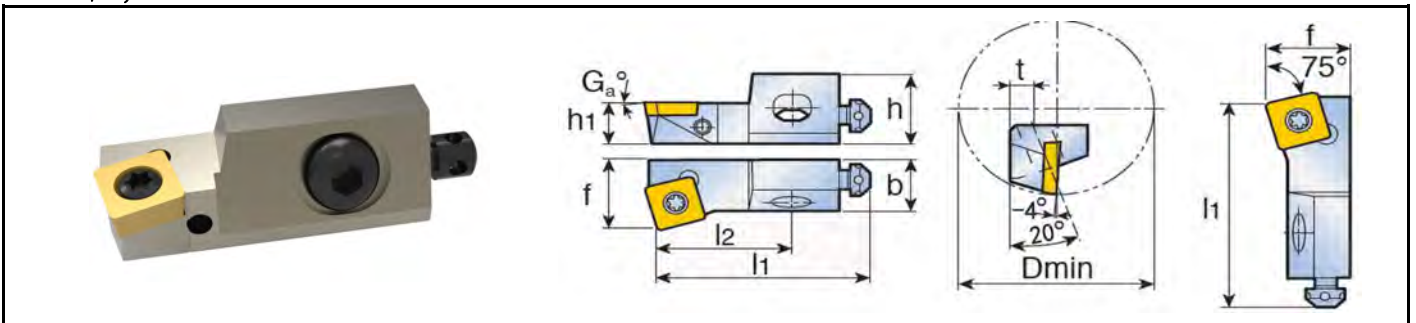


Model	Hand Type	Dimension (mm)									Insert t
		h	h1	b	l1	l2	f	Gr	t	Dmin	
SCFCR 08CA-06	Right	11	8	8	32	15	10	—	—	25	CC...0602
SCFCR 10CA-09		15	10	11	50	30	14	—	—	40	CC...09T3
SCFCR 12CA-09		20	12	16	55	35	20	—	—	50	CC...09T3
SCFCR 12CA-12		20	12	16	55	47	20	-3	6	50	CC...1204
SCFCL 08CA-06	Left	11	8	8	32	15	10	—	—	25	CC...0602
SCFCL 10CA-09		15	10	11	50	30	14	—	—	40	CC...09T3
SCFCL 12CA-09		20	12	16	55	35	20	—	—	50	CC...09T3
SCFCL 12CA-12		20	12	16	55	47	20	-3	6	50	CC...1204

© Inserts must be ordered separately.

© For spare parts and installation dimensions, please refer to page D36.

SSKCR/L, 75°



Model	Hand Type	Dimension (mm)									Insert t
		h	h1	b	l1	l2	f	Ga	t	Dmin	
SSKCR 10CA-09	Right	15	10	11	50	30	14	-1	5	40	SC...09T3
SSKCR 12CA-12		20	12	15	55	35	20	-1	6	50	SC...1204
SSKCL 10CA-09	Left	15	10	11	50	30	14	-1	5	40	SC...09T3
SSKCL 12CA-12		20	12	15	55	35	20	-1	6	50	SC...1204

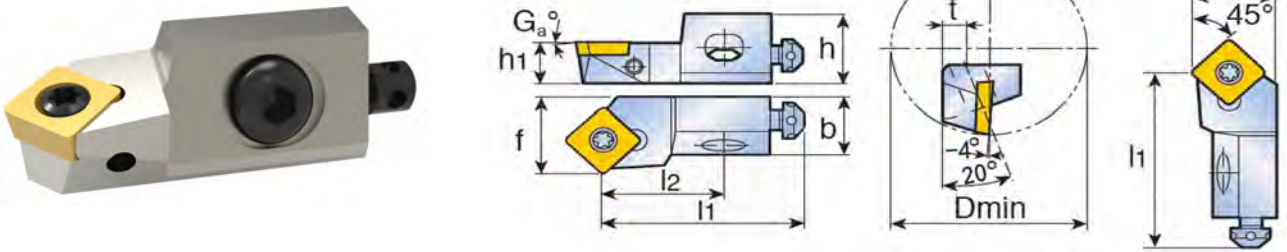
© Inserts must be ordered separately. For spare parts and installation dimensions, please refer to page D36

SSKCR/L、SSSCR/L



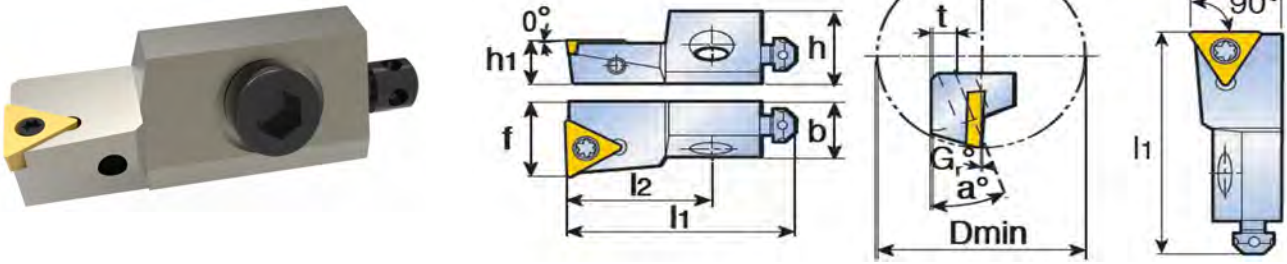
Boring Tool Clamp

SSSCR/L, 45°

											
Model	Hand Type	Dimension (mm)									Insert t
		h	h1	b	l1	l2	f	Ga	t	Dmin	
SSSCR 10CA-09	Right	15	10	11	44	24	14	-4	5	40	SC...09T3
SSSCR 12CA-12		20	12	15	47	27	20	-4	6	50	SC...1204
SSSCL 10CA-09	Left	15	10	11	44	24	14	-4	5	40	SC...09T3
SSSCL 12CA-12		20	12	15	47	27	20	-4	6	50	SC...1204

© Inserts must be ordered separately.; For spare parts and installation dimensions, please refer to page D36

STFCR/L, 90°

											
Model	Hand Type	Dimension (mm)									Insert t
		h	h1	b	l1	l2	f	Gr	t	Dmin	
STFCR 10CA 09	Right	15	10	10	50	30	14	-3	5	—	TC...0902
STFCR 10CA 11		15	10	11	50	30	14	-3	5	40	TC...1102
STFCR 12CA 16		20	12	15	55	35	20	-3	6	50	TC...16T3
STFCR 16CA 16		21	16	20	63	38	25	-6	—	50	
STFCL 10CA 09	Left	15	10	10	50	30	14	-3	5	—	TC...0902
STFCL 10CA 11		15	10	11	50	30	14	-3	5	40	TC...1102
STFCL 12CA 16		20	12	15	55	35	20	-3	6	50	TC...16T3
STFCL 16CA 16		21	16	20	63	38	25	-6	—	50	

© Inserts must be ordered separately.; For spare parts and installation dimensions, please refer to page D36

注: 10CA , α=20°
12CA , α=20°
16CA , α=45°

STFCR/L



Boring Tool Clamp

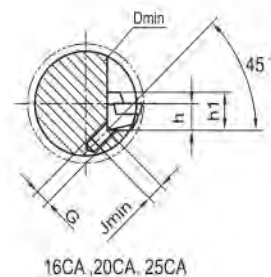
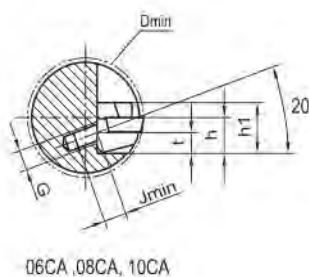
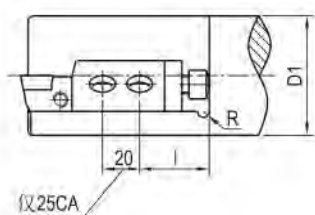
Insert Screw

Model	Screw	Wrench	Model	Screw	Wrench
CC...0602	CSC2560	CTS08W	SC...1204	CSC5012	CTS20W
CC...09T3	CSC4090	CTS15W	TC...0902	CSC2250	CTS07W
CC...1204	CSC5012	CTS20W	TC...1102	CSC2560	CTS08W
SC...09T3	CSC4090	CTS15W	TC...16T3	CSC4090	CTS15W

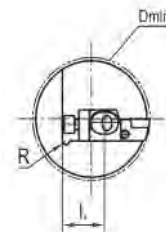
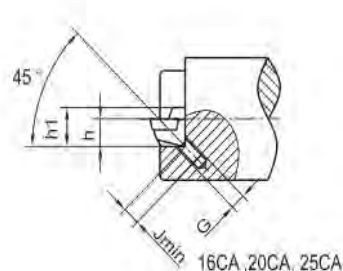
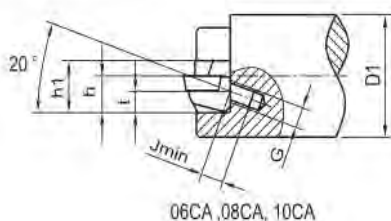
Clamp Spare Parts and Installation Dimensions

	刀夹型号	①Screw	②Wrench	③Axial Screw	④Radial Screw	⑤Wrench
	06CA	CLB0350806	CBL23	CLZ390	CLC0300605	CBL15
	08CA	CLB0401607	CBL25	CLZ470	CLC0300605	CBL15
	10CA	CLB0602010	CBL40	CLZ470	CLC0400807	CBL20
	12CA	CLB0602510	CBL40	CLZ580	CLC0401207	CBL20
	16CA	CLB08030125	CBL50	CLZ618	CLC0401207	CBL20

- 轴向安装 Axial mounting



- 径向安装 Radial mounting

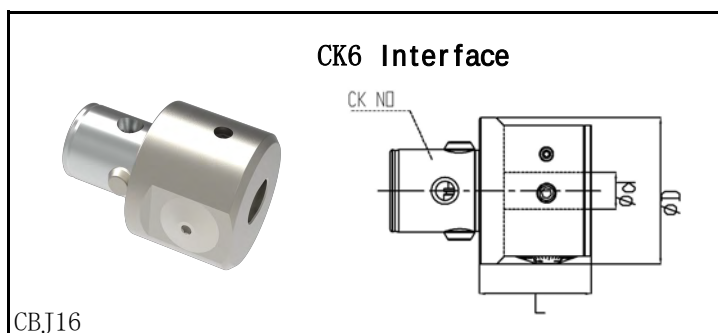


Clamp Model	h	l	G	Jmin	t	h1	Rmax	Dmin	D1
06CA	6	12	M3.5X0.6	10	3.5	8.5	2.0	20	The maximum diameter of the tool rod is less than the diameter of the boring hole by 3 mm.
08CA	8	17	M4X0.7	10	4.5	10	2.5	25	
10CA	10	20	M6X1	14	5.0	15	4.0	40	
12CA	12	20	M6X1	14	6.0	20	5.0	50	
16CA	16	25	M8X1.25	15	—	21	5.0	55	
16CA	20	30	M8X1.25	15	—	25	5.0	70	

Precision Boring of Small Diameter in Steel

Machining Range $\phi 6 - \phi 50$

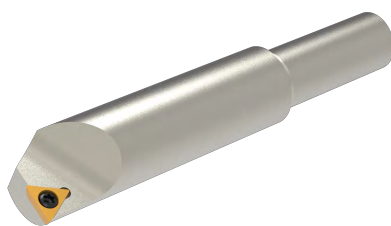
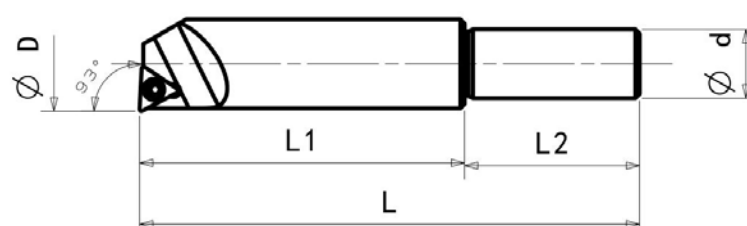
Tool Holder Model	Length	Kg
BT40-CK6-55	55	1.22
BT50-CK6-85	85	4.28
SK40-CK6-90	90	1.22
SK50-CK6-85	85	4.28
HSK A63-CK6-100	100	2.20
HSK A100-CK6-85	85	4.20



Model	CK NO.	D	d	L	行程	Weight kg
CBJ16	6	64	16	50	6	1.25

©Note: The tool holder, precision boring mechanism, and steel boring tool rod must be ordered separately.

Steel Boring Tool Holder

Model	Range	D	d	L1	L2	L	Insert	Insert Screw /Wrench	W. kg
CBJ1606-24	6-8	6	16	24	42	66	WBGT 0601	CSS2005 CTS06W	0.07
CBJ1608-32	8-11	8		32	42	76	TBGT 0601		0.08
CBJ1610-40	10-13	10		40	42	77			0.08
CBJ1612-53	12-17	12		53	42	90	TPGH 0902	CSC2560 CTS08W	0.11
CBJ1616-68	16-21	16		68	42	102			0.14
CBJ1620-83	20-26	20		83	42	120	TPGH 1103	CSC3080 CTS10W	0.21
CBJ1625-90	25-32	25		90	38	124			0.30
CBJ1630-90	30-42	30		90	38	124			0.32
CBJ1640-90	40-50	40		90	38	124			0.41

©Standard Tool Holder Without Internal Cooling

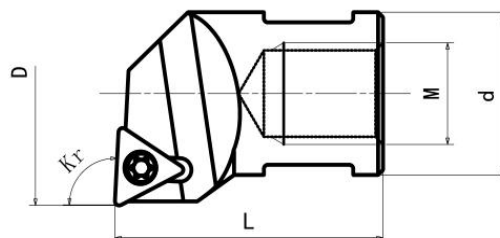
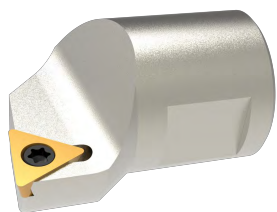
©Inserts must be ordered separately.

CN



Small Diameter Precision Boring Head

Boring Tool Head



Model	Dimension					Range	W. kg	Insert	Screw /Wrench
	D	L	M	d	Kr				
CN09	9	18	M5	8	93°	9-10. 5	0. 03	TPGT 0802	CSS2005 CTS06W
CN10. 5	10. 5					10. 5-12	0. 03		
CN12	12					12-14	0. 03		
CN14	14	23	M6	10		14-16	0. 03		
CN16	16			12		16-18	0. 04		
				14					
CN18	18	27	M10	16		18-20	0. 04		
CN20	20					20-22	0. 05		
CN22	22					22-24	0. 05		
CN24	24					24-26	0. 05		
CN26	26					26-28	0. 05		
CN28	28					28-30	0. 06		
CN30	30					30-32	0. 06		
CN32	32					32-34	0. 07		
CN34	34					34-36	0. 09		
CN36	36					36-38	0. 11		
CN38	38					38-40	0. 15		
CN40	40					40-42	0. 16		
CN42	42					42-46	0. 19		
CN46	46	46-50	0. 26						

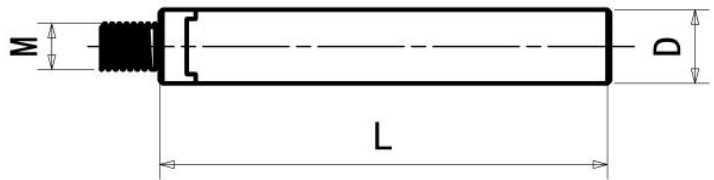
©This tool head is compatible with the CWC carbide tool rod. For details on the tool rod, please refer to page D39.

CWC



Solid Carbide Small Diameter Precision Boring

Carbide Shock-Resistant Tool Holder

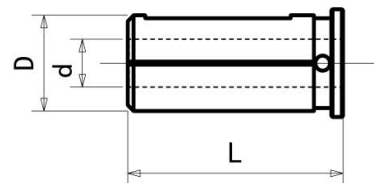


Model	Dimension			Sleeve Adapter	W.kg	Modular Boring Head
	D	L	M			
CWC08H100M5	8	100	M5	CEC1608	0.08	CN09/10.5
CWC10H100M6	10	100	M6	CEC1610	0.15	CN12
CWC10H150M6	10	150			0.23	
CWC12H100M6	12	100		CEC1612	0.24	CN14
CWC12H150M6	12	150			0.33	
CWC14H150M6	14	150		CEC1614	0.43	CN16
CWC14H200M6	14	200			0.58	
CWC16H100M10	16	100	M10	—	0.42	CN18/2/2/24/2/28/30/32/ 34/36/38/40/4/N46
CWC16H150M10	16	150	M10		0.61	
CWC16H200M10	16	200	M10		0.82	

©Standard Tool Holder Without Internal Cooling

Sleeve Adapter

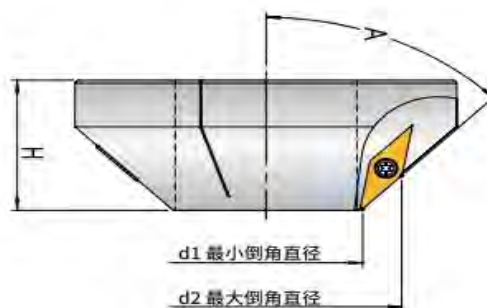
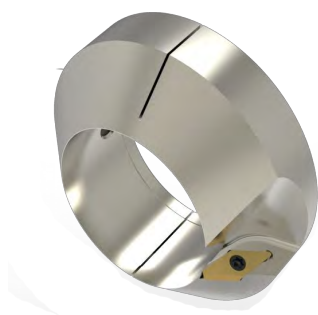
Model	Dimension			Modular Carbide Tool Holder
	D	d	L	
CEC1608	16	8	37	CWC08*M5
CEC1610	16	10	37	CWC10*M6
CEC1612	16	12	37	CWC12*M6
CEC1614	16	14	37	CWC14*M6



MC



Chamfer Ring



Model	Edge	Angle	d1	d2	H	Tool Holder	Insert	Insert Screw	Screw	W.kg
MC1-34-45	1	45	21	34	22	CK1	VCGT110302	CSC2560 CTS08W	M5x16	0.06
MC2-39-45			26	39	25	CK2				0.12
MC3-54-45			34	54	35	CK3	VCGT160404	CSC4090 CTS15W	M6x20	0.52
MC4-62-45			42	62	38	CK4				0.70
MC5-93-45	2		53	93	43	CK5			M6x25	1.31
MC6-107-45			67	107	46	CK6				M8x25
MC6-138-45			98	138			3.85			
MC6-160-45			120	160			5.58			
MC1-41-30	2	30	23	41	30	CK1	VCGT110302	CSC2560 CTS08W	M5x16	0.11
MC2-46-30			28	46	35	CK2				0.22
MC3-53-30			35	53		CK3			M6x20	0.35
MC4-61-30			43	61		CK4				0.42
MC5-84-30			56	84	48	CK5	VCGT160404	CSC4090 CTS15W	M8x25	1.30
MC6-98-30			70	98		CK6				1.20
MC6-120-30			92	120						3.05
MC6-142-30			114	142						4.10

© Inserts must be ordered separately.

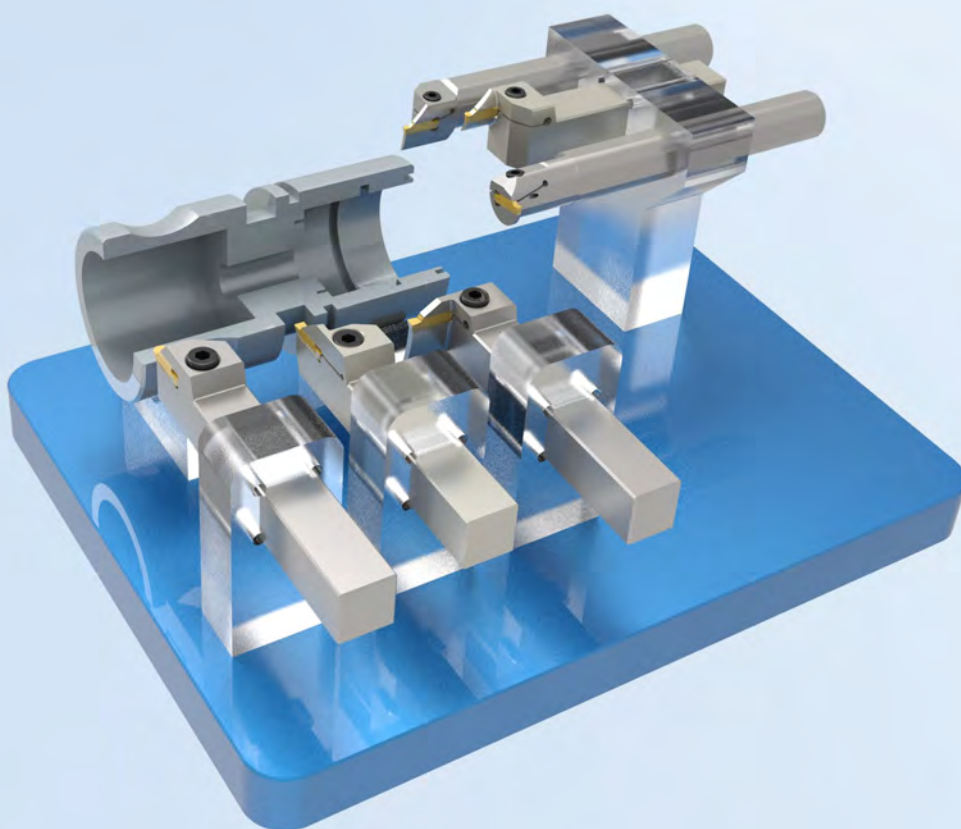
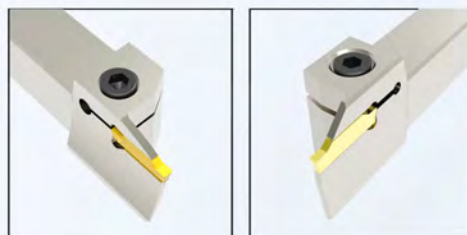
车消系列



超尔槽刀系列

让切槽变得 **更轻松！**

- ① TTER/L 外圆切槽刀杆
- ② TTFR/L-RN 端面切槽刀杆
- ③ TGIFR/L 端面内孔切槽刀杆
- ④ TTIR/L 内孔切槽刀杆

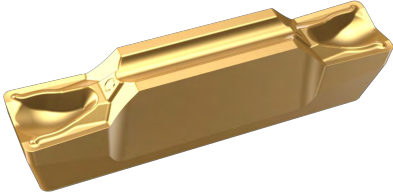
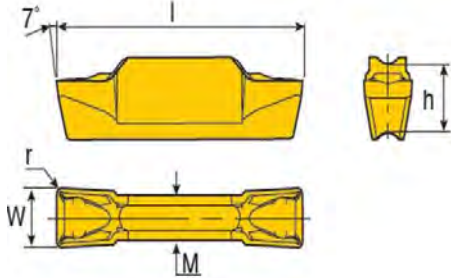


TDGU/TDGX

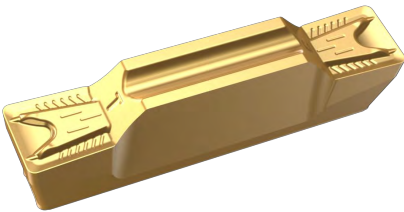
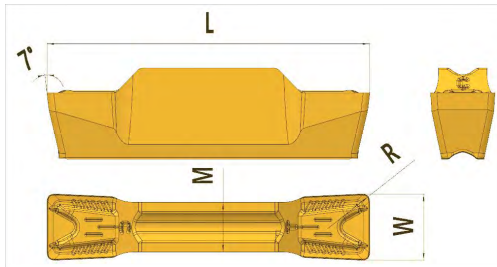


Grooving Insert

FLAT INSERTS: PRESSED INSERTS FOR EXTERNAL, INTERNAL FACETURNING , GROOVING AND PARTING

 									
Model	Dimension (mm)					Turning		Grooving	Grade
	W±0.05	M	l	h	r	Feed (mm/rev)	Cut.Depth (mm)	Feed (mm/rev)	CT5320
TDGU 200	2.0	1.7	20.0	4.7	0.3	0.12-0.18	0.4-1.2	0.03-0.18	●
TDGU 250	2.5	2.2	20.0	4.7	0.3	0.15-0.19	0.4-1.8	0.04-0.11	
TDGU 300	3.0	2.2	20.0	4.7	0.3	0.15-0.19	0.4-1.8	0.04-0.11	
TDGU 400	4.0	3.0	20.0	4.7	0.4	0.18-0.24	0.5-2.4	0.09-0.15	
TDGU 500	5.0	4.0	25.0	5.2	0.4	0.20-0.30	0.5-3.0	0.11-0.20	
TDGU 600	6.0	5.0	25.0	5.2	0.8	0.22-0.36	0.1-0.4	0.13-0.23	

FLAT INSERTS: PRESSED INSERTS FOR EXTERNAL, INTERNAL FACETURNING , GROOVING AND PARTING

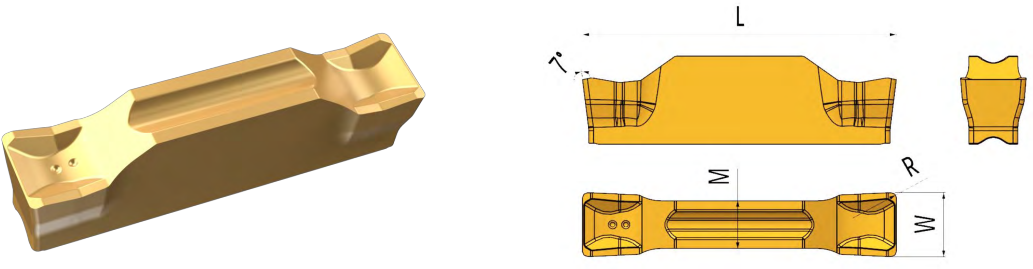
 									
Model	Dimension (mm)				Turning		Grooving	Grade	
	W±0.05	M	L	R	Feed (mm/rev)	Cut.Depth (mm)	Feed (mm/rev)	CT5320	CT7320
TDGX 3E-0.4	3.0	2.2	20.0	0.4	0.17-0.20	0.5-1.8	0.06-0.18	●	●
TDGX 4E-0.4	4.0	3.0	20.0	0.4	0.20-0.27	0.5-2.4	0.07-0.20		
TDGX 4E-0.8	4.0	3.0	20.0	0.8	0.22-0.27	1.0-2.4	0.07-0.20		
TDGX 5E-0.4	5.0	4.0	25.0	0.4	0.22-0.32	0.5-3.0	0.08-0.23		
TDGX 5E-0.8	5.0	4.0	25.0	0.8	0.25-0.37	1.0-3.0	0.08-0.23		
TDGX 6E-0.4	6.0	5.0	25.0	0.4	0.25-0.38	0.5-3.6	0.12-0.35		
TDGX 6E-0.8	6.0	5.0	25.0	0.8	0.26-0.42	1.0-3.6	0.12-0.35		

TDGC/TDGU-R

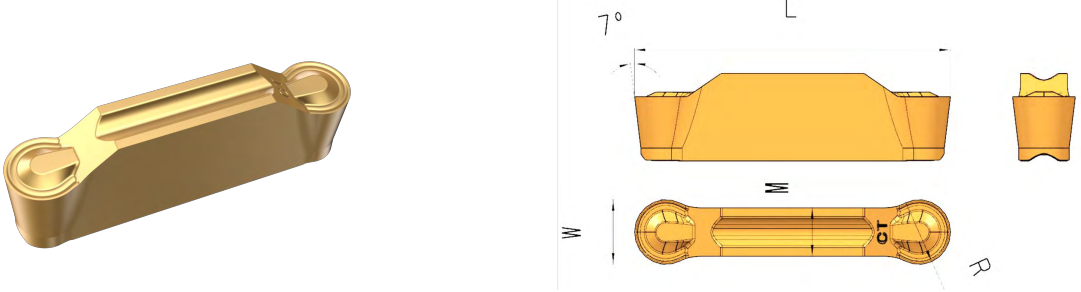


Grooving Insert

FLAT INSERTS : FOR GROOVING、PARTING & TURNING MILL PROCESS

									
Model	Dimension (mm)				Turning		Grooving	Grade	
	W ±0.05	M	L	R	Feed (mm/rev)	Cut.Depth (mm)	Feed (mm/rev)	CT5320	CT7320
TDGC 2E-02	2.0	1.7	20.0	0.2	0.17-0.20	0.5-1.8	0.05-0.18	●	●
TDGC 3E-02	3.0	2.4	20.0	0.2	0.20-0.27	0.5-2.4	0.07-0.25		
TDGC 4E-03	4.0	3.0	20.0	0.3	0.22-0.27	1.0-2.4	0.08-0.30		
TDGC 5E-03	5.0	4.0	25.0	0.3	0.20-0.27	0.5-2.4	0.09-0.35		
TDGC 6E-03	6.0	5.0	25.0	0.3	0.22-0.27	1.0-2.4	0.12-0.40		

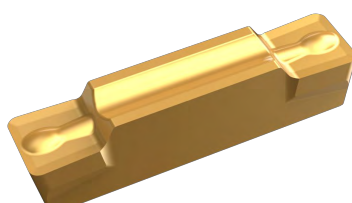
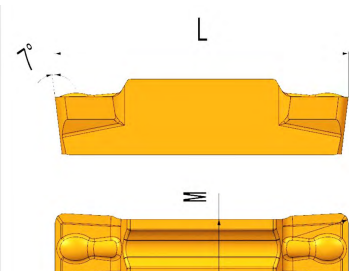
ROUND INSERTS : FOR EXTERNAL, INNER HOLE TURNING MILL、GROOVING AND PROFILING

									
Model	Dimension (mm)				Turning		Grooving	Grade	
	W±0.05	M	L	R	Feed (mm/rev)	Cut.Depth (mm)	Feed (mm/rev)	CT5320	
TDGU 200-1.0R	2.0	1.7	20.0	1.0	0.10-0.25	0.0-1.0	0.05-0.15	●	
TDGU 300-1.5R	3.0	2.2	20.0	1.5	0.15-0.28	0.0-1.5	0.08-0.18		
TDGU 400-2.0R	4.0	3.0	20.0	2.0	0.18-0.35	0.0-2.0	0.10-0.20		
TDGU 500-2.5R	5.0	4.0	25.0	2.5	0.20-0.42	0.0-2.5	0.12-0.23		
TDGU 600-3.0R	6.0	5.0	25.0	3.0	0.25-0.54	0.0-3.0	0.15-0.27		
TDGU 800-4.0R	8.0	6.0	30.0	4.0	0.30-0.67	0.0-4.0	0.18-0.35		

©The slot cutter with a blade width of 8mm currently has no standard tool holder available and can be customized according to requirements.

Grooving Insert

FLAT INSERT : FOR EXTERNAL, INNER HOLE, FACE TURNING MILL, GROOVING & PARTING

Model	Dimension (mm)				Turning		Grooving	Grade	
	W±0.05	M	L	R	Feed (mm/rev)	Cut.Depth (mm)	Feed (mm/rev)	CT5320	CT101
TDEF 3.00E-0.40	3.0	2.2	20.0	0.4	0.15-0.22	0.5-2.0	0.07-0.15	●	●
TDEF 4.00E-0.40	4.0	3.0	20.0	0.4	0.18-0.30	0.5-2.4	0.09-0.18		
TDEF 4.00E-0.80	4.0	3.0	20.0	0.8	0.18-0.30	1.0-2.4	0.09-0.18		
TDEF 5.00E-0.40	5.0	4.0	25.0	0.4	0.20-0.35	0.5-2.3	0.11-0.20		
TDEF 5.00E-0.80	5.0	4.0	25.0	0.8	0.23-0.35	1.0-3.0	0.11-0.20		
TDEF 6.00E-0.80	6.0	5.0	25.0	0.8	0.24-0.42	1.0-3.6	0.13-0.30		
TDEF 6.00E-1.20	6.0	5.0	25.0	1.2	0.24-0.42	1.3-3.6	0.13-0.30		
TDEF 8.00E-0.80	8.0	6.0	30.0	0.8	0.30-0.56	1.0-4.8	0.15-0.40		
TDEF 8.00E-1.20	8.0	6.0	30.0	1.2	0.30-0.56	1.3-4.8	0.15-0.40		

©The slot cutter with a blade width of 8mm currently has no standard tool holder available and can be customized according to requirements.

©The CT101 grade is part of the "Aluminum" machining series.

• Considerations for Selecting Slot Cutters

• Minimum Cutting Diameter (mm) for End Face Slotting Inserts

End Face Machining	Insert (Flat)	Width	Min. Dia	Insert (Flat)	Width	Min. Dia	Insert (Flat)	Width	Min. Dia	Insert (Round)	Width	Min. Dia
	TDGU TDGX	3	18	TDGC	3	54	TDEF	3	44	TDGU -R	3	41
		4	18		4	34		4	42		4	36
		5	20		/	/		5	50		5	54
		6	18		/	/		6	48		6	48

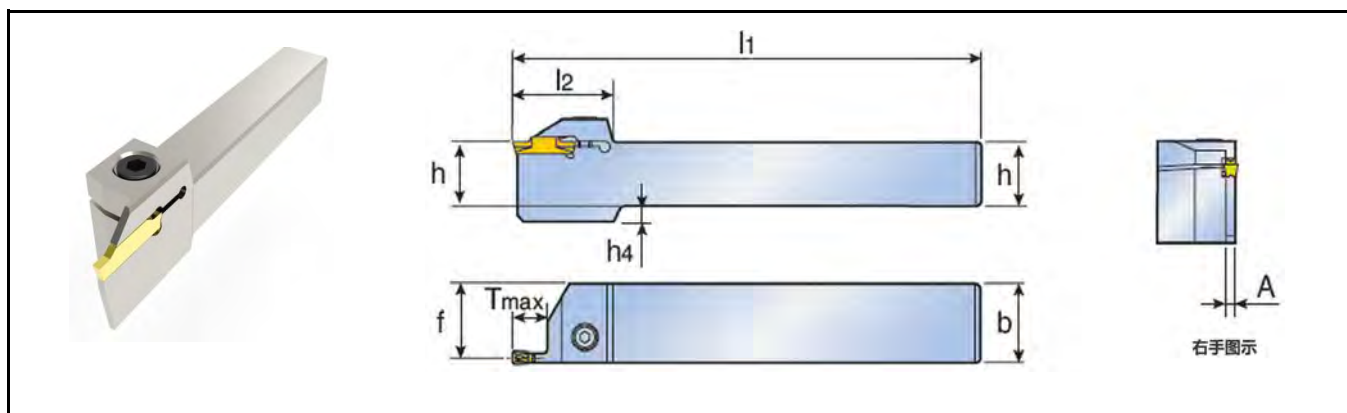
• Minimum Cutting Diameter (mm) for Internal Slotting Inserts

Internal Hole Machining	Insert (Flat)	Width	Min. Dia	Insert (Flat)	Width	Min. Dia	Insert (Flat)	Width	Min. Dia	Insert (Round)	Width	Min. Dia
	TDGU TDGX	2	24	TDGC	2	40	TDEF	/	/	TDGU -R	2	41
		2.5	24		/	/		/	/		/	/
		3	24		3	50		3	40		3	38
		4	21		4	50		4	40		4	38
		5	30		5	60		5	50		5	43
		6	31		6	60		6	50		6	46
		/	/		/	/		8	62		8	56

TTER/L



Groove Tool Holder Series: External Turning and Grooving



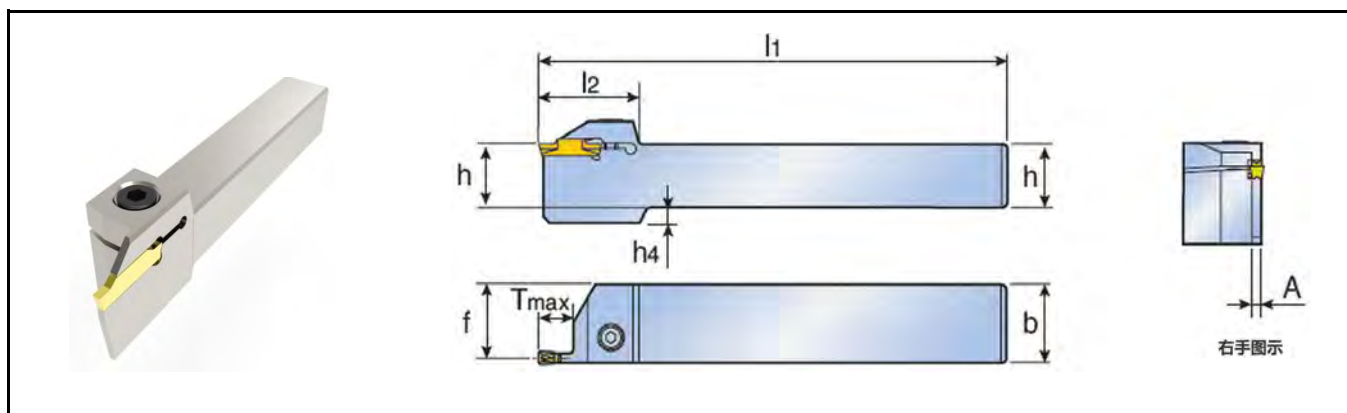
Model	Seat Size	Dimension (mm)								Insert
		h	b	l1	f	l2	A	h4	Tmax	
TTER/L 1616-2T08	2	16	16	110	15.1	33	1.8	4	8.0	TDGU TDGX TDGC TDEF
TTER/L 2020-2T08	2	20	20	125	19.1	33	1.8	—	8.0	
TTER/L 2525-2T08	2	25	25	150	24.1	33	1.8	—	8.0	
TTER/L 1616-2	2	16	16	110	15.1	32	1.8	4	12.0	
TTER/L 2020-2	2	20	20	125	19.1	32	1.8	—	12.0	
TTER/L 2525-2	2	25	25	150	24.1	32	1.8	—	12.0	
TTER/L 1616-2T17	2	16	16	110	15.1	37	1.8	4	17.0	
TTER/L 2020-2T17	2	20	20	125	19.1	37	1.8	—	17.0	
TTER/L 2525-2T17	2	25	25	150	24.1	37	1.8	—	17.0	
TTER/L 1616-2.5	2.5	16	16	110	15.1	32	2.0	4	12.0	
TTER/L 2020-2.5	2.5	20	20	125	19.1	32	2.0	—	12.0	
TTER/L 2525-2.5	2.5	25	25	150	24.1	32	2.0	—	12.0	
TTER/L 1616-3T09	3	16	16	110	14.8	32	2.4	4	9.0	
TTER/L 2020-3T09	3	20	20	125	18.8	32	2.4	—	9.0	
TTER/L 2525-3T09	3	25	25	150	23.8	32	2.4	—	9.0	
TTER/L 1616-3	3	16	16	110	14.8	32	2.4	4	12.0	
TTER/L 2020-3	3	20	20	125	18.8	32	2.4	—	12.0	
TTER/L 2525-3	3	25	25	150	23.8	32	2.4	—	12.0	
TTER/L 1616-3T20	3	16	16	110	14.8	38.5	2.4	—	20.0	
TTER/L 2020-3T20	3	20	20	125	18.8	38.5	2.4	—	20.0	
TTER/L 2525-3T20	3	25	25	150	23.8	38.5	2.4	—	20.0	
TTER/L 2525-3T25	3	25	25	150	23.8	44.5	2.4	—	25.0	
TTER/L 1616-4T10	4	16	16	110	14.5	32	3.0	4	10.0	
TTER/L 2020-4T10	4	20	20	125	18.5	32	3.0	—	10.0	
TTER/L 2525-4T10	4	25	25	150	23.5	32	3.0	—	10.0	

© Inserts must be ordered separately., This tool holder has no internal cooling.

TTER/L



External Turning and Grooving



Model	Seat Size	Dimension (mm)								Insert
		h	b	l1	f	l2	A	h4	Tmax	
TTER/L 1616-4	4	16	16	110	14.5	33	3.0	4	15.0	TDGU TDGX TDGC TDEF
TTER/L 2020-4	4	20	20	125	18.5	33	3.0	—	15.0	
TTER/L 2525-4	4	25	25	150	23.5	33	3.0	—	15.0	
TTER/L 1616-4T25	4	16	16	110	14.5	45	3.0	—	25.0	
TTER/L 2020-4T25	4	20	20	125	18.5	45	3.0	—	25.0	
TTER/L 2525-4T25	4	25	25	150	23.5	45	3.0	—	25.0	
TTER/L 2020-5T12	5	20	20	125	18.1	37	4.0	—	12.0	
TTER/L 2525-5T12	5	25	25	150	23.1	37	4.0	—	12.0	
TTER/L 2020-5	5	20	20	125	18.1	37	4.0	—	20.0	
TTER/L 2525-5	5	25	25	150	23.1	37	4.0	—	20.0	
TTER/L 2525-5T25	5	25	25	150	23.1	37	4.0	—	25.0	
TTER/L 2525-5T32	5	25	25	150	23.0	56	4.0	—	32.0	
TTER/L 2020-6T12	6	20	20	125	17.6	37	5.0	—	12.0	
TTER/L 2525-6T12	6	25	25	150	22.6	37	5.0	7	12.0	
TTER/L 2020-6	6	20	20	125	17.6	41	5.0	—	20.0	
TTER/L 2525-6	6	25	25	150	22.6	41	5.0	7	20.0	
TTER/L 2525-6T32	6	25	25	150	22.5	56	5.0	7	32.0	

© Inserts must be ordered separately., This tool holder has no internal cooling

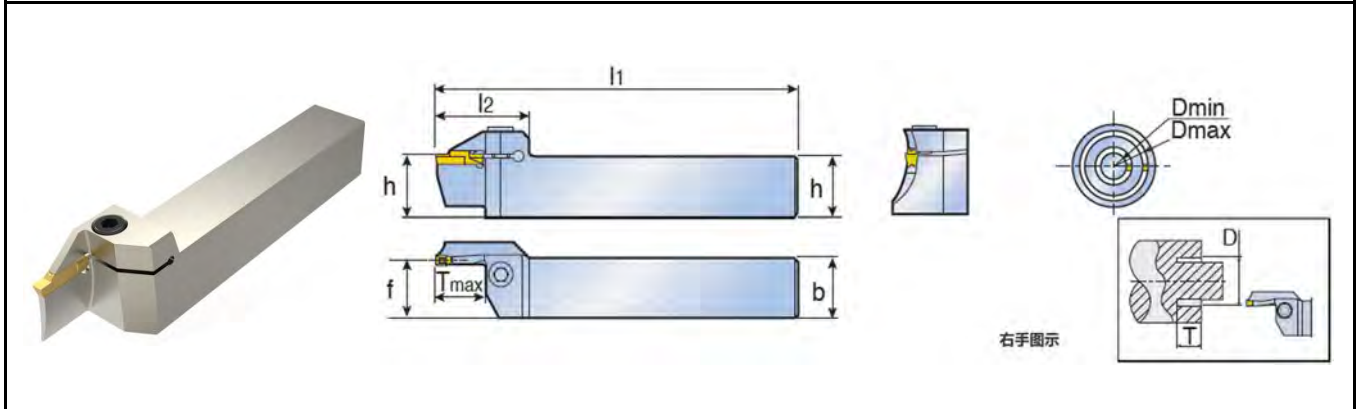
Spare Parts

Model	Screw	Wrench	Model	Screw	Wrench
TTER/L 1616-2/2.5/3	CLA0501608	CBL40	TTER/L 2020-4/5	CLA0602010	CBL50
TTER/L 2020-2/2.5/3	CLA0502008	CBL40	TTER/L 2525-4/5	CLA08020125	CBL60
TTER/L 2525-2/2.5/3	CLA0601610	CBL50	TTER/L 2020-6	CLA08020125	CBL60
TTER/L 1616-4/5	CLA0601610	CBL50	TTER/L 2525-6	CLA08020125	CBL60

TTFR/L-RN



End Face Deep Grooving and Turning



Model	Seat Size	Dimension (mm)								Insert t
		h	b	l1	f	l2	Tmax	Dmin	Dmax	
TTFR/L 20-21-30-3T10RN	3	20	20	125	19	31	10	21	30	TDGU TDGX TDGC TDEF
TTFR/L 20-24-35-3T10RN	3	20	20	125	19	31	10	24	35	
TTFR/L 20-29-40-3T10RN	3	20	20	125	19	31	10	29	40	
TTFR/L 20-34-50-3T10RN	3	20	20	125	19	31	10	34	50	
TTFR/L 20-44-70-3T15RN	3	20	20	125	19	35	15	44	70	
TTFR/L 20-64-100-3T15RN	3	20	20	125	19	35	15	64	100	
TTFR/L 20-19-30-4T10RN	4	20	20	125	18.6	31	10	19	30	
TTFR/L 20-22-36-4T10RN	4	20	20	125	18.6	31	10	22	36	
TTFR/L 20-28-42-4T16RN	4	20	20	125	18.6	36	16	28	42	
TTFR/L 20-34-50-4T16RN	4	20	20	125	18.6	36	16	34	50	
TTFR/L 20-42-70-4T16RN	4	20	20	125	18.6	36	16	42	70	
TTFR/L 20-62-120-4T16RN	4	20	20	125	18.6	36	16	62	120	
TTFR/L 20-112-200-4T16RN	4	20	20	125	18.6	36	16	112	200	
TTFR/L 25-30-3RN	3	25	25	150	24.0	38	10.0	24	35	
TTFR/L 25-35-3RN	3	25	25	150	24.0	38	10.0	29	40	
TTFR/L 25-40-3RN	3	25	25	150	24.0	38	10.0	34	50	
TTFR/L 25-50-3RN	3	25	25	150	24.0	38	15.0	44	70	
TTFR/L 25-70-3RN	3	25	25	150	24.0	38	15.0	64	100	
TTFR/L 25-30-4RN	4	25	25	150	23.6	39	10.0	22	36	
TTFR/L 25-36-4RN	4	25	25	150	23.6	39	20.0	28	42	
TTFR/L 25-42-4RN	4	25	25	150	23.6	39	20.0	34	50	
TTFR/L 25-50-4RN	4	25	25	150	23.6	39	20.0	42	70	
TTFR/L 25-70-4RN	4	25	25	150	23.6	39	20.0	62	120	

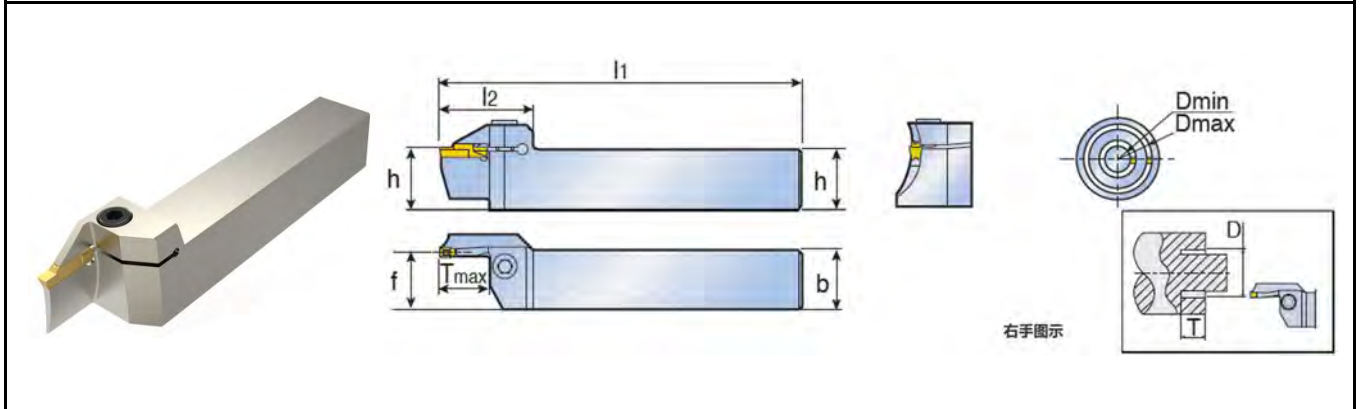
© Inserts must be ordered separately.

© This tool holder has no internal cooling

TTFR/L-RN



End Face Deep Grooving and Turning



Model	Seat Size	Dimension (mm)								Insert
		h	b	l1	f	l2	Tmax	Dmin	Dmax	
TTFR/L 25-120-4RN	4	25	25	150	23.6	39	20.0	112	200	TDGU TDGX TDGC TDEF
TTFR/L 25-200-4RN	4	25	25	150	23.6	39	20.0	200	∞	
TTFR/L 25-60-5RN	5	25	25	150	23.1	49	25.0	50	80	
TTFR/L 25-60-5T15RN	5	25	25	150	23.1	41	15.0	50	80	
TTFR/L 25-80-5RN	5	25	25	150	23.1	49	25.0	70	110	
TTFR/L 25-80-5T15RN	5	25	25	150	23.1	41	15.0	70	110	
TTFR/L 25-110-5RN	5	25	25	150	23.1	49	25.0	100	150	
TTFR/L 25-150-5RN	5	25	25	150	23.1	49	25.0	140	200	
TTFR/L 25-200-5RN	5	25	25	150	23.1	49	25.0	200	∞	
TTFR/L 25-60-6RN	6	25	25	150	22.6	49	25.0	48	70	
TTFR/L 25-70-6RN	6	25	25	150	22.6	49	25.0	58	100	
TTFR/L 25-100-6RN	6	25	25	150	22.6	49	25.0	88	180	
TTFR/L 25-180-6RN	6	25	25	150	22.6	49	25.0	168	400	
TTFR/L 25-400-6RN	6	25	25	150	22.6	49	25.0	400	∞	

© Inserts must be ordered separately.

© This tool holder has no internal cooling

Spare Parts

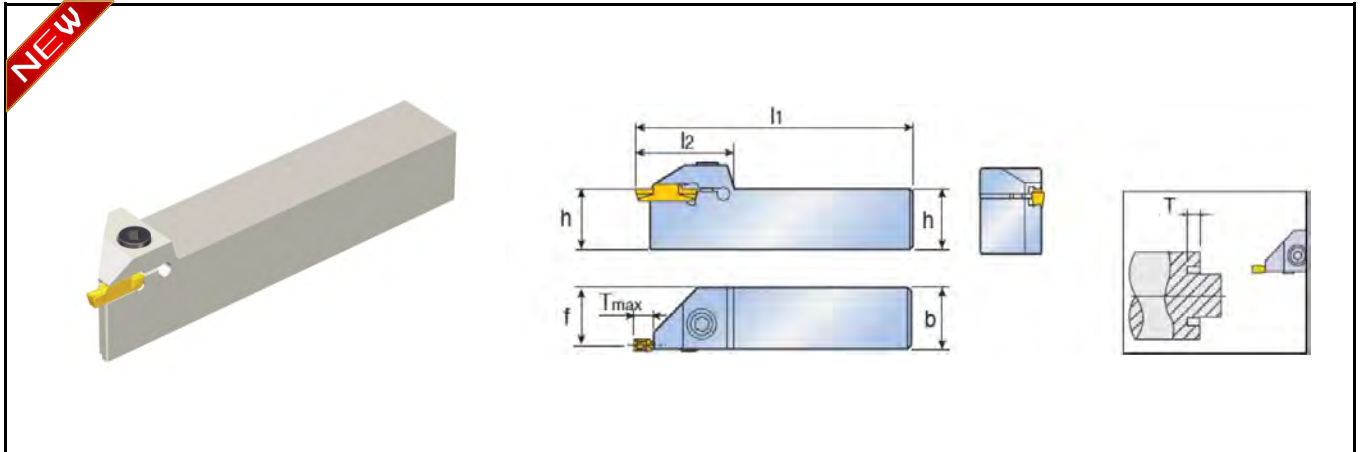
Model	Screw	Wrench
TTFR/L 20...RN	CLA0602010	CBL50
TTFR/L 25...3/4RN	CLA0602510	CBL50
TTFR/L 25...5/6RN	CLA08020125	CBL60

End Face Machining	Considerations for Tool Insert Selection
	During the tool insert selection, please first confirm the minimum machining diameter for internal grooving on page E04.

TGFR/L



External Diameter End Face Grooving and Turning



Model	Seat Size	Dimension (mm)						Insert
		h	b	l1	f	L2	Tmax	
TGFR/L 1616-4	2/3/4	16	16	110	14.6	33	4.8	TDGU TDGX TDGC TDEF
TGFR/L 2020-4	2/3/4	20	20	125	18.6	33	4.8	
TGFR/L 2525-4	2/3/4	25	25	150	23.6	33	4.8	
TGFR/L 2020-6	5/6	20	20	125	17.6	37	4.8	
TGFR/L 2525-6	5/6	25	25	150	22.6	37	4.8	

© Inserts must be ordered separately.

© This tool holder has no internal cooling

Spare Parts

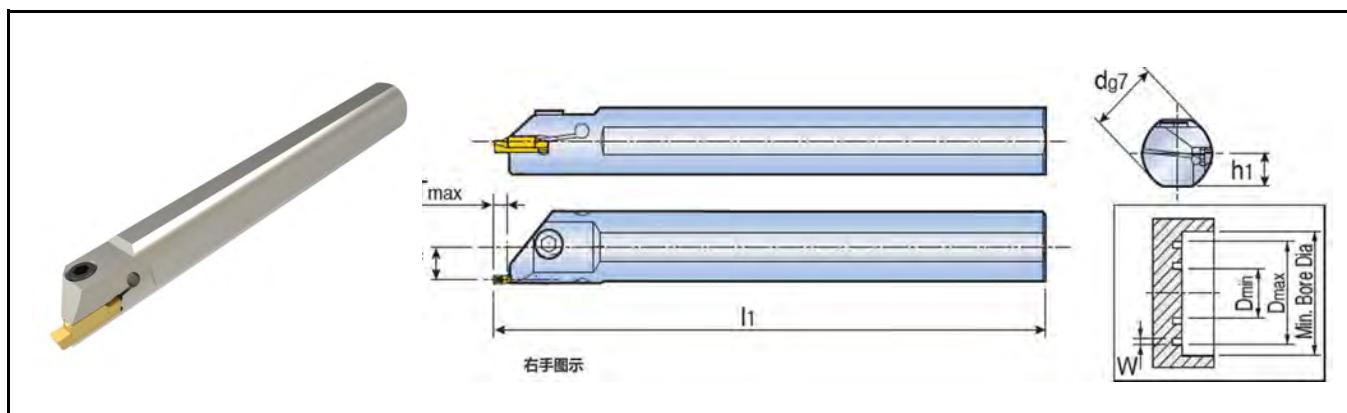
Model	Screw	Wrench
TGFR/L 1616	CLA0601610	CBL50
TGFR/L 2020	CLA0602010	CBL50
TGFR/L 2525	CLA0602510	CBL50

End Face Machining	Considerations for Tool Insert Selection
	During the tool insert selection, please first confirm the minimum machining diameter for internal grooving on page E04.

TGIFR/L



End Face Internal Shallow Grooving and End Face Turning Tool Holder



Model	Seat Size	Dimension (mm)					Insert
		d	l1	f	h1	Tmax	
TGIFR/L 25-4C-T5.5	3, 4	25	200	11.3	11.5	5.5	TDGU TDGX TDGC TDEF
TGIFR/L 32-4C-T5.5	3, 4	32	250	14.8	15	5.5	
TGIFR/L 25-6C-T5.5	5, 6	25	200	10.3	11.5	5.5	
TGIFR/L 32-6C-T5.5	5, 6	32	250	13.8	15	5.5	

© Inserts must be ordered separately.

© This tool holder has no internal cooling

W	Min. Boring Hole Diameter		Dmin		Dmax
	d=25	d=32	TDGU	TDGU round insert	
3	26.3	33.3	20	44	∞
4	26.8	33.8	18	42	
5	26.3	33.3	20		
6	26.8	33.8	18		

Spare Parts

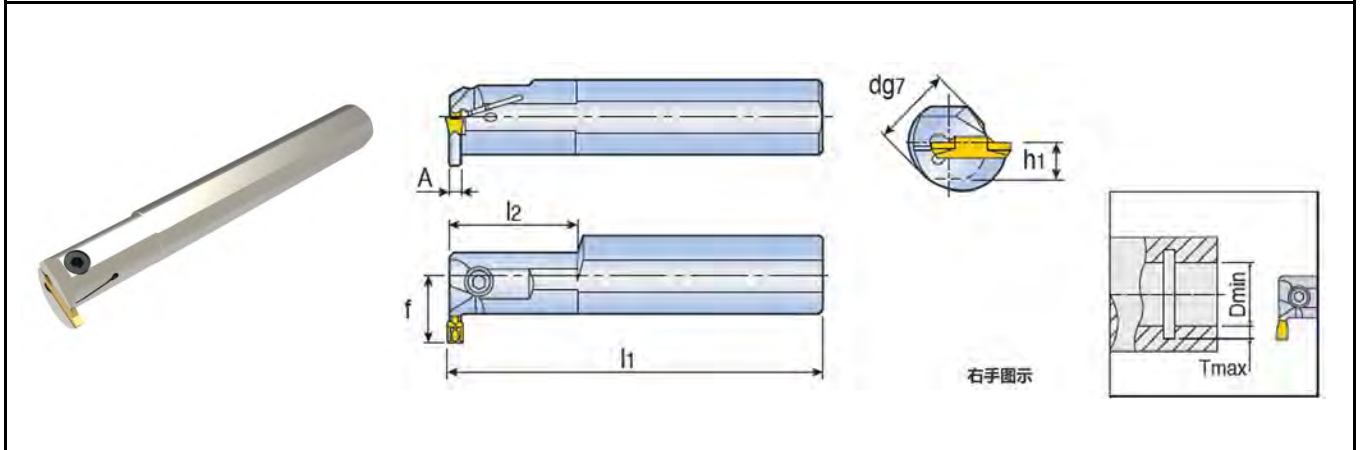
Model	Screw	Wrench
TGIFR/L 25	CLA0602010	CBL50
TGIFR/L 32	CLA0602510	CBL50

End Face Machining	Considerations for Tool Insert Selection
	During the tool insert selection, please first confirm the minimum machining diameter for internal grooving on page E04.

TTIR/L



内孔车削、切槽及仿形切削



Model	Seat Size	Dimension (mm)								Insert
		d	l1	l2	f	h1	A	Tmax	Dmin	
TTIR/L 16-2	2	16	125	—	16.5	7.5	1.8	8.5	25	TDGU TDGX TDGC TDEF
TTIR/L 20-2	2	20	160	40	15.8	9.0	1.6	6.0	25	
TTIR/L 25-2	2	25	200	40	17.5	11.5	1.6	5.0	25	
TTIR/L 20-2.5	2.5	20	160	40	15.8	9.0	2.0	6.0	25	
TTIR/L 25-2.5	2.5	25	200	40	17.5	11.5	2.0	5.0	25	
TTIR/L 32-2.5	2.5	32	250	60	19.8	14.0	2.0	4.7	31	
TTIR/L 20-3	3	20	160	40	15.8	9.0	2.1	6.0	25	
TTIR/L 25-3	3	25	200	40	17.5	11.5	2.1	5.1	25	
TTIR/L 32-3	3	32	250	60	19.8	14.0	2.1	4.7	31	
TTIR/L 20-4	4	20	160	40	15.8	9.0	2.9	6.0	25	
TTIR/L 25-4	4	25	200	40	17.5	11.5	2.9	5.2	25	
TTIR/L 32-4	4	32	250	60	20.8	14.0	2.9	4.7	31	

© Inserts must be ordered separately.

© This tool holder has no internal cooling

Spare Parts

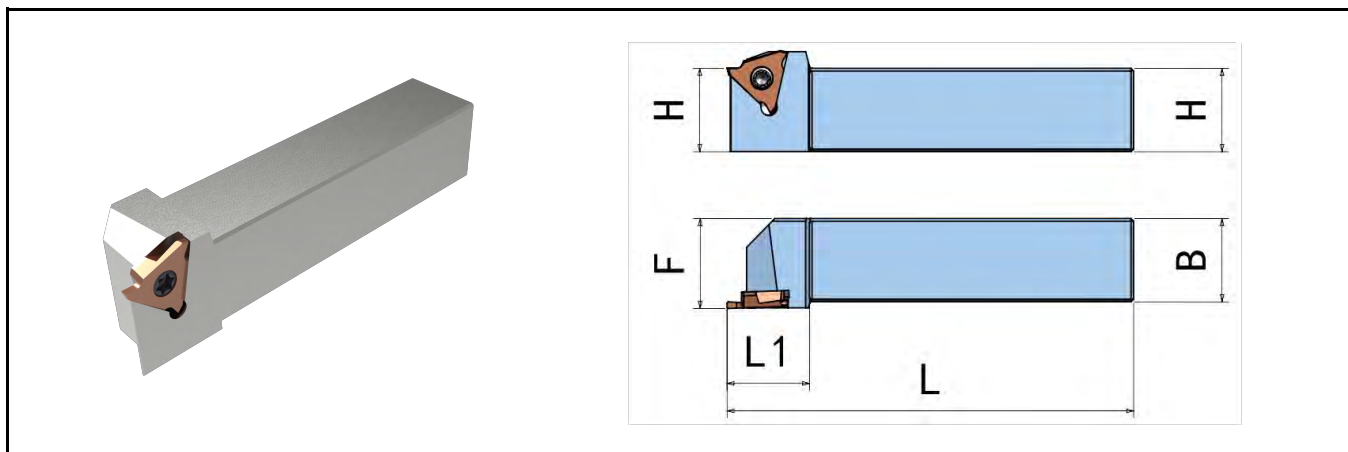
Model	Screw	Wrench
TTIR/L 16/20-2	CLA0501208	CBL40
TTIR/L 20-2.5/3/4	CLA0501608	CBL40
TTIR/L 25-2/2.5/3/4	CLA0502008	CBL40
TTIR/L 32-2.5/3/4	CLA0502508	CBL40

End Face Machining	Considerations for Tool Insert Selection
	During the tool insert selection, please first confirm the minimum machining diameter for internal grooving on page E04.

CQCR/L



External Shallow Grooving Holders



©Shows a right-hand tool holder

Model	Dimension (mm)						Insert
	H	B	L	F	L1	Cutting Width	
CQCR/L 1616K16-15	16	16	125	21	25.5	1.1-1.8	3CGF 16R/L 110-180
CQCR/L 2020K16-15	20	20	125	25			
CQCR/L 2525M16-15	25	25	150	30		1.8-3.0	3CGF 16R/L 180-300
CQCR/L 1616K16-25	16	16	125	21			
CQCR/L 2020K16-25	20	20	125	25		1.0-2.3	3CGF 22R/L 100-230
CQCR/L 2525M16-25	25	25	150	30			
CQCR/L 2020K22-15	20	20	125	25		2.3-3.3	3CGF 22R/L 230-330
CQCR/L 2525M22-15	25	25	150	30			
CQCR/L 2020K22-25	20	20	125	25		3.3-4.8	3CGF 22R/L 330-480
CQCR/L 2525M22-25	25	25	150	30			
CQCR/L 2020K22-35	20	20	125	25			
CQCR/L 2525M22-35	25	25	150	30			

© Inserts must be ordered separately.

© Select the right (R) holder for the right (R) insert, and select the left (L) holder for the left (L) insert.

© This tool holder has no internal cooling

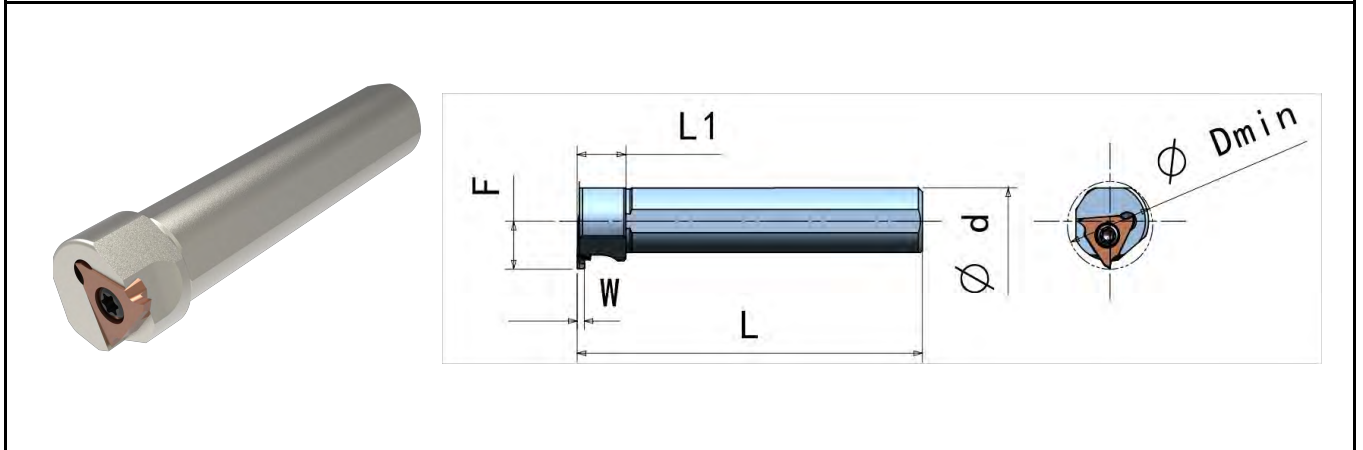
Spare Parts

Model	Screw	Wrench
CQCR/L**16	CSC4090	CTS15W
CQCR/L**22	CSG5012-P	CTS20W-P

SQCR/L



Internal Shallow Grooving Holders



©Shows a right-hand tool holder

Model	Dimension (mm)						Insert
	ϕD_{min}	ϕd	L	F	L1	Cut.Width	
S20M-QC1615R/L 25	26	20	150	12.5	15	1.1-1.8	3CGF 16R/L 110-180
S20M-QC1625R/L 25	26	20	150	12.5	15	1.8-3.0	3CGF 16R/L 180-300
S25M-QC2215R/L 35	35	25	150	18.2	15	1.0-2.3	3CGF 22R/L 100-230
S25M-QC2225R/L 35	35	25	150	18.2	20	2.3-3.3	3CGF 22R/L 230-330
S25M-QC2235R/L 35	35	25	150	18.2	20	3.3-4.8	3CGF 22R/L 330-480

© Inserts must be ordered separately.

©Right (R) tool holders are paired with left (L) inserts, while left (L) tool holders are paired with right (R) inserts

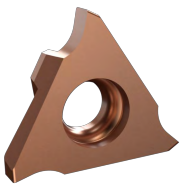
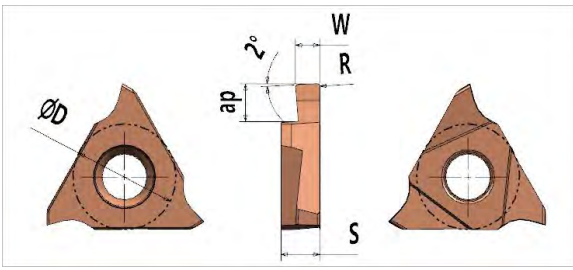
©This tool holder has no internal cooling

Spare Parts

Model	Screw	Wrench
S**QCR/L**16	CSC4090	CTS15W
S**QCR/L**22	CSG5012-P	CTS20W-P

3CGF**16L/22L

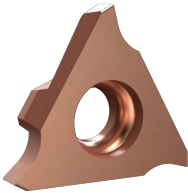
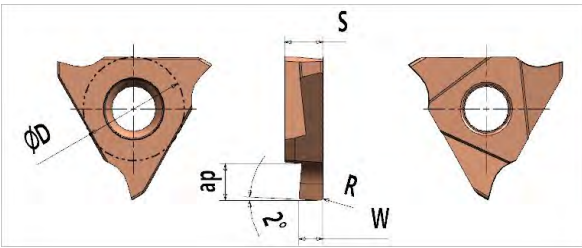


		Intro				
 left-hand insert.						• Vertical Insert • Shallow Grooving Insert • 3CGF 16/20L**is for left-hand insert.
	Dimension (mm)					Grade
Model	W	ap	øD	S	R	CT5520
3CGF 16L110-R01	1.10	2.0	9.525	3.18	0.1	●
3CGF 16L125-R02	1.25	2.0	9.525	3.18	0.2	●
3CGF 16L145-R02	1.45	2.0	9.525	3.18	0.2	●
3CGF 16L150-R02	1.50	2.0	9.525	3.18	0.2	●
3CGF 16L175-R02	1.75	2.0	9.525	3.18	0.2	●
3CGF 16L185-R02	1.85	2.5	9.525	3.18	0.2	●
3CGF 16L200-R02	2.00	2.5	9.525	3.18	0.2	●
3CGF 16L250-R02	2.50	2.5	9.525	3.18	0.2	●
3CGF 16L300-R02	3.00	3.0	9.525	3.18	0.2	●
3CGF 22L125-R02	1.25	2.0	12.7	3.18	0.2	●
3CGF 22L145-R02	1.45	2.0	12.7	3.18	0.2	●
3CGF 22L150-R02	1.50	3.5	12.7	4.76	0.2	●
3CGF 22L175-R02	1.75	3.5	12.7	4.76	0.2	●
3CGF 22L185-R02	1.85	3.5	12.7	4.76	0.2	●
3CGF 22L200-R02	2.00	3.5	12.7	4.76	0.2	●
3CGF 22L230-R02	2.30	3.5	12.7	4.76	0.2	●
3CGF 22L250-R03	2.50	4.0	12.7	4.76	0.3	●
3CGF 22L265-R03	2.65	4.0	12.7	4.76	0.3	●
3CGF 22L280-R03	2.80	4.0	12.7	4.76	0.3	●
3CGF 22L300-R03	3.00	4.0	12.7	4.76	0.3	●
3CGF 22L320-R03	3.20	4.0	12.7	4.76	0.3	●
3CGF 22L330-R03	3.30	4.0	12.7	4.76	0.3	●
3CGF 22L350-R03	3.50	5.0	12.7	4.76	0.3	●
3CGF 22L400-R04	4.0	5.0	12.7	4.76	0.4	●
3CGF 22L430-R04	4.3	5.0	12.7	4.76	0.4	●
3CGF 22L450-R04	4.5	5.0	12.7	4.76	0.4	●
3CGF 22L480-R04	4.8	5.0	12.7	5.06	0.4	●

3CGF**16L/22R



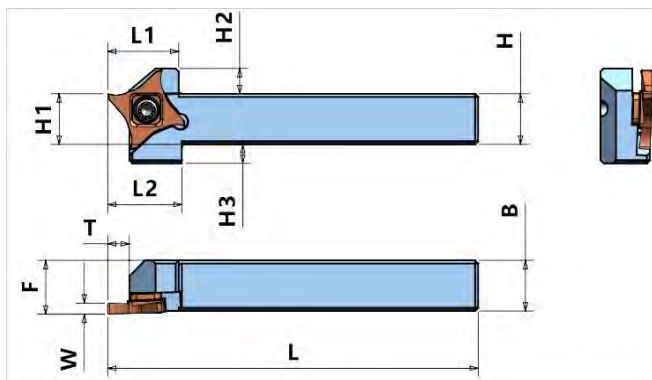
3CGF**16R/22R

		Intro				
 Right-hand insert						• Vertical Insert • Shallow Grooving Insert • 3CGF 16/20R**is for Right-hand insert.
	Dimension (mm)					Grade
Model	W	ap	ØD	S	R	CT5520
3CGF 16R110-R01	1.10	2.0	9.525	3.18	0.1	●
3CGF 16R125-R02	1.25	2.0	9.525	3.18	0.2	●
3CGF 16R145-R02	1.45	2.0	9.525	3.18	0.2	●
3CGF 16R150-R02	1.50	2.0	9.525	3.18	0.2	●
3CGF 16R175-R02	1.75	2.0	9.525	3.18	0.2	●
3CGF 16R185-R02	1.85	2.5	9.525	3.18	0.2	●
3CGF 16R200-R02	2.00	2.5	9.525	3.18	0.2	●
3CGF 16R250-R02	2.50	2.5	9.525	3.18	0.2	●
3CGF 16R300-R02	3.00	3.0	9.525	3.18	0.2	●
3CGF 22R125-R02	1.25	2.0	12.7	3.18	0.2	●
3CGF 22R145-R02	1.45	2.0	12.7	3.18	0.2	●
3CGF 22R150-R02	1.50	3.5	12.7	4.76	0.2	●
3CGF 22R175-R02	1.75	3.5	12.7	4.76	0.2	●
3CGF 22R185-R02	1.85	3.5	12.7	4.76	0.2	●
3CGF 22R200-R02	2.00	3.5	12.7	4.76	0.2	●
3CGF 22R230-R02	2.30	3.5	12.7	4.76	0.2	●
3CGF 22R250-R03	2.50	4.0	12.7	4.76	0.3	●
3CGF 22R265-R03	2.65	4.0	12.7	4.76	0.3	●
3CGF 22R280-R03	2.80	4.0	12.7	4.76	0.3	●
3CGF 22R300-R03	3.00	4.0	12.7	4.76	0.3	●
3CGF 22R320-R03	3.20	4.0	12.7	4.76	0.3	●
3CGF 22R330-R03	3.30	4.0	12.7	4.76	0.3	●
3CGF 22R350-R03	3.50	5.0	12.7	4.76	0.3	●
3CGF 22R400-R04	4.0	5.0	12.7	4.76	0.4	●
3CGF 22R430-R04	4.3	5.0	12.7	4.76	0.4	●
3CGF 22R450-R04	4.5	5.0	12.7	4.76	0.4	●
3CGF 22R480-R04	4.8	5.0	12.7	5.06	0.4	●

4CHR/L



External Diameter Shallow Grooving Tool Holder



©Right-Holder

Model	Dimension (mm)								Insert
	H	B	L	F	T	Cut. Width	L1/12	H2/H3	
4CHR/L 10-27-2	10	10	120	13	4.5-5.5	2.0-2.5	23/25	8/10	4CGF 27
4CHR/L 12-27-2	12	12	120	13			23/24	8/8	
4CHR/L 16-27-2	16	16	120	17			23/24	8/6	
4CHR/L 20-27-2	20	20	120	21			23/24	8/2	
4CHR/L 25-27-2	25	25	135	26			23/—	8/—	
4CHR/L 10-27	10	10	120	13	5.5-6.5	2.7-3.5	23/25	8/10	
4CHR/L 12-27	12	12	120	13			23/24	8/8	
4CHR/L 16-27	16	16	120	17			23/24	8/6	
4CHR/L 20-27	20	20	120	21			23/24	8/2	
4CHR/L 25-27	25	25	135	26			23/—	8/—	
4CHR/L 10-27-4	10	10	120	14	6.5	3.6-4.5	23/25	8/10	
4CHR/L 12-27-4	12	12	120	14			23/24	8/8	
4CHR/L 16-27-4	16	16	120	17			23/24	8/6	
4CHR/L 20-27-4	20	20	120	21			23/24	8/2	
4CHR/L 25-27-4	25	25	135	26			23/—	8/—	

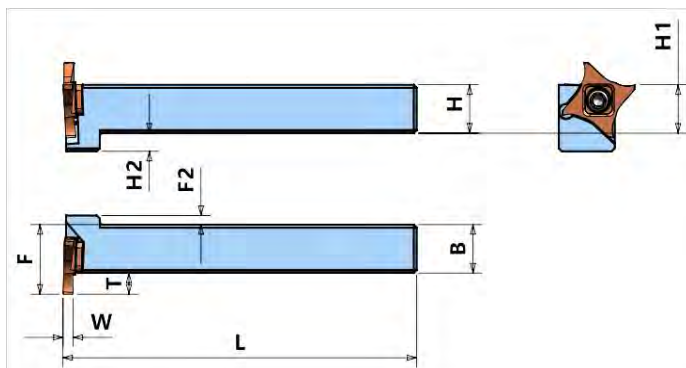
© Inserts must be ordered separately. This tool holder has no internal cooling

© Select the right (R) holder for the right (R) insert, and select the left (L) holder for the left (L) insert.

4CHPR/L



External Shallow Turning Holder



©Right holder

Model	Dimension (mm)								Insert
	H	B	L	F	T	Cut. Width	H2	F2	
4CHPR/L 16-27-2	16	16	120	23	4.5-5.5	2.0-2.5	6	3	4CGF 27
4CHPR/L 20-27-2	20	20	120	27			2	—	
4CHPR/L 25-27-2	25	25	135	32			—	—	
4CHPR/L 16-27	16	16	120	23	5.5-6.5	2.7-3.5	6	3	
4CHPR/L 20-27	20	20	120	27			2	—	
4CHPR/L 25-27	25	25	135	32			—	—	
4CHPR/L 16-27-4	16	16	120	23	6.5	3.6-4.5	6	3	
4CHPR/L 20-27-4	20	20	120	27			2	—	
4CHPR/L 25-27-4	25	25	135	32			—	—	

© Inserts must be ordered separately. This tool holder has no internal cooling

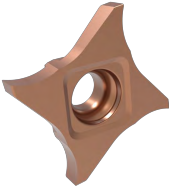
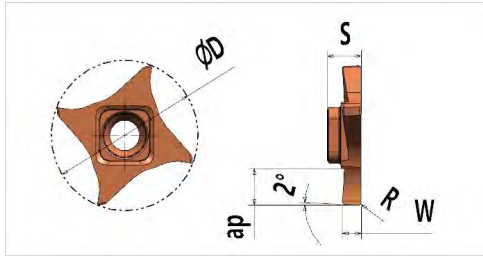
© Right (R) tool holders are paired with left (L) inserts, while left (L) tool holders are paired with right (R) inserts



Spare Parts

Model	Screw	Wrench
4CH/4CHP-27	CSC5012	CTS20W

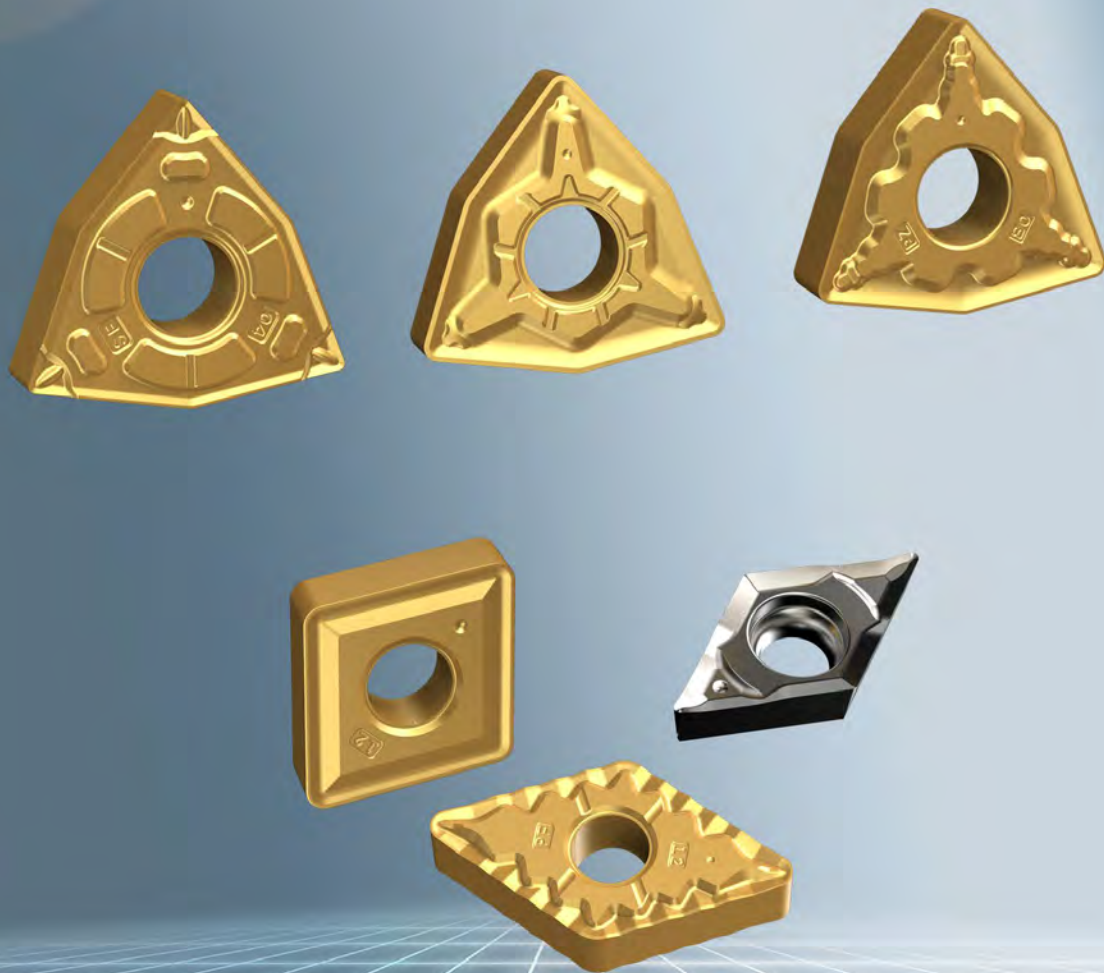
4CGF

						Intro	
 Right-hand Insert						• Vertical Insert • Shallow Grooving Insert • 4CGF 27L**left hand insert • 4CGF 27R**right hand insert	
Model	Dimension (mm)					Type	Grade
	øD	W	S	ap	R		CT5520
4CGF 27L200-R02	27.0	2.0	5.2	4.5	0.2	L Left	●
4CGF 27L230-R02		2.3		5.5	0.2		●
4CGF 27L250-R03		2.5		5.5	0.3		●
4CGF 27L270-R03		2.7	6.2	5.5	0.3		●
4CGF 27L300-R03		3.0		6.5	0.3		●
4CGF 27L320-R03		3.2		6.5	0.3		●
4CGF 27L330-R03		3.3		6.5	0.3		●
4CGF 27L340-R03		3.4		6.5	0.3		●
4CGF 27L350-R03		3.5		6.5	0.3		●
4CGF 27L360-R02		3.6	7.2	6.5	0.2		●
4CGF 27L375-R02		3.75		6.5	0.2		●
4CGF 27L400-R04		4.0		6.5	0.4		●
4CGF 27L400-R08		4.0		6.5	0.8		●
4CGF 27L415-R02		4.15		6.5	0.2		●
4CGF 27L450-R04		4.5		6.5	0.4		●
4CGF 27R200-R02	27.0	2.0	5.2	4.5	0.2	R Right	●
4CGF 27R230-R02		2.3		5.5	0.2		●
4CGF 27R250-R03		2.5		5.5	0.3		●
4CGF 27R270-R03		2.7	6.2	5.5	0.3		●
4CGF 27R300-R03		3.0		6.5	0.3		●
4CGF 27R320-R03		3.2		6.5	0.3		●
4CGF 27R330-R03		3.3		6.5	0.3		●
4CGF 27R340-R03		3.4		6.5	0.3		●
4CGF 27R350-R03		3.5		6.5	0.3		●
4CGF 27R360-R02		3.6	7.2	6.5	0.2		●
4CGF 27R375-R02		3.75		6.5	0.2		●
4CGF 27R400-R04		4.0		6.5	0.4		●
4CGF 27R400-R08		4.0		6.5	0.8		●
4CGF 27R415-R02		4.15		6.5	0.2		●
4CGF 27R450-R04		4.5		6.5	0.4		●

POWER

车刀片 系列

- 丰富的排屑槽类型设计, 兼备了刀尖的切削效果和刃口强度;
- 多种类的涂层效果, 使刀片在加工钢/不锈钢/铸铁以及难加工材料, 都有很好的应用



Chai Tools

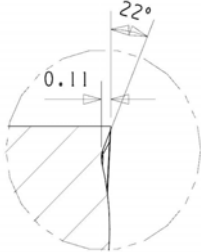
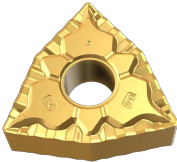
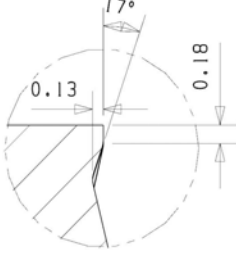
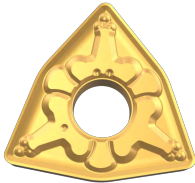
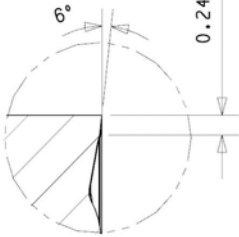
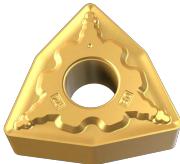
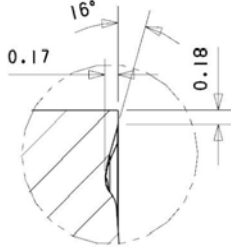
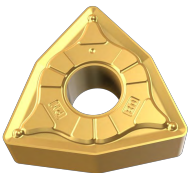
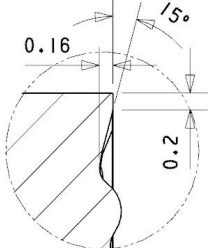
Material Specification Table



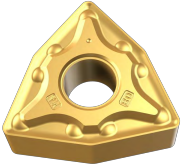
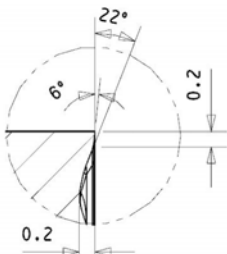
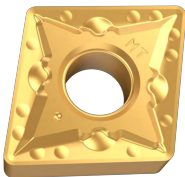
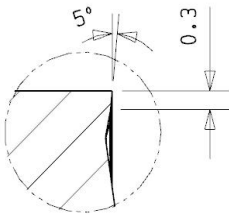
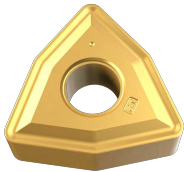
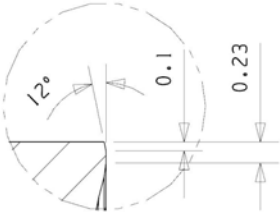
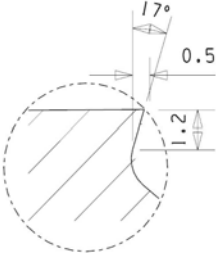
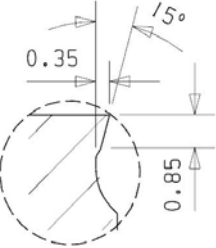
Workpiece Material	P: Steel		M : Stainless Steel	K: Cast Iron
	N: Non-ferrous Metals		S: Heat-resistant Alloy	H: Hard Materials
Grade	ISO		Description	
CT5215	P10	— P25	Bimetallic CVD Coating: Continuous to Light Intermittent Processing of Materials such as Carbon Steel and Alloy Steel	
CT5225	P15	— P30	Bimetallic CVD Coating: Suitable for Various Machining Applications of Steel Materials	
CT5415	P10	— P20	Black CVD Coating: Continuous to Light Intermittent Processing of Materials such as Carbon Steel and Alloy Steel	
CT5425	P20	— P30	Black CVD Coating: Suitable for Various Machining Applications, the Preferred Choice for Steel Component Processing	
CT7415	K10	— K25	Suitable for High-Speed Machining of Cast Iron	
CT7425	K15	— K30	Best for High-Speed Machining of Cast Iron	
CT8520	M10	— M30	High Toughness Ultra-Fine Hard Alloy Substrate, Paired with Wear-Resistant Nano Composite PVD Coating, Suitable for Continuous and Light Intermittent Processing of Stainless Steel	
CT8320	M15	— M40	High Toughness Ultra-Fine Hard Alloy Substrate, Paired with Tough Nano Composite PVD Coating, Suitable for General Machining of Stainless Steel	
CT101	K05	— K15	Non-Coated Alloy, Suitable for General Turning of Aluminum Alloys, Copper Alloys, and Non-Ferrous Metals	
	N05	— N15		
	S05	— S15		

Groove Type Description

Negative Inserts: Chip Break Slot Names and Geometric Angles

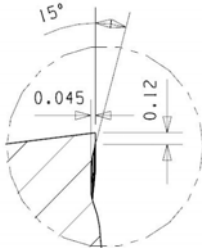
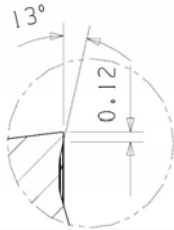
Negative Inserts			Applications and Features
SF			- Precision to Semi-Finishing of Steel and Stainless Steel - Good Chip Removal at Low Feed Rates and Shallow Cutting Depths - Excellent Chip Control Capability
PF			- Excellent Overall Performance of Edge Strength and Sharpness - Used for Semi-Finishing to Medium Machining of Steel and Alloy Steel - Curved Cutting Edge Design for Smooth Chip Removal and Good Chip Control
TM			- Medium Machining Slot Type for Steel Components - Sharpness with Low Cutting Resistance - Universal Chip Break Slot with a Wide Range of Chip Removal Applications
PZ			- Medium Machining Slot Type for Steel Components - Radius Edge Treatment for Balance Cutting Effect and Edge Strength, Offering Excellent Overall Performance - Good Chip Breaking Performance During Medium Machining
PM			- Medium Coarse Machining Slot Type for Steel Components - Negative Chamfer Design to Enhance Edge Strength and Impact Resistance - Dual Chip Break Platform Design to Expand Chip Breaking Range

Groove Type Description

Negative Inserts: Chip breaker Name and Geometry			Applications and Features
MA			- Moderate loading of stainless steel, mild steel, hard-to-cut materials slot type; - The cutting edge is sharp and takes into account a certain strength, with Good impact resistance; - Long cutting life.
MT			- Medium machining groove for steel and stainless steel. - Positive rake angle design, combining sharpness and edge strength for overall excellent performance.
General Groove			- General groove type for machining cast iron. - Good edge strength and versatility.
R/L -VF			- Reduce vibration. - Suitable for machining long shaft parts. - Large rake angle reduces cutting resistance.
R/L -FS			- Medium machining of steel parts. - Effectively controls cutting resistance with good sharpness.

Groove Type Description

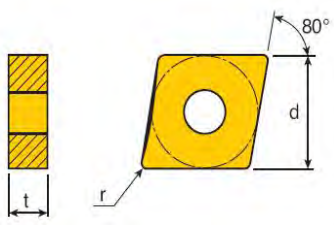
Positive Inserts: Chip breaker Designation and Geometry

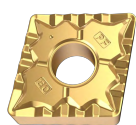
Positive Inserts			Applications and Features
PC			• Medium semi-finish groove type for steel parts. • Compact chip groove combines sharpness and low cutting resistance. • Good chip removal during medium machining. °
MT			• Medium machining groove type for steel parts. • Combines cutting effectiveness of the cutting edge with edge strength. • Preferred groove type for medium machining.

CNMG



Negative 80° Diamond-shaped Inserts.

	Cutting Edge Length	Dimension (mm)		
		d	t	r
	12	12.7	4.76	0.1-1.6

	Model	Feed (mm/rev)	Cut.Depth (mm)	P				M/S		K		N
				CT5215	CT5225	CT5415	CT5425	CT8520	CT8320	CT7415	CT7425	CT101
 Finishing	CNMG	120404 SF	0.05-0.30	0.2-2.5			●	○				
		120408 SF	0.08-0.35	0.3-2.5			●	○				
 Finishing	CNMG	120408 PF	0.10-0.40	0.5-4.0	○	●	○	●				
 Medium machining	CNMG	120404 MT	0.17-0.55	1.2-5.0	○	●	○	●				
		120408 MT	0.17-0.55	1.2-5.0	○	●	○	●				
 Medium machining	CNMG	120404 MA	0.10-0.50	0.5-5.0				●	●			
		120408 MA	0.13-0.50	0.5-5.0				●	●			
		120412 MA	0.15-0.55	0.5-5.0				●	●			
 Medium machining	CNMG	120408	0.23-0.60	1.2-5.0						○	●	
		120412	0.25-0.60	2.0-5.0						○	●	

●The stock status for the corresponding tool holder is currently unavailable. For inventory details, please call for inquiry.

● Recommended grades

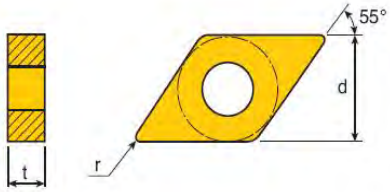
○ Optional grades

E23

DNMG



Negative 55° Diamond-shaped Inserts.

	Cutting Edge Length	Dimension (mm)		
		d	t	r
	15	12.7	4.76-6.35	0.1-1.2

	Model	Feed (mm/rev)	Cut.Depth (mm)	P				M/S		K		N
				CT5215	CT5225	CT5415	CT5425	CT8520	CT8320	CT7415	CT7425	CT101
 Finishing	DNMG	150408 PF	0.10-0.40	0.5-4.0	○	●	○	●				
		150412 PF	0.10-0.40	0.5-4.0	○	●	○	●				
 Medium machining	DNMG	150404 MT	0.17-0.50	1.0-4.0		●		●				
		150408 MT	0.17-0.50	1.0-4.0		●		●				
 Medium machining	DNMG	150412 PM	0.17-0.50	1.0-4.0		●		●				
 Medium machining	DNMG	150608	0.15-0.65	0.8-4.0						○	●	
 粗加工	DNMG	150412	0.25-0.55	1.5-4.0						○	●	

● The stock status for the corresponding tool holder is currently unavailable. For inventory details, please call for inquiry.

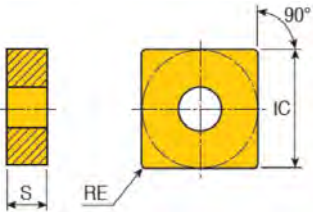
E24

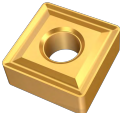
- Recommended grades
- Optional grades

SNMG



Negative 90° Square Insert

	Cutting Edge Length	Dimension (mm)		
		IC	S	RE
	12	12.7	4.76	0.8

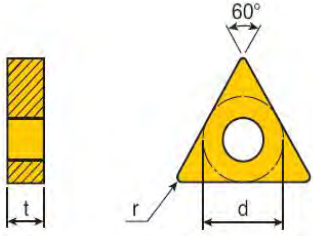
	Model	Feed (mm/rev)	Cut .Depth (mm)	P				M/S		K		N
				CT5215	CT5225	CT5415	CT5425	CT8520	CT8320	CT7415	CT7425	CT101
 Medium machining	SNMG	120408	0.17-0.55	1.2-5.0		○					●	

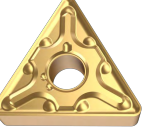
● The stock status for the corresponding tool holder is currently unavailable. For inventory details, please call for inquiry.

TNMG



Negative 60° Triangular Insert

	Cutting Edge Length	Dimension (mm)		
		d	t	r
	16	9.52	4.76	0.4-1.6

	Model	Feed (mm/rev)	Cut .Depth (mm)	P				M/S		K		N
				CT5215	CT5225	CT5415	CT5425	CT8520	CT8320	CT7415	CT7425	CT101
 Finishing	TNMG	160404 SF	0.10-0.40	0.5-4.0		●	○					
		160408 SF	0.10-0.40	0.5-4.0		●	○					
 Finishing	TNMG	160408 PF	0.10-0.40	0.5-4.0	●	●	○	●				
 Medium machining (right hand)	TNMG	160404 R-VF	0.17-0.40	1.0-3.5		●		●				
		160404 L-VF	0.17-0.50	1.2-3.5		●		●				
		160408 R-VF	0.20-0.50	1.5-3.5		●		●				
		160408 L-VF										
 Medium machining (right hand)	TNMG	160404 R-FS	0.17-0.40	1.0-3.5		●		●				
		160404 L-FS	0.17-0.50	1.2-3.5		●		●				
		160408 R-FS	0.20-0.50	1.5-3.5		●		●				
		160408 L-FS										
 Medium machining	TNMG	160404 MA	0.13-0.50	0.8-4.5				●	●			
		160408 MA	0.15-0.55	0.8-4.5				●	●			

● The stock status for the corresponding tool holder is currently unavailable. For inventory details, please call for inquiry.

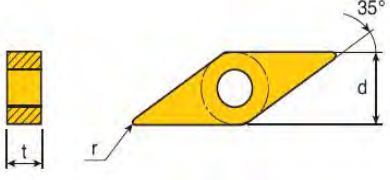
E26

- Recommended grades
- Optional grades

VNMG



Negative 35° Rhombic Insert

	Cutting Edge Length	Dimension (mm)		
		d	t	r
	16	9.52	4.76	0.1-1.2

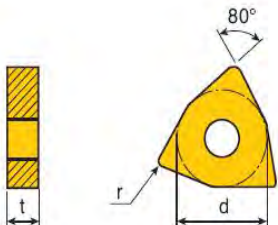
	Model	Feed (mm/rev)	Cut .Depth (mm)	P				M/S		K		N
				CT5215	CT5225	CT5415	CT5425	CT8520	CT8320	CT7415	CT7425	CT101
 Medium machining	VNMG	160404 MT	0.15-0.36	0.8-3.0	●		●					
		160408 MT	0.17-0.36	1.0-2.5	●		●					
 Medium machining	VNMG	160408 MA	0.13-0.50	0.8-3.5				●	●			
								●	●			

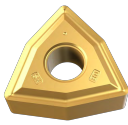
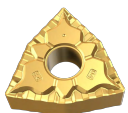
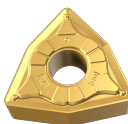
● The stock status for the corresponding tool holder is currently unavailable. For inventory details, please call for inquiry.

WNMG



Negative 80° Triangular Insert

	Cutting Edge Length	Dimension (mm)		
		d	t	r
	08	12.7	4.76	0.4-1.2

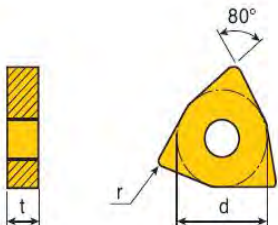
	Model	Feed (mm/rev)	Cut .Depth (mm)	P				M/S		K		N
				CT5215	CT5225	CT5415	CT5425	CT8520	CT8320	CT7415	CT7425	CT101
 Finishing	WNMG	080404 SF	0.10-0.40	0.5-4.0		●	○	○	○			
		080408 SF	0.10-0.40	0.5-4.0		●	○	○	○			
 Finishing	WNMG	080404 MS	0.10-0.40	0.5-4.0				●	●			
		080408 MS	0.10-0.40	0.5-4.0				●	●			
 Medium machining	WNMG	080404 PF	0.10-0.40	0.5-4.0	○	●	○	●				
		080408 PF	0.10-0.40	0.5-4.0	○	●	○	●				
 Medium machining	WNMG	080404 PM	0.15-0.40	0.5-4.0	○	●	○	●				
		080408 PM	0.15-0.40	0.5-4.0	○	●	○	●				
		080412 PM	0.15-0.40	0.5-4.0	○	●	○	●				
 Medium machining	WNMG	080408 TM	0.17-0.55	1.2-4.0	○	●	○	●				
		080412 TM	0.25-0.55	1.5-4.0	○	●	○	●				

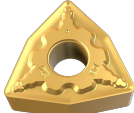
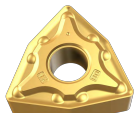
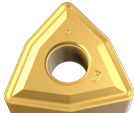
● The stock status for the corresponding tool holder is currently unavailable. For inventory details, please call for inquiry.

WNMG



Negative 80° Triangular Insert

	Cutting Edge Length	Dimension (mm)		
		d	t	r
08		12.7	4.76	0.4-1.6

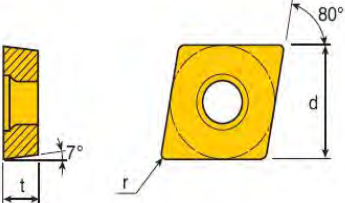
	Model	Feed (mm/rev)	Cut.Depth (mm)	P				M/S		K		N
				CT5215	CT5225	CT5415	CT5425	CT8520	CT8320	CT7415	CT7425	CT101
 Medium machining	WNMG	080408 PZ	0.17-0.55	1.2-4.0	○	●	○	●				
		080412 PZ	0.25-0.55	1.5-4.0	○	●	○	●				
 Medium machining	WNMG	080404 MA	0.10-0.45	0.8-4.0					●	●		
		080408 MA	0.12-0.45	0.8-4.0					●	●		
		080412 MA	0.12-0.45	0.8-4.0					●	●		
		080416 MA	0.12-0.45	0.8-4.0					●	●		
 Rough finishing	WNMG	080404	0.15-0.70	1.0-5.0						○	●	
		080408	0.15-0.70	1.0-5.0						○	●	
		080412	0.20-0.80	1.5-5.0						○	●	
		080416	0.20-0.80	1.5-5.0						○	●	

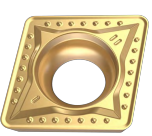
● The stock status for the corresponding tool holder is currently unavailable. For inventory details, please call for inquiry.

CCMT



Positive 7° Relief Rhombic Insert

	Cutting Edge Length	Dimension (mm)		
		d	t	r
	06	6.35	2.38	0.1-0.8
	09	9.52	3.97	0.1-0.8
	12	12.7	4.76	0.4-1.2

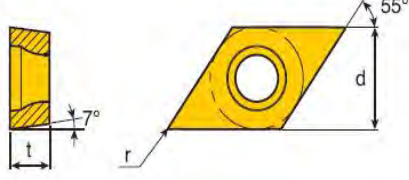
	Model	Feed (mm/rev)	Cut .Depth (mm)	P				M/S		K		N
				CT5215	CT5225	CT5415	CT5425	CT8520	CT8320	CT7415	CT7425	CT101
 Medium machining	CCMT	060204 PC	0.07-0.20	0.5-2.0	o	o	●	o	o			
		060208 PC	0.13-0.30	0.7-2.0	o	o	●	o	o			
		09T304 PC	0.10-0.25	0.7-3.5	o	o	●	o	o			
		09T308 PC	0.13-0.30	1.0-3.5	o	o	●	o	o			
		120404 PC	0.10-0.25	1.0-5.0	o	o	●	o	o			
		120408 PC	0.13-0.30	1.3-5.0	o	o	●	o	o			
 Medium machining	CCMT	09T304 MT	0.10-0.25	0.7-3.5	o	●	●	●	●			
		09T308 MT	0.13-0.30	1.0-3.5	o	●	●	●	●			

● The stock status for the corresponding tool holder is currently unavailable. For inventory details, please call for inquiry.

DCMT



Positive 7° Relief 55° Rhombic Insert

	Cutting Edge Length	Dimension (mm)		
		d	t	r
07		6.35	2.38	0.03-0.8
11		9.52	3.97	0.03-0.8

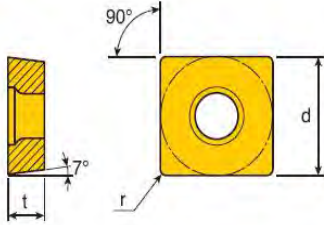
	Model	Feed (mm/rev)	Cut .Depth (mm)	P				M/S		K		N
				CT5215	CT5225	CT5415	CT5425	CT8520	CT8320	CT7415	CT7425	CT101
 Medium machining	DCMT	070204 PC	0.06-0.18	0.3-2.0	●	●		●	o	o		
		070208 PC	0.08-0.25	0.4-2.0	●	●		●	o	o		
		11T304 PC	0.08-0.25	0.35-3.0	●	●		●	o	o		
		11T308 PC	0.10-0.28	0.5-3.0	●	●		●	o	o		

● The stock status for the corresponding tool holder is currently unavailable. For inventory details, please call for inquiry.

SCMT



Positive 7° Relief 55° Rhombic Insert

	Cutting Edge Length	Dimension (mm)		
		d	t	r
09		9.52	3.97	0.4-0.8
12		12.7	4.76	0.4-1.2

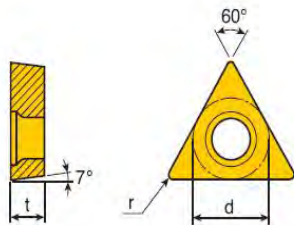
	Model	Feed (mm/rev)	Cut .Depth (mm)	P				M/S		K		N
				CT5215	CT5225	CT5415	CT5425	CT8520	CT8320	CT7415	CT7425	CT101
 Medium machining	SCMT	09T304 PC	0.25-0.50	1.5-4.0	○		●		○			
		09T308 PC	0.30-0.60	2.5-5.0	○		●		○			
		120408 PC	0.48-0.90	3.5-9.0	○		●		○			

● The stock status for the corresponding tool holder is currently unavailable. For inventory details, please call for inquiry.

TCMT



Positive 7° Relief Triangular Insert

	Cutting Edge Length	Dimension (mm)		
		d	t	r
09		5.56	2.38	0.4-0.8
11		6.35	2.38-3.18	0.1-0.8
16		9.52	3.97	0.4-1.2

	Model	Feed (mm/rev)	Cut .Depth (mm)	P				M/S		K		N
				CT5215	CT5225	CT5415	CT5425	CT8520	CT8320	CT7415	CT7425	CT101
 Medium machining	TCMT	090204 PC	0.10-0.25	0.6-2.0	●		●		o			
		110204 PC	0.10-0.25	0.6-3.0	●		●		o			
		110208 PC	0.13-0.30	0.8-3.0	●		●		o			
		16T304 PC	0.10-0.25	0.8-5.0	●		●		o			
		16T308 PC	0.10-0.30	1.0-5.0	●		●		o			

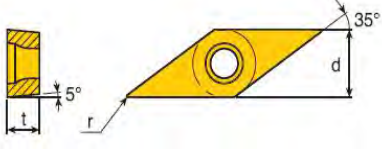
● The stock status for the corresponding tool holder is currently unavailable. For inventory details, please call for inquiry.

VBMT/VCMT



Positive 5° /7° Relief 35° Rhombic Insert

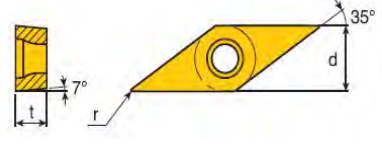
VBMT, 5° Relief

	Cutting Edge Length	Dimension (mm)		
		d	t	r
	16	9.52	4.76	0.4-1.2

	Model	Feed (mm/rev)	Cut .Depth (mm)	P				M/S		K		N
				CT5215	CT5225	CT5415	CT5425	CT8520	CT8320	CT7415	CT7425	CT101
 Medium machining	VBMT	160404 PC	0.10-0.25	0.6-3.0	o	o	●	o	o			
		160408 PC	0.13-0.30	0.9-3.0	o	o	●	o	o			

●The stock status for the corresponding tool holder is currently unavailable. For inventory details, please call for inquiry.

VCMT, 7° Relief

	Cutting Edge Length	Dimension (mm)		
		d	t	r
	11	6.35	3.18	0.1-0.4
	16	9.52	4.76	0.4-0.8

	Model	Feed (mm/rev)	Cut .Depth (mm)	P				M/S		K		N
				CT5215	CT5225	CT5415	CT5425	CT8520	CT8320	CT7415	CT7425	CT101
 Medium machining	VCMT	110304 PC	0.08-0.20	0.5-2.0	o	o	●	o	o			
		160404 PC	0.08-0.20	0.5-2.0	o	o	●	o	o			
		160408 PC	0.08-0.20	0.5-2.0	o	o	●	o	o			

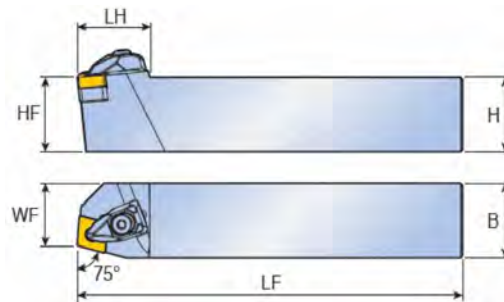
●The stock status for the corresponding tool holder is currently unavailable. For inventory details, please call for inquiry.

- Recommended grades
- Optional grades

TCBNR/L, TCKNR/L

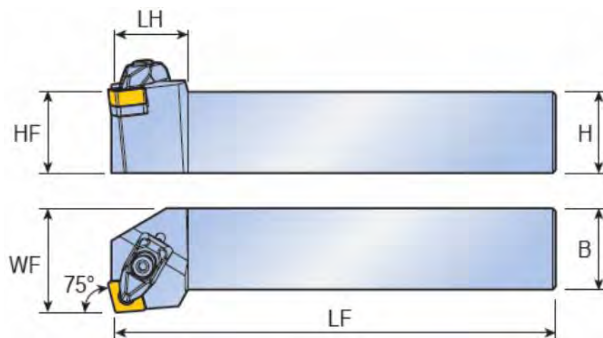
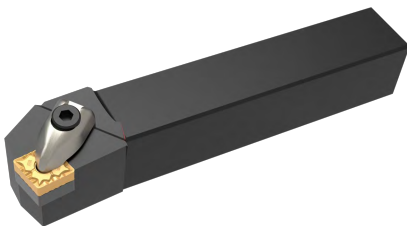


Negative CN Insert, T-Slot Clamp, External Turning Tool Holder



Model	Kr	Dimension (mm)						Insert
		H	B	HF	WF	LF	LH	
TCBNR/L 2525 M12	75°	25	25	25	22.5	150	32	CN. . 1204
TCBNR/L 3232 P19		32	32	32	27	170	42	CN. . 1906

© Inserts must be ordered separately; For insert selection, please refer to the insert details on page E23



Model	Kr	Dimension (mm)						Insert
		H	B	HF	WF	LF	LH	
TCKNR/L 2525 M12	75°	25	25	25	32	150	25	CN. . 1204

© Inserts must be ordered separately ; For insert selection, please refer to the insert details on page E23

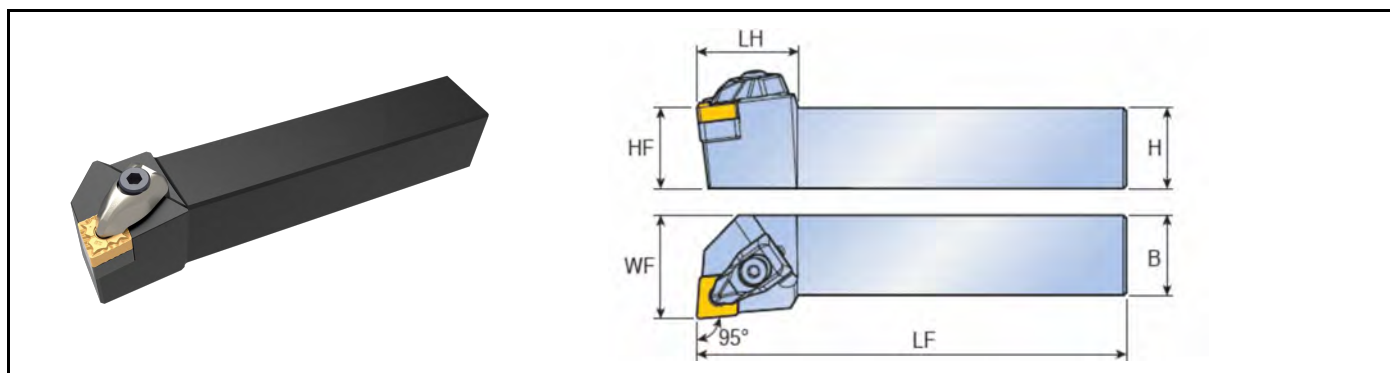
Spare Parts

Model	Pressure Plate	Plat Screw	Spring	Tool Pad	Pad Screw	Wrench
CN. . 1204	CYT4	CLT5023	CPT4	CDTC1206	CSC4090	CBL40
CN. . 1906	CYT6	CLT6026	CPT5	CDTC1904	CSC8011	CBL40

TCLNR/L



Negative CN Insert, T-Slot Clamp, External Turning Tool Holder



Model	Kr	Dimension (mm)						Insert
		H	B	HF	WF	LF	LH	
TCLNR/L 2020 K12	95°	20	20	20	25	125	32	CN. . 1204
TCLNR/L 2525 M12		25	25	25	32	150		
TCLNR/L 3225 P12		32	25	32	32	170		
TCLNR/L 3232 P12		32	32	32	40	170		
TCLNR/L 2525 M16	95°	25	25	25	32	150	36	CN. . 1606
TCLNR/L 3232 P16		32	32	32	40	170		
TCLNR/L 3232 P19	95°	32	32	32	40	170	42	CN. . 1906
TCLNR/L 4040 S19		40	40	40	50	250		

© Inserts must be ordered separately.

©For insert selection, please refer to the insert details on page E23

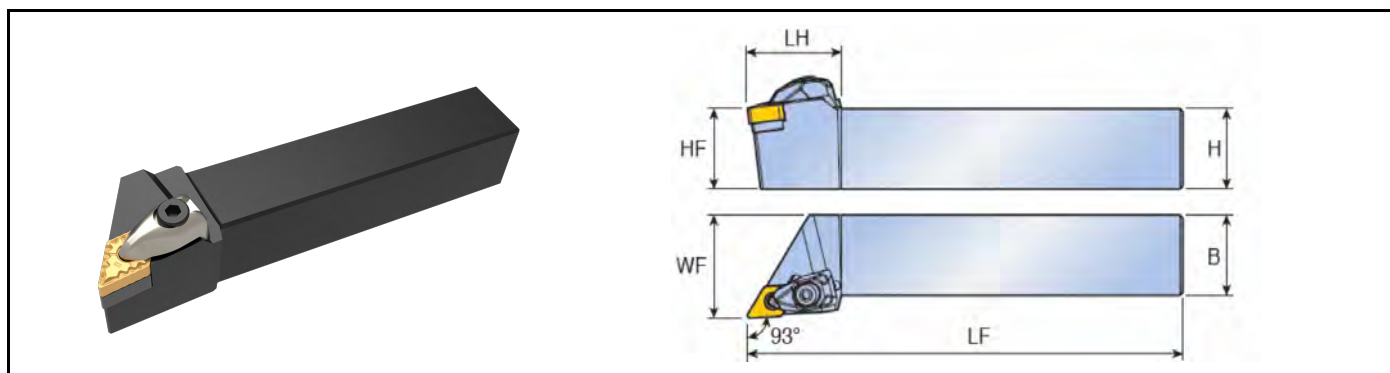
Spare Parts

Model	Pressure Plate	Plate Screw	Spring	Tool Pad	Pad Screw	Wrench
CN. . 1204	CYT4	CLT5023	CPT4	CDTC1206	CSC4090	CBL40
CN. . 1606	CYT5	CLT6026	CPT5	CDTC1606	CSC5012	CBL40
CN. . 1906	CYT6	CLT6026	CPT5	CDTC1904	CSC8011	CBL40

TDJNR/L



Negative DN Insert, Clamped with a T-Slot Clamp, External Turning Tool Holder



Model	Kr	Dimension (mm)						Insert
		H	B	HF	WF	LF	LH	
TDJNR/L 2020 K15	93°	20	20	20	25	125	39	DN. . 1504 DN. . 1506
TDJNR/L 2525 M15		25	25	25	32	150		
TDJNR/L 3232 P15		32	32	32	40	170		

© Inserts must be ordered separately.

© For insert selection, please refer to the insert details on page E24

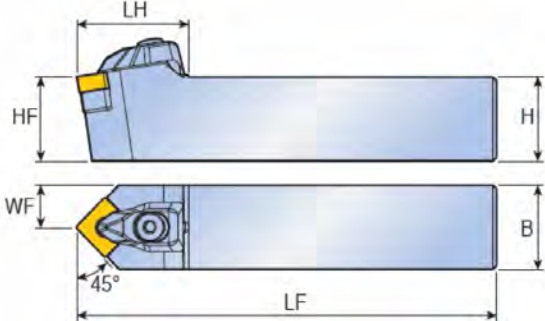
Spare Parts

Model	Pressure Plate	Plate Screw	Spring	Tool Pad	Pad Screw	Wrench
DN. . 1504	CYT4	CLT5023	CPT4	CDTD1506	CSC4090	CBL40
DN. . 1506	CYT4	CLT5023	CPT4	CDTD1504	CSC4090	CBL40

TSDNN、TSSNR/L



Negative SN Insert, Clamped with a T-Slot Clamp, External Turning Tool Holder.

								
Model	Kr	Dimension (mm)						Insert
		H	B	HF	WF	LF	LH	
TSDNN 2525 M12	45°	25	25	25	12.5	150	34	SN. .1204
TSDNN 3232 P19		32	32	32	16	170	44	SN. .1906

© Inserts must be ordered separately. For insert selection, please refer to the insert details on page E25

Model	Kr	Dimension (mm)						Insert
		H	B	HF	WF	LF	LH	
TSSNR/L 2525 M12	45°	25	25	25	32	150	35	SN. .1204

© Inserts must be ordered separately. For insert selection, please refer to the insert details on page E25

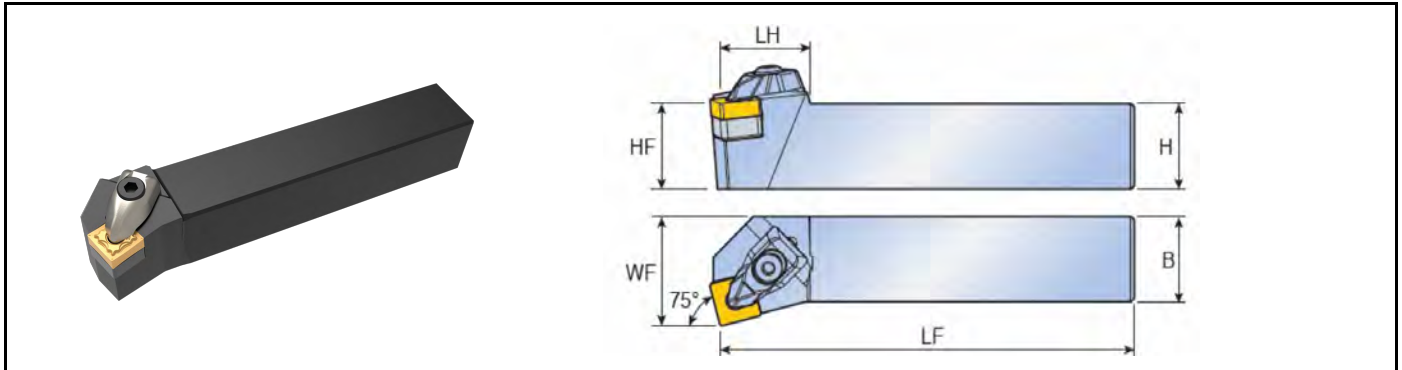
Spare Parts

Model	Pressure Plate	Plate Screw	Spring	Tool Pad	Pad Screw	Wrench
						
SN. .1204	CYT4	CLT5023	CPT4	CDTS1206	CSC4090	CBL40
SN. .1906	CYT6	CLT6026	CPT5	CDTS1904	CSC8011	CBL40

TSKNR/L



Negative SN Insert, Clamped with a T-Slot Clamp, External Turning Tool Holder.



Model	Kr	Dimension (mm)						Insert
		H	B	HF	WF	LF	LH	
TSKNR/L 2525 M12	75°	25	25	25	32	150	27	SN..1204

© Inserts must be ordered separately.

©For insert selection, please refer to the insert details on page E25

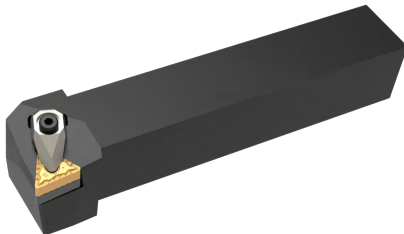
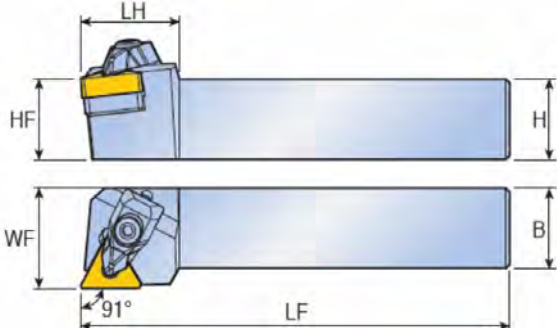
Spare Parts

	Model	Pressure Plate	Plate Screw	Spring	Tool Pad	Pad Screw	Wrench
	SN..1204	CYT4	CLT5023	CPT4	CDTS1206	CSC4090	CBL40

TTGNR/L, TTJNR/L



Negative TN Insert, Clamped with a T-Slot Clamp, External Turning Tool Holder.

								
Model	Kr	Dimension (mm)						Insert
		H	B	HF	WF	LF	LH	
TTGNR/L 2525 M16	91°	25	25	25	32	150	25	TN. .1604

© Inserts must be ordered separately. For insert selection, please refer to the insert details on page E26

Model	Kr	Dimension (mm)						Insert
		H	B	HF	WF	LF	LH	
TTJNR/L 2020 K16	93°	20	20	20	25	125	25	TN. .1604
TTJNR/L 2525 M16	93°	25	25	25	32	150	25	

© Inserts must be ordered separately. For insert selection, please refer to the insert details on page E26

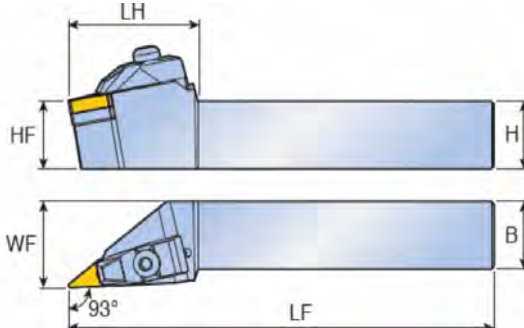
Spare Parts

	Model	Pressure Plate	Plate Screw	Spring	Tool Pad	Pad Screw	Wrench
							
	TN. .1604	CYT-3	CLT4017	CPT3	CDTT1604	CSC3581	CBL25

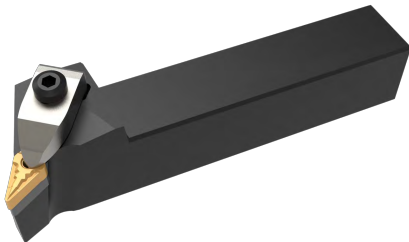
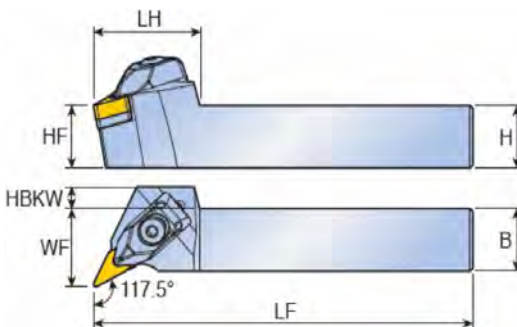
TVJNR/L、TVQNR/L



Negative VN Insert, Clamped with a T-Slot Clamp, External Turning Tool Holder.

								
Model	Kr	Dimension (mm)						Insert
		H	B	HF	WF	LF	LH	
TVJNR/L 2020 K16	93°	20	20	20	25	125	49	VN. . 1604
TVJNR/L 2525 M16		25	25	25	32	150	49	

© Inserts must be ordered separately. For insert selection, please refer to the insert details on page E27

								
Model	Kr	Dimension (mm)						Insert
		H=B	HF	WF	LF	LH	HBKW	
TVQNR/L 2020 K16	117.5°	20	20	25	125	42	8	VN. . 1604
TVQNR/L 2525 M16		25	25	32	150	42	2	

© Inserts must be ordered separately. For insert selection, please refer to the insert details on page E27

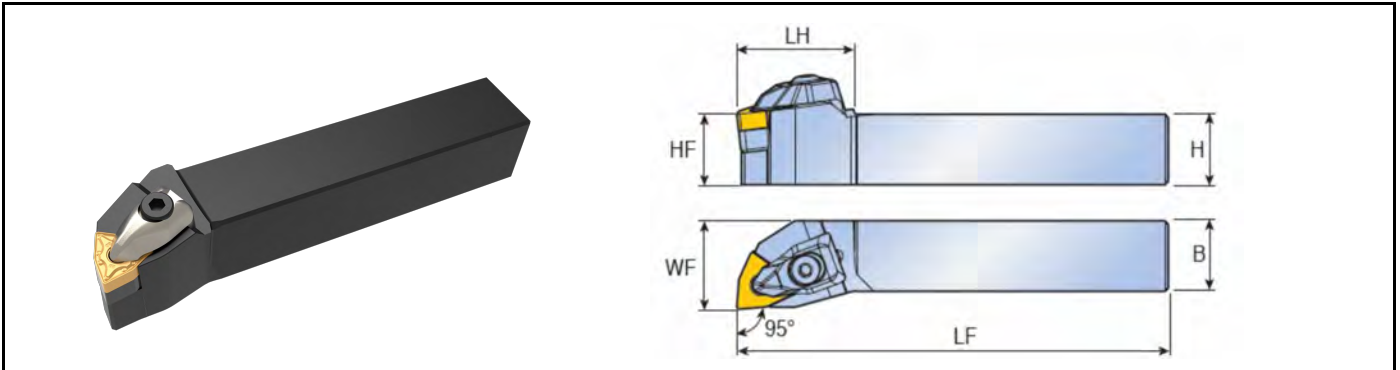
Spare Parts

	I Model	Pressure Plate	Plate Screw	Spring	Tool Pad	Pad Screw	Wrench
							
	VN. . 1604	CYT-3V	CLT6026	CPT5	CDTV1604	CSC3580	CBL40

TWLNRL/L



Negative SN Insert, Clamped with a T-Slot Clamp, External Turning Tool Holder.



Model	Kr	Dimension (mm)						Insert
		H	B	HF	WF	LF	LH	
TWLNRL/L 2020 K08	95°	20	20	20	25	125	34.2	WN. .0804
TWLNRL/L 2525 M08		25	25	25	32	150		
TWLNRL/L 3232 P08		32	32	32	40	170		

© Inserts must be ordered separately.

© For insert selection, please refer to the insert details on page E28

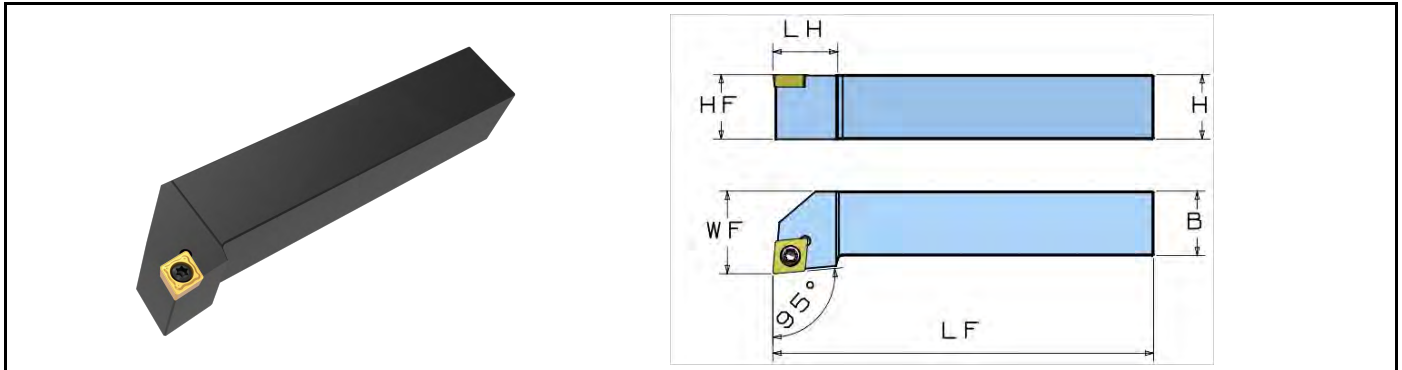
Spare Parts

	Model	Pressure Plate	Plate Screw	Spring	Tool Pad	Pad Screw	Wrench
	WN. .0804	CYT4	CLT5023	CPT4	CDTW0806	CSC4090	CBL40

SCLCR/L



Positive CC Insert, Clamped with an S-Slot Screw, External Turning Tool Holder



Model	Kr	Dimension (mm)						Insert
		H	B	HF	WF	LF	LH	
SCLCR/L 0808 F06	95°	8	8	8	10	80	10	CC. .0602
SCLCR/L 1010 F06		10	10	10	12	80	10	
SCLCR/L 1212 F09	95°	12	12	12	16	80	16	CC. .09T3
SCLCR/L 1616 H09		16	16	16	20	100	16	
SCLCR/L 2020 K09		20	20	20	25	125	20	
SCLCR/L 2525 M09		25	25	25	32	150	20	
SCLCR/L 2020 K12	95°	20	20	20	25	125	25	CC. .1204
SCLCR/L 2525 M12		25	25	25	32	150	26	

© Inserts must be ordered separately.

© For insert selection, please refer to the insert details on page E30

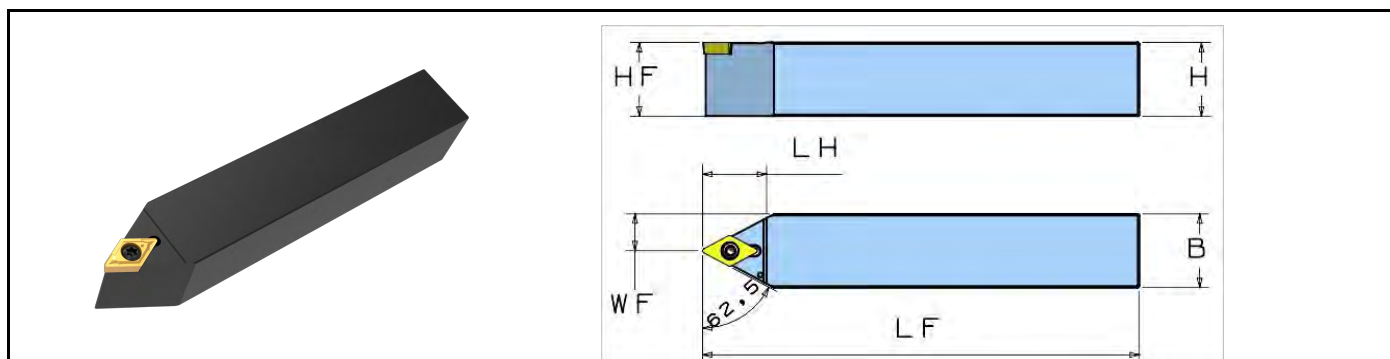
Spare Parts

	Model	Screw	Wrench
	CC. .0602	CSC2560	CTS08W
	CC. .09T3	CSC4090	CTS15W
	CC. .1204	CSC5012	CTS20W

SDNCN、SDJCR/L

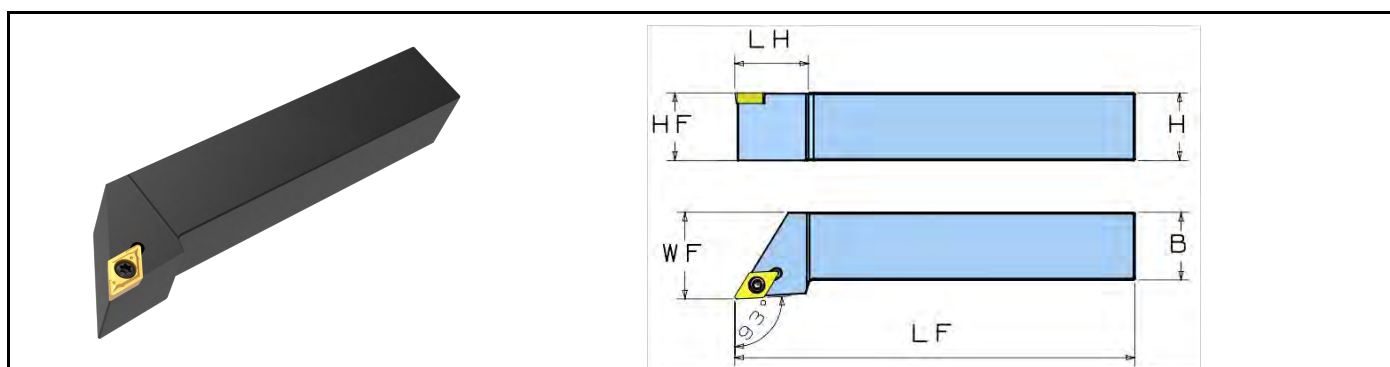


Positive DC Insert, Clamped with an S-Slot Screw, External Turning Tool Holder



Model	Kr	Dimension (mm)						Insert
		H	B	HF	WF	LF	LH	
SDNCN 0808 F07	62.5°	8	8	8	4	80	15	DC..0702
SDNCN 1010 F07		10	10	10	5	80	15	
SDNCN 1616 H11		16	16	16	8	100	22	DC..11T3
SDNCN 2525 M11		25	25	25	12.5	150	22	

© Inserts must be ordered separately. For insert selection, please refer to the insert details on page E31



Model	Kr	Dimension (mm)						Insert
		H	B	HF	WF	LF	LH	
SDJCR/L 1212 F07	93°	12	12	12	16	80	15	DC..0702
SDJCR/L 1616 H07		16	16	16	20	100	15	
SDJCR/L 2020 K07		20	20	20	25	125	20	
SDJCR/L 1616 H11	93°	16	16	16	20	100	24	DC..11T3
SDJCR/L 2020 K11		20	20	20	25	125	24	
SDJCR/L 2525 M11		25	25	25	32	150	28	

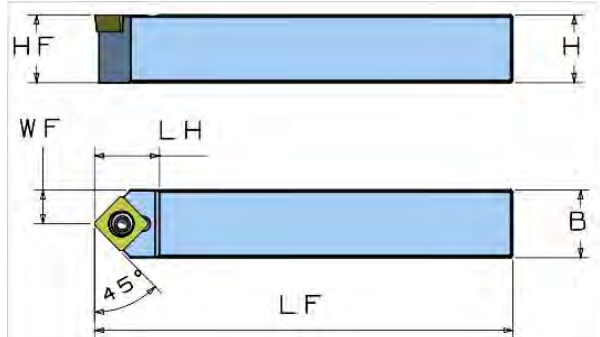
© Inserts must be ordered separately. For insert selection, please refer to the insert details on page E31

Model	Screw	Wrench
DC..0702	CSC2560	CTS08W
DC..11T3	CSC4090	CTS15W

SSDCN、SSSCR/L



Positive SC Insert, Clamped with an S-Slot Screw, External Turning Tool Holder

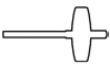
								
Model	Kr	Dimension (mm)						Insert
		H	B	HF	WF	LF	LH	
SSDCN 1212 F09	45°	12	12	12	6	80	15.5	SC..09T3
SSDCN 1616 H09		16	16	16	8	100	15.5	

© Inserts must be ordered separately. For insert selection, please refer to the insert details on page E32

Model	Kr	Dimension (mm)						Insert
		H	B	HF	WF	LF	LH	
SSSCR/L 1212 F09	45°	12	12	12	14	80	15.5	SC..09T3
SSSCR/L 1616 H09		16	16	16	17	100	15.5	
SSSCR/L 2020 K12		20	20	20	22	125	24	SC..1204
SSSCR/L 2525 M12		25	25	25	27	150	24	

© Inserts must be ordered separately. For insert selection, please refer to the insert details on page E32

Spare Parts

Model	Screw	Wrench
		
SC..09T3	CSC4090	CTS15W
SC..1204	CSC5012	CTS20W

STFCR/L、 STGCR/L



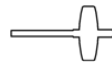
Positive TC Insert, Clamped with an S-Slot Screw, External Turning Tool Holder

Model	Kr	Dimension (mm)						Insert
		H	B	HF	WF	LF	LH	
STFCR/L 1212 F11	91°	12	12	12	16	80	14	TC..1102
STFCR/L 1616 H11		16	16	16	20	100	14	
STFCR/L 1616 H16	91°	16	16	16	20	100	19	TC..16T3
STFCR/L 2020 K16		20	20	20	25	125	19	
STFCR/L 2525 M16		25	25	25	32	150	20	

© Inserts must be ordered separately. For insert selection, please refer to the insert details on page E33

Model	Kr	Dimension (mm)						Insert
		H	B	HF	WF	LF	LH	
STGCR/L 1010 E09	91°	10	10	10	12	70	11	TC..0902
STGCR/L 1212 F11	91°	12	12	12	16	80	14.3	TC..1102
STGCR/L 1616 H11		16	16	16	20	100	14.3	
STGCR/L 1616 H16	91°	16	16	16	20	100	21	TC..16T3
STGCR/L 2020 K16		20	20	20	25	125	21	
STGCR/L 2525 M16		25	25	25	32	150	21	

© Inserts must be ordered separately. For insert selection, please refer to the insert details on page E33

Model	Screw	Wrench
		
TC..0902	CSC2250	CTS07W
TC..1102	CSC2560	CTS08W
TC..16T3	CSC4090	CTS15W

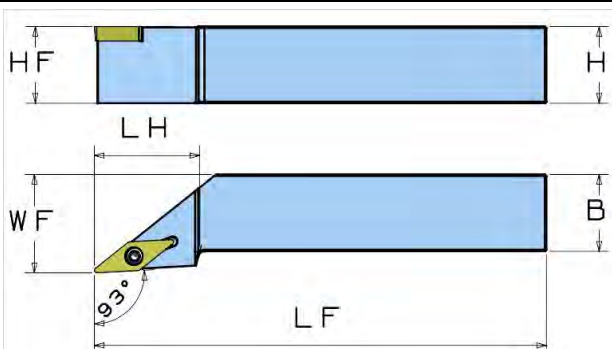
SVVBN 、SVJBR/L



Positive VB Insert, Clamped with an S-Slot Screw, External Turning Tool Holder

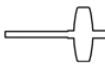
Model	Kr	Dimension (mm)						Insert
		H	B	HF	WF	LF	LH	
SVVBN 2020 K16	72.5°	20	20	20	10.0	125	31.5	VB. . 1604
SVVBN 2525 M16		25	25	25	12.5	150	31.5	
SVVBN 3225 P16		32	25	32	12.5	170	31.5	

© Inserts must be ordered separately. For insert selection, please refer to the insert details on page E34

								
Model	Kr	Dimension (mm)						Insert
		H	B	HF	WF	LF	LH	
SVJBR/L 2020 K16	93°	20	20	20	25	125	35	VB. . 1604
SVJBR/L 2525 M16		25	25	25	32	150	35	
SVJBR/L 3225 P16		32	25	32	32	170	35	
SVJBR/L 3232 P16		32	32	32	40	170	35	

© Inserts must be ordered separately. For insert selection, please refer to the insert details on page E34

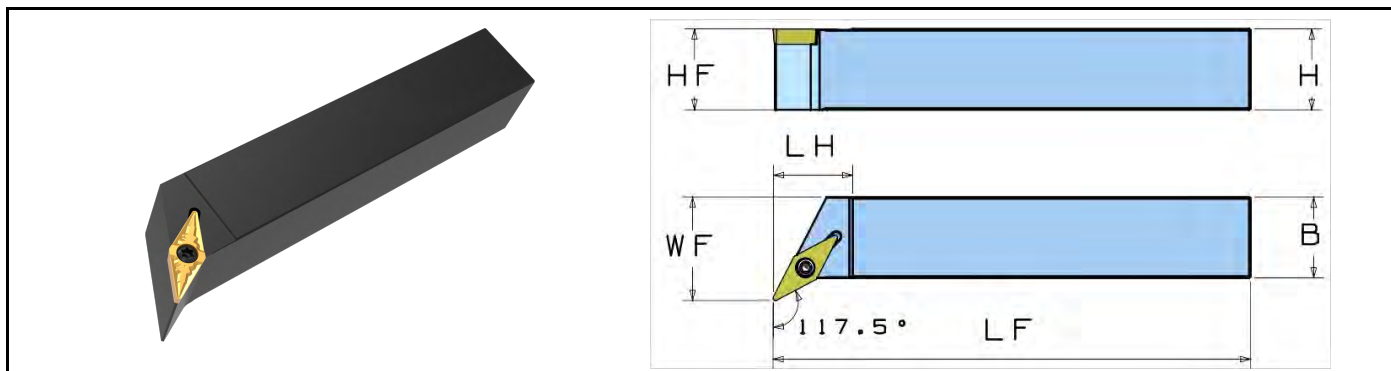
Spare Parts

Model	Screw	Wrench
		
VB..1604	CSC4090	CTS15W

SVPBR/L



Positive VB Insert, Clamped with an S-Slot Screw, External Turning Tool Holder

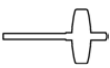


Model	Kr	Dimension (mm)						Insert
		H	B	HF	WF	LF	LH	
SVPBR/L 2020 K16	117.5°	20	20	20	25	125	25	VB..1604
SVPBR/L 2525 M16		25	25	25	32	150	25	

© Inserts must be ordered separately.

© For insert selection, please refer to the insert details on page E34

Spare Parts

Model	Screw	Wrench
		
VB..1604	CSC4090	CTS15W

SVVCN, SVJCR/L

Positive VC Insert, Clamped with an S-Slot Screw, External Turning Tool Holder

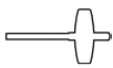
Model	Kr	Dimension (mm)						Insert
		H	B	HF	WF	LF	LH	
SVVCN 2020 K16	72.5°	20	20	20	10.0	125	31.5	VC..1604
SVVCN 2525 M16		25	25	25	12.5	150	31.5	
SVVCN 3225 P16		32	25	32	12.5	170	31.5	
SVVCN 3232 P16		32	32	32	16.0	170	32.0	

© Inserts must be ordered separately. For insert selection, please refer to the insert details on page E34

Model	Kr	Dimension (mm)						Insert
		H	B	HF	WF	LF	LH	
SVJCR/L 2020 K16	93°	20	20	20	25	125	35	VC. . 1604
SVJCR/L 2525 M16		25	25	25	32	150	35	
SVJCR/L 3225 P16		32	25	32	32	170	35	
SVJCR/L 3232 P16		32	32	32	40	170	47	

© Inserts must be ordered separately. For insert selection, please refer to the insert details on page E34

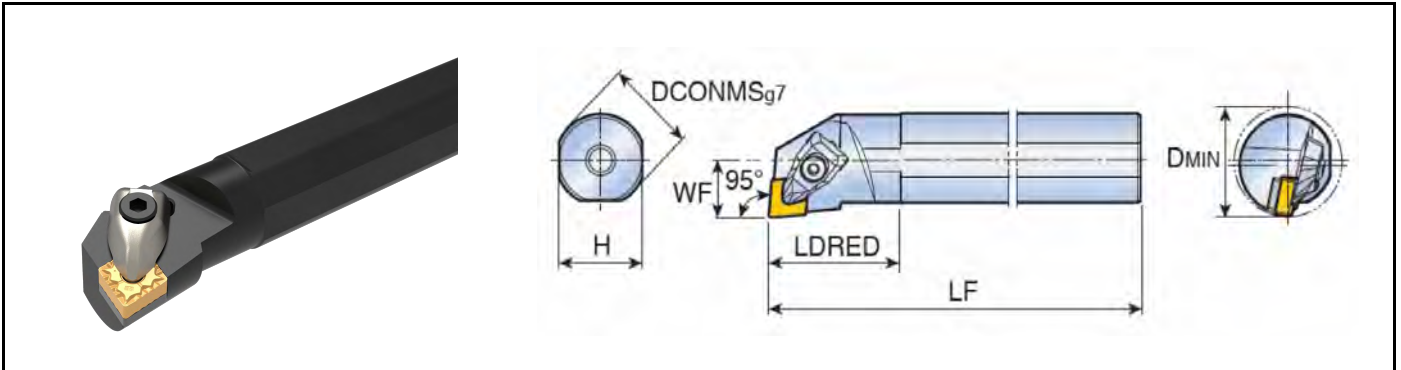
Spare Parts

Model	Screw	Wrench
		
VC..1604	CSC4090	CTS15W

S-TCLNR/L



Negative CN Insert, Clamped with a T-Slot Clamp, Internal Turning Tool Holder



Model	Kr	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	Dmin	
S25R TCLNR/L 12	95°	25	23	200	45	17	32	CN. . 1204
S32S TCLNR/L 12		32	30	250	45	22	40	
S40T TCLNR/L 12		40	37	300	45	27	50	
S50U TCLNR/L 12		50	47	350	45	35	63	

© Inserts must be ordered separately.

© For insert selection, please refer to the insert details on page E23

© Standard tool holders do not have internal cooling.

Spare Parts

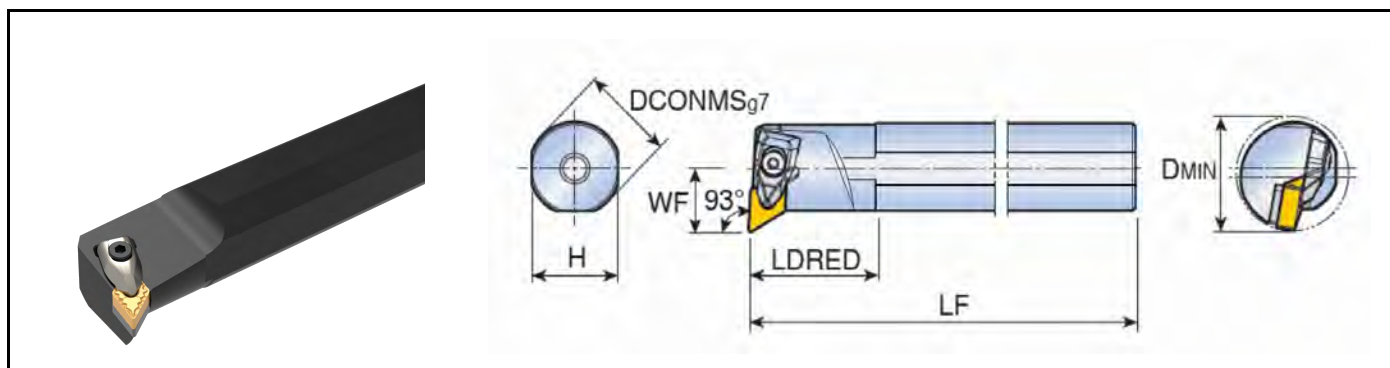
Model	Pressure Plate	Plate Screw	Spring	Tool Pad	Pad Screw	Wrench
CN. . 1204 (25SD)	CYT4	CLT5023	CPT4	CDTC1203	CSD5012	CBL40
CN. . 1204 (32SD)	CYT4	CLT5023	CPT4	CDTC1203	CSD5012	CBL40
CN. . 1204 (40SD)	CYT4	CLT5023	CPT4	CDTC1206	CSC4090	CBL40
CN. . 1204 (50SD)	CYT4	CLT5023	CPT4	CDTC1206	CSC4090	CBL40

©SD: Shank Diameter

S-TDUNR/L, S-TDLNR/L



Negative DN Insert, Clamped with a T-Slot Clamp, Internal Turning Tool Holder



Model	Kr	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	Dmin	
S32S TDUNR/L 15	93°	32	30	250	45	22	40	DN. . 1506
S40T TDUNR/L 15		40	37	300	45	27	50	
S50U TDUNR/L 15		50	47	350	45	35	63	

© Inserts must be ordered separately; For insert selection, please refer to the insert details on page E24

© Standard tool holders do not have internal cooling.

Spare Parts

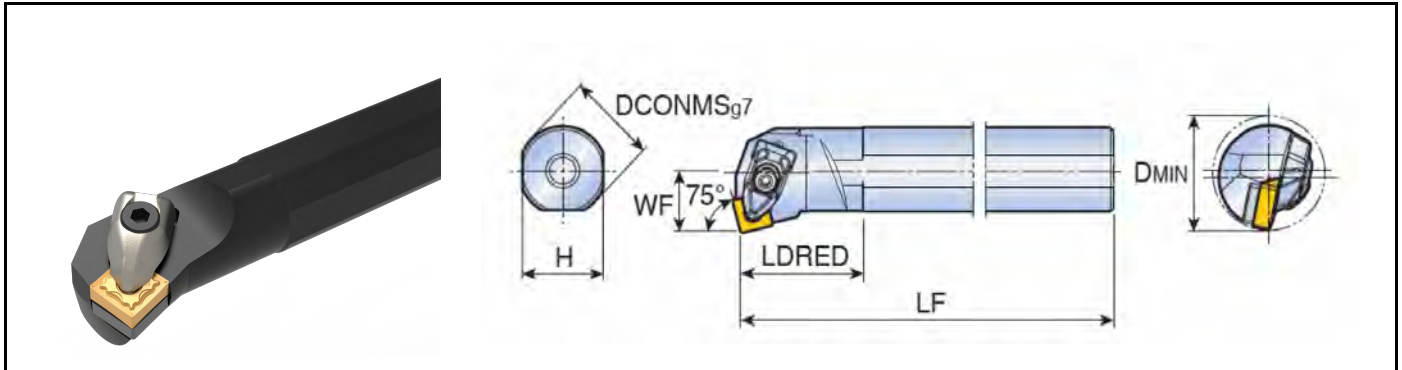
Model	Pressure Plate	Plate Screw	Spring	Tool Pad	Pad Screw	Wrench
DN. . 1506 (32SD)	CYT4	CLT5023	CPT4	CDTD1503	CSD5012	CBL40
DN. . 1506	CYT4	CLT5023	CPT4	CDTD1504	CSC4090	CBL40

©SD: Shank Diameter

S-TSKNR/L



Negative SN Insert, Clamped with a T-Slot Clamp, Internal Turning Tool Holder



Model	Kr	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	Dmin	
S25R TSKNR/L 12	75°	25	23	200	45	17	32	SN..1204

© Inserts must be ordered separately.

© For insert selection, please refer to the insert details on page E25

© Standard tool holders do not have internal cooling.

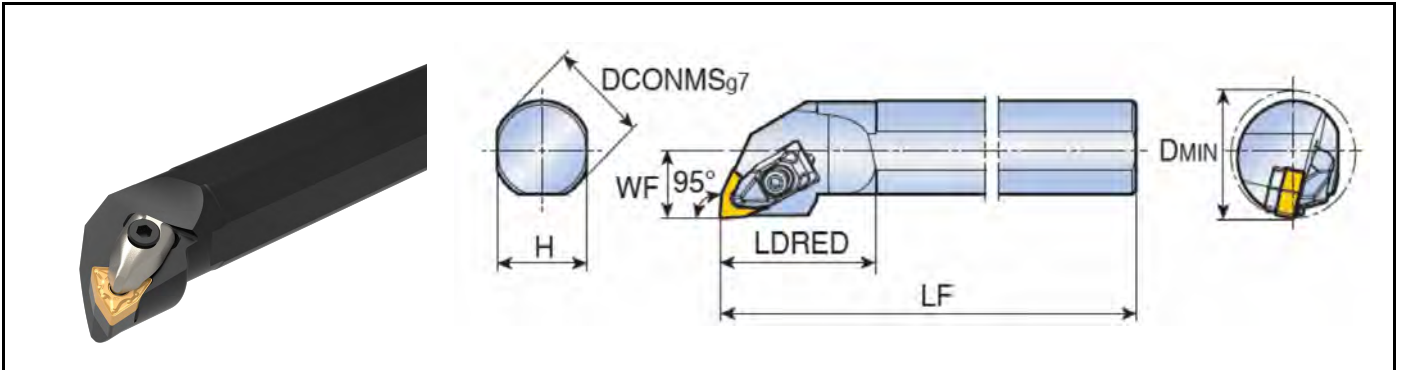
Spare Parts

Model	Pressure Plate	Plate Screw	Spring	Tool Pad	Pad Screw	Wrench
SN..1204	CYT4	CLT5023	CPT4	CDTS1204	CSD5012	CBL40

S-TWLNR/L



Negative WN Insert, Secured with T-Type Clamping Plate, Internal Turning Tool Holder



Model	Kr	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	Dmin	
S25R TWLNR/L 08	95°	25	23	200	40	17	32	WN. .0804
S32S TWLNR/L 08		32	30	250	45	22	40	
S40T TWLNR/L 08		40	37	300	45	27	50	

© Inserts must be ordered separately.

© For insert selection, please refer to the insert details on page E28

© Standard tool holders do not have internal cooling.

Spare Parts

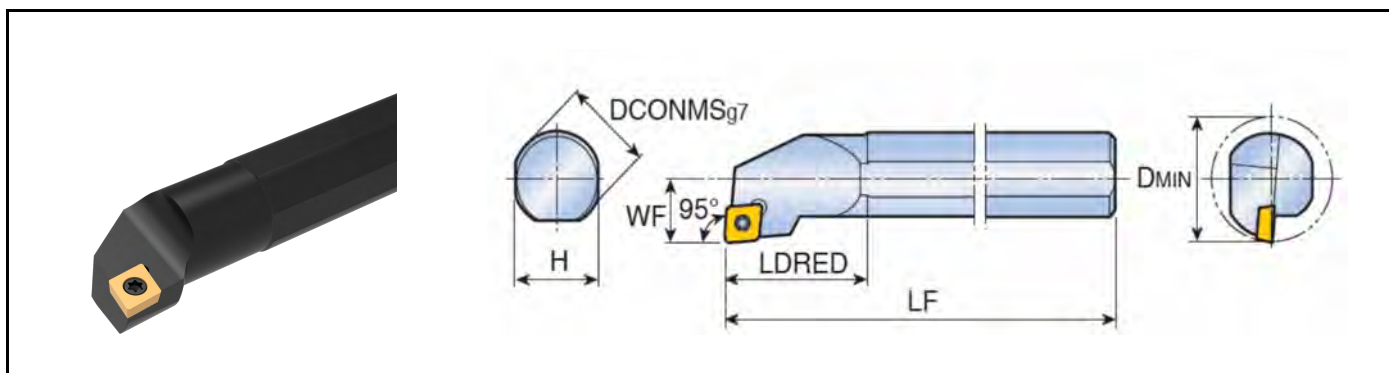
	Model	Pressure Plate	Plate Screw	Spring	Tool Pad	Pad Screw	Wrench
							
	WN. .0804	CYT4	CLT5023	CPT4	CDTW0804	CSD5012	CBL40
	WN. .0804 (40SD)	CYT4	CLT5023	CPT4	CDTW0806	CSC4090	CBL40

©SD: Shank Diameter

S-SCLCR/L



Standard CC Insert, Secured with S-Type Screws, Internal Turning Tool Holder



Model	Kr	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	Dmin	
S08K SCLCR/L 06	95°	8	7	125	18	6	11	CC. . 0602
S10K SCLCR/L 06		10	9	125	20	7	13	
S12M SCLCR/L 06		12	11	150	25	9	16	
S16N SCLCR/L 06		16	15	160	30	11	20	
S12M SCLCR/L 09	95°	12	11	150	23	9	16	CC. . 09T3
S16N SCLCR/L 09		16	15	160	30	11	20	
S20Q SCLCR/L 09		20	18	180	32	13	25	
S25R SCLCR/L 09		25	23	200	42	17	32	
S25R SCLCR/L 12	95°	25	23	200	42	17	32	CC. . 1204
S32S SCLCR/L 12		32	30	250	45	22	40	
S40T SCLCR/L 12		40	37	300	55	27	50	

© Inserts must be ordered separately.

© For insert selection, please refer to the insert details on page E30

© Standard tool holders do not have internal cooling.

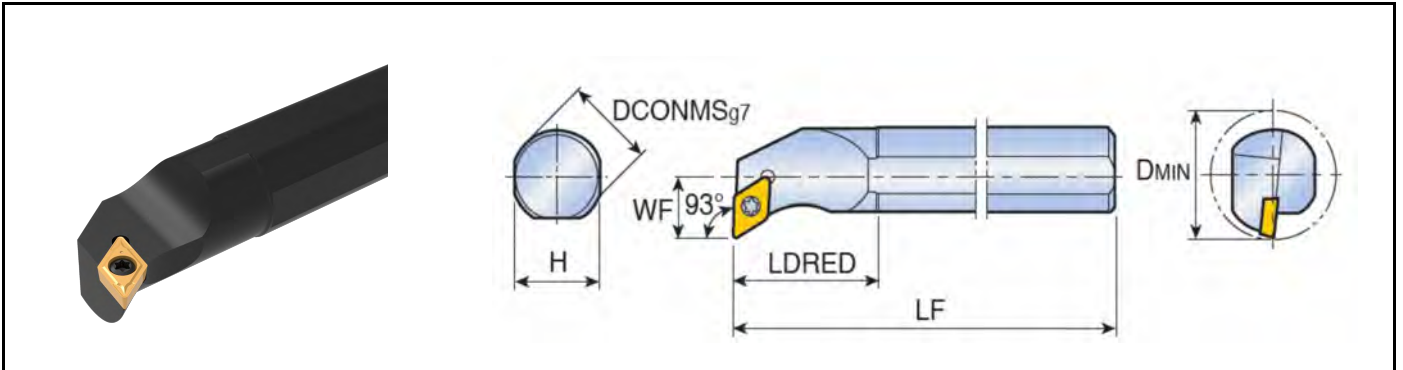
Spare Parts

Model	Screw	Wrench
CC. . 0602	CSC2560	CTS08W
CC. . 09T3	CSC4090	CTS15W
CC. . 1204	CSC5012	CTS20W

S-SDUCR/L



Standard DC Insert, Secured with S-Type Screws, Internal Turning Tool Holder.



Model	Kr	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	Dmin	
S10K SDUCR/L 07	93°	10	9	125	20	7	13	DC. . 0702
S12M SDUCR/L 07		12	11	150	23	9	16	
S16N SDUCR/L 07		16	15	160	30	11	20	
S16N SDUCR/L 11	93°	16	15	160	27	11	20	DC. . 11T3
S20Q SDUCR/L 11		20	18	180	32	13	25	
S25R SDUCR/L 11		25	23	200	42	17	32	
S32S SDUCR/L 11		32	30	250	55	22	40	

© Inserts must be ordered separately.

© For insert selection, please refer to the insert details on page E31

© Standard tool holders do not have internal cooling.

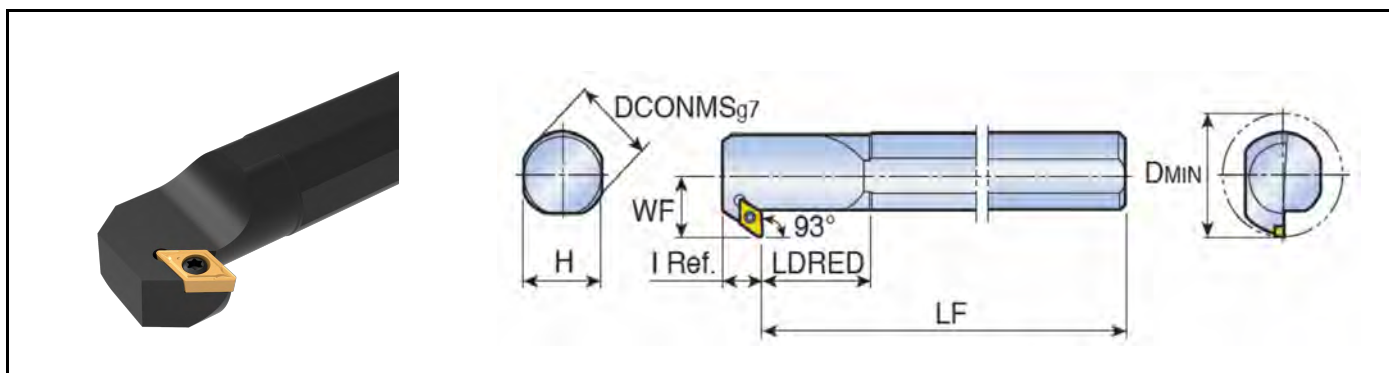
Spare Parts

Model	Screw	Wrench
DC. . 0702	CSC2560	CTS08W
DC. . 11T3	CSC4090	CTS15W

S-SDZCR/L



Standard DC Insert, Secured with S-Type Screws, Internal Back Turning Tool Holder.



Model	Kr	Dimension (mm)							Insert
		DCONMS	H	LF	LDRED	WF	Dmin	Ref	
S16N SDZCR/L 07	93°	16	15	160	23	13	22	12	DC. . 0702
S20Q SDZCR/L 07		20	18	180	28	15	30	12	
S25R SDZCR/L 07		25	23	200	33	18	33	12	
S20Q SDZCR/L 11		20	18	180	24	15	27	16	DC. . 11T3
S32T SDZCR/L 11		32	30	300	34	22	40	16	

© Inserts must be ordered separately.

© For insert selection, please refer to the insert details on page E31

© Standard tool holders do not have internal cooling.

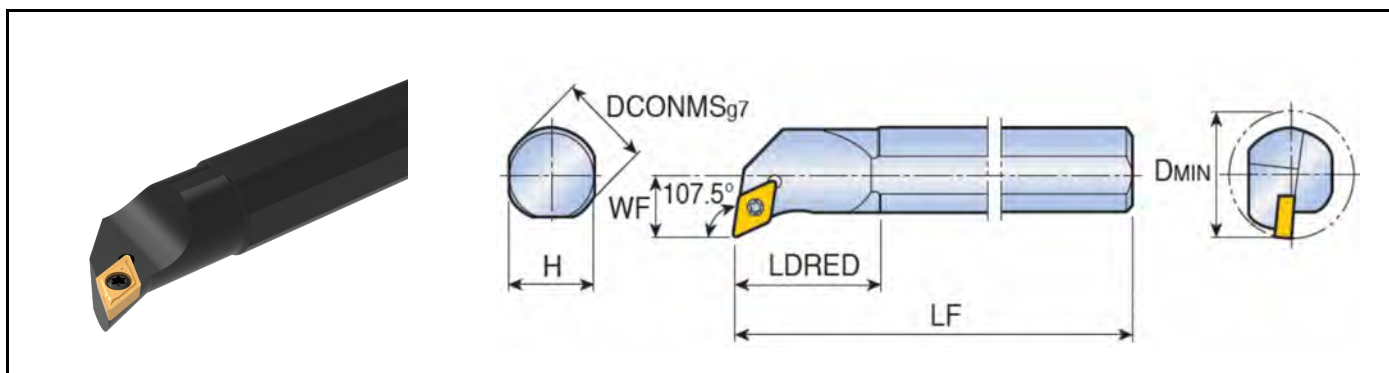
Spare Parts

	Model	Screw	Wrench
	DC. . 0702	CSC2560	CTS08W
	DC. . 11T3	CSC4090	CTS15W

S-SDQCR/L



Standard DC Insert, Secured with S-Type Screws, Internal Turning Tool Holder.



Model	Kr	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	Dmin	
S10K SDQCR/L 07	107.5°	10	9	125	20	7	13	DC. .0702
S12M SDQCR/L 07		12	11	150	22	9	16	
S16N SDQCR/L 07		16	15	160	27	11	20	
S20Q SDQCR/L 11	107.5°	20	18	180	40	13	25	DC. .11T3
S25R SDQCR/L 11		25	23	200	50	17	32	

© Inserts must be ordered separately.

© For insert selection, please refer to the insert details on page E31

© Standard tool holders do not have internal cooling.

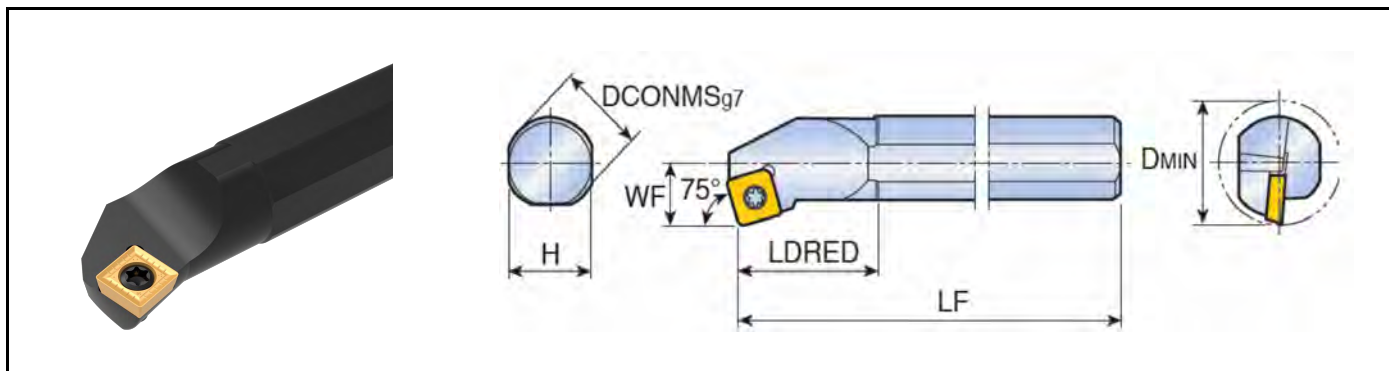
Spare Parts

Model	Screw	Wrench
DC. .0702	CSC2560	CTS08W
DC. .11T3	CSC4090	CTS15W

S-SSKCR/L



Standard SC Insert, Secured with S-Type Screws, Internal Turning Tool Holder.



Model	Kr	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	Dmin	
S16N SSKCR/L 09	75°	16	15	160	28	11	20	SC..09T3
S20Q SSKCR/L 09		20	18	180	30	13	25	
S25R SSKCR/L 12		25	23	200	33	17	32	SC..1204

© Inserts must be ordered separately.

© For insert selection, please refer to the insert details on page E32

© Standard tool holders do not have internal cooling.

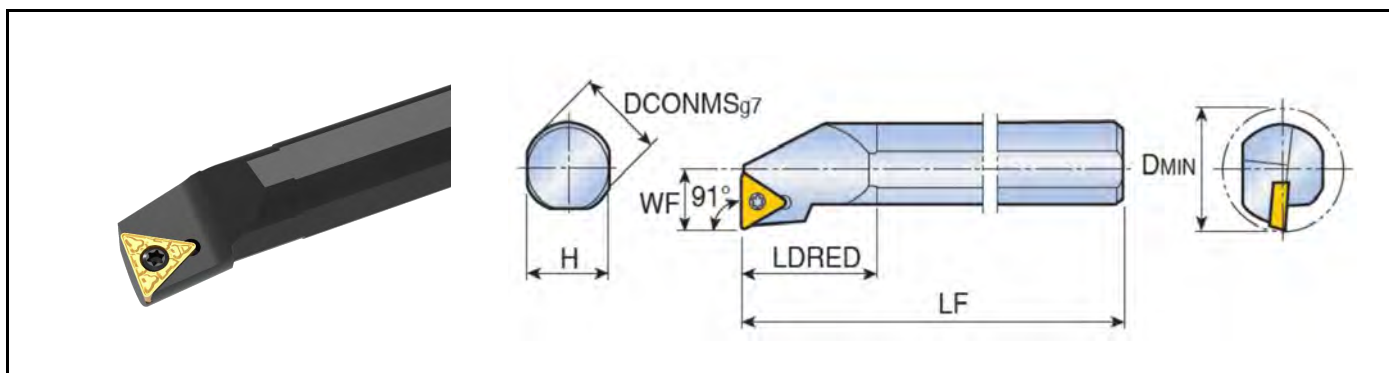
Spare Parts

	Model	Screw	Wrench
	SC..09T3	CSC4090	CTS15W
	SC..1204	CSC5012	CTS20W

S-STFCR/L



Standard TC Insert, Secured with S-Type Screws Internal Turning Tool Holder.



Model	Kr	Dimension (mm)						Insert t
		DCONMS	H	LF	LDRED	WF	Dmin	
S08K STFCR/L 09	91°	8	7	125	20	6	11	TC. . 0902
S10K STFCR/L 09		10	9	125	22.5	7	13	
S12M STFCR/L 09		12	11	150	30	9	16	
S16N STFCR/L 09		16	15	160	35	11	20	
S12M STFCR/L 11	91°	12	11	150	25	9	16	TC. . 1102
S16N STFCR/L 11		16	15	160	35	11	20	
S20Q STFCR/L 11		20	18	180	36	13	25	
S20Q STFCR/L 16	91°	20	18	180	36	13	25	TC. . 16T3
S25R STFCR/L 16		25	23	200	49	17	32	
S32S STFCR/L 16		32	30	250	45	22	40	
S40T STFCR/L 16		40	37	300	60	27	50	

© Inserts must be ordered separately.

© For insert selection, please refer to the insert details on page E33

© Standard tool holders do not have internal cooling.

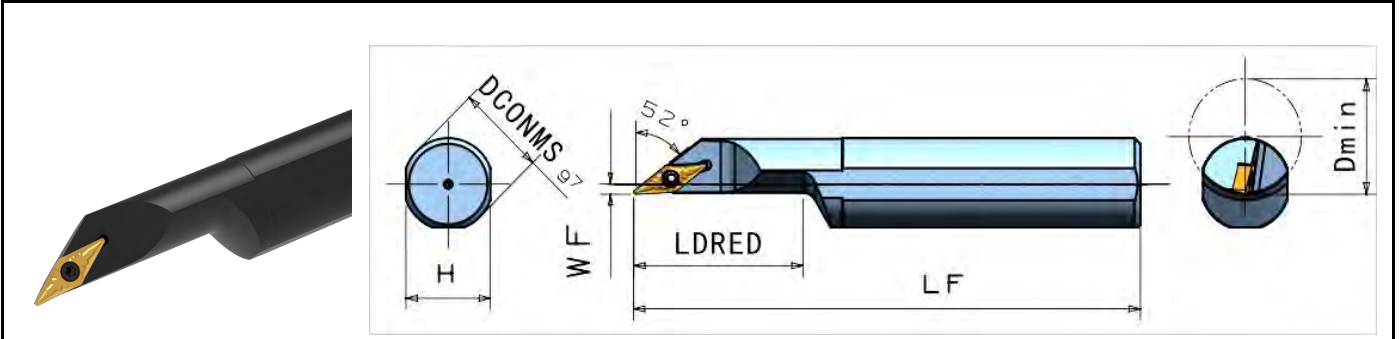
Spare Parts

Model	Screw	Wrench
TC. . 0902	CSC2250	CTS07W
TC. . 1102	CSC2560	CTS08W
TC. . 16T3	CSC4090	CTS15W

S-SVJBR/L、S-SVUBR/L

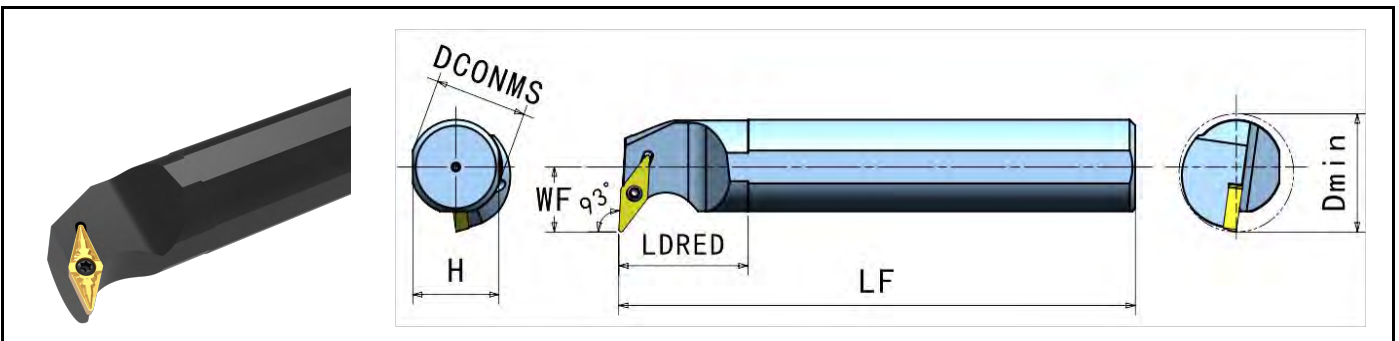


Standard VB Insert, Secured with S-Type Screws, Internal Turning Tool Holder.

								
Model	Kr	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	Dmin	
S32S SVJBR/L 16	52°	32	30	250	60	3.5	40	VB. . 1604
S40T SVJBR/L 16		40	37	300	75	4.5	50	

© Inserts must be ordered separately; For insert selection, please refer to the insert details on page E34

© Standard tool holders do not have internal cooling.

								
Model	Kr	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	Dmin	
S32S SVUBR/L 16	93°	32	30	250	45	22	40	VB. . 1604
S40T SVUBR/L 16		40	37	300	55	27	50	

© Inserts must be ordered separately; For insert selection, please refer to the insert details on page E34

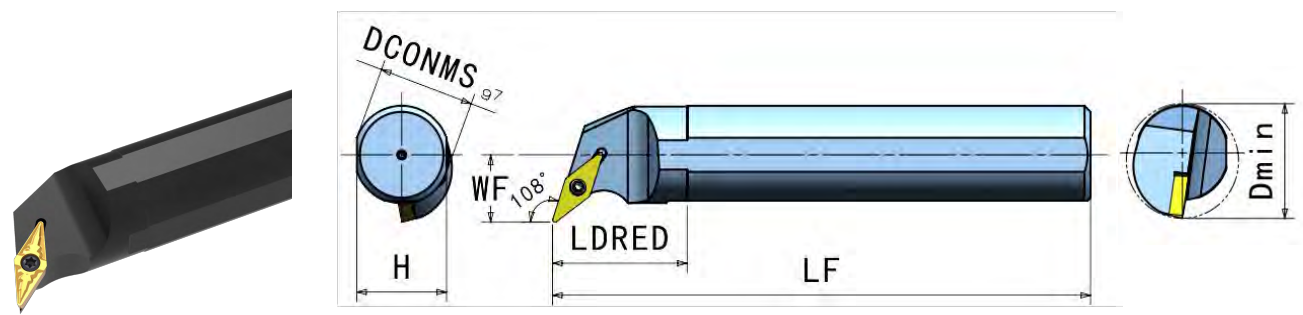
© Standard tool holders do not have internal cooling.

Spare Parts

	Model	Screw	Wrench
	VB. . 1604	CSC4090	CTS15W

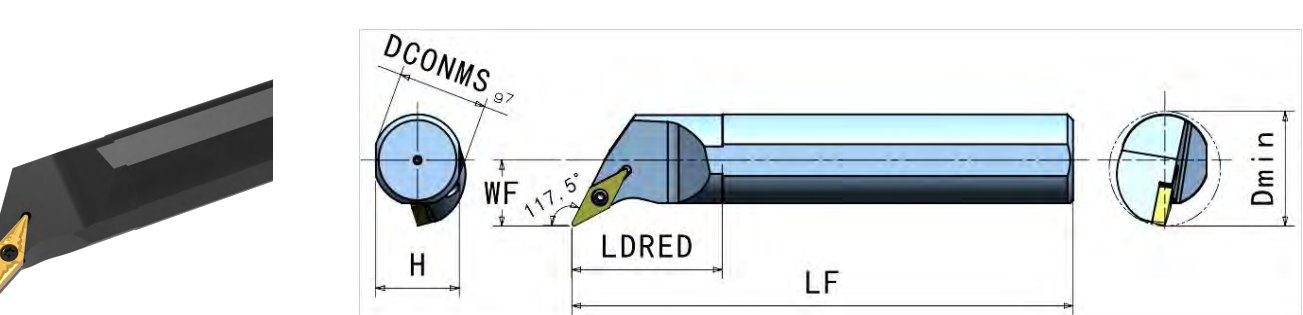
S-SVQBR/L、S-SVPBR/L

Standard VB Insert, Secured with S-Type Screws, Internal Turning Tool Holder.

								
Model	Kr	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	Dmin	
S25R SVQBR/L 16	108°	25	23	200	40	17	32	VB. . 1604
S32S SVQBR/L 16		32	30	250	45	22	40	
S40T SVQBR/L 16		40	37	300	55	27	50	

© Inserts must be ordered separately.; For insert selection, please refer to the insert details on page E34

© Standard tool holders do not have internal cooling.

								
Model	Kr	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	Dmin	
S25R SVPBR/L 16	117.5°	25	23	200	51	18	31	VB. . 1604
S32S SVPBR/L 16		32	30	250	54	23	40	

© Inserts must be ordered separately.; For insert selection, please refer to the insert details on page E34

© Standard tool holders do not have internal cooling.

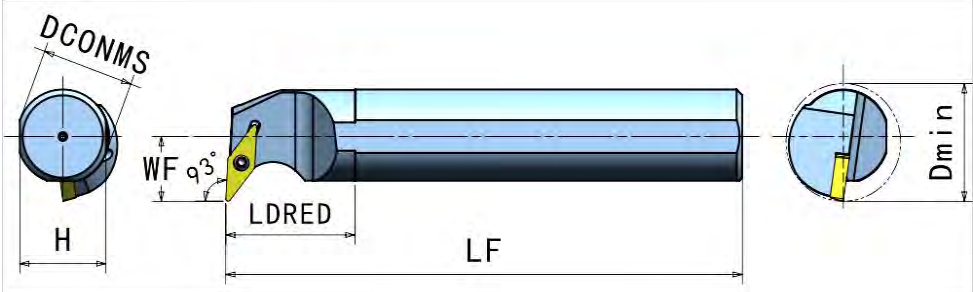
Spare Parts

Model	Screw	Wrench
		
VB. . 1604	CSC4090	CTS15W

S-SVUCR/L, S-SVQCR/L

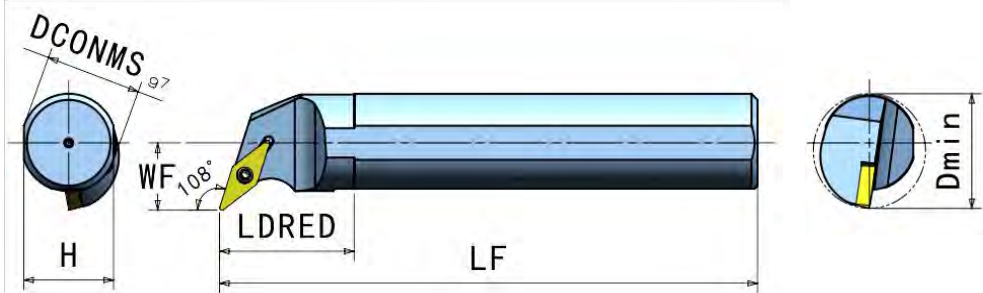


Standard VC Insert, Secured with S-Type Screws, Internal Turning Tool Holder.

 								
Model	Kr	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	Dmin	
S32S SVUCR/L 16	93°	32	30	250	35	22	40	VC..1604
S40T SVUCR/L 16		40	37	300	41	27	50	

© Inserts must be ordered separately. For insert selection, please refer to the insert details on page E34

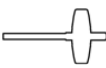
© Standard tool holders do not have internal cooling.

 								
Model	Kr	Dimension (mm)						Insert
		DCONMS	H	LF	LDRED	WF	Dmin	
S32S SVQCR/L 16	108°	32	30	250	45	22	40	VC..1604
S40T SVQCR/L 16		40	37	300	55	27	50	

© Inserts must be ordered separately.; For insert selection, please refer to the insert details on page E34

© Standard tool holders do not have internal cooling.

Spare Parts

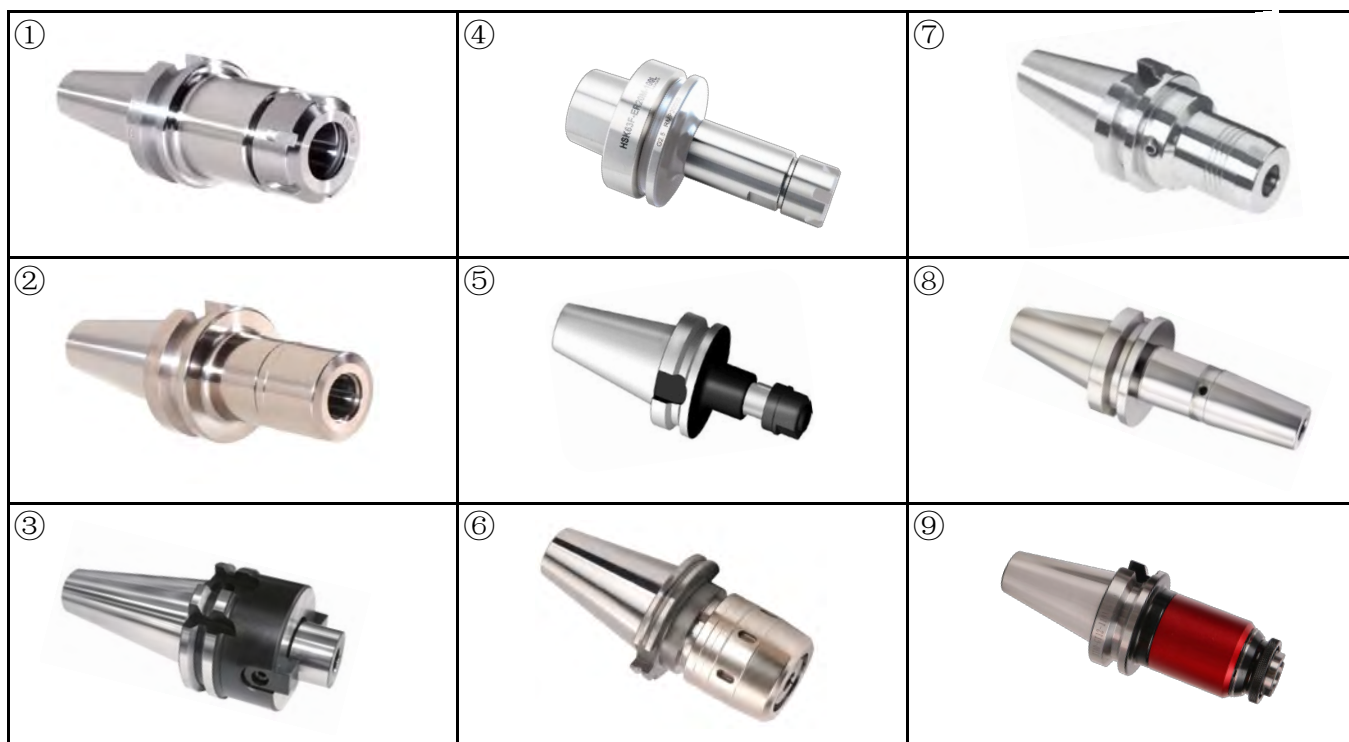
Model	Screw	Wrench
		
VC..1604	CSC4090	CTS15W

工具系统

TOOLING
SYSTEM



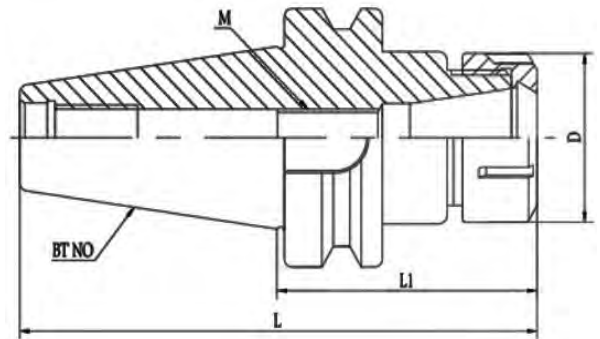
 Chai Tools



BT-ER



Tool System Holder Series: Elastic Collet Chuck Holder



Model	Dimension (mm)			Clamping Capacity	Collet	Nut	Wrench
	L1	L	D				
BT30-ER11-60	60	108.4	19	0.5-7	ER11	ER11-A	OW/ER11
BT30-ER11-100	100	148.4					
BT30-ER16-60	60	108.4	28	1-10	ER16	ER16-A	OW/ER16
BT30-ER16-100	100	148.4					
BT30-ER20-60	60	108.4	34	2-13	ER20	ER20-A	OW/ER20
BT30-ER20-100	100	148.4					
BT30-ER25-60	60	108.4	42	2-16	ER25	ER25-UM	UW/ER25
BT30-ER25-100	100	148.4					
BT30-ER32-60	60	108.4	50	3-20	ER32	ER32-UM	UW/ER32
BT30-ER32-100	100	148.4					

BT40-ER11-70	70	135.4	19	0.5-7	ER11	ER11-A	OW/ER11
BT40-ER11-100	100	165.4					
BT40-ER16-70	70	135.4	28	1-10	ER16	ER16-A	OW/ER16
BT40-ER16-100	100	165.4					
BT40-ER16-150	150	215.4	34	2-13	ER20	ER20-A	OW/ER20
BT40-ER20-70	70	135.4					
BT40-ER20-100	100	165.4					
BT40-ER20-150	150	215.4	42	2-16	ER25	ER25-UM	UW/ER25
BT40-ER25-70	70	135.4					
BT40-ER25-100	100	165.4					
BT40-ER25-150	150	215.4	50	3-20	ER32	ER32-UM	UW/ER32
BT40-ER32-70	70	135.4					
BT40-ER32-100	100	165.4					
BT40-ER32-150	150	215.4					

© Collet, Pull Pin, and Wrench Must Be Ordered Separately.

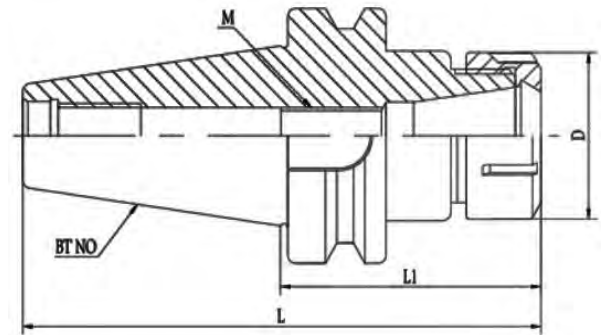


F01

BT-ER



Elastic Collet Chuck Holder



Model	Dimension (mm)			Clamping Capacity	Collet	Nut	Wrench
	L1	L	D				
BT40-ER40-80	80	145.4	63	3-26	ER40	ER40-UM	UW/ER40
BT40-ER40-100	100	165.4					
BT40-ER40-150	150	215.4					

BT50-ER16-80	80	171.8	28	1-10	ER16	ER16-A	OW/ER16
BT50-ER16-100	100	201.8					
BT50-ER16-150	150	251.8					
BT50-ER20-80	80	171.8	34	2-13	ER20	ER20-A	OW/ER20
BT50-ER20-100	100	201.8					
BT50-ER20-150	150	251.8					
BT50-ER25-80	80	171.8	42	2-16	ER25	ER25-UM	UW/ER25
BT50-ER25-100	100	201.8					
BT50-ER25-150	150	251.8					
BT50-ER32-90	90	171.8	50	3-20	ER32	ER32-UM	UW/ER32
BT50-ER32-100	100	201.8					
BT50-ER32-150	150	251.8					
BT50-ER40-100	100	201.8	63	3-26	ER40	ER40-UM	UW/ER40
BT50-ER40-150	150	251.8					
BT50-ER40-200	200	301.8					

© Collet, Pull Pin, and Wrench Must Be Ordered Separately.

F02



F54



F74

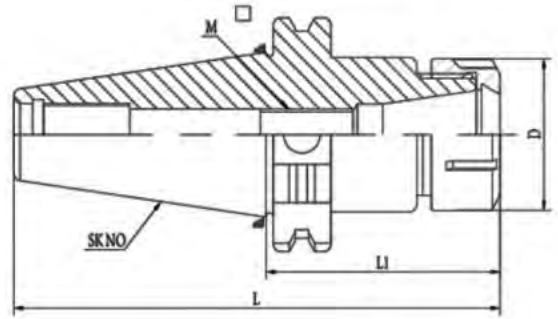


F77

SK-ER



Elastic Collet Chuck Holder



Model	Dimension (mm)			Clamping Capacity	Collet	Nut	Wrench
	L1	L	D				
SK30-ER11-60	60	107.8	19	0.5-7	ER11	ER11-A	OW/ER11
SK30-ER11-100	100	147.8					
SK30-ER16-60	60	107.8	28	1-10	ER16	ER16-A	OW/ER16
SK30-ER16-100	100	147.8					
SK30-ER20-60	60	107.8	34	2-13	ER20	ER20-A	OW/ER20
SK30-ER20-100	100	147.8					
SK30-ER25-60	60	107.8	42	2-16	ER25	ER25-A	UW/ER25
SK30-ER25-100	100	147.8					
SK30-ER32-60	60	107.8	50	3-20	ER32	ER32-A	UW/ER32
SK30-ER32-100	100	147.8					

SK40-ER11-70	70	138.4	19	0.5-7	ER11	ER11-A	OW/ER11
SK40-ER11-100	100	168.4					
SK40-ER16-70	70	138.4	28	1-10	ER16	ER16-A	OW/ER16
SK40-ER16-100	100	168.4					
SK40-ER16-150	150	218.4	34	2-13	ER20	ER20-A	OW/ER20
SK40-ER20-70	70	138.4					
SK40-ER20-100	100	168.4					
SK40-ER20-150	150	218.4	42	2-16	ER25	ER25-UM	UW/ER25
SK40-ER25-70	70	138.4					
SK40-ER25-100	100	168.4					
SK40-ER25-150	150	218.4					

© Collet, Pull Pin, and Wrench Must Be Ordered Separately.



F54



F74



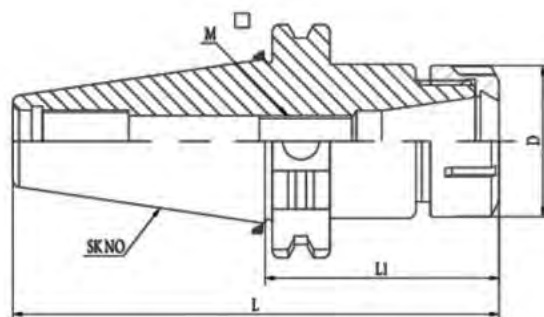
F77

F03

SK-ER



Elastic Collet Chuck Holder



Model	Dimension (mm)			Clamping Capacity	Collet	Nut	Wrench
	L1	L	D				
SK40-ER32-70	70	138.4	50	3-20	ER32	ER32-UM	UW/ER32
SK40-ER32-100	100	168.4					
SK40-ER32-150	150	218.4					
SK40-ER40-80	80	148.4	63	3-26	ER40	ER40-UM	UW/ER40
SK40-ER40-100	100	168.4					
SK40-ER40-150	150	218.4					

SK50-ER16-70	70	171.8	28	1-10	ER16	ER16-A	OW/ER16
SK50-ER16-100	100	201.8					
SK50-ER16-150	150	251.8					
SK50-ER20-70	70	171.8	34	2-13	ER20	ER20-A	OW/ER20
SK50-ER20-100	100	201.8					
SK50-ER20-150	150	251.8					
SK50-ER25-70	70	171.8	42	2-16	ER25	ER25-UM	UW/ER25
SK50-ER25-100	100	201.8					
SK50-ER25-150	150	251.8					
SK50-ER32-70	70	171.8	50	3-20	ER32	ER32-UM	UW/ER32
SK50-ER32-100	100	201.8					
SK50-ER32-150	150	251.8					
SK50-ER40-80	80	171.8	63	3-26	ER40	ER40-UM	UW/ER40
SK50-ER40-100	100	201.8					
SK50-ER40-150	150	251.8					
SK50-ER40-200	200	301.8					

© Collet, Pull Pin, and Wrench Must Be Ordered Separately.

F04



F54



F74

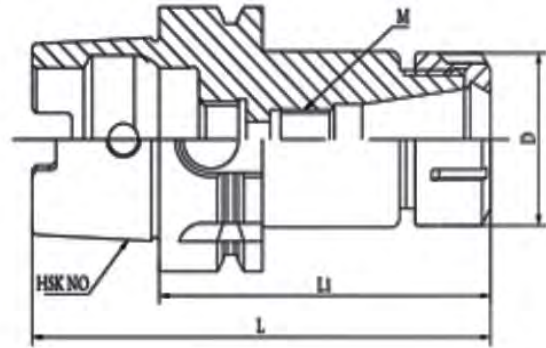


F77

HSK-ER



Elastic Collet Chuck Holder



Model	Dimension (mm)		Clamping Capacity	Collet	Nut
	L1	D			
HSK40A-ER11-80	80	19	0.5-7	ER11	ER11-A
HSK40A-ER11-100	100				
HSK40A-ER16-80	80	28	0.5-10	ER16	ER16-A
HSK40A-ER16-100	100				
HSK40A-ER20-80	80	34	1.0-12	ER20	ER20-A
HSK40A-ER20-100	100				
HSK40A-ER25-80	80	42	1.0-16	ER25	ER25-UM
HSK40A-ER25-100	100				
HSK40A-ER32-80	80	50	2.0-20	ER32	ER32-UM
HSK40A-ER32-100	100				

HSK50A-ER11-80	80	19	0.5-7	ER11	ER11-A
HSK50A-ER11-100	100				
HSK50A-ER11-120	120				
HSK50A-ER16-80	80	28	0.5-10	ER16	ER16-A
HSK50A-ER16-100	100				
HSK50A-ER16-120	120				
HSK50A-ER20-80	80	34	1.0-12	ER20	ER20-A
HSK50A-ER20-100	100				
HSK50A-ER20-120	120				
HSK50A-ER25-80	80	42	1.0-16	ER25	ER25-UM
HSK50A-ER25-100	100				
HSK50A-ER25-120	120				
HSK50A-ER32-80	80	50	2.0-20	ER32	ER32-UM
HSK50A-ER32-100	100				
HSK50A-ER32-120	120				

© Collet and Wrench Must Be Ordered Separately.



F54



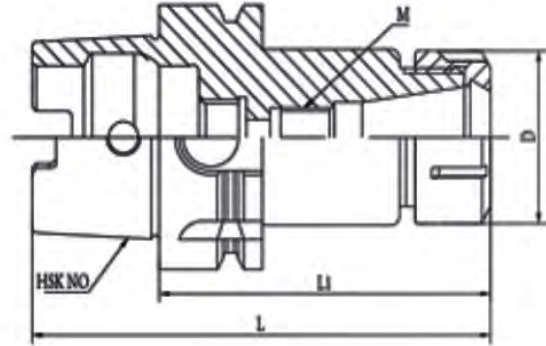
F77

F05

HSK-ER



Elastic Collet Chuck Holder



Model	Dimension (mm)		Clamping Capacity	Collet	Nut
	L1	D			
HSK63A-ER11-75	75	19	0.5-7	ER11	ER11-A
HSK63A-ER16-80	80	28	0.5-10	ER16	ER16-A
HSK63A-ER16-100	100				
HSK63A-ER16-120	120				
HSK63A-ER16-160	160				
HSK63A-ER20-80	80	34	1.0-12	ER20	ER20-A
HSK63A-ER20-100	100				
HSK63A-ER20-120	120				
HSK63A-ER20-160	160				
HSK63A-ER25-80	80	42	1.0-16	ER25	ER25-UM
HSK63A-ER25-100	100				
HSK63A-ER25-120	120				
HSK63A-ER25-160	160				
HSK63A-ER32-80	80	50	2.0-20	ER32	ER32-UM
HSK63A-ER32-100	100				
HSK63A-ER32-120	120				
HSK63A-ER32-160	160				
HSK63A-ER40-80	80	63	3.0-26	ER40	ER40-UM
HSK63A-ER40-100	100				
HSK63A-ER40-120	120				
HSK63A-ER40-160	160				
HSK80A-ER16-100	100	28	0.5-10	ER16	ER16-A
HSK80A-ER20-100	100	34	1.0-12	ER20	ER20-A
HSK80A-ER25-100	100	42	1.0-16	ER25	ER25-UM
HSK80A-ER32-100	100	50	2.0-20	ER32	ER32-UM

© Collet and Wrench Must Be Ordered Separately.

F06



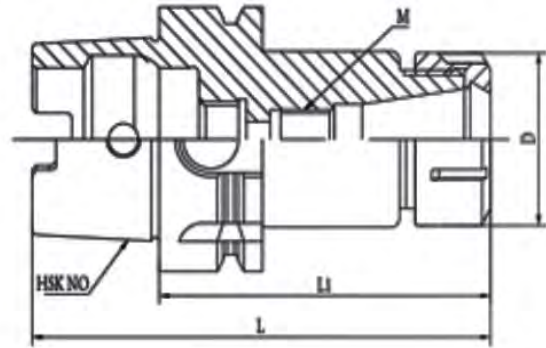
F54



F77

HSK-ER

Elastic Collet Chuck Holder



Model	Dimension (mm)		Clamping Capacity	Collet	Nut
	L1	D			
HSK100A-ER16-100	100	28	0.5-10	ER16	ER16-A
HSK100A-ER16-120	120				
HSK100A-ER16-160	160				
HSK100A-ER20-100	100	34	1.0-12	ER20	ER20-A
HSK100A-ER20-120	120				
HSK100A-ER20-160	160				
HSK100A-ER25-100	100	42	1.0-16	ER25	ER25-UM
HSK100A-ER25-120	120				
HSK100A-ER25-160	160				
HSK100A-ER32-100	100	50	2.0-20	ER32	ER32-UM
HSK100A-ER32-120	120				
HSK100A-ER32-160	160				
HSK100A-ER40-100	100	63	3.0-26	ER40	ER40-UM
HSK100A-ER40-120	120				
HSK100A-ER40-160	160				

© Collet and Wrench Must Be Ordered Separately.



F54



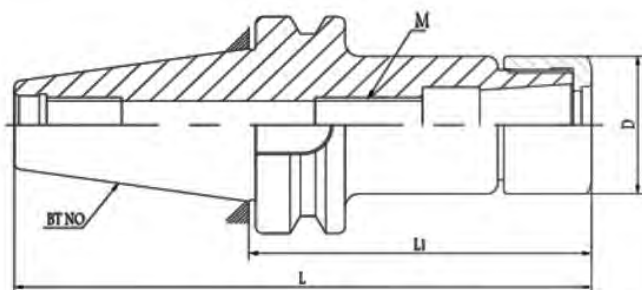
F77

F07

BT-GSK



High-Speed Precision Collet Holder



Model	Dimension (mm)			Clamping Capacity	Collet	Nut	Wrench
	L1	L	D				
BT30-GSK06-60	60	108.4	20	2-6	GSK06	GSK06	OB/SK06
BT30-GSK06-80	80	128.4					
BT30-GSK10-70	70	118.4	27	2-10	GSK10	GSK10	OB/SK10
BT30-GSK10-95	95	143.4					
BT30-GSK16-60	60	108.4	40	3-16	GSK16	GSK16	OB/SK16
BT30-GSK16-80	80	128.4					
BT30-GSK16-100	100	148.4					
BT30-GSK25-80	80	128.4	54	6-25.4	GSK25	GSK25	OB/SK25

BT40-GSK06-65	65	130.4	20	2-6	GSK06	GSK06	OB/SK06
BT40-GSK06-85	85	150.4					
BT40-GSK10-55	55	120.4	27	2-10	GSK10	GSK10	OB/SK10
BT40-GSK10-80	80	145.4					
BT40-GSK10-100	100	165.4					
BT40-GSK10-150	150	215.4					
BT40-GSK16-55	55	120.4	40	3-16	GSK16	GSK16	OB/SK16
BT40-GSK16-80	80	145.4					
BT40-GSK16-100	100	165.4					
BT40-GSK16-150	150	215.4					
BT40-GSK25-70	70	135.4	54	6-25.4	GSK25	GSK25	OB/SK25
BT40-GSK25-95	95	160.4					
BT40-GSK25-110	110	175.4					

© Collet, Pull Pin, and Wrench Must Be Ordered Separately.

F08



F70



F74

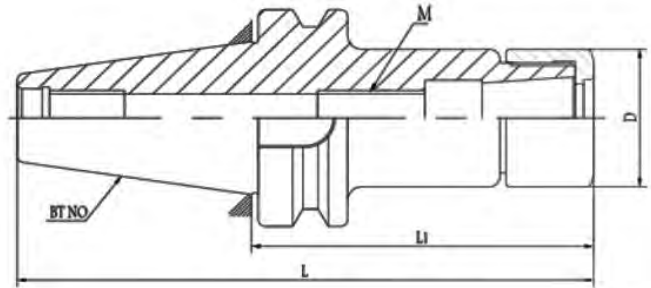


F77

BT-GSK



High-Speed Precision Collet Holder



Model	Dimension (mm)			Clamping Capacity	Collet	Nut	Wrenchh
	L1	L	D				
BT50-GSK06-70	70	171.8	20	2-6	GSK06	GSK06	OB/SK06
BT50-GSK06-100	100	201.8					
BT50-GSK10-100	100	201.8	27	2-10	GSK10	GSK10	OB/SK10
BT50-GSK10-130	130	231.8					
BT50-GSK10-150	150	251.8					
BT50-GSK16-100	100	201.8	40	3-16	GSK16	GSK16	OB/SK16
BT50-GSK16-130	130	231.8					
BT50-GSK16-150	150	251.8					
BT50-GSK25-100	100	201.8	54	6-25.4	GSK25	GSK25	OB/SK25
BT50-GSK25-130	130	231.8					
BT50-GSK25-150	150	251.8					

© Collet, Pull Pin, and Wrench Must Be Ordered Separately.

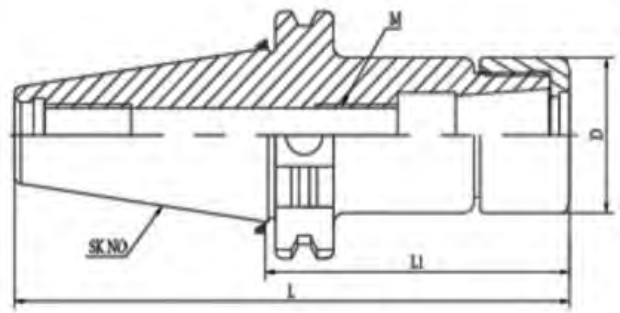


F09

SK-GSK



High-Speed Precision Collet Holder



Model	Dimension (mm)			Clamping Capacity	Collet	Nut	Wrench
	L1	L	D				
SK30-GSK06-55	60	102.8	20	2-6	GSK06	GSK06	OB/SK06
SK30-GSK10-70	80	117.8	27	2-10	GSK10	GSK10	OB/SK10
SK30-GSK10-95	70	142.8					
SK30-GSK16-85	95	132.8	40	3-16	GSK16	GSK16	OB/SK16
SK30-GSK16-100	60	147.8					
SK30-GSK25-85	80	132.8	54	6-25.4	GSK25	GSK25	OB/SK25
SK40-GSK06-70	70	138.4	20	2-6	GSK06	GSK06	OB/SK06
SK40-GSK06-100	100	168.4					
SK40-GSK10-80	80	148.4	27	2-10	GSK10	GSK10	OB/SK10
SK40-GSK10-100	100	168.4					
SK40-GSK16-80	80	148.4	40	3-16	GSK16	GSK16	OB/SK16
SK40-GSK16-100	100	168.4					
SK40-GSK25-95	95	163.4	54	6-25.4	GSK25	GSK25	OB/SK25
SK40-GSK25-100	110	178.4					
SK50-GSK06-80	80	181.75	20	2-6	GSK06	GSK06	OB/SK06
SK50-GSK10-100	100	201.75	27	2-10	GSK10	GSK10	OB/SK10
SK50-GSK10-130	130	231.75					
SK50-GSK16-100	100	201.75	40	3-16	GSK16	GSK16	OB/SK16
SK50-GSK16-130	130	231.75					
SK50-GSK16-150	150	251.75					
SK50-GSK25-100	100	201.75	54	6-25.4	GSK25	GSK25	OB/SK25
SK50-GSK25-130	130	231.75					
SK50-GSK25-150	150	251.75					

© Collet, Pull Pin, and Wrench Must Be Ordered Separately.

F10



F70



F74

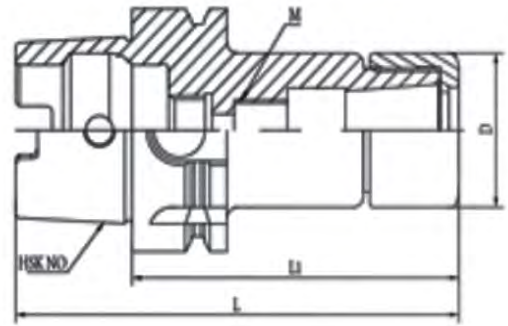


F77

HSK-GSK



High-Speed Precision Collet Holder



Model	Dimension (mm)			Clamping Capacity	Collet	Nut	Wrench
	L1	L	D				
HSK63A-GSK06-80	80	112	20	2-6	GSK06	GSK06	OB/SK06
HSK63A-GSK10-60	60	92	27	2-10	GSK10	GSK10	OB/SK10
HSK63A-GSK10-80	80	112					
HSK63A-GSK10-100	100	132					
HSK63A-GSK16-80	80	112	40	3-16	GSK16	GSK16	OB/SK16
HSK63A-GSK25-90	90	122	54	6-25.4	GSK25	GSK25	OB/SK25

© Collet and Wrench Must Be Ordered Separately.



F70



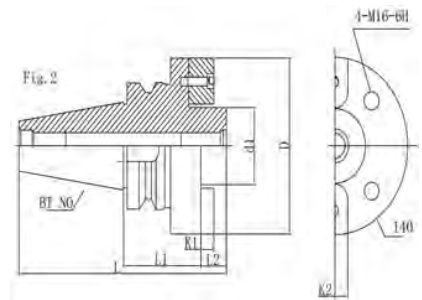
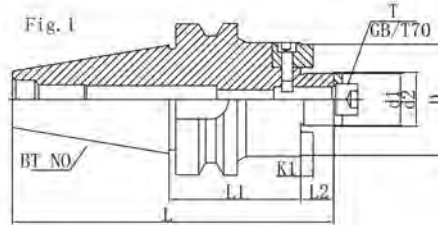
F77

F11

BT-FMB



Face Mill Holder



Model	Dimension (mm)								FIG	T
	L1	L	L2	d1	d2	D	K	K2		
BT30-FMB22-45	45	109.9	16.5	22	26	45	4.8	10	Fig. 1	M10x30
BT30-FMB22-60	60	124.9								
BT30-FMB27-45	45	111.9	18.5	27	33	54	5.8	12		M12x30
BT30-FMB27-60	60	126.9								
BT30-FMB32-60	60	130.4	22	32	41	58	6.8	14		M16x35

BT40-FMB22-45	45	126.9	16.5	22	26	48	4.8	10	Fig. 1	M10x30
BT40-FMB22-60	60	141.9								
BT40-FMB22-100	100	181.9								
BT40-FMB22-150	150	231.9								
BT40-FMB27-45	45	128.9	18.5	27	33	60	5.8	12	Fig. 1	M12x30
BT40-FMB27-60	60	143.9								
BT40-FMB27-100	100	183.9								
BT40-FMB27-150	150	233.9								
BT40-FMB27-200	200	283.9	20	32	41	62	6.8	14	Fig. 1	M16x35
BT40-FMB32-60	60	147.4								
BT40-FMB32-100	100	187.4								
BT40-FMB32-150	150	237.4								
BT40-FMB32-200	200	287.4								

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F12

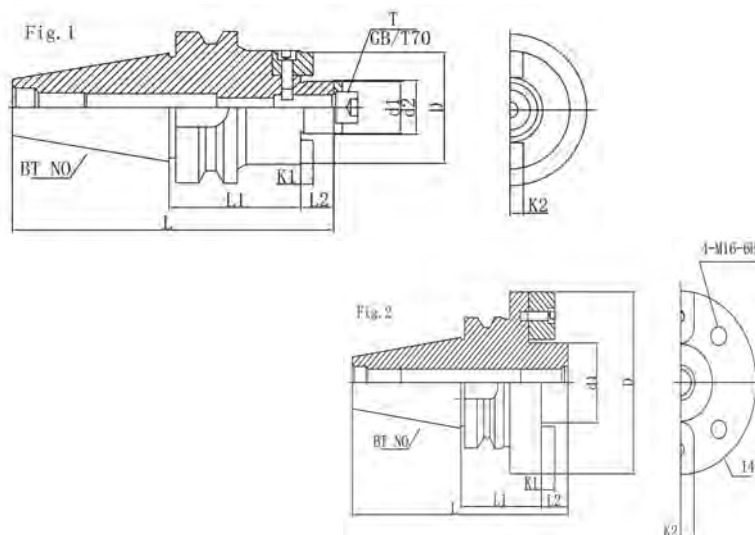


F74

BT-FMB



Face Mill Holder



Model	Dimension (mm)								FIG	T
	L1	L2	d1	d2	D	K	K2	D3		
BT40-FMB40-60	60	23	40	48	80	8	16	\	Fig. 1	M16x35
BT40-FMB40-100	100									
BT40-FMB40-150	150									
BT40-FMB40-200	200									
BT40-FMC40-60	60			\	98			66.7	Fig. 2	
BT50-FMB22-60	60	16.5	22	26	48	4.8	10	\	Fig. 1	M10x30
BT50-FMB22-100	100									
BT50-FMB22-150	150									
BT50-FMB22-200	200									
BT50-FMB27-60	60	18.5	27	33	60	5.8	12	\	Fig. 1	M12x30
BT50-FMB27-100	100									
BT50-FMB27-150	150									
BT50-FMB27-200	200									
BT50-FMB32-60	60	20	32	41	73	6.8	14	\	Fig. 1	M16x35
BT50-FMB32-100	100									
BT50-FMB32-150	150									
BT50-FMB32-200	200									
BT50-FMB40-60	60	23	40	48	80	8	16	\	Fig. 1	
BT50-FMB40-100	100									
BT50-FMB40-150	150									
BT50-FMB40-200	200			\	98			66.7	Fig. 2	
BT50-FMC40-60	60									
BT50-FMC60. 129-75	75	25	60	\	129	12.5	25.4	101.6	Fig. 2	M16x35
BT50-FMC60. 129-100	100									

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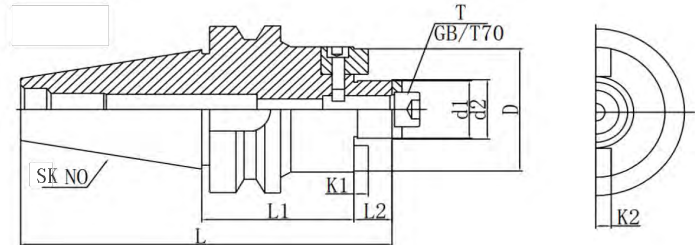
F74

F13

SK-FMB



Face Mill Holder



Model	Dimension (mm)								T
	L1	L	L2	d1	d2	D	K1	K2	
SK30-FMB22-45	45	109.3	16.5	22	26	45	4.8	10	M10x30
SK30-FMB22-60	60	124.3							
SK30-FMB27-45	45	111.3	18.5	27	33	54	5.8	12	M12x30
SK30-FMB27-60	60	126.3							
SK30-FMB32-60	60	130.3	22	32	41	58	6.8	14	M16x35

SK40-FMB22-45	45	129.9	16.5	22	26	48	4.8	10	M10x30
SK40-FMB22-60	60	144.9							
SK40-FMB22-100	100	184.9							
SK40-FMB22-150	150	234.9							
SK40-FMB27-45	45	131.9	18.5	27	33	60	5.8	12	M12x30
SK40-FMB27-60	60	146.9							
SK40-FMB27-100	100	186.9							
SK40-FMB27-150	150	236.9							
SK40-FMB27-200	200	286.9	20	32	41	62	6.8	14	M16x35
SK40-FMB32-60	60	150.4							
SK40-FMB32-100	100	190.4							
SK40-FMB32-150	150	240.4							
SK40-FMB32-200	200	290.4	23	40	48	80	8	16	M16x35
SK40-FMB40-60	60	153.4							
SK40-FMB40-100	100	193.4							
SK40-FMB40-150	150	243.4							
SK40-FMB40-200	200	293.4							

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F14

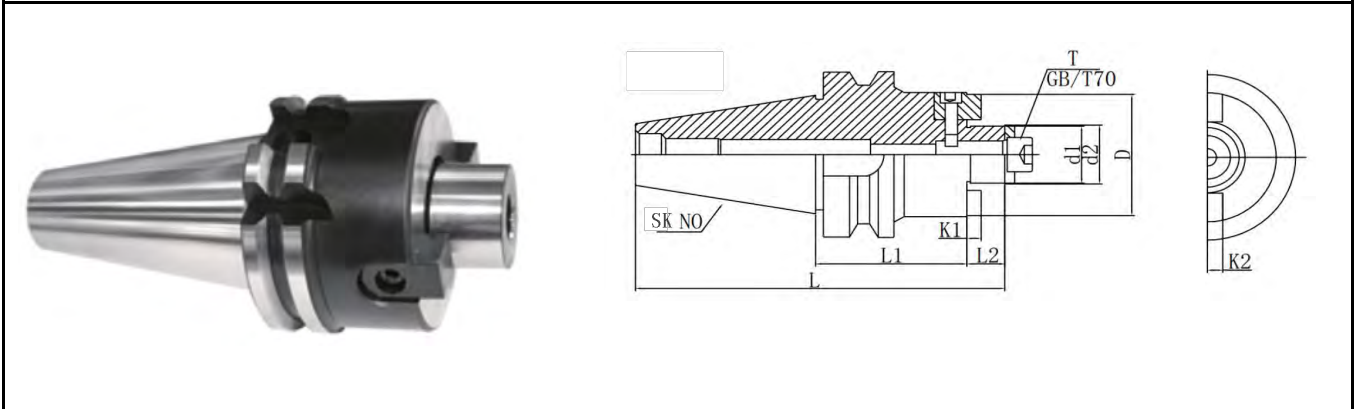


F74

SK-FMB



Face Mill Holder



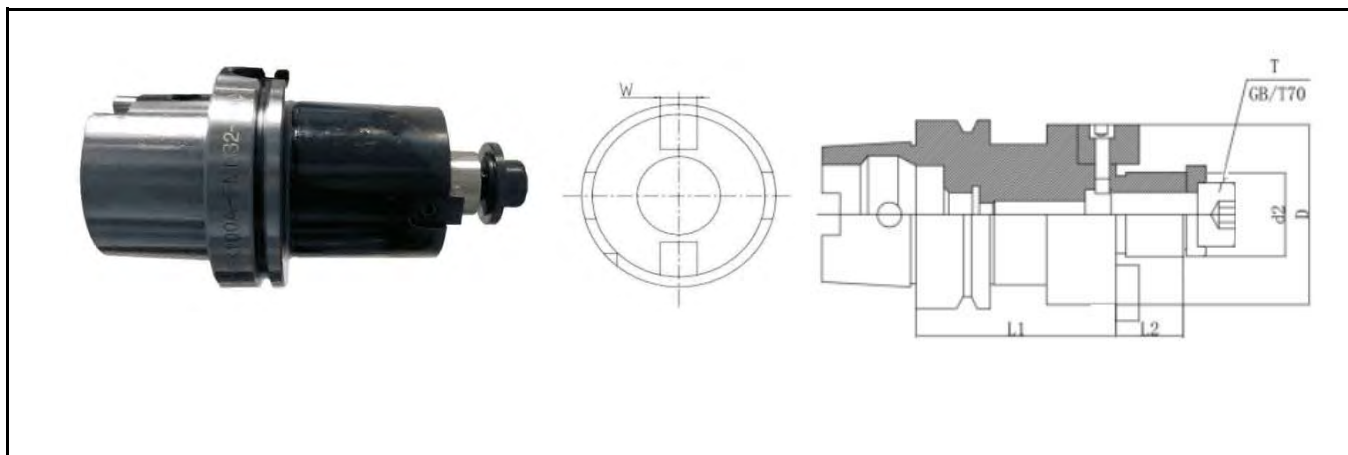
Model	Dimension (mm)								T
	L1	L	d1	d2	D	L2	K1	K2	
SK50-FMB22-60	60	178.25	22	26	48	16.5	4.8	10	M10x30
SK50-FMB22-100	100	218.25							
SK50-FMB22-150	150	268.25							
SK50-FMB22-200	200	318.25							
SK50-FMB27-60	60	180.25	27	33	60	18.5	5.8	12	M12x30
SK50-FMB27-100	100	220.25							
SK50-FMB27-150	150	270.25							
SK50-FMB27-200	200	320.25							
SK50-FMB32-60	60	183.75	32	41	73	20	6.8	14	M16x35
SK50-FMB32-100	100	223.75							
SK50-FMB32-150	150	273.75							
SK50-FMB32-200	200	333.75							
SK50-FMB40-60	60	186.75	40	48	80	23	8	16	M16x35
SK50-FMB40-100	100	226.75							
SK50-FMB40-150	150	276.75							
SK50-FMB40-200	200	326.75							

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HSK-FMB



Face Mill Holder



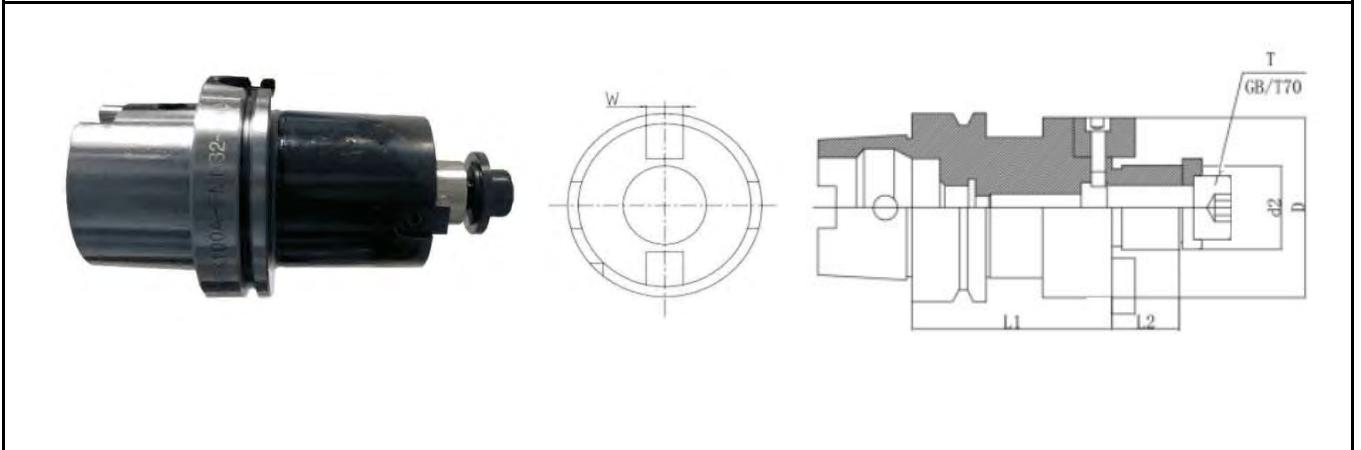
Model	Dimension (mm)					T
	L1	d2	D	L2	W	
HSK40A-FMB16-60	50	16	40	16.5	8	M8x25
HSK40A-FMB22-50	50	22	48	16.5	10	M10x30
HSK40A-FMB27-60	60	27	60	18.5	12	M12x30

HSK50A-FMB16-60	50	16	40	16.5	8	M8x25
HSK50A-FMB22-50	50	22	48	16.5	10	M10x30
HSK50A-FMB27-60	60	27	60	18.5	12	M12x30

HSK63A-FMB16-50	50	16	40	16.5	8	M8x25
HSK63A-FMB16-100	100					
HSK63A-FMB16-145	145					
HSK63A-FMB22-50	50	22	48	16.5	10	M10x30
HSK63A-FMB22-100	100					
HSK63A-FMB22-160	160					
HSK63A-FMB27-60	60	27	60	18.5	12	M12x30
HSK63A-FMB27-100	100					
HSK63A-FMB27-160	160					
HSK63A-FMB32-60	60	32	62	20	14	M16x35
HSK63A-FMB32-100	100					
HSK63A-FMB32-160	160					
HSK63A-FMB40-60	60	40	80	23	16	M16x35

HSK-FMB

Face Mill Holder

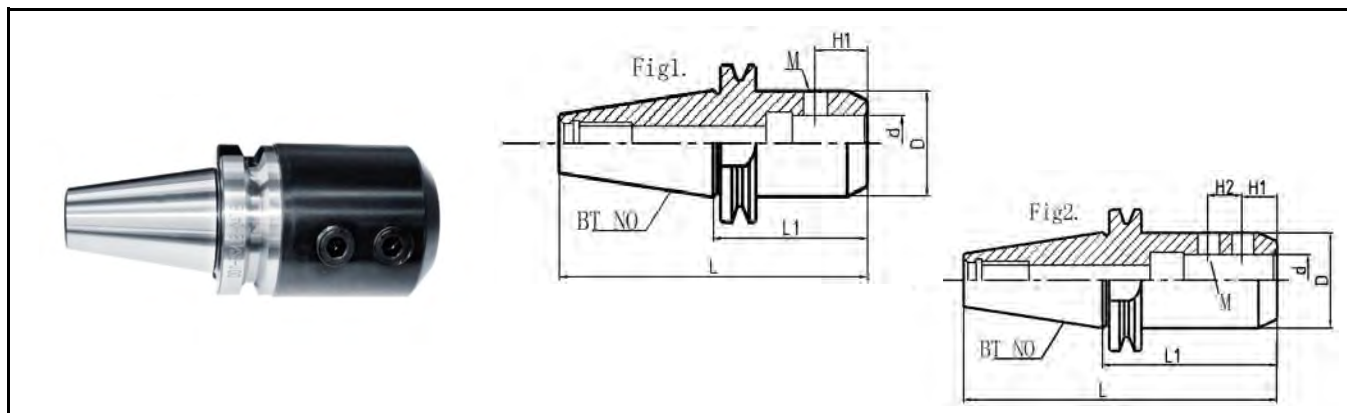


Model	Dimension (mm)					T
	L1	d2	D	L2	W	
HSK100A-FMB22-50	50	22	48	16.5	10	M10x30
HSK100A-FMB22-100	100					
HSK100A-FMB27-50	50	27	60	18.5	12	M12x30
HSK100A-FMB27-100	100					
HSK100A-FMB27-160	160					
HSK100A-FMB32-50	50	32	73	20	14	M16x35
HSK100A-FMB32-100	100					
HSK100A-FMB32-160	160					
HSK100A-FMB40-60	60	40	80	23	16	M16x35
HSK100A-FMB40-100	100					
HSK100A-FMB40-160	160					

BT-SLN



SLN Side Lock Tool Holder



Model	Dimension (mm)						Shank Type	FIG
	D	M	L	L1	H1	H2	d	
BT30-SLN06-60	25	M6	108.4	60	18	—	6	Fig. 1
BT30-SLN08-60	28	M8			18		8	
BT30-SLN10-60	35	M10			20		10	
BT30-SLN12-60	42	M12			22.5		12	
BT30-SLN16-75	48	M12	123.4	75	24		16	
BT30-SLN20-63	52	M16	111.4	63	25	25	20	Fig. 2
BT30-SLN20-75	52	M16	123.4	75	25			
BT30-SLN25-80	65	M16	128.4	80	24			
BT30-SLN25-90	65	M16	138.4	90	24		25	
BT30-SLN25-100	65	M16	148.4	100	24			

BT40-SLN06-50	25	M6	115.4	50	18	—	6	Fig. 1
BT40-SLN08-50	28	M8			18		8	
BT40-SLN10-63	35	M10	128.4	63	20		10	
BT40-SLN12-63	42	M12			22.5		12	
BT40-SLN16-63	48	M12			24		16	
BT40-SLN20-63	52	M16			25		20	
BT40-SLN25-90	65	M16	155.4	90	24	25	25	Fig. 2
BT40-SLN25-100	65	M16	165.4	100	24			
BT40-SLN32-100	72	M20			24	28	32	
BT40-SLN40-105	80	M20	170.4	105	30	32	40	
BT40-SLN42-105	82	M20			30		42	

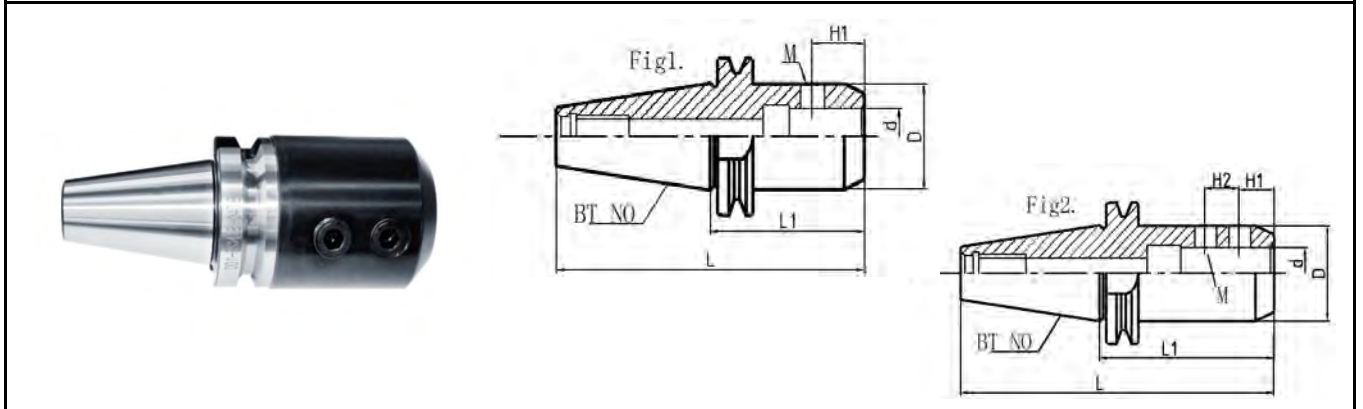
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BT-SLN



SLN Side Lock Tool Holder



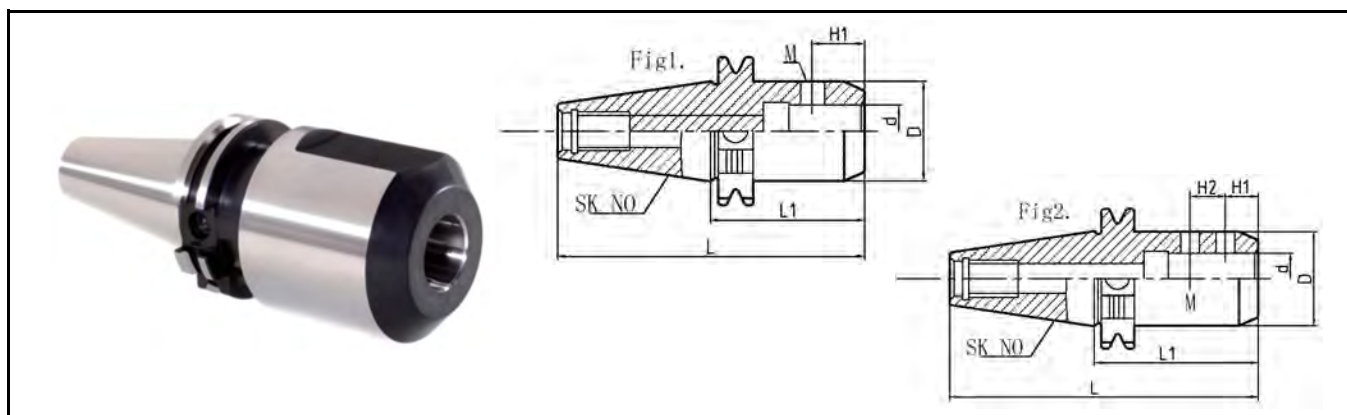
Model	Dimension (mm)						Shank Type	FIG
	D	M	L	L1	H1	H2	d	
BT50-SLN06-63	25	M6	164.8	63	18		6	Fig. 1
BT50-SLN08-63	28	M8			18		8	
BT50-SLN10-63	35	M10			20		10	
BT50-SLN12-80	42	M12	181.8	80	22.5		12	
BT50-SLN16-80	48	M12			24		16	
BT50-SLN20-80	52	M16			25		20	
BT50-SLN25-100	65	M16	201.8	100	24	25	25	Fig. 2
BT50-SLN32-105	72	M20	206.8	105	24	28	32	
BT50-SLN40-115	80	M20	216.8	115	30	32	40	
BT50-SLN42-120	82	M20	221.8	120	30		42	

© Pull Pin Must Be Ordered Separately.

SK-SLN



Side Lock Tool Holder



Model	Dimension (mm)							FIG
	D	M	d	L	L1	H1	H2	
SK30-SLN06-50	25	M6	6	97.8	50	18	—	Fig. 1
SK30-SLN08-50	28	M8	8			18		Fig. 1
SK30-SLN10-50	35	M10	10			20		Fig. 1
SK30-SLN12-50	42	M12	12			22.5		Fig. 1
SK30-SLN16-63	48	M12	16	110.8	63	24	—	Fig. 1
SK30-SLN20-63	52	M16	20			25		Fig. 1
SK40-SLN06-50	25	M6	6	118.4	50	18	—	Fig. 1
SK40-SLN08-50	28	M8	8			18		Fig. 1
SK40-SLN10-50	35	M10	10			20		Fig. 1
SK40-SLN12-50	42	M12	12			22.5		Fig. 1
SK40-SLN16-63	48	M12	16	131.4	63	24	—	Fig. 1
SK40-SLN20-63	52	M16	20			25		Fig. 1
SK40-SLN25-100	65	M16	25	168.4	100	24	25	Fig. 2
SK40-SLN32-100	72	M20	32			24	28	Fig. 2
SK50-SLN06-63	25	M6	6	164.75	63	18	—	Fig. 1
SK50-SLN08-63	28	M8	8			18		Fig. 1
SK50-SLN10-63	35	M10	10			20		Fig. 1
SK50-SLN12-63	42	M12	12			22.5		Fig. 1
SK50-SLN16-63	48	M12	16			24		Fig. 1
SK50-SLN20-63	52	M16	20			25		Fig. 1
SK50-SLN25-80	65	M16	25	181.75	80	24	25	Fig. 2
SK50-SLN32-100	72	M20	32	201.75	100	24	28	Fig. 2
SK50-SLN40-100	90	M20	40			30	32	Fig. 2
SK50-SLN42-100	100	M20	42			30	32	Fig. 2

© Pull Pin Must Be Ordered Separately.

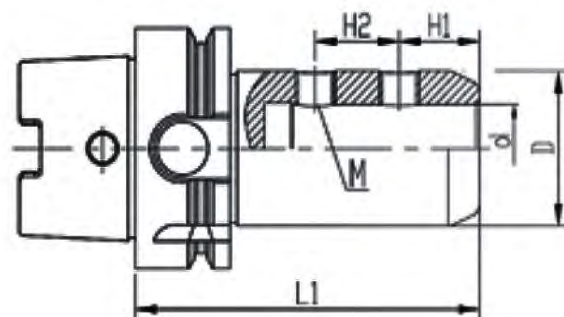
F20



F74

HSK-SLN

Side Lock Tool Holder

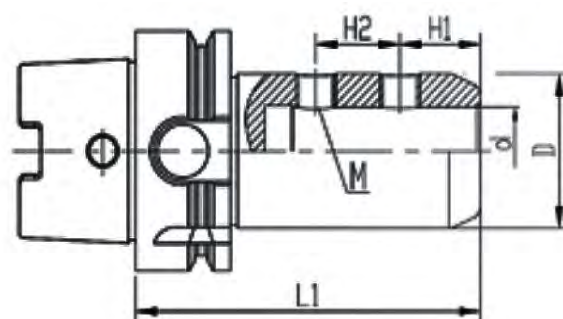


Model	Dimension (mm)					
	L1	d	D	H1	H2	M
HSK63A-SLN06-65	65	6	25	12	10	M6
HSK63A-SLN06-100	100					
HSK63A-SLN06-120	120					
HSK63A-SLN08-65	65	8	28	14	12	M8
HSK63A-SLN08-120	120					
HSK63A-SLN08-160	160					
HSK63A-SLN10-65	65	10	35	15	14	M10
HSK63A-SLN10-120	120					
HSK63A-SLN10-160	160					
HSK63A-SLN12-80	80	12	42	20	16	M12
HSK63A-SLN12-120	120					
HSK63A-SLN12-160	160					
HSK63A-SLN16-80	80	16	48	22	18	M12
HSK63A-SLN16-120	120					
HSK63A-SLN16-160	160					
HSK63A-SLN20-80	80	20	52	25	20	M16
HSK63A-SLN20-120	120					
HSK63A-SLN20-160	160					
HSK63A-SLN25-110	110	25	65	24	25	M16
HSK63A-SLN25-160	160					
HSK63A-SLN32-110	110	32	72	24	28	M20
HSK63A-SLN32-160	160					

HSK-SLN



Side Lock Tool Holder

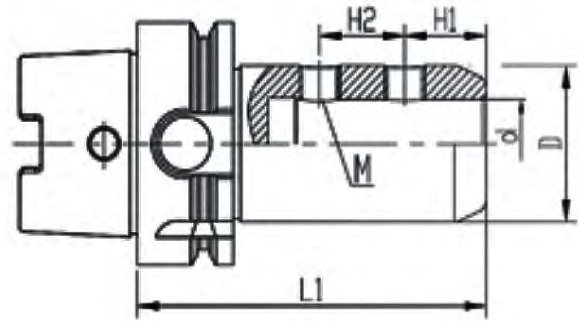


Model	Dimension (mm)					
	L1	d	D	H1	H2	M
HSK80A-SLN06-80	80	6	25	12	10	M6
HSK80A-SLN06-120	120					
HSK80A-SLN06-160	160					
HSK80A-SLN08-80	80	8	28	14	12	M8
HSK80A-SLN08-120	120					
HSK80A-SLN08-160	160					
HSK80A-SLN10-80	80	10	35	15	14	M10
HSK80A-SLN10-120	120					
HSK80A-SLN10-160	160					
HSK80A-SLN12-80	80	12	42	20	16	M12
HSK80A-SLN12-120	120					
HSK80A-SLN12-160	160					
HSK80A-SLN16-100	100	16	48	22	18	M12
HSK80A-SLN16-160	160					
HSK80A-SLN20-100	100	20	52	25	20	M16
HSK80A-SLN20-160	160					
HSK80A-SLN25-100	100	25	65	24	25	M16
HSK80A-SLN25-160	160					
HSK80A-SLN32-100	100	32	72	24	28	M20
HSK80A-SLN32-160	160					
HSK80A-SLN40-120	120	40	84	30	32	M20
HSK80A-SLN40-160	160					

HSK-SLN



Side Lock Tool Holder

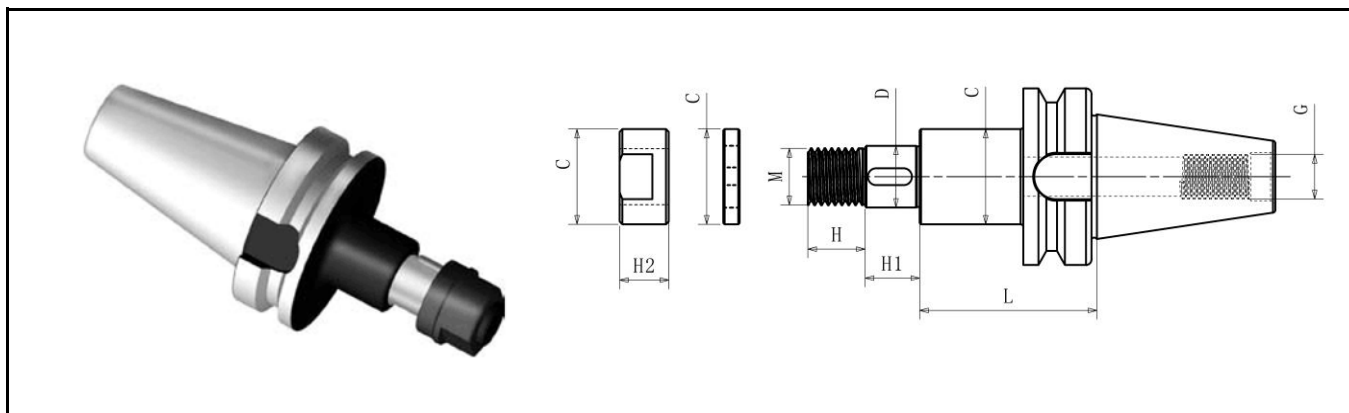


Model	Dimension (mm)					
	L1	d	D	H1	H2	M
HSK100A-SLN06-80	80	6	25	12	10	M6
HSK100A-SLN06-120	120					
HSK100A-SLN06-160	160					
HSK100A-SLN08-80	80	8	28	14	12	M8
HSK100A-SLN08-120	120					
HSK100A-SLN08-160	160					
HSK100A-SLN10-80	80	10	35	15	14	M10
HSK100A-SLN10-120	120					
HSK100A-SLN10-160	160					
HSK100A-SLN12-80	80	12	42	20	16	M12
HSK100A-SLN12-120	120					
HSK100A-SLN12-160	160					
HSK100A-SLN16-100	100	16	48	22	18	M12
HSK100A-SLN16-160	160					
HSK100A-SLN20-100	100	20	52	25	20	M16
HSK100A-SLN20-160	160					
HSK100A-SLN25-100	100	25	65	24	25	M16
HSK100A-SLN25-160	160					
HSK100A-SLN32-100	100	32	72	24	28	M20
HSK100A-SLN32-160	160					
HSK100A-SLN40-120	120	40	84	30	32	M20
HSK100A-SLN40-160	160					

BT-XS



Side Milling Three-Edge Tool Holder



Model	Dimension (mm)						Shank Type	M	G	Kg
	D	L	H	C	H1	H2				
BT30-XS13-75	13	75	15	20	30	12	BT30	M12×1.75	M12	0.6
BT30-XS16-75	16	75	16	26	30	13	BT30	M14×1.5	M12	0.7
BT30-XS22-75	22	75	21	34	30	18	BT30	M20×1.5	M12	0.8

BT40-XS13-75	13	75	15	20	30	12	BT40	M12×1.75	M16	1.3
BT40-XS13-105	13	105	15	20	30	12	BT40	M12×1.75	M16	1.4
BT40-XS16-75	16	75	16	26	30	13	BT40	M14×1.5	M16	1.4
BT40-XS16-105	16	105	16	26	30	13	BT40	M14×1.5	M16	1.5
BT40-XS22-75	22	75	25	34	30	24	BT40	M20×1.5	M16	1.6
BT40-XS22-105	22	105	25	34	30	24	BT40	M20×1.5	M16	1.9
BT40-XS27-75	27	75	25	40	30	24	BT40	M24×1.5	M16	2.1
BT40-XS27-120	27	120	25	40	30	24	BT40	M24×1.5	M16	2.5
BT40-XS32-90	32	90	30	47	30	29	BT40	M30×1.5	M16	2.6

BT50-XS13-75	13	75	15	20	30	12	BT50	M12×1.75	M24	3.7
BT50-XS13-105	13	105	15	20	30	12	BT50	M12×1.75	M24	3.8
BT50-XS16-90	16	90	16	26	30	13	BT50	M14×1.5	M24	4.0
BT50-XS16-120	16	120	16	26	30	13	BT50	M14×1.5	M24	4.1
BT50-XS22-90	22	90	25	34	30	24	BT50	M20×1.5	M24	4.3
BT50-XS22-135	22	135	25	34	30	24	BT50	M20×1.5	M24	4.6
BT50-XS27-90	27	90	25	40	30	24	BT50	M24×1.5	M24	4.7
BT50-XS27-135	27	135	25	40	30	24	BT50	M24×1.5	M24	5.1
BT50-XS32-90	32	90	30	47	30	29	BT50	M30×1.5	M24	5.1
BT50-XS32-135	32	135	30	47	30	29	BT50	M30×1.5	M24	5.7

© Pull Pin Must Be Ordered Separately.

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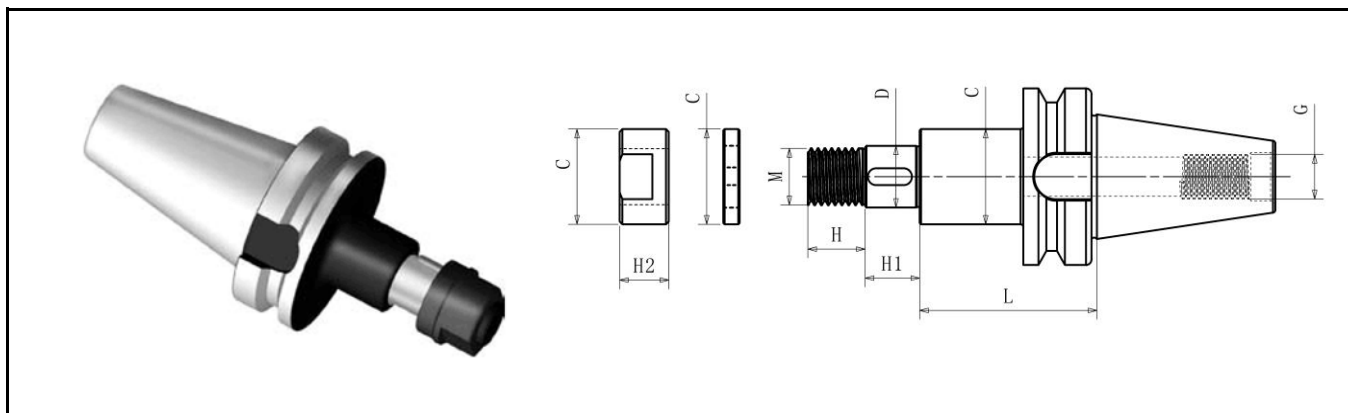


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BT-XS



Side Milling Three-Edge Tool Holder



Model	Dimension (mm)						Shank Type	M	G	Kg
	D	L	H	C	H1	H2				
BT50-XS40-90	40	90	35	55	30	34	BT50	M36×2.0	M24	5.8
BT50-XS40-135	40	135	35	55	30	34	BT50	M36×2.0	M24	6.8
BT50-XS50-100	50	100	40	69	30	39	BT50	M48×2.0	M24	7.0
BT50-XS50-150	50	150	40	69	30	39	BT50	M48×2.0	M24	8.5

© Pull Pin Must Be Ordered Separately.。

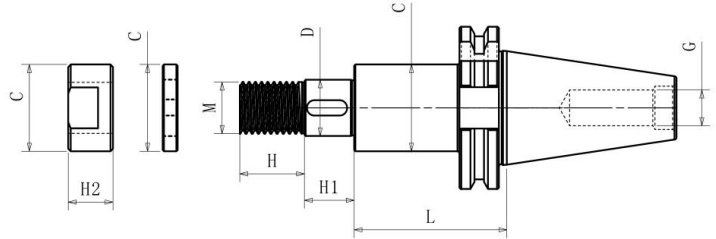
Spare Parts

Model	Key	Lock Nut	Spacer Sleeve
XS13	—	LM M12×1.75	FJ XS13×5/10/20
XS16	JK04 4×4×25	LM M14×1.5	FJ XS16×5/10/20
XS22	JK06 6×6×25	LM M20×1.5	FJ XS22×5/10/20
XS27	JK07 7×7×25	LM M24×1.5	FJ XS27×5/10/20
XS32	JK08 8×7×25	LM M30×1.5	FJ XS32×5/10/20
XS40	JK10 10×8×25	LM M36×2.0	FJ XS40×5/10/20
XS50	JK12 12×8×25	LM M48×2.0	FJ XS50×5/10/20

SK-XS



Side Milling Three-Edge Tool Holder



Model	Dimension (mm)						M	G	Kg
	D	L	H	C	H1	H2			
SK30-XS13-75	13	75	15	20	30	12	M12×1.75	M12	0.6
SK30-XS16-75	16	75	16	26	30	13	M14×1.5	M12	0.7
SK30-XS22-75	22	75	21	34	30	18	M20×1.5	M12	0.8

SK40-XS13-75	13	75	15	20	30	12	M12×1.75	M16	1.3
SK40-XS13-105	13	105	15	20	30	12	M12×1.75	M16	1.4
SK40-XS16-75	16	75	16	26	30	13	M14×1.5	M16	1.4
SK40-XS16-105	16	105	16	26	30	13	M14×1.5	M16	1.5
SK40-XS22-75	22	75	21	34	30	18	M20×1.5	M16	1.6
SK40-XS22-105	22	105	21	34	30	18	M20×1.5	M16	1.9
SK40-XS27-75	27	75	25	40	30	21	M24×2.0	M16	2.1
SK40-XS27-120	27	120	25	40	30	21	M24×2.0	M16	2.5
SK40-XS32-90	32	90	30	47	30	26	M30×1.5	M16	2.6

SK50-XS13-75	13	75	15	20	30	12	M12×1.75	M24	3.7
SK50-XS13-105	13	105	15	20	30	12	M12×1.75	M24	3.8
SK50-XS16-90	16	90	16	26	30	13	M14×1.5	M24	4.0
SK50-XS16-120	16	120	16	26	30	13	M14×1.5	M24	4.1
SK50-XS22-90	22	90	21	34	30	18	M20×1.5	M24	4.3
SK50-XS22-135	22	135	21	34	30	18	M20×1.5	M24	4.6
SK50-XS27-90	27	90	25	40	30	21	M24×2.0	M24	4.7
SK50-XS27-135	27	135	25	40	30	21	M24×2.0	M24	5.1
SK50-XS32-90	32	90	30	47	30	26	M30×1.5	M24	5.1
SK50-XS32-135	32	135	30	47	30	26	M30×1.5	M24	5.7

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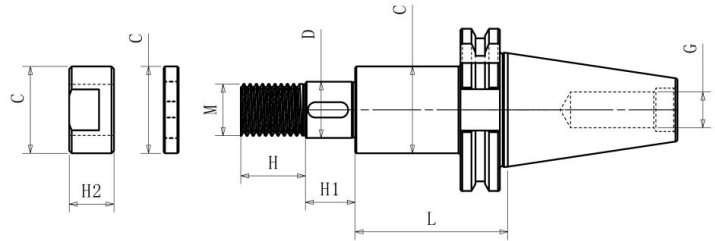


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SK-XS



Side Milling Three-Edge Tool Holder



Model	Dimension (mm)						M	G	Kg
	D	L	H	C	H1	H2			
SK50-XS40-90	40	90	35	55	30	34	M36×2.0	M24	5.8
SK50-XS40-135	40	135	35	55	30	34	M36×2.0	M24	6.8
SK50-XS50-150	50	150	40	69	30	39	M48×2.0	M24	8.5

© Pull Pin Must Be Ordered Separately. .

Spare Parts

Model	Key	Lock Nut	Space Sleeve
XS13	—	LM M12×1.75	FJ XS13×5/10/20
XS16	PL08 4×4×25	LM M14×1.5	FJ XS16×5/10/20
XS22	PL08 6×6×25	LM M20×1.5	FJ XS22×5/10/20
XS27	PL08 7×7×25	LM M24×2.0	FJ XS27×5/10/20
XS32	PL08 8×7×25	LM M30×2.0	FJ XS32×5/10/20
XS40	PL08 10×8×25	LM M36×2.0	FJ XS40×5/10/20
XS50	PL08 12×8×25	LM M48×2.0	FJ XS50×5/10/20



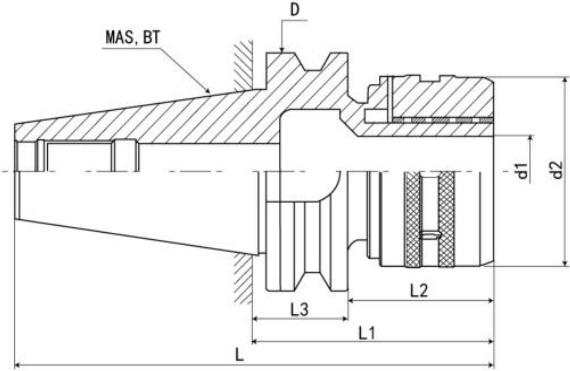
F74

F27

BT-C



High Precision Power Tool Holder



Model	Shank Type	Dimension (mm)							Collet	Kg
		L	L1	L2	L3	D	d1	d2		
BT30-C20-80	BT30	128.4	80	58	22	46	20	56	SC20	1.3
BT30-C25-100		148.4	100	78	22	46	25	61	SC25	1.6
BT30-C32-105		153.4	105	83	22	46	32	68	SC32	2.3
BT40-C20-100	BT40	165.4	100	73	27	63	20	56	SC20	2.0
BT40-C25-100		165.4	100	73	27	63	25	61	SC25	2.2
BT40-C25-135		200.4	135	108	27	63	25	61		3.1
BT40-C32-105		170.4	105	78	27	63	32	68	SC32	2.5
BT40-C32-135		200.4	135	108	27	63	32	68		3.1
BT40-C32-165		230.4	165	138	27	63	32	68		3.9
BT40-C32-200		265.4	200	173	27	63	32	68		4.6
BT40-C32-250		315.4	250	223	27	63	32	68	SC42	5.7
BT40-C42-130		195.4	130	103	27	63	42	87		—
BT50-C25-110	BT50	211.8	110	72	38	100	25	61	SC25	—
BT50-C25-165		236.8	165	127	38	100	25	61		6.1
BT50-C32-110		211.8	110	72	38	100	32	68	SC32	—
BT50-C32-135		236.8	135	97	38	100	32	68		6.1
BT50-C32-165		266.8	165	127	38	100	32	68		6.9
BT50-C32-200		301.8	200	162	38	100	32	68		7.8
BT50-C32-250		351.8	250	212	38	100	32	68		9.45
BT50-C32-300		401.8	300	262	38	100	32	68		11.75
BT50-C32-350		451.8	350	312	38	100	32	68		12.3
BT50-C32-400		501.8	400	362	38	100	32	68		—
BT50-C32-450		551.8	450	412	38	100	32	68		—
BT50-C42-135		236.8	135	97	38	100	42	87	SC42	6.2
BT50-C42-165		266.8	165	127	38	100	42	87		7.6
BT50-C42-200		301.8	200	162	38	100	42	87		9.0

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F71



F74



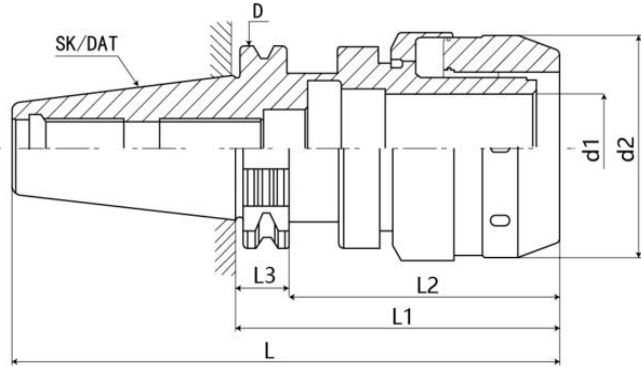
F77

© Collet, Pull Pin, and Wrench Must Be Ordered Separately.

SK-C



High Precision Power Tool Holder



Model	Shank Type	Dimension (mm)							Collet
		L	L1	L2	L3	d1	d2	D	
SK30-C20-85	SK30	132.8	85	69	19.1	20	56	50	SC20
SK30-C20-100		147.8	100	84	19.1	20	56	50	
SK30-C32-105		152.8	105	89	19.1	32	68	63.55	SC32

SK40-C20-85	SK40	132.8	85	69	19.1	20	56	63.55	SC20
SK40-C20-100		147.8	100	84	19.1	20	56	63.55	
SK40-C20-135		182.8	135	119	19.1	20	56	63.55	
SK40-C25-100		147.8	100	84	19.1	25	61	63.55	SC25
SK40-C25-135		182.8	135	119	19.1	25	61	63.55	
SK40-C32-105		152.8	105	89	19.1	32	68	63.55	SC32
SK40-C32-135		182.8	135	119	19.1	32	68	63.55	

SK50-C20-105	SK50	206.75	105	89	19.1	20	56	97.5	SC20
SK50-C20-150		251.75	150	134	19.1	20	56	97.5	
SK50-C25-105		206.75	105	89	19.1	25	61	97.5	SC25
SK50-C25-165		266.75	165	149	19.1	25	61	97.5	
SK50-C32-110		211.75	110	94	19.1	32	68	97.5	SC32
SK50-C32-165		266.75	165	149	19.1	32	68	97.5	
SK50-C32-200		301.75	200	184	19.1	32	68	97.5	
SK50-C42-110		211.75	110	94	19.1	42	87	97.5	SC42
SK50-C42-150		251.75	150	134	19.1	42	87	97.5	

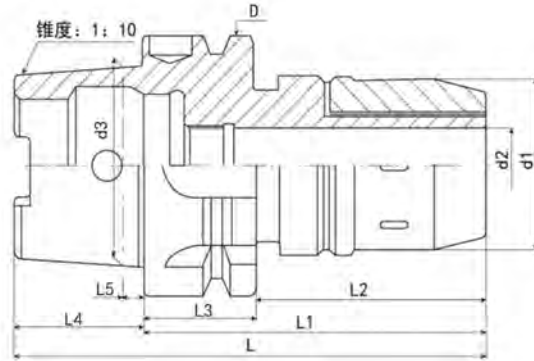
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HSK-C



High Precision Power Tool Holder



Model	Shank Type	Dimension (mm)										Collet
		D	L	L1	L2	L3	L4	L5	d1	d2	d3	
HSK50A-C20-120	HSK50A	38	145	120	94	26	25	5	55	20	38	SC20
HSK50A-C25-120		38	145	120	94	26	25	5	60	25	38	SC25

HSK63A-C20-95	HSK63A	63	127	95	69	26	32	6.3	55	20	48	SC20
HSK63A-C20-110		63	142	110	84	26	32	6.3	55	20	48	
HSK63A-C25-100		63	132	100	74	26	32	6.3	60	25	48	SC25
HSK63A-C25-130		63	162	130	104	26	32	6.3	60	25	48	
HSK63A-C32-110		63	142	110	108	26	32	6.3	73	32	48	SC32
HSK63A-C32-130		63	162	130	104	26	32	6.3	73	32	48	
HSK63A-C32-150		63	182	150	124	26	32	6.3	73	32	48	

HSK80A-C20-105	HSK80A	80	145	105	79	26	40	8	55	20	60	SC20
HSK80A-C25-105		80	145	105	79	26	40	8	60	25	60	SC25
HSK80A-C32-120		80	160	120	94	26	40	8	73	32	60	SC32
HSK80A-C42-130		80	170	130	104	26	40	8	95	42	60	SC42

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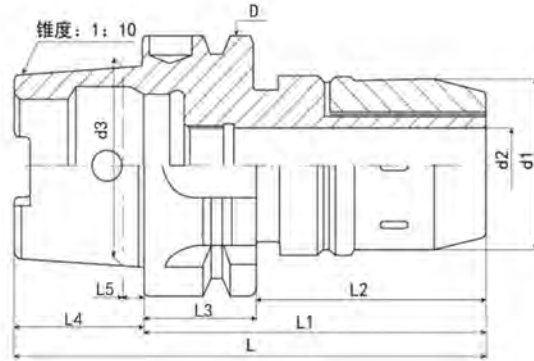


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HSK-C



High Precision Power Tool Holder



Model	Shank Type	Dimension (mm)										Collet
		D	L	L1	L2	L3	L4	L5	d1	d2	d3	
HSK100A-C20-100	HSK 100A	100	150	100	71	29	50	10	55	20	75	SC20
HSK100A-C20-110		100	160	110	81	29	50	10	55	20	75	
HSK100A-C20-130		100	180	130	101	29	50	10	55	20	75	

HSK100A-C25-100	HSK 100A	100	150	100	71	29	50	10	60	25	75	SC25
HSK100A-C25-110		100	160	110	81	29	50	10	60	25	75	
HSK100A-C25-130		100	180	130	101	29	50	10	60	25	75	
HSK100A-C25-160		100	210	160	130	29	50	10	60	25	75	

HSK100A-C32-100	HSK 100A	100	150	100	71	29	50	10	73	32	75	SC32
HSK100A-C32-110		100	160	110	81	29	50	10	73	32	75	
HSK100A-C32-130		100	180	130	101	29	50	10	73	32	75	
HSK100A-C32-160		100	210	160	131	29	50	10	73	32	75	
HSK100A-C32-200		100	250	200	171	29	50	10	73	32	75	
HSK100A-C32-250		100	300	250	221	29	50	10	73	32	75	
HSK100A-C32-300		100	350	300	271	29	50	10	73	32	75	

HSK100A-C42-110	HSK 100A	100	160	110	81	29	50	10	95	42	75	SC42
HSK100A-C42-130		100	180	130	101	29	50	10	95	42	75	
HSK100A-C42-160		100	210	160	131	29	50	10	95	42	75	
HSK100A-C42-200		100	250	200	171	29	50	10	95	42	75	
HSK100A-C42-250		100	300	250	221	29	50	10	95	42	75	
HSK100A-C42-300		100	350	300	271	29	50	10	95	42	75	

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F71



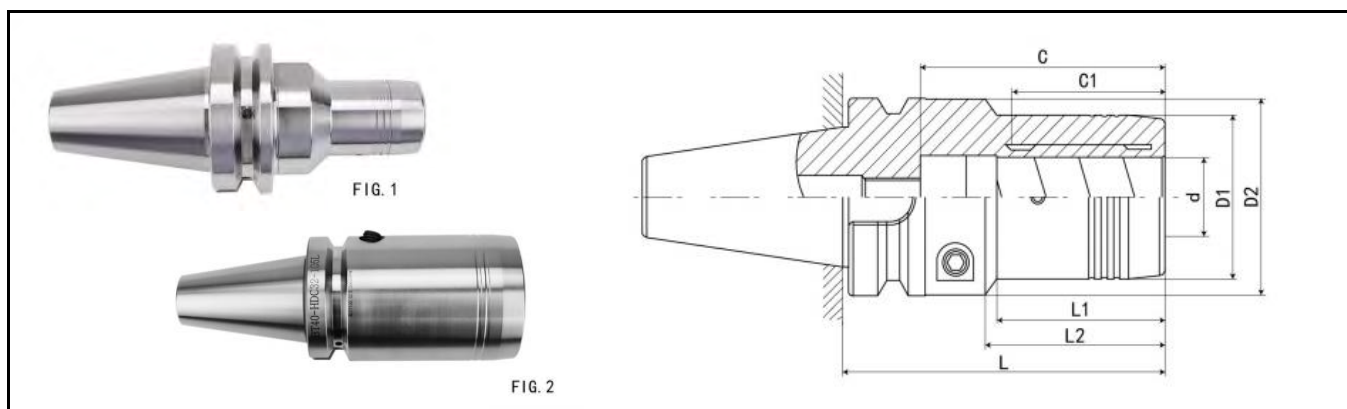
F77

F31

BT-CY



Hydraulic Tool Holder



Model	Dimension (mm)									类型 Fig	Weight (KG)
	d	D1	D2	L	L1	L2	C1	C	M		
BT30-CY06-75	6	30	46	75	26	30	26	42	5	1	0.8
BT30-CY08-75	8	32	46	75	26	24	26	42	6	1	0.85
BT30-CY10-75	10	34	46	75	31	24	31	45	6	1	0.85
BT30-CY12-75	12	36	46	75	25	27	32	45	8	1	0.85
BT30-CY16-90	16	40	46	90	33	35	42	52	8	1	1.05
BT30-CY20-90	20	46	46	90	—	—	42	52	8	1	1.1
BT30-CY25-105	25	55	65	105	44	47	50	80	8	2	1.65
BT30-CY32-105	32	60	70	105	39	44	52	80	8	2	1.8

BT40-CY06-75	6	31	46	75	26	30	26	46	5	1	1.32
BT40-CY06-90	6	30	46	90	33	44	26	46	5	1	1.41
BT40-CY08-75	8	33	48	75	26	30	25	46	5	1	1.36
BT40-CY08-90	8	32	48	90	33	44	25	46	5	1	1.46
BT40-CY10-75	10	35	50	75	26	30	31	57	8	1	1.43
BT40-CY10-90	10	36	52	90	34	44	31	57	8	1	1.57
BT40-CY12-75	12	37	51	75	26	30	32	57	8	1	1.46
BT40-CY12-90	12	38	54	90	33	44	32	57	8	1	1.62
BT40-CY14-75	14	38	56	75	26	30	41	57	8	1	1.48
BT40-CY14-90	14	40	56	90	33	44	41	57	8	1	1.68
BT40-CY16-75	16	40	58	75	26	30	42	75	12	1	1.51
BT40-CY16-90	16	42	58	90	33	44	42	75	12	1	1.7
BT40-CY20-75	20	44	60	75	26	30	42	75	12	1	1.52
BT40-CY20-90	20	46	60	90	33	44	42	75	12	1	1.75
BT40-CY25-105	25	52	62	105	47	58	51	80	12	1	2.05
BT40-CY32-105	32	62	73	105	43.2	46.1	53	90	12	2	2.34

© C1为最少插入深度；C为最大插入深度。

© Collet, Pull Pin, and Wrench Must Be Ordered Separately.

F32



F72

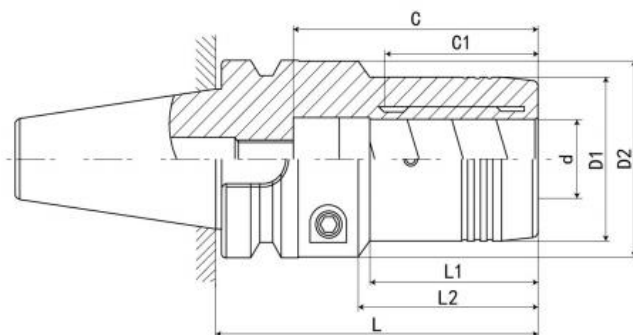


F74

BT-CY



Hydraulic Tool Holder



Model	Dimension (mm)									Weight (kg)
	d	D1	D2	L	L1	L2	C1	C	M	
BT50-CY06-105	6	30	46	105	26	29	30.5	57	5	4.09
BT50-CY08-105	8	32	48	105	26	29	27.5	57	6	4.16
BT50-CY10-105	10	36	52	105	26	29	31	57	8	4.26
BT50-CY12-105	12	38	54	105	26	29	32	57	10	4.34
BT50-CY16-105	16	42	58	105	26	29	42	75	10	4.48
BT50-CY20-105	20	46	60	105	26	29	42	75	10	4.53
BT50-CY25-120	25	52	62	120	56	58	50	80	16	4.68
BT50-CY32-120	32	62	72	120	43	47	50	90	16	5.15
BT50-CY40-120	40	70	84	120	53	82	57.5	89.5	16	5.35

© C1为最少插入深度；C为最大插入深度。

© Collet, Pull Pin, and Wrench Must Be Ordered Separately.



F72



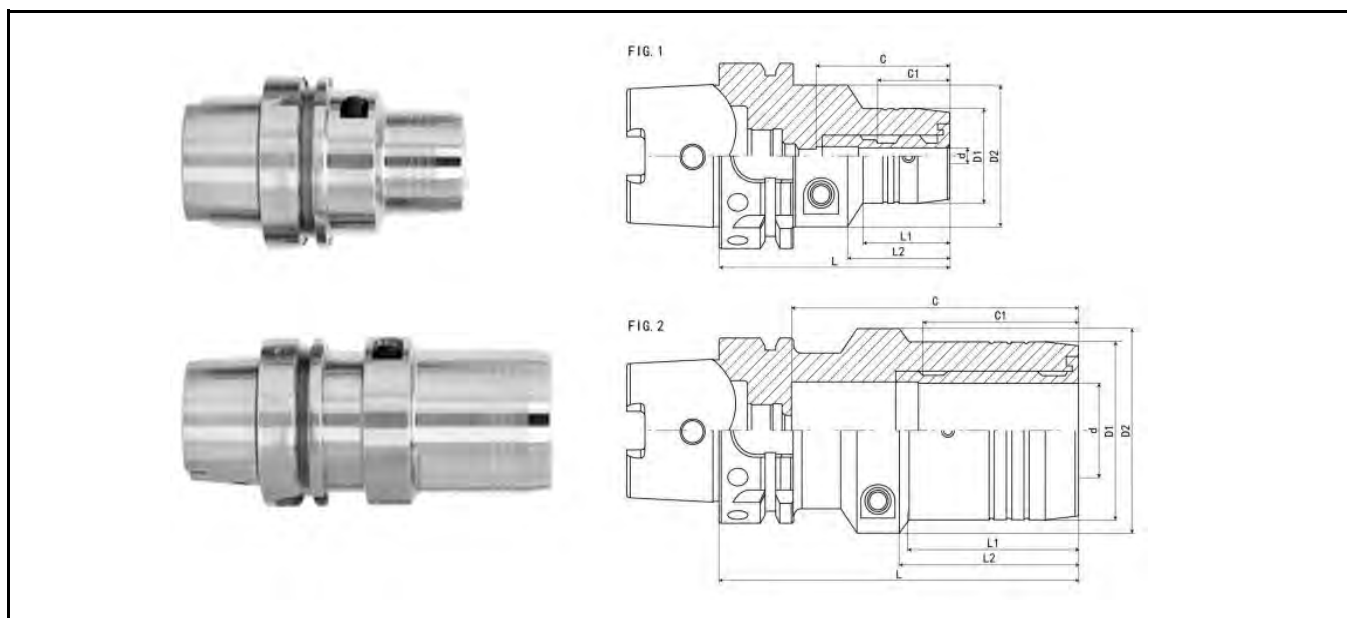
F74

F33

HSK-CY



Hydraulic Tool Holder



Model	Dimension (mm)									FIG	W.Kg
	d	D1	D2	L	L1	L2	C1	C	M		
HSK63A-CY06-80	6	32	48	80	30	35	26	44.5	5	1	1.15
HSK63A-CY08-80	8	34	50	80	32	35	25	46	6	1	1.15
HSK63A-CY10-80	10	36	52	80	32	36	31	50	6	1	1.2
HSK63A-CY12-80	12	38	52	80	32	36	41	50	6	1	1.25
HSK63A-CY14-90	14	40	52	90	41	44	42	50.5	12	1	1.35
HSK63A-CY16-90	16	42	52	90	41	44	42	60	12	1	1.35
HSK63A-CY20-90	20	46	52	90	41	44	42	60	12	1	1.4
HSK63A-CY25-120	25	55	63	120	52.5	55.5	51	95	—	2	2.1
HSK63A-CY32-125	32	60	69	125	59	62	53	100	—	2	2.2

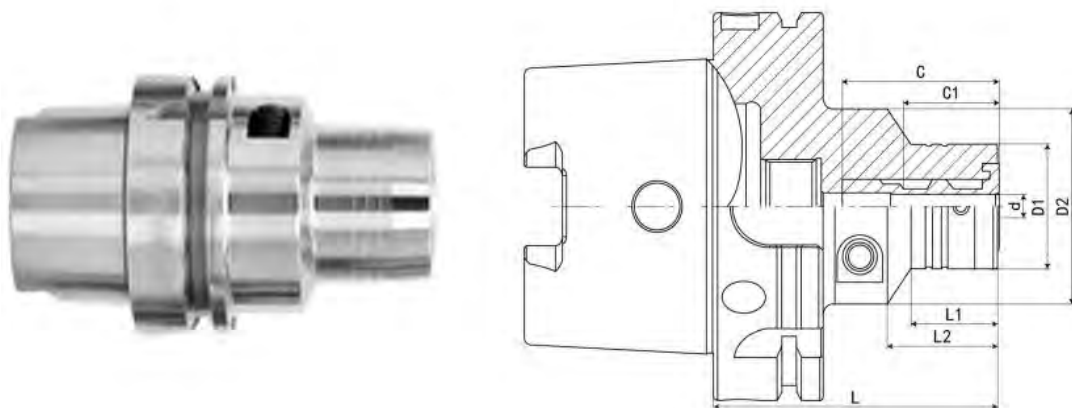
© C1 is the minimum insertion depth; C is the maximum insertion depth.

© Collet Must Be Ordered Separately.



HSK-CY

Hydraulic Tool Holder



Model	Dimension (mm)								W. KG
	d	D1	D2	L	L1	L2	C1	C	
HSK100A-CY06-75	6	32	50	75	26	29	26	41	2.55
HSK100A-CY08-75	8	34	50	75	26	29	26	41	2.55
HSK100A-CY10-90	10	36	50	90	42	44	31	61	2.7
HSK100A-CY12-95	12	38	50	95	47	49	37	63	2.75
HSK100A-CY16-100	16	42	50	100	53	54	42	68	2.8
HSK100A-CY20-105	20	46	52	105	59	—	41.5	73	2.95
HSK100A-CY25-110	25	55	63	110	61	63.4	50.2	77.5	3.4
HSK100A-CY32-110	32	60	75	110	61	63.4	54.5	77.5	3.8

© C1 is the minimum insertion depth; C is the maximum insertion depth

© Collet Must Be Ordered Separately.



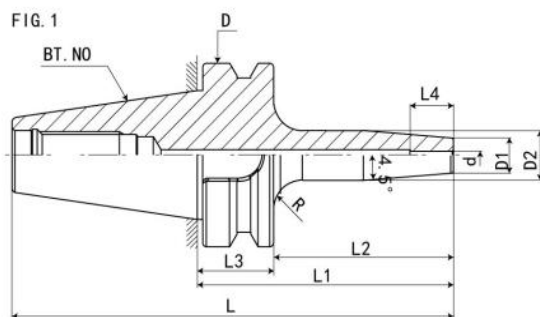
F72

F35

BT-SF



Shrink Fit Tool Holder



Model	Dimension (mm)										W.KG
	L	L1	L2	L3	L4	D	D1	D2	d	R	
BT30-SF03-80L	128.4	80	58	22	15	46	12	17	3	5	0.6
BT30-SF04-80L	128.4	80	58	22	17	46	12	17	4	5	0.6
BT30-SF04-120L	168.4	120	98	22	17	46	12	17	4	5	0.7
BT30-SF05-80L	128.4	80	58	22	17	46	12	17	5	5	0.6
BT30-SF05-120L	168.4	120	98	22	17	46	12	17	5	5	0.7
BT30-SF06-80L	128.4	80	58	22	23	46	21	27	6	3	0.7
BT30-SF06-120L	168.4	120	98	22	23	46	21	27	6	5	0.9
BT30-SF08-80L	128.4	80	58	22	27	46	21	27	8	3	0.7
BT30-SF08-120L	168.4	120	98	22	27	46	21	27	8	5	0.9
BT30-SF10-80L	128.4	80	58	22	32	46	24	32	10	1	0.8
BT30-SF10-120L	168.4	120	98	22	32	46	24	32	10	4	1.1
BT30-SF12-80L	128.4	80	58	22	37	46	24	32	12	1	0.8
BT30-SF12-120L	168.4	120	98	22	37	46	24	32	12	4	1.1
BT30-SF14-80L	128.4	80	58	22	37	46	27	34	14	1	0.8
BT30-SF14-120L	168.4	120	98	22	37	46	27	34	14	3	1.1
BT30-SF16-90L	138.4	90	68	22	40	46	27	34	16	1	0.8
BT30-SF16-120L	168.4	120	98	22	40	46	27	34	16	3	1.1
BT30-SF18-90L	138.4	90	68	22	40	46	33	41	18	1	1.0
BT30-SF18-120L	168.4	120	98	22	40	46	33	42	18	1	1.5
BT30-SF20-90L	138.4	90	68	22	42	46	33	41	20	1	1.0
BT30-SF20-120L	168.4	120	98	22	42	46	33	42	20	1	1.5

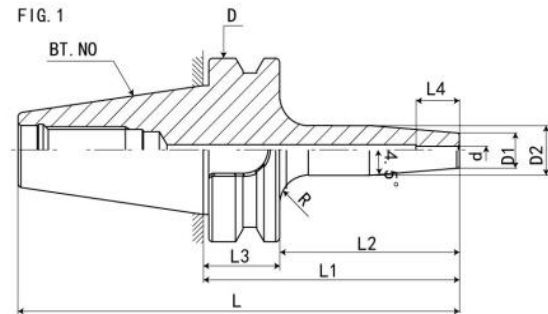
© Pull Pin Must Be Ordered Separately.



BT-SF



Shrink Fit Tool Holder



Model	Dimension (mm)										W. KG
	L	L1	L2	L3	L4	D	D1	D2	d	R	
BT40-SF03-90L	155.4	90	63	27	15	63	12	17	3	5	1.1
BT40-SF03-120L	185.4	120	93	27	15	63	12	17	3	5	1.2
BT40-SF03-160L	225.4	160	133	27	15	63	12	17	3	5	1.3
BT40-SF04-90L	155.4	90	63	27	17	63	12	17	4	5	1.1
BT40-SF04-120L	185.4	120	93	27	17	63	12	17	4	5	1.2
BT40-SF04-160L	225.4	160	133	27	17	63	12	17	4	5	1.3
BT40-SF05-90L	155.4	90	63	27	17	63	12	17	5	5	1.1
BT40-SF05-120L	185.4	120	93	27	17	63	12	17	5	5	1.2
BT40-SF05-160L	225.4	160	133	27	17	63	12	17	5	5	1.3

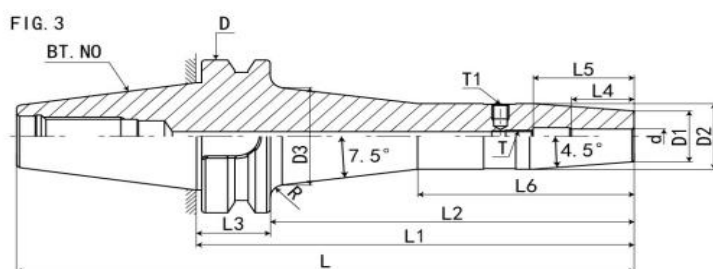
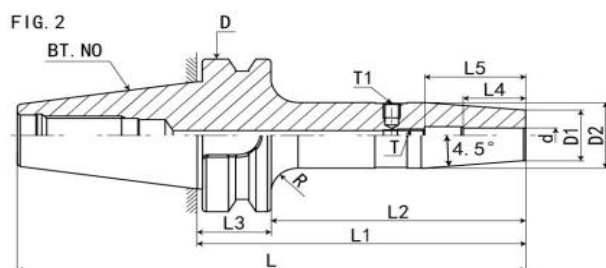
© Pull Pin Must Be Ordered Separately.



F74

F37

Shrink Fit Tool Holder



Model	Dimension (mm)										W. KG
	L	L1	L2	L4	L5	L6	D1	D2	D3	d	
BT40-SF06-90L	155.4	90	63	23	37	-	21	27	-	6	1.2
BT40-SF06-120L	185.4	120	93	23	37	-	21	27	-	6	1.5
BT40-SF06-160L *	225.4	160	133	23	37	78	21	27	41	6	1.8
BT40-SF06-200L *	265.4	200	173	23	37	118	21	27	41	6	2.2
BT40-SF08-90L	155.4	90	63	27	37	-	21	27	-	8	1.2
BT40-SF08-120L	185.4	120	93	27	37	-	21	27	-	8	1.5
BT40-SF08-160L *	225.4	160	133	27	37	78	21	27	41	8	1.8
BT40-SF08-200L *	265.4	200	173	27	37	118	21	27	41	8	2.2
BT40-SF10-90L	155.4	90	63	32	42	-	24	32	-	10	1.3
BT40-SF10-120L	185.4	120	93	32	42	-	24	32	-	10	1.6
BT40-SF10-160L *	225.4	160	133	32	42	78	24	32	46	10	1.9
BT40-SF10-200L *	265.4	200	173	32	42	118	24	32	46	10	2.3
BT40-SF12-90L	155.4	90	63	37	48	-	24	32	-	12	1.3
BT40-SF12-120L	185.4	120	93	37	48	-	24	32	-	12	1.6
BT40-SF12-160L *	225.4	160	133	37	48	78	24	32	46	12	1.9
BT40-SF12-200L *	265.4	200	173	37	48	118	24	32	46	12	2.3
BT40-SF14-90L	155.4	90	63	37	48	-	27	34	-	14	1.3
BT40-SF14-120L	185.4	120	93	37	48	-	27	34	-	14	1.6
BT40-SF14-160L *	225.4	160	133	37	48	78	27	34	48	14	1.9
BT40-SF14-200L *	265.4	200	173	37	48	118	27	34	48	14	2.3

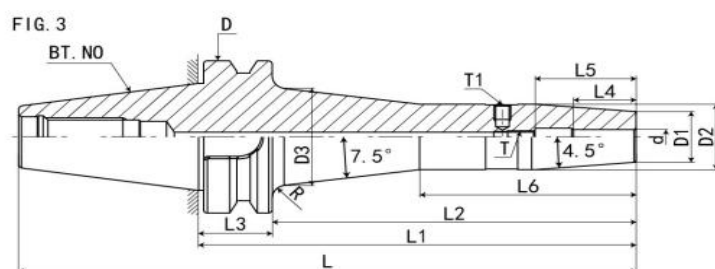
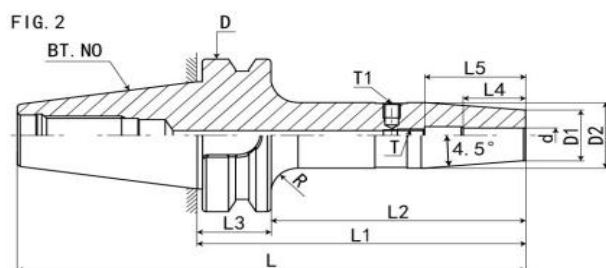
◎标记为*的刀具为Fig. 3所示加强型刀柄。◎ Pull Pin

Must Be Ordered Separately.

接口d	调整螺钉T	接口d	调整螺钉T
6	M5*0.8P	10	M8*1.0P
8	M6*1.0P	12	M10*1.0P
		14	M10*1.0P



Shrink Fit Tool Holder



Model	Dimension (mm)										W.KG
	L	L1	L2	L4	L5	L6	D1	D2	D3	d	
BT40-SF16-90	155.4	90	63	40	51	-	27	34	-	16	1.3
BT40-SF16-120	185.4	120	93	40	51	-	27	34	-	16	1.6
BT40-SF16-160 *	225.4	160	133	40	51	78	27	34	48	16	1.9
BT40-SF16-200 *	265.4	200	173	40	51	118	27	34	48	16	2.3
BT40-SF18-90	155.4	90	63	40	51	-	33	41	-	18	1.4
BT40-SF18-120	185.4	120	93	40	51	-	33	42	-	18	1.8
BT40-SF18-160	225.4	160	133	40	51	-	33	42	-	18	2.1
BT40-SF18-200	265.4	200	173	40	51	-	33	42	-	18	2.4
BT40-SF20-90	155.4	90	63	42	52	-	33	42	-	20	1.4
BT40-SF20-120	185.4	120	93	42	52	-	33	42	-	20	1.8
BT40-SF20-160	225.4	160	133	42	52	-	33	42	-	20	2.1
BT40-SF20-200	265.4	200	173	42	52	-	33	42	-	20	2.4
BT40-SF25-100	155.4	90	63	48	59	-	44	53	-	25	2.1
BT40-SF25-120	185.4	120	93	48	59	-	44	53	-	25	2.3
BT40-SF25-160	225.4	160	133	48	59	-	44	53	-	25	2.6
BT40-SF25-200	265.4	200	173	48	59	-	44	53	-	25	3.1
BT40-SF32-100	155.4	90	63	52	61	-	44	53	-	32	2.1
BT40-SF32-120	185.4	120	93	52	61	-	44	53	-	32	2.3
BT40-SF32-160	225.4	160	133	52	61	-	44	53	-	32	2.6
BT40-SF32-200	265.4	200	173	52	61	-	44	53	-	32	3.1

◎标记为*的刀具为Fig. 3所示加强型刀柄。

◎ Pull Pin Must Be Ordered Separately.

接口d	调整螺钉T	接口d	调整螺钉T
16	M6*1.0P	25	M8*1.0P
20	M6*1.0P	32	M10*1.0P



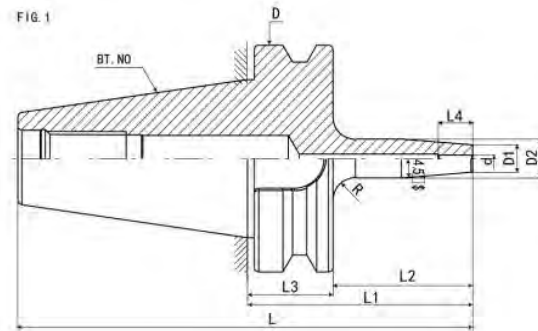
F74

F39

BT-SF



Shrink Fit Tool Holder



Model	Dimension (mm)									W.KG
	L	L1	L2	L3	L4	D	D1	D2	d	
BT50-SF03-100L	201.8	100	62	38	12	100	12	17	3	3.7
BT50-SF03-120L	221.8	120	82	38	12	100	12	20	3	3.9
BT50-SF03-160L	261.8	160	122	38	12	100	12	20	3	4.2
BT50-SF04-100L	201.8	100	62	38	16	100	12	17	4	3.7
BT50-SF04-120L	221.8	120	82	38	16	100	15	22	4	3.9
BT50-SF04-160L	261.8	160	122	38	16	100	15	22	4	4.2
BT50-SF05-100L	201.8	100	62	38	18	100	12	17	5	3.7
BT50-SF05-120L	221.8	120	82	38	18	100	15	22	5	3.9
BT50-SF05-160L	261.8	160	122	38	18	100	15	22	5	4.2

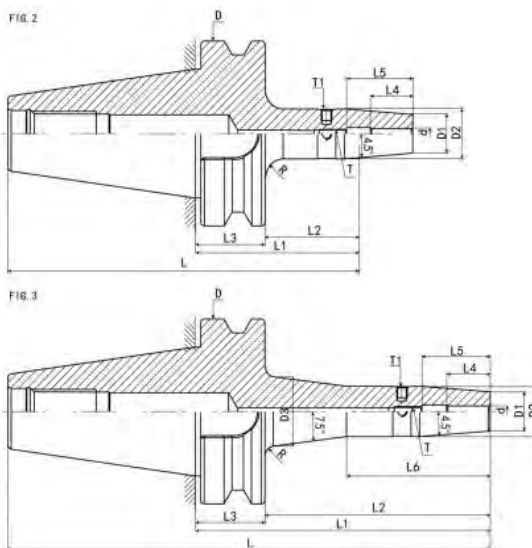
© Pull Pin Must Be Ordered Separately.



BT-SF



Shrink Fit Tool Holder



Model	Dimension (mm)										W. KG
	L	L1	L2	L4	L5	L6	D1	D2	D3	d	
BT50-SF06-100L	201.8	100	62	23	37	—	21	27	—	6	3.7
BT50-SF06-120L	221.8	120	82	23	37	—	21	27	—	6	3.9
BT50-SF06-160L *	261.8	160	122	23	37	78	21	27	41	6	4.2
BT50-SF06-200L *	301.8	200	162	23	37	118	21	27	41	6	5.8
BT50-SF08-100L	201.8	100	62	27	37	—	21	27	—	8	3.8
BT50-SF08-120L	221.8	120	82	27	37	—	21	27	—	8	3.9
BT50-SF08-160L *	261.8	160	122	27	37	78	21	27	41	8	4.2
BT50-SF08-200L *	301.8	200	162	27	37	118	21	27	41	8	5.8
BT50-SF10-100L	201.8	100	62	32	42	—	24	32	—	10	3.9
BT50-SF10-120L	221.8	120	82	32	42	—	24	32	—	10	4.1
BT50-SF10-160L *	261.8	160	122	32	42	78	24	32	40	10	4.3
BT50-SF10-200L *	301.8	200	162	32	42	118	24	32	40	10	5.9
BT50-SF12-100L	201.8	100	62	37	48	—	24	32	—	12	3.9
BT50-SF12-120L	221.8	120	82	37	48	—	24	32	—	12	4.1
BT50-SF12-160L *	261.8	160	122	37	48	78	24	32	40	12	4.3
BT50-SF12-200L *	301.8	200	162	37	48	118	24	32	40	12	5.9
BT50-SF14-100L	201.8	100	62	37	48	—	27	34	—	14	3.9
BT50-SF14-120L	221.8	120	82	37	48	—	27	34	—	14	4.1
BT50-SF14-160L *	261.8	160	122	37	48	78	27	34	42	14	4.3
BT50-SF14-200L *	301.8	200	162	37	48	118	27	34	42	14	5.9

©The tools marked with * are the reinforced tool holders shown in Fig. 3.

© Pull Pin Must Be Ordered Separately.

I/F d	Adjusting Screw T	I/F d	Adjusting Screw T
6	M5*0.8P	10	M8*1.0P
8	M6*1.0P	12/14	M10*1.0P



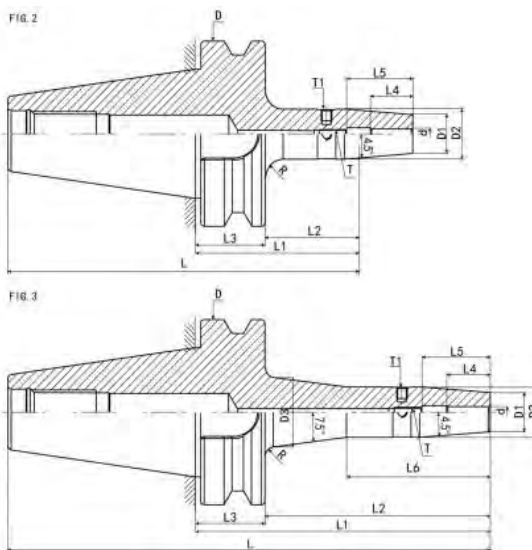
F74

F41

BT-SF



Shrink Fit Tool Holder



Model	Dimension (mm)										W. KG
	L	L1	L2	L4	L5	L6	D1	D2	D3	d	
BT50-SF16-100	201.8	100	62	40	51	—	27	34	—	16	3.9
BT50-SF16-120	221.8	120	82	40	51	—	27	34	—	16	4.1
BT50-SF16-160 *	261.8	160	122	40	51	78	27	34	42	16	4.3
BT50-SF16-200 *	301.8	200	162	40	51	118	27	34	42	16	5.9
BT50-SF18-100	201.8	100	62	40	51	—	33	42	—	18	4.1
BT50-SF18-120	221.8	120	82	40	51	—	33	42	—	18	4.2
BT50-SF18-160 *	261.8	160	122	40	51	78	33	42	—	18	4.4
BT50-SF18-200 *	301.8	200	162	40	51	118	33	42	—	18	6.1
BT50-SF20-100	201.8	100	62	42	53	—	33	42	—	20	4.1
BT50-SF20-120	221.8	120	82	42	53	—	33	42	—	20	4.2
BT50-SF20-160 *	261.8	160	122	42	53	78	33	42	—	20	4.4
BT50-SF20-200 *	301.8	200	162	42	53	118	33	42	—	20	6.1
BT50-SF25-100	211.8	100	72	48	59	—	44	53	—	25	4.5
BT50-SF25-120	221.8	120	82	48	59	—	44	53	—	25	4.7
BT50-SF25-160 *	261.8	160	122	48	59	78	44	53	—	25	5.1
BT50-SF25-200 *	301.8	200	162	48	59	118	44	53	—	25	6.1
BT50-SF32-110	211.8	110	72	52	63	—	44	53	—	32	4.5
BT50-SF32-120	221.8	120	82	52	63	—	44	53	—	32	4.7
BT50-SF32-160 *	261.8	160	122	52	63	78	44	53	—	32	5.1
BT50-SF32-200 *	301.8	200	162	52	63	118	44	53	—	32	6.1

©The tools marked with * are the reinforced tool holders shown in Fig. 3.

© Pull Pin Must Be Ordered Separately.

I/F d	Adjusting Screw T	I/F d	Adjusting Screw T
16	M5*0.8P	20	M8*1.0P
18	M6*1.0P	25/32	M10*1.0P

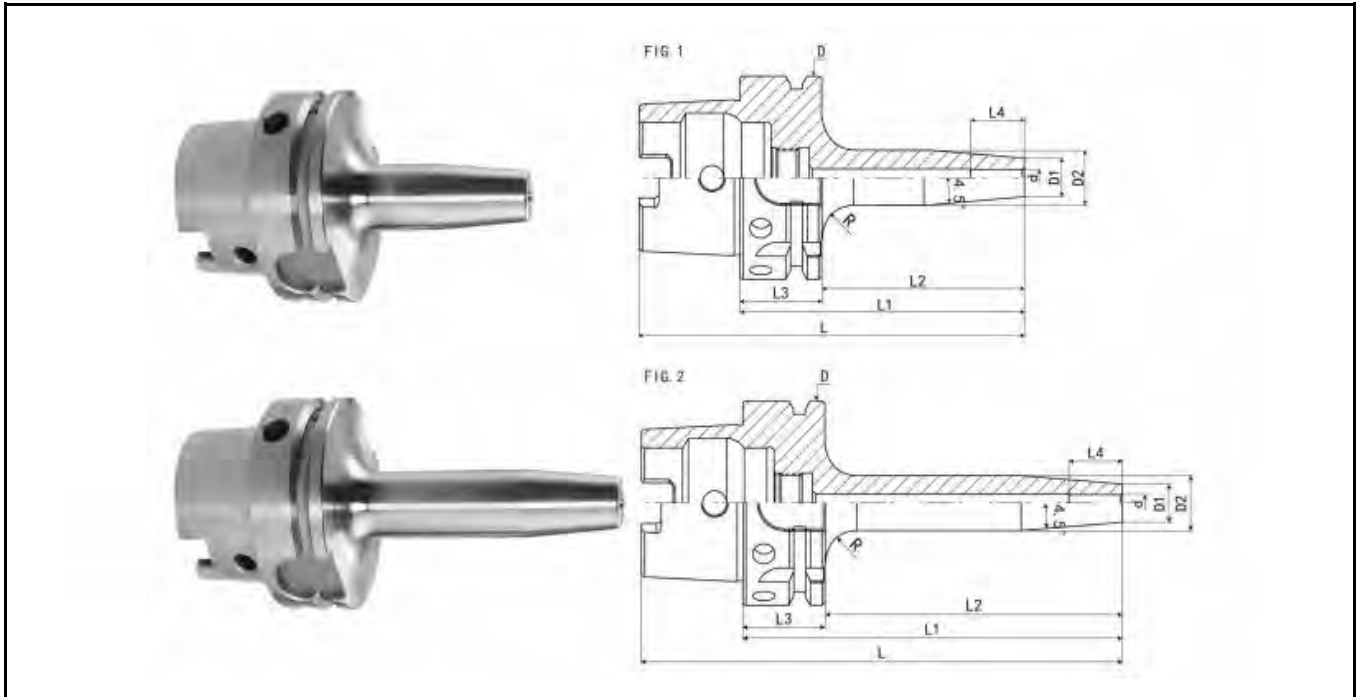
F42



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HSK-SF

Shrink Fit Tool Holder

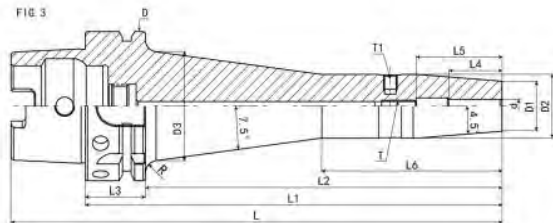
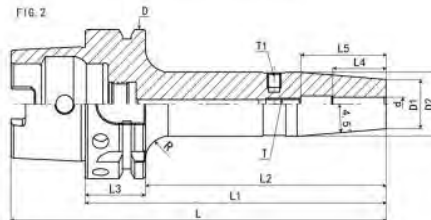
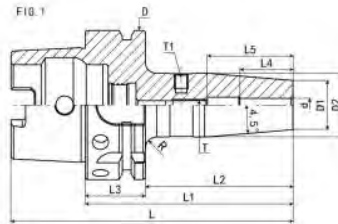


Model	Dimension (mm)										FIG	W.KG
	L	L1	L2	L3	L4	D	D1	D2	D3	d		
HSK63A-SF03-80	112	80	54	26	12	63	12	17	—	3	1	0.7
HSK63A-SF03-120	152	120	94	26	12	63	12	20	—	3	2	1.1
HSK63A-SF03-160	192	160	134	26	12	63	12	20	—	3	2	1.3
HSK63A-SF04-80	112	80	54	26	16	63	12	17	—	4	1	0.7
HSK63A-SF04-120	152	120	94	26	16	63	15	22	—	4	2	1.1
HSK63A-SF04-160	192	160	134	26	16	63	15	22	—	4	2	1.3
HSK63A-SF05-80	112	80	54	26	18	63	12	17	—	5	1	0.7
HSK63A-SF05-120	152	120	94	26	18	63	15	22	—	5	2	1.1
HSK63A-SF05-160	192	160	134	26	18	63	15	22	—	5	2	1.3

HSK-SF



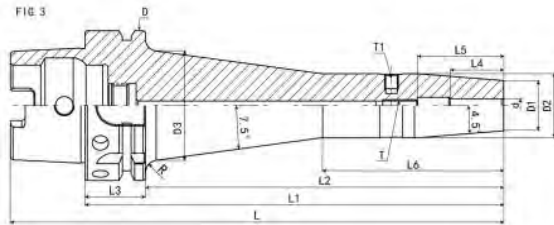
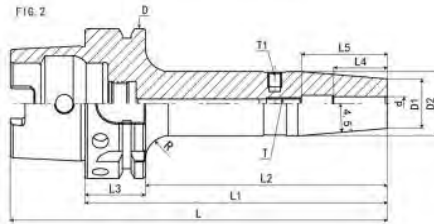
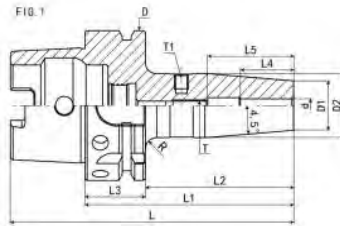
Shrink Fit Tool Holder



Model	Dimension (mm)										FIG	W.KG
	L	L1	L2	L4	L5	L6	D1	D2	D3	d		
HSK63A-SF06-80	112	80	54	23	37	—	21	27	—	6	1	0.8
HSK63A-SF06-120	152	120	94	23	37	—	21	27	—	6	2	1.1
HSK63A-SF06-160	192	160	134	23	37	78	21	27	41	6	3	1.4
HSK63A-SF06-200	232	200	174	23	37	118	21	27	41	6	3	1.8
HSK63A-SF08-80	112	80	54	27	37	—	21	27	—	8	1	0.8
HSK63A-SF08-120	152	120	94	27	37	—	21	27	—	8	2	1.1
HSK63A-SF08-160	192	160	134	27	37	78	21	27	41	8	3	1.4
HSK63A-SF08-200	232	200	174	27	37	118	21	27	41	8	3	1.8
HSK63A-SF10-85	117	85	59	32	42	—	24	32	—	10	1	0.9
HSK63A-SF10-120	152	120	94	32	42	—	24	32	—	10	2	1.2
HSK63A-SF10-160	192	160	134	32	42	78	24	32	40	10	3	1.5
HSK63A-SF10-200	232	200	174	32	42	118	24	32	40	10	3	1.9
HSK63A-SF12-90	122	90	64	37	48	—	24	32	—	12	1	1.2
HSK63A-SF12-120	152	120	94	37	48	—	24	32	—	12	2	1.5
HSK63A-SF12-160	192	160	134	37	48	78	24	32	40	12	3	1.9
HSK63A-SF12-200	232	200	174	37	48	118	24	32	40	12	3	0.9
HSK63A-SF14-90	122	90	64	37	48	—	27	34	—	14	1	0.9
HSK63A-SF14-120	152	120	94	37	48	—	27	34	—	14	2	1.2
HSK63A-SF14-160	192	160	134	37	48	78	27	34	42	14	3	1.5
HSK63A-SF14-200	232	200	174	37	48	118	27	34	42	14	3	1.9

HSK-SF

Shrink Fit Tool Holder

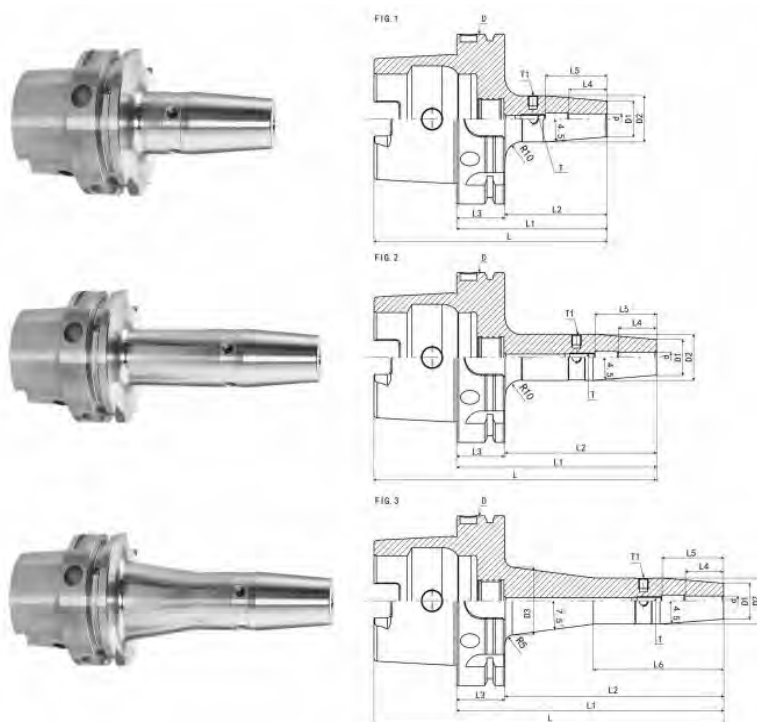


Model	Dimension (mm)										FIG	W.KG
	L	L1	L2	L4	L5	L6	D1	D2	D3	d		
HSK63A-SF16-95	127	95	69	40	51	—	27	34	—	16	1	0.9
HSK63A-SF16-120	152	120	94	40	51	—	27	34	—	16	2	1.2
HSK63A-SF16-160	192	160	134	40	51	78	27	34	42	16	3	1.5
HSK63A-SF16-200	232	200	174	40	51	118	27	34	42	16	3	1.9
HSK63A-SF18-95	127	95	69	40	51	—	33	42	—	18	1	1.1
HSK63A-SF18-120	152	120	94	40	51	—	33	42	—	18	2	1.3
HSK63A-SF18-160	192	160	134	40	51	—	33	42	—	18	2	1.6
HSK63A-SF18-200	232	200	174	40	51	—	33	42	—	18	2	2.1
HSK63A-SF20-100	132	100	74	42	53	—	33	42	—	20	1	1.1
HSK63A-SF20-120	152	120	94	42	53	—	33	42	—	20	2	1.3
HSK63A-SF20-160	192	160	134	42	53	—	33	42	—	20	2	1.6
HSK63A-SF20-200	232	200	174	42	53	—	33	42	—	20	2	2.1
HSK63A-SF25-115	147	115	89	48	59	—	44	53	—	25	1	1.9
HSK63A-SF25-130	162	130	104	48	59	—	44	53	—	25	2	2.1
HSK63A-SF25-160	192	160	134	48	59	—	44	53	—	25	2	2.2
HSK63A-SF25-200	232	200	174	48	59	—	44	53	—	25	2	2.6
HSK63A-SF32-120	152	120	94	52	63	—	44	53	—	32	1	1.9
HSK63A-SF32-130	162	130	104	52	63	—	44	53	—	32	2	2.2
HSK63A-SF32-160	192	160	134	52	63	—	44	53	—	32	2	2.3
HSK63A-SF32-200	232	200	174	52	63	—	44	53	—	32	2	2.7

HSK-SF



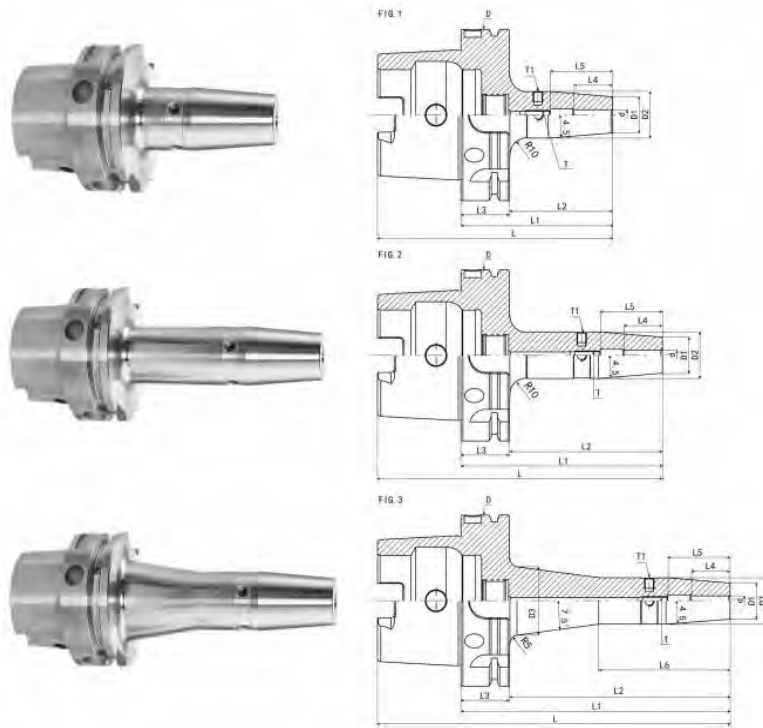
Shrink Fit Tool Holder



Model	Dimension (mm)										FIG	W. KG
	L	L1	L2	L4	L5	L6	D1	D2	D3	d		
HSK80A-SF06-85	125	85	59	23	37	—	21	27	—	6	1	1.4
HSK80A-SF06-120	160	120	94	23	37	—	21	27	—	6	2	1.5
HSK80A-SF06-160	200	160	134	23	37	78	21	27	41	6	3	2.1
HSK80A-SF06-200	240	200	174	23	37	118	21	27	41	6	3	2.2
HSK80A-SF08-85	125	85	59	27	37	—	21	27	—	8	1	1.4
HSK80A-SF08-120	160	120	95	27	37	—	21	27	—	8	2	1.5
HSK80A-SF08-160	200	160	134	27	37	78	21	27	41	8	3	2.1
HSK80A-SF08-200	240	200	174	27	37	118	21	27	41	8	3	2.2
HSK80A-SF10-90	130	90	64	32	42	—	24	32	—	10	1	1.5
HSK80A-SF10-120	160	120	94	32	42	—	24	32	—	10	2	1.6
HSK80A-SF10-160	200	160	134	32	42	78	24	32	40	10	3	2.1
HSK80A-SF10-200	240	200	174	32	42	118	24	32	40	10	3	2.3
HSK80A-SF12-95	135	95	69	37	48	—	24	32	—	12	1	1.5
HSK80A-SF12-120	160	120	94	37	48	—	24	32	—	12	2	1.6
HSK80A-SF12-160	200	160	134	37	48	78	24	32	40	12	3	2.1
HSK80A-SF12-200	240	200	174	37	48	118	24	32	40	12	3	2.3
HSK80A-SF14-95	135	95	69	37	48	—	27	34	—	14	1	1.5
HSK80A-SF14-120	160	120	94	37	48	—	27	34	—	14	2	1.7
HSK80A-SF14-160	200	160	134	37	48	78	27	34	42	14	3	2.1
HSK80A-SF14-200	240	200	174	37	48	118	27	34	42	14	3	2.2

HSK-SF

Shrink Fit Tool Holder

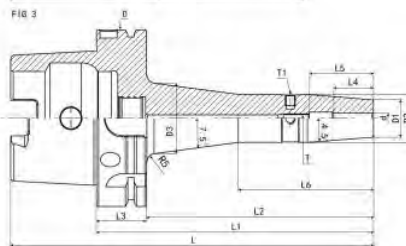
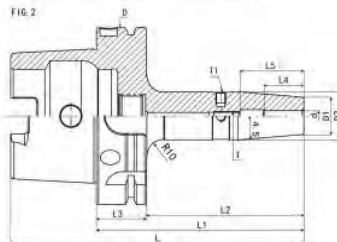
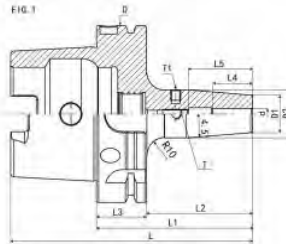


Model	Dimension (mm)										FIG	W.KG
	L	L1	L2	L4	L5	L6	D1	D2	D3	d		
HSK80A-SF16-100	140	100	74	40	51	—	27	34	—	16	1	1.5
HSK80A-SF16-120	160	120	94	40	51	—	27	34	—	16	2	1.8
HSK80A-SF16-160	200	160	134	40	51	78	27	34	42	16	3	2.1
HSK80A-SF16-200	240	200	174	40	51	118	27	34	42	16	3	2.2
HSK80A-SF18-100	140	100	74	40	51	—	33	42	—	18	1	1.6
HSK80A-SF18-120	160	120	94	40	51	—	33	42	—	18	2	1.9
HSK80A-SF18-160	200	160	134	40	51	—	33	42	—	18	3	2.2
HSK80A-SF18-200	240	200	174	40	51	—	33	42	—	18	3	2.6
HSK80A-SF20-105	145	105	79	42	53	—	33	42	—	20	1	1.6
HSK80A-SF20-120	160	120	94	42	53	—	33	42	—	20	2	2.1
HSK80A-SF20-160	200	160	134	42	53	—	33	42	—	20	3	2.3
HSK80A-SF20-200	240	200	174	42	53	—	33	42	—	20	3	2.7
HSK80A-SF25-115	155	115	89	48	59	—	44	53	—	25	1	2.5
HSK80A-SF25-160	200	160	134	48	59	—	44	53	—	25	3	2.8
HSK80A-SF25-200	240	200	174	48	59	—	44	53	—	25	3	3.6
HSK80A-SF32-120	160	120	94	52	63	—	44	53	—	32	1	2.5
HSK80A-SF32-160	200	160	134	52	63	—	44	53	—	32	3	3.2
HSK80A-SF32-200	240	200	174	52	63	—	44	53	—	32	3	3.5

HSK-SF



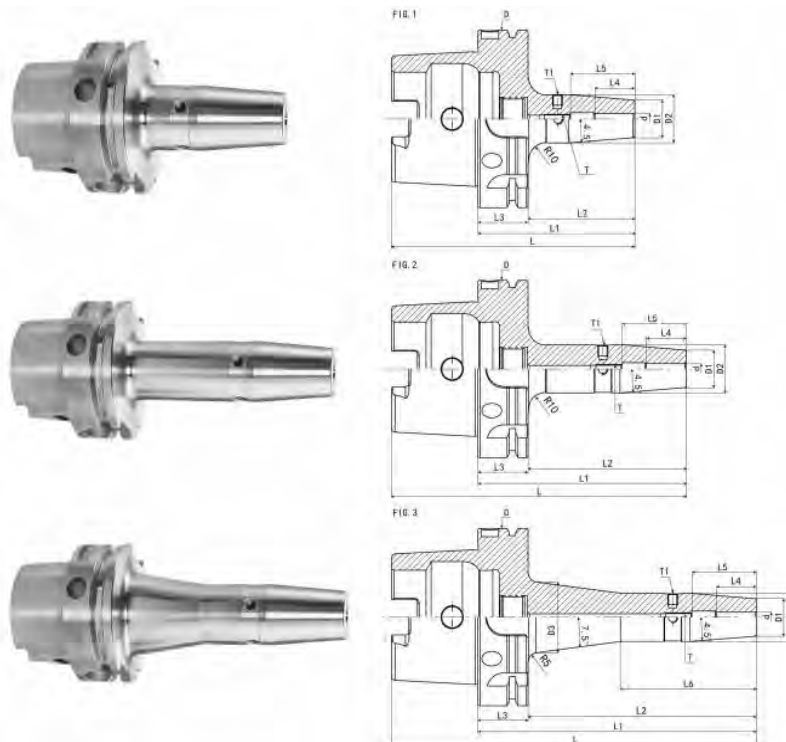
Shrink Fit Tool Holder



Model	Dimension (mm)										FIG	W.KG
	L	L1	L2	L4	L5	L6	D1	D2	D3	d		
HSK100A-SF06-85	135	85	56	23	37	—	21	27	—	6	1	2.2
HSK100A-SF06-120	170	120	91	23	37	—	21	27	—	6	2	2.5
HSK100A-SF06-160	210	160	131	23	37	78	21	27	41	6	3	2.8
HSK100A-SF06-200	250	200	171	23	37	118	21	27	41	6	3	3.2
HSK100A-SF08-85	135	85	56	27	37	—	21	27	—	8	1	2.2
HSK100A-SF08-120	170	120	91	27	37	—	21	27	—	8	2	2.5
HSK100A-SF08-160	210	160	131	27	37	78	21	27	41	8	3	2.8
HSK100A-SF08-200	250	200	171	27	37	118	21	27	41	8	3	3.2
HSK100A-SF10-90	140	90	61	32	42	—	24	32	—	10	1	2.3
HSK100A-SF10-120	170	120	91	32	42	—	24	32	—	10	2	2.6
HSK100A-SF10-160	210	160	131	32	42	78	24	32	40	10	3	2.9
HSK100A-SF10-200	250	200	171	32	42	118	24	32	40	10	3	3.3
HSK100A-SF12-95	145	95	66	37	48	—	24	32	—	12	1	2.3
HSK100A-SF12-120	170	120	91	37	48	—	24	32	—	12	2	2.6
HSK100A-SF12-160	210	160	131	37	48	78	24	32	40	12	3	2.9
HSK100A-SF12-200	250	200	171	37	48	118	24	32	40	12	3	3.3
HSK100A-SF14-95	145	95	66	37	48	—	27	34	—	14	1	2.3
HSK100A-SF14-120	170	120	91	37	48	—	27	34	—	14	2	2.6
HSK100A-SF14-160	210	160	131	37	48	78	27	34	42	14	3	2.9
HSK100A-SF14-200	250	200	171	37	48	118	27	34	42	14	3	3.3

HSK-SF

Shrink Fit Tool Holder

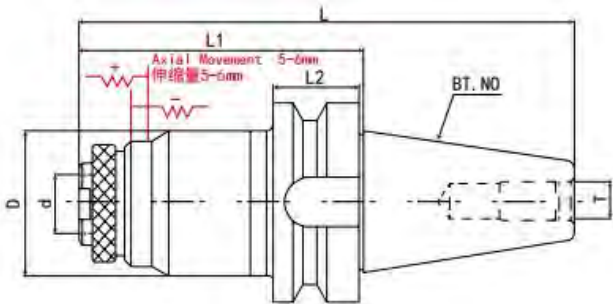


Model	Dimension (mm)										FIG	W.KG
	L	L1	L2	L4	L5	L6	D1	D2	D3	d		
HSK100A-SF16-100	150	100	71	40	51	—	27	34	—	16	1	2.3
HSK100A-SF16-120	170	120	91	40	51	—	27	34	—	16	2	2.6
HSK100A-SF16-160	210	160	131	40	51	78	27	34	42	16	3	2.9
HSK100A-SF16-200	250	200	171	40	51	118	27	34	42	16	3	3.3
HSK100A-SF18-100	150	100	71	40	51	—	33	42	—	18	1	2.4
HSK100A-SF18-120	170	120	91	40	51	—	33	42	—	18	2	2.7
HSK100A-SF18-160	210	160	131	40	51	78	33	42	—	18	3	3.1
HSK100A-SF18-200	250	200	171	40	51	118	33	42	—	18	3	3.4
HSK100A-SF20-105	155	105	76	42	53	—	33	42	—	20	1	2.4
HSK100A-SF20-120	170	120	91	42	53	—	33	42	—	20	2	2.7
HSK100A-SF20-160	210	160	131	42	53	78	33	42	—	20	3	2.1
HSK100A-SF20-200	250	200	171	42	53	118	33	42	—	20	3	3.4
HSK100A-SF25-115	165	115	86	48	59	—	44	53	—	25	1	3.2
HSK100A-SF25-130	180	130	101	48	59	—	44	53	—	25	2	3.4
HSK100A-SF25-160	210	160	131	48	59	78	44	53	—	25	3	3.6
HSK100A-SF25-200	250	200	171	48	59	118	44	53	—	25	3	4.4
HSK100A-SF32-120	170	120	91	52	63	—	44	53	—	32	1	3.2
HSK100A-SF32-140	190	140	111	52	63	—	44	53	—	32	2	3.4
HSK100A-SF32-160	210	160	131	52	63	78	44	53	—	32	3	3.6
HSK100A-SF32-200	250	200	171	52	63	118	44	53	—	32	3	4.1

BT-GT



Torque Tapping Body



Model	Tapping Range	Dimension (mm)					Shank Type	Chuck Name
		D	d	L	L1	T		
BT30-GT12-120L	M3-M16	46	19	168	120	M12	BT30	GT12
BT40-GT12-110L				175	110	M16	BT40	
BT50-GT12-120L				222	120	M24	BT50	
BT30-GT24-120L	M5-M30	66	30	168	120	M12	BT30	GT24
BT40-GT24-130L				195	130	M16	BT40	
BT50-GT24-130L				232	130	M24	BT50	
BT50-GT42-190L	M24-M42	95	45	292	190	M24	BT50	GT42

- ◎Body Specifications: JIS MAS 403 BT
- ◎Equipped with torque overload protection to prevent tap breakage.
- ◎Features floating, telescoping, and quick-change functions.
- ◎Tapping collet and pull pin need to be ordered separately.

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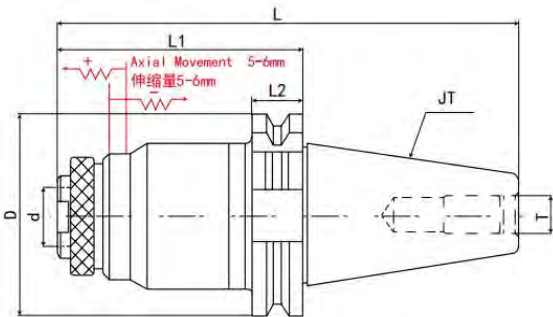


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SK-GT



Torque Tapping Body



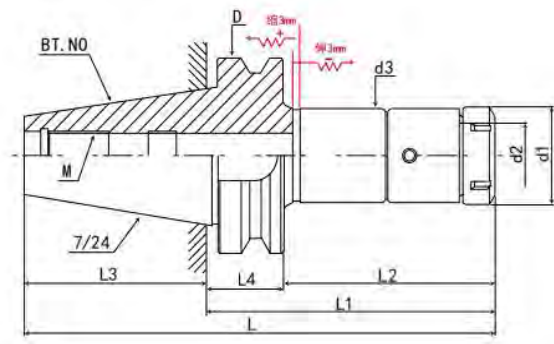
Model	Tapping Range	Dimension (mm)					Shank Type	Chuck Name
		D	d	L	L1	T		
SK30-GT12-120L	M3-M16	46	19	168	120	M12	SK30	GT12
SK40-GT12-110L				175	110	M16	SK40	
SK50-GT12-120L				222	120	M24	SK50	
SK30-GT24-120L	M5-M30	66	30	168	120	M12	SK30	GT24
SK40-GT24-130L				195	130	M16	SK40	
SK50-GT24-130L				232	130	M24	SK50	
SK50-GT42-190L	M24-M42	95	45	292	190	M24	SK50	GT42

- ◎Body Specifications:DIN69871-A或GB 10944
- ◎Equipped with torque overload protection to prevent tap breakage.
- ◎Features floating, telescoping, and quick-change functions.
- ◎Tapping collet and pull pin need to be ordered separately.

BT-TER-B



Rigid Tapping Tool Holder



Model	Shank Type	Dimension (mm)					Collet	Tapping Range	Shank Thread M
		L	L1	L2	d1	d2			
BT30-TER16-B-100L	BT30	148.4	100	73	28	16	TER16	M2-M12	M12*1.75P
BT30-TER20-B-100L					34	20	TER20	M2-M16	
BT30-TER25-B-100L					42	25	TER25	M2-M22	
BT30-TER32-B-100L					50	32	TER32	M2-M30	
BT30-TER40-B-100L					63	40	TER40	M2-M36	
BT40-TER16-B-100L	BT40	165.4	100	73	28	16	TER16	M2-M12	M16*2.0P
BT40-TER20-B-100L					34	20	TER20	M2-M16	
BT40-TER25-B-100L					42	25	TER25	M2-M22	
BT40-TER32-B-100L					50	32	TER32	M2-M30	
BT40-TER40-B-120L		185.4	120	93	63	40	TER40	M2-M36	
BT50-TER16-B-110L	BT50	211.8	110	72	28	16	TER16	M2-M12	M24*3.0P
BT50-TER20-B-110L					34	20	TER20	M2-M16	
BT50-TER25-B-110L					42	25	TER25	M2-M22	
BT50-TER32-B-130L		222.8	130	92	50	32	TER32	M2-M30	
BT50-TER40-B-140L		232.8	140	102	63	40	TER40	M2-M36	

©Body Specifications: JIS MAS 403 BT

©Rigid Function: Ensures precise synchronization between the spindle rotation and feed of the machining center when using a dedicated basic tool holder.

©Rigid Tapping Tool Holder: Can be replaced with ER collets for holding drill bits, reamers, and milling tools.

©Usage Note: When using a rigid tapping body, do not over-tighten the nut to avoid damage. ER wrenches are sold separately.

© Collet, Pull Pin, and Wrench Must Be Ordered Separately.

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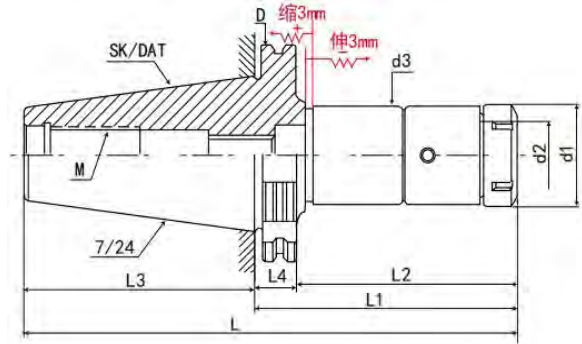
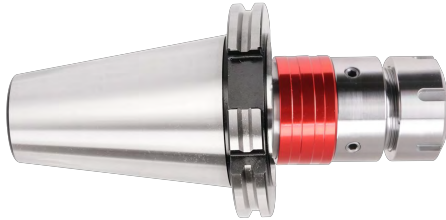


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SK-TER-B



Rigid Tapping Tool Holder



Model	Shank Type	Dimension (mm)					Collet	Tapping Range	Shank Thread M
		L	L1	L2	d1	d2			
SK40-TER16-B-100L	SK40	168.4	100	82	28	16	TER16	M2-M12	M16*2.0P
SK40-TER20-B-100L					34	20	TER20	M2-M16	
SK40-TER25-B-100L					42	25	TER25	M2-M22	
SK40-TER32-B-100L					50	32	TER32	M2-M30	
SK40-TER40-B-120L					63	40	TER40	M2-M36	
SK50-TER16-B-110L	SK50	211.7	110	91	28	16	TER16	M2-M12	M24*3.0P
SK50-TER20-B-110L					34	20	TER20	M2-M16	
SK50-TER25-B-110L					42	25	TER25	M2-M22	
SK50-TER32-B-130L					50	32	TER32	M2-M30	
SK50-TER40-B-140L					63	40	TER40	M2-M36	

©Body Specifications: DIN69871-A or GB 10944

©Rigid Function: Ensures precise synchronization between the spindle rotation and feed of the machining center when using a dedicated basic tool holder.

©Rigid Tapping Tool Holder: Can be replaced with ER collets for holding drill bits, reamers, and milling tools.

©Usage Note: When using a rigid tapping body, do not over-tighten the nut to avoid damage. ER wrenches are sold separately.

© Collet, Pull Pin Must Be Ordered Separately.



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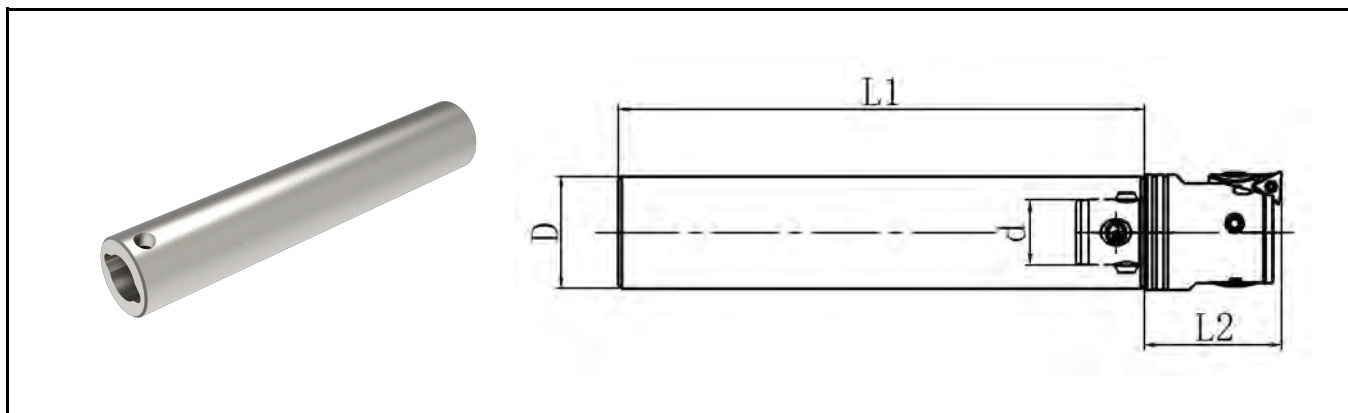
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SCB



Ultra-Hard Solid Carbide Boring Bar



Model	SD Type	I/F Type	Dimension (mm)				Kg
			D	d	L1	L2	
SCB-C19-CKB1-150	SCB	CK1	19	11	150	32.5	0.50
SCB-C19-CKB1-200	SCB	CK1	19	11	200	32.5	0.70
SCB-C19-CKB1-250	SCB	CK1	19	11	250	32.5	0.90
SCB-C24-CKB2-200	SCB	CK2	24	14	200	35.5	1.00
SCB-C24-CKB2-250	SCB	CK2	24	14	250	35.5	1.20
SCB-C24-CKB2-300	SCB	CK2	24	14	300	35.5	1.50
SCB-C32-CKB3-250	SCB	CK3	32	18	250	40	1.80
SCB-C32-CKB3-300	SCB	CK3	32	18	300	40	2.20
SCB-C32-CKB3-350	SCB	CK3	32	18	350	40	3.00

©Ultra-hard carbide tungsten steel boring bars with high toughness, durability, high hardness, high rigidity, and excellent shock resistance, suitable for deep hole machining (8D).

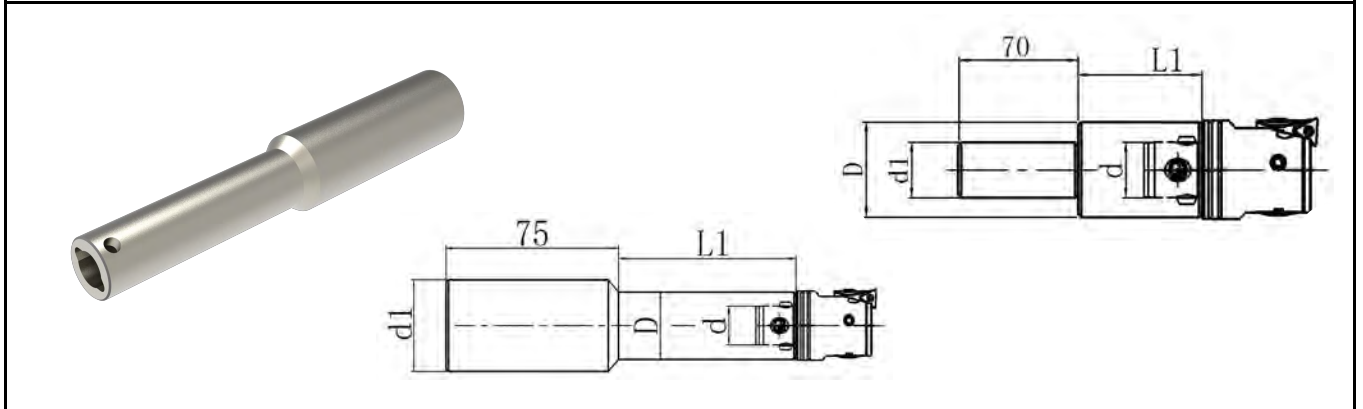
©Various specifications come with coolant holes, providing good chip removal and cooling effects during deep hole machining.

©Straight shank design allows for adjustable machining depth according to processing needs.

SSB



Steel CK Interface Boring Bar

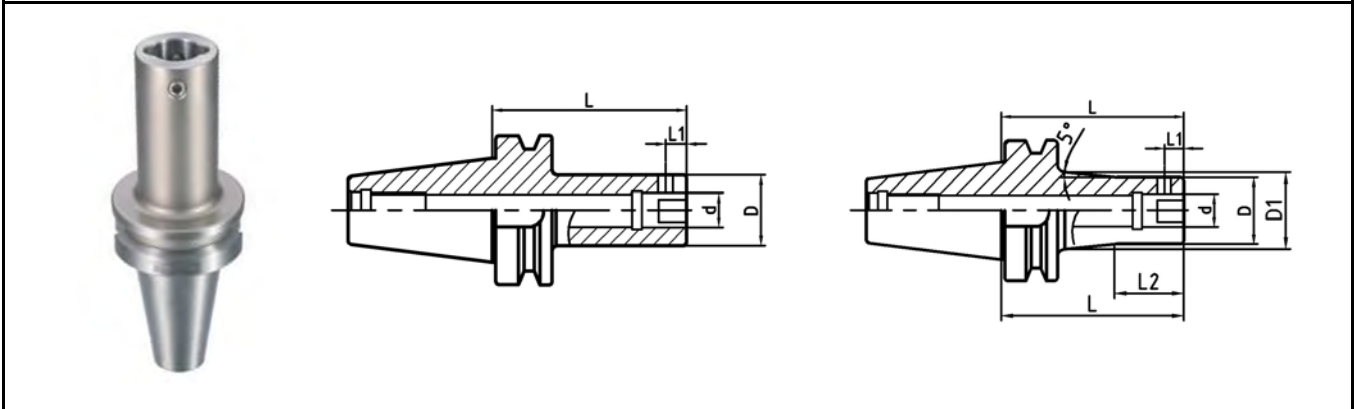


Model	SD Type	I/F Type	Dimension (mm)				Kg
			D	d	d1	L	
SSB-C32-CKB1-75	SSB	CK1	19	11	32	75	0.52
SSB-C32-CKB2-70	SSB	CK2	24	14	32	70	0.59
SSB-C32-CKB2-120	SSB	CK2	24	14	32	120	0.85
SSB-C32-CKB3-70	SSB	CK3	31	18	32	70	0.73
SSB-C32-CKB3-120	SSB	CK3	31	18	32	120	1.01
SSB-C32-CKB4-60	SSB	CK4	39	22	32	60	0.77
SSB-C32-CKB4-110	SSB	CK4	39	22	32	110	1.19
SSB-C32-CKB5-60	SSB	CK5	50	28	32	60	1.02
SSB-C32-CKB5-120	SSB	CK5	50	28	32	120	1.89
SSB-C32-CKB6-60	SSB	CK6	64	36	32	60	1.42
SSB-C32-CKB6-120	SSB	CK6	64	36	32	120	2.20

BT - CK



Boring Tool Holder Series

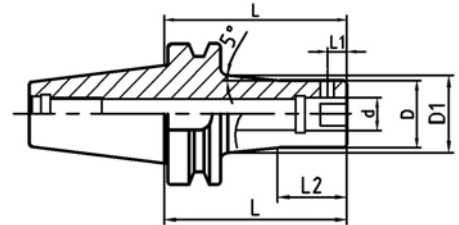
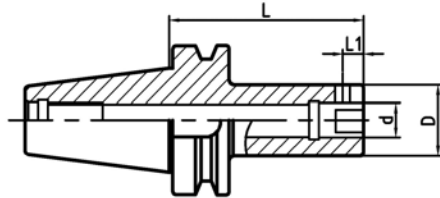


Model	I/F Type	Dimension (mm)				B Dimension		CK Side Lock Screw	Wrench	Kg
		D	d	L1	L	d1	L2			
BT40-CK1-70	CK1	19	11	5.05	70	—	—	M050Z050-30P-D	L025	1.03
BT40-CK1-100	CK1	19	11	5.05	100	20.7	60	M050Z050-30P-D	L025	1.10
BT40-CK2-75	CK2	24	14	6.62	75	—	—	M050Z060-30P-D	L025	1.10
BT40-CK2-100	CK2	24	14	6.62	100	—	—	M050Z060-30P-D	L025	1.18
BT40-CK2-130	CK2	24	14	6.62	130	30	65	M050Z060-30P-D	L025	1.33
BT40-CK3-80	CK3	31	18	8	80	—	—	M060Z090-30P-D	L03	1.22
BT40-CK3-100	CK3	31	18	8	100	—	—	M060Z090-30P-D	L03	1.32
BT40-CK3-135	CK3	31	18	8	135	34.5	75	M060Z090-30P-D	L03	1.54
BT40-CK3-165	CK3	31	18	8	165	39.7	85	M060Z090-30P-D	L03	1.76
BT40-CK4-70	CK4	39	22	10	70	—	—	M080Z120-30P-D	L04	1.21
BT40-CK4-100	CK4	39	22	10	100	—	—	M080Z120-30P-D	L04	1.46
BT40-CK4-150	CK4	39	22	10	150	43.4	85	M080Z120-30P-D	L04	1.90
BT40-CK4-170	CK4	39	22	10	170	46.9	95	M080Z120-30P-D	L04	2.16
BT40-CK5-60	CK5	50	28	13	60	—	—	M100Z160-30P-D	L05	1.22
BT40-CK5-80	CK5	50	28	13	80	—	—	M100Z160-30P-D	L05	1.52
BT40-CK5-100	CK5	50	28	13	100	—	—	M100Z160-30P-D	L05	1.80
BT40-CK5-150	CK5	50	28	13	150	—	—	M100Z160-30P-D	L05	2.52
BT40-CK5-180	CK5	50	28	13	180	—	—	M100Z160-30P-D	L05	2.90
BT40-CK6-55	CK6	64	36	16	55	—	—	M120Z200-30P-D	L06	1.22
BT40-CK6-100	CK6	64	36	16	100	—	—	M120Z200-30P-D	L06	2.29
BT40-CK6-150	CK6	64	36	16	150	—	—	M120Z200-30P-D	L06	3.50
BT40-CK6-180	CK6	64	36	16	180	—	—	M120Z200-30P-D	L06	4.22
BT40-CK7-100	CK7	90	46	19.15	100	—	—	M200Z290-30P-D	L10	3.50
BT40-CK7-150	CK7	90	46	19.15	150	—	—	M200Z290-30P-D	L10	5.50

BT - CK



Boring Tool Holder Series

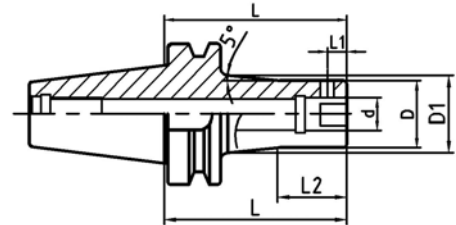
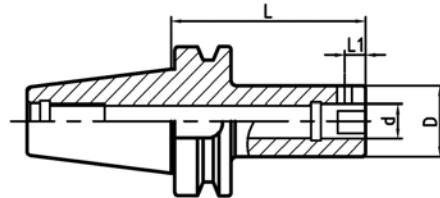


Model	I/F Type	Dimension (mm)				B Dimension		CK Side Lock Screw	Wrench	 Kg
		D	d	L1	L	d1	L2			
BT50-CK1-80	CK1	19	11	5.05	80	—	—	M050Z050-30P-D	L025	3.20
BT50-CK1-115	CK1	19	11	5.05	115	20.7	50	M050Z050-30P-D	L025	3.73
BT50-CK2-80	CK2	24	14	6.62	80	—	—	M050Z060-30P-D	L025	3.68
BT50-CK2-105	CK2	24	14	6.62	105	—	—	M050Z060-30P-D	L025	3.78
BT50-CK2-135	CK2	24	14	6.62	135	26.6	65	M050Z060-30P-D	L025	3.89
BT50-CK3-85	CK3	31	18	8	85	—	—	M060Z090-30P-D	L03	3.80
BT50-CK3-110	CK3	31	18	8	110	—	—	M060Z090-30P-D	L03	3.95
BT50-CK3-140	CK3	31	18	8	140	32.7	75	M060Z090-30P-D	L03	4.09
BT50-CK3-170	CK3	31	18	8	170	38	85	M060Z090-30P-D	L03	4.31
BT50-CK4-100	CK4	39	22	10	100	—	—	M080Z120-30P-D	L04	3.98
BT50-CK4-160	CK4	39	22	10	160	42.5	85	M080Z120-30P-D	L04	4.50
BT50-CK4-205	CK4	39	22	10	205	50	95	M080Z120-30P-D	L04	5.13
BT50-CK5-90	CK5	50	28	13	90	—	—	M100Z160-30P-D	L05	4.30
BT50-CK5-165	CK5	50	28	13	165	—	—	M100Z160-30P-D	L05	5.20
BT50-CK5-210	CK5	50	28	13	210	57.8	120	M100Z160-30P-D	L05	5.92
BT50-CK5-270	CK5	50	28	13	270	68.4	120	M100Z160-30P-D	L05	7.23
BT50-CK6-85	CK6	64	36	16	85	—	—	M120Z200-30P-D	L06	4.28
BT50-CK6-155	CK6	64	36	16	155	—	—	M120Z200-30P-D	L06	5.97
BT50-CK6-215	CK6	64	36	16	215	—	—	M120Z200-30P-D	L06	7.43
BT50-CK6-250	CK6	64	36	16	250	—	—	M120Z200-30P-D	L06	8.27
BT50-CK6-300	CK6	64	36	16	300	80.5	160	M120Z200-30P-D	L06	10.21
BT50-CK6-350	CK6	64	36	16	350	90	160	M120Z200-30P-D	L06	12.90
BT50-CK7-85	CK7	90	36	19.15	85	—	—	M200Z290-30P-D	L10	4.96
BT50-CK7-150	CK7	90	36	19.15	150	—	—	M200Z290-30P-D	L10	6.52
BT50-CK7-210	CK7	90	36	19.15	210	—	—	M200Z290-30P-D	L10	8.55
BT50-CK7-250	CK7	90	36	19.15	250	—	—	M200Z290-30P-D	L10	10.35
BT50-CK7-300	CK7	90	36	19.15	300	—	—	M200Z290-30P-D	L10	12.55
BT50-CK7-350	CK7	90	36	19.15	350	—	—	M200Z290-30P-D	L10	13.25

SK-CK



Boring Tool Holder Series

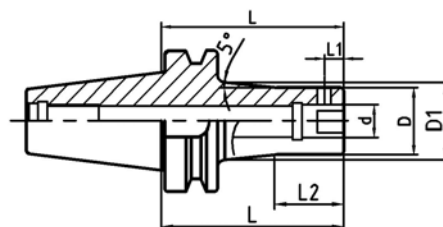
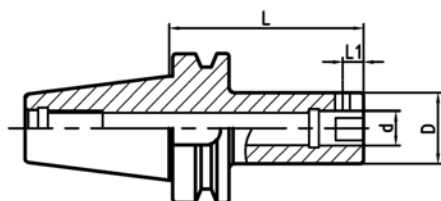


Model	I/F Type	Dimension (mm)				B Dimension		CK Side Lock Screw	Wrench	
		D	d	L1	L	d1	L2			
SK40-CK1-70	CK1	19	11	5.05	70	—	—	M050Z050-30P-D	L025	1.03
SK40-CK1-100L	CK1	19	11	5.05	100	20.7	60	M050Z050-30P-D	L025	1.10
SK40-CK2-75	CK2	24	14	6.62	75	—	—	M050Z060-30P-D	L025	1.10
SK40-CK2-100	CK2	24	14	6.62	100	—	—	M050Z060-30P-D	L025	1.18
SK40-CK2-130L	CK2	24	14	6.62	130	28.3	75	M050Z060-30P-D	L025	1.33
SK40-CK3-80	CK3	31	18	8	80	—	—	M060Z090-30P-D	L03	1.22
SK40-CK3-100	CK3	31	18	8	100	—	—	M060Z090-30P-D	L03	1.32
SK40-CK3-135L	CK3	31	18	8	135	34.5	85	M060Z090-30P-D	L03	1.54
SK40-CK3-165L	CK3	31	18	8	165	39.7	85	M060Z090-30P-D	L03	1.76
SK40-CK4-70	CK4	39	22	10	70	—	—	M080Z120-30P-D	L04	1.21
SK40-CK4-100	CK4	39	22	10	100	—	—	M080Z120-30P-D	L04	1.46
SK40-CK4-150L	CK4	39	22	10	150	43.4	95	M080Z120-30P-D	L04	1.90
SK40-CK4-170L	CK4	39	22	10	170	46.9	95	M080Z120-30P-D	L04	2.16
SK40-CK5-80	CK5	50	28	13	80	—	—	M100Z160-30P-D	L05	1.52
SK40-CK5-100	CK5	50	28	13	100	—	—	M100Z160-30P-D	L05	1.80
SK40-CK5-150	CK5	50	28	13	150	—	—	M100Z160-30P-D	L05	2.52
SK40-CK5-180	CK5	50	28	13	180	—	—	M100Z160-30P-D	L05	2.90
SK40-CK6-90	CK6	64	36	16	90	—	—	M120Z200-30P-D	L06	1.22
SK40-CK6-150	CK6	64	36	16	150	—	—	M120Z200-30P-D	L06	3.50
SK40-CK6-180	CK6	64	36	16	180	—	—	M120Z200-30P-D	L06	4.22
SK40-CK7-100	CK7	90	46	19.15	100	—	—	M200Z290-30P-D	L10	3.50
SK40-CK7-150	CK7	90	46	19.15	150	—	—	M200Z290-30P-D	L10	5.50

SK-CK



Boring Tool Holder Series

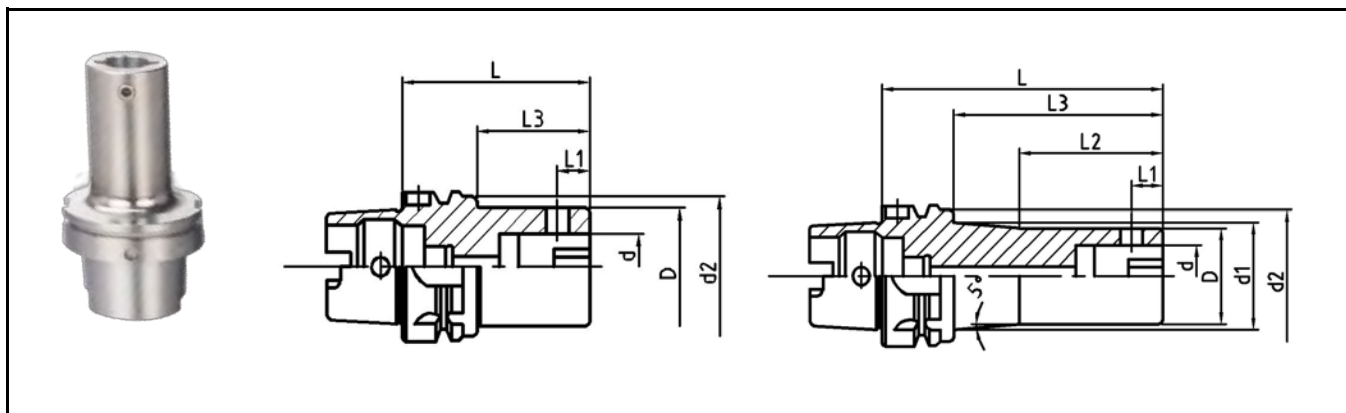


Model	I/F Type	Dimension (mm)				B Dimension		CK Side Lock Screw	Wrench	Kg
		D	d	L1	L	d1	L2			
SK50-CK1-80	CK1	19	11	5.05	80	—	—	M050Z050-30P-D	L025	3.60
SK50-CK1-115L	CK1	19	11	5.05	115	20.7	60	M050Z050-30P-D	L025	3.73
SK50-CK2-80	CK2	24	14	6.62	80	—	—	M050Z060-30P-D	L025	3.60
SK50-CK2-105	CK2	24	14	6.62	105	—	—	M050Z060-30P-D	L025	3.78
SK50-CK2-135L	CK2	24	14	6.62	135	26.6	75	M050Z060-30P-D	L025	3.89
SK50-CK3-85	CK3	31	18	8	85	—	—	M060Z090-30P-D	L03	3.80
SK50-CK3-110	CK3	31	18	8	110	—	—	M060Z090-30P-D	L03	3.95
SK50-CK3-140L	CK3	31	18	8	140	32.7	85	M060Z090-30P-D	L03	4.09
SK50-CK3-170L	CK3	31	18	8	170	38	85	M060Z090-30P-D	L03	4.31
SK50-CK4-100	CK4	39	22	10	100	—	—	M080Z120-30P-D	L04	3.98
SK50-CK4-160L	CK4	39	22	10	160	42.5	95	M080Z120-30P-D	L04	4.50
SK50-CK4-205L	CK4	39	22	10	205	50	95	M080Z120-30P-D	L04	5.13
SK50-CK5-90	CK5	50	28	13	90	—	—	M100Z160-30P-D	L05	4.30
SK50-CK5-165	CK5	50	28	13	165	—	—	M100Z160-30P-D	L05	5.20
SK50-CK5-210L	CK5	50	28	13	210	57.8	120	M100Z160-30P-D	L05	5.92
SK50-CK5-270L	CK5	50	28	13	270	68.4	120	M100Z160-30P-D	L05	7.23
SK50-CK6-85	CK6	64	36	16	85	—	—	M120Z200-30P-D	L06	4.28
SK50-CK6-155	CK6	64	36	16	155	—	—	M120Z200-30P-D	L06	5.97
SK50-CK6-215	CK6	64	36	16	215	—	—	M120Z200-30P-D	L06	7.43
SK50-CK6-250	CK6	64	36	16	250	—	—	M120Z200-30P-D	L06	8.27
SK50-CK6-300L	CK6	64	36	16	300	80.5	160	M120Z200-30P-D	L06	10.21
SK50-CK7-85	CK7	90	36	19.15	85	—	—	M200Z290-30P-D	L10	4.96
SK50-CK7-150	CK7	90	36	19.15	150	—	—	M200Z290-30P-D	L10	6.52
SK50-CK7-210	CK7	90	36	19.15	210	—	—	M200Z290-30P-D	L10	8.55
SK50-CK7-250	CK7	90	36	19.15	250	—	—	M200Z290-30P-D	L10	10.35
SK50-CK7-300	CK7	90	36	19.15	300	—	—	M200Z290-30P-D	L10	12.55
SK50-CK7-350	CK7	90	36	19.15	350	—	—	M200Z290-30P-D	L10	13.25

HSK A -CK



Boring Tool Holder Series

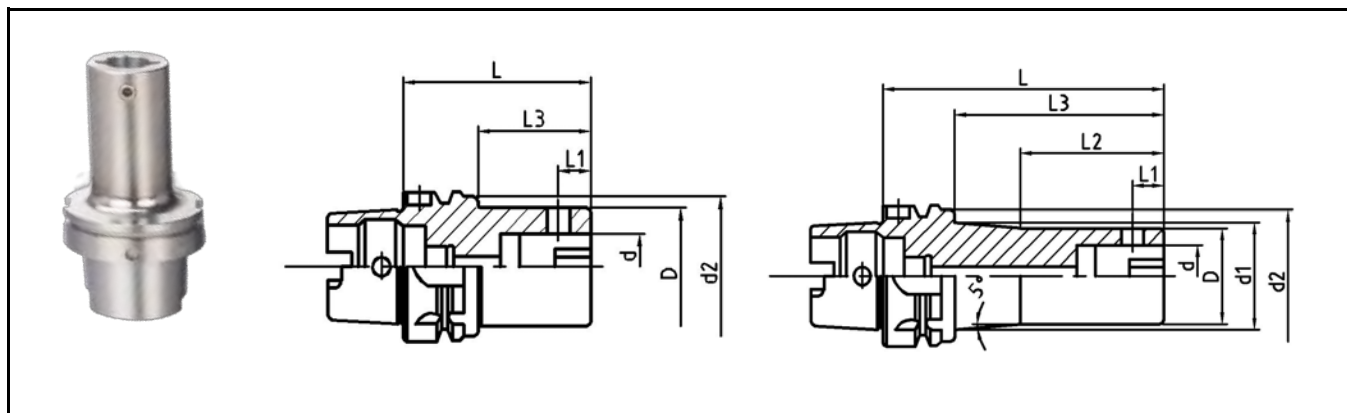


Model	I/F Type	Dimension (mm)				B Dimension		CK Side Lock Screw	Wrench	Kg
		D	d	L1	L	d1	L2			
HSKA63-CK1-70	CK1	19	11	5.05	70	—	—	M050Z050-30P-D	L025	0.80
HSKA63-CK1-100L	CK1	19	11	5.05	100	23.5	50	M050Z050-30P-D	L025	0.90
HSKA63-CK2-75	CK2	24	14	6.62	75	—	—	M050Z060-30P-D	L025	0.90
HSKA63-CK2-100	CK2	24	14	6.62	100	—	—	M050Z060-30P-D	L025	1.00
HSKA63-CK2-130L	CK2	24	14	6.62	130	31	65	M050Z060-30P-D	L025	1.10
HSKA63-CK3-80	CK3	31	18	8	80	—	—	M060Z090-30P-D	L03	1.00
HSKA63-CK3-100	CK3	31	18	8	100	—	—	M060Z090-30P-D	L03	1.10
HSKA63-CK3-135L	CK3	31	18	8	135	37	75	M060Z090-30P-D	L03	1.30
HSKA63-CK3-165L	CK3	31	18	8	165	41	85	M060Z090-30P-D	L03	1.40
HSKA63-CK4-70	CK4	39	22	10	70	—	—	M080Z120-30P-D	L04	1.00
HSKA63-CK4-100	CK4	39	22	10	100	—	—	M080Z120-30P-D	L04	1.30
HSKA63-CK4-150L	CK4	39	22	10	150	44	95	M080Z120-30P-D	L04	1.70
HSKA63-CK4-170L	CK4	39	22	10	170	47.5	95	M080Z120-30P-D	L04	1.90
HSKA63-CK5-80	CK5	50	28	13	80	—	—	M100Z160-30P-D	L05	1.40
HSKA63-CK5-100	CK5	50	28	13	100	—	—	M100Z160-30P-D	L05	1.80
HSKA63-CK5-150	CK5	50	28	13	150	—	—	M100Z160-30P-D	L05	2.20
HSKA63-CK5-180	CK5	50	28	13	180	—	—	M100Z160-30P-D	L05	2.70
HSKA63-CK6-100	CK6	64	36	16	100	—	—	M120Z200-30P-D	L06	2.20
HSKA63-CK6-150	CK6	64	36	16	150	—	—	M120Z200-30P-D	L06	2.80
HSKA63-CK6-180	CK6	64	36	16	180	—	—	M120Z200-30P-D	L06	3.30
HSKA63-CK7-110	CK7	90	46	19.15	110	—	—	M200Z290-30P-D	L10	3.50
HSKA63-CK7-150	CK7	90	46	19.15	150	—	—	M200Z290-30P-D	L10	5.20

HSK A -CK



Boring Tool Holder Series

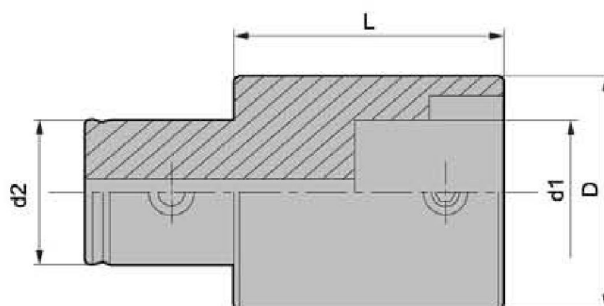


Model	I/F Type	Dimension (mm)				B Dimension		CK Side Lock Screw	Wrench	Kg
		D	d	L1	L	d1	L2			
HSKA100-CK1-80	CK1	19	11	5.05	80	—	—	M050Z050-30P-D	L025	2.40
HSKA100-CK1-115L	CK1	19	11	5.05	115	24	50	M050Z050-30P-D	L025	2.50
HSKA100-CK2-80	CK2	24	14	6.62	80	—	—	M050Z060-30P-D	L025	2.45
HSKA100-CK2-105	CK2	24	14	6.62	105	—	—	M050Z060-30P-D	L025	2.50
HSKA100-CK2-135L	CK2	24	14	6.62	135	30	65	M050Z060-30P-D	L025	2.60
HSKA100-CK3-85	CK3	31	18	8	85	—	—	M060Z090-30P-D	L03	2.60
HSKA100-CK3-110	CK3	31	18	8	110	—	—	M060Z090-30P-D	L03	2.70
HSKA100-CK3-140L	CK3	31	18	8	140	35.5	75	M060Z090-30P-D	L03	2.80
HSKA100-CK3-170L	CK3	31	18	8	170	41	85	M060Z090-30P-D	L03	2.90
HSKA100-CK4-100	CK4	39	22	10	100	—	—	M080Z120-30P-D	L04	2.80
HSKA100-CK4-160L	CK4	39	22	10	160	47	85	M080Z120-30P-D	L04	3.50
HSKA100-CK4-205L	CK4	39	22	10	205	50.5	110	M080Z120-30P-D	L04	4.00
HSKA100-CK5-90	CK5	50	28	13	90	—	—	M100Z160-30P-D	L05	3.50
HSKA100-CK5-165	CK5	50	28	13	165	—	—	M100Z160-30P-D	L05	4.20
HSKA100-CK5-210L	CK5	50	28	13	210	61	120	M100Z160-30P-D	L05	4.80
HSKA100-CK5-270L	CK5	50	28	13	270	69.5	130	M100Z160-30P-D	L05	5.60
HSKA100-CK6-85	CK6	64	36	16	85	—	—	M120Z200-30P-D	L06	4.20
HSKA100-CK6-155	CK6	64	36	16	155	—	—	M120Z200-30P-D	L06	5.00
HSKA100-CK6-215	CK6	64	36	16	215	—	—	M120Z200-30P-D	L06	5.80
HSKA100-CK6-250	CK6	64	36	16	250	—	—	M120Z200-30P-D	L06	6.20
HSKA100-CK6-300L	CK6	64	36	16	300	80	180	M120Z200-30P-D	L06	7.10
HSKA100-CK7-125	CK7	90	36	19.15	125	—	—	M200Z290-30P-D	L10	5.22
HSKA100-CK7-200	CK7	90	36	19.15	200	—	—	M200Z290-30P-D	L10	6.88
HSKA100-CK7-275	CK7	90	36	19.15	275	—	—	M200Z290-30P-D	L10	8.26

CK



Equal Diameter Extension Holder

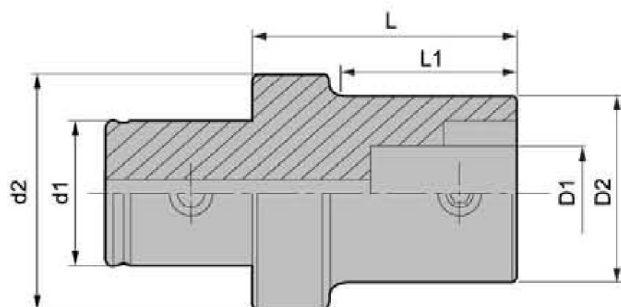


Model	I/F Type	Dimension (mm)				CK Side Lock Screw	Wrench	Kg
		D	d1	d2	L			
CK1-1-30	CK1	19	11	11	30	M050Z050-30P-D	L025	0.06
CK2-2-30	CK2	24	14	14	30	M050Z060-30P-D	L025	0.09
CK3-3-30	CK3	31	18	18	30	M060Z090-30P-D	L03	0.14
CK4-4-45	CK4	39	22	22	45	M080Z120-30P-D	L04	0.29
CK4-4-60	CK4	39	22	22	60	M080Z120-30P-D	L04	0.47
CK5-5-60	CK5	50	28	28	60	M100Z160-30P-D	L05	0.75
CK5-5-90	CK5	50	28	28	90	M100Z160-30P-D	L05	1.18
CK6-6-60	CK6	64	36	36	60	M120Z200-30P-D	L06	1.46
CK6-6-100	CK6	64	36	36	100	M120Z200-30P-D	L06	2.35
CK7-7-105	CK7	80	36	36	105	M200Z300-30P-D	L10	5.28

CK



Equal Diameter Extension Holder

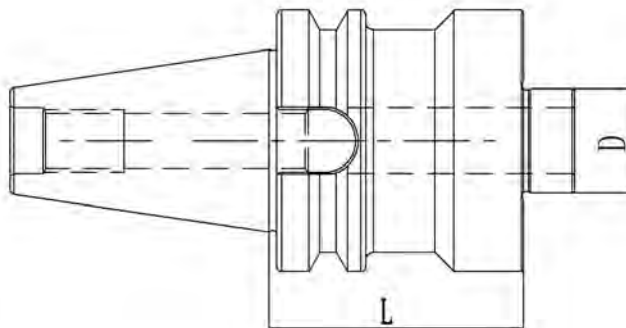


Model	Dimension (mm)						CK Side Lock Screw	Wrench	Kg
	D1	D2	d1	d2	L1	L			
CK2-1-36	11	19	14	24	30	36	M050Z050-30P-D	L025	0.08
CK3-1-41	11	19	18	31	30	41	M050Z050-30P-D	L025	0.12
CK3-2-37	14	24	18	31	25	37	M050Z060-30P-D	L025	0.13
CK4-1-58	11	19	22	39	40	58	M050Z050-30P-D	L025	0.24
CK4-2-50	14	24	22	39	36	50	M050Z060-30P-D	L025	0.22
CK4-3-50	18	31	22	39	37	50	M060Z090-30P-D	L03	0.30
CK5-1-60	11	19	28	50	40	60	M050Z050-30P-D	L025	0.38
CK5-2-54	14	24	28	50	35	54	M050Z060-30P-D	L025	0.38
CK5-2-74	14	24	28	50	55	74	M050Z060-30P-D	L025	0.45
CK5-3-47	18	31	28	50	29	47	M060Z090-30P-D	L03	0.46
CK5-3-72	18	31	28	50	54	72	M060Z120-30P-D	L03	0.54
CK5-4-42	22	39	28	50	25	42	M080Z120-30P-D	L04	0.43
CK5-4-67	22	39	28	50	50	67	M080Z050-30P-D	L04	0.62
CK6-1-70	11	19	36	64	40	70	M050Z060-30P-D	L025	0.90
CK6-2-63	14	24	36	64	35	63	M050Z060-30P-D	L025	0.66
CK6-2-93	14	24	36	64	65	93	M050Z090-30P-D	L025	0.71
CK6-3-56	18	31	36	64	39	56	M060Z090-30P-D	L03	0.70
CK6-3-96	18	31	36	64	79	96	M060Z120-30P-D	L03	0.91
CK6-4-51	22	39	36	64	35	51	M080Z120-30P-D	L04	0.76
CK6-4-101	22	39	36	64	85	101	M080Z160-30P-D	L04	1.19
CK6-5-41	28	50	36	64	25	41	M100Z160-30P-D	L05	0.72
CK6-5-91	28	50	36	64	75	91	M100Z050-30P-D	L05	1.46
CK7-6-106	28	50	36	64	75	91	M100Z050-30P-D	L05	3.12

CT



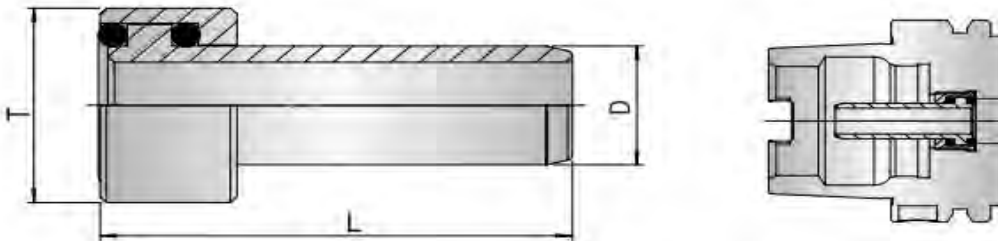
Bridge Boring Tool Holder



Model	ΦD	L	Fastening Screw	Shank Type	W.kg
BT40-CT-100	40	100	E120U400-D	BT40	2.90
BT40-CT-150	40	150	E120U400-D		4.24
BT50-CT-100	40	100	E120U400-D	BT50	5.50
BT50-CT-150	40	150	E120U400-D		6.38
BT50-CT-200	40	200	E120U400-D		7.61
BT50-CT-250	40	250	E120U400-D		10.44
BT50-CT-300	40	300	E120U400-D		12.37
BT50-CT-350	40	350	E120U400-D		14.33
BT50-CT-400	40	400	E120U400-D		15.0
SK50-CT-100	40	100	E120U400-D	SK50	5.50
SK50-CT-150	40	150	E120U400-D		6.38
SK50-CT-200	40	200	E120U400-D		7.61
HSKA100-CT-100	40	100	E120U400-D	HSKA100	3.96
HSKA100-CT-150	40	150	E120U400-D		4.59
HSKA100-CT-200	40	200	E120U400-D		5.48
HSKA100-CT-250	40	250	E120U400-D		7.52
HSKA100-CT-300	40	300	E120U400-D		10.32

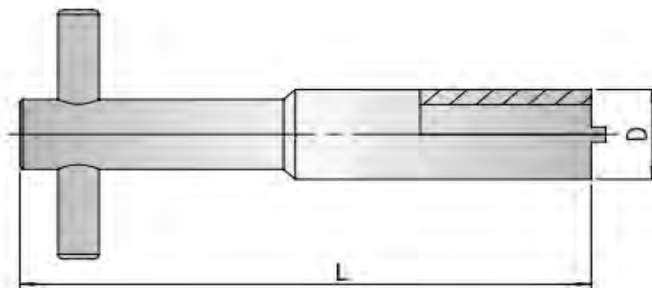
HSK-CP

Internal Coolant Pipe



Model	L	l1	D	T	W.kg
HSK63-CP	36.6	11.5	12	M18x1.0	0.02
HSK100-CP	44	15.5	16	M24x1.0	0.06

Internal Coolant Pipe Wrench

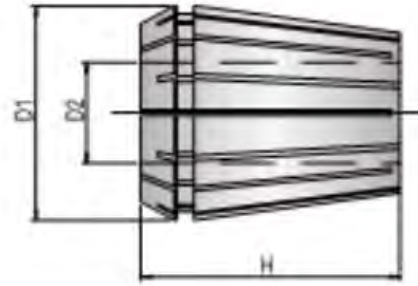


Model	L	D	W.kg
HSK63-CPW	100	18	0.14
HSK100-CPW	125	24	0.32

ER Collet



Collet



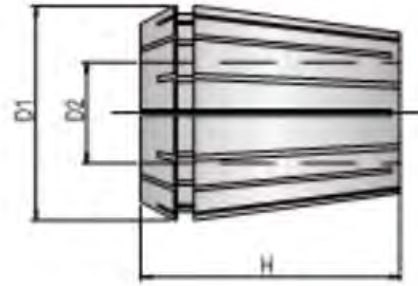
ER11		ER16		ER20	
Model	Clamp. Range	Model	Clamp. Range	Model	Clamp. Range
ER11-1	1-0.5	ER16-1	1-0.5	ER20-1	1-0.5
ER11-1.5	1.5-1	ER16-1.5	1.5-1	ER20-1.5	1.5-1
ER11-2	2-1.5	ER16-2	2-1.5	ER20-2	2-1.5
ER11-2.5	2.5-2	ER16-2.5	2.5-2	ER20-2.5	2.5-2
ER11-3	3-2.5	ER16-3	3-2	ER20-3	3-2
ER11-3.5	3.5-3	ER16-4	4-3	ER20-4	4-3
ER11-4	4-3.5	ER16-5	5-4	ER20-5	5-4
ER11-4.5	4.5-4	ER16-6	6-5	ER20-6	6-5
ER11-5	5-4.5	ER16-7	7-6	ER20-7	7-6
ER11-5.5	5.5-5	ER16-8	8-7	ER20-8	8-7
ER11-6	6-5.5	ER16-9	9-8	ER20-9	9-8
ER11-6.5	6.5-6	ER16-10	10-9	ER20-10	10-9
ER11-7	7-6.5			ER20-11	11-10
				ER20-12	12-11
				ER20-13	13-12

◇ If high-precision collets are required, please add "AA" after the model number, for example, ER16-10AA.

◇ Within a 4x diameter range, standard collet accuracy is less than 0.01mm, while high-precision collet accuracy is less than 0.005mm.

ER Collet

Collet



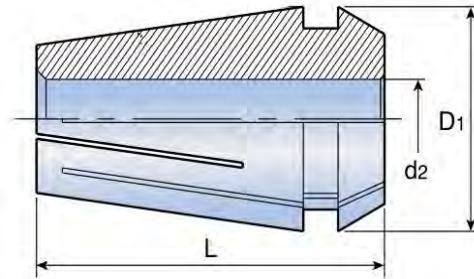
ER25		ER32		ER40	
Model	Clamp. Range	Model	Clamp. Range	Model	Clamp. Range
ER25-1	1-0.5	ER32-1	1-0.5	ER40-3	3-2
ER25-1.5	1.5-1	ER32-1.5	1.5-1	ER40-4	4-3
ER25-2	2-1.5	ER32-2	2-1.5	ER40-5	5-4
ER25-2.5	2.5-2	ER32-2.5	2.5-2	ER40-6	6-5
ER25-3	3-2	ER32-3	3-2	ER40-7	7-6
ER25-4	4-3	ER32-4	4-3	ER40-8	8-7
ER25-5	5-4	ER32-5	5-4	ER40-9	9-8
ER25-6	6-5	ER32-6	6-5	ER40-10	10-9
ER25-7	7-6	ER32-7	7-6	ER40-11	11-10
ER25-8	8-7	ER32-8	8-7	ER40-12	12-11
ER25-9	9-8	ER32-9	9-8	ER40-13	13-12
ER25-10	10-9	ER32-10	10-9	ER40-14	14-13
ER25-11	11-10	ER32-11	11-10	ER40-15	15-14
ER25-12	12-11	ER32-12	12-11	ER40-16	16-15
ER25-13	13-12	ER32-13	13-12	ER40-17	17-16
ER25-14	14-13	ER32-14	14-13	ER40-18	18-17
ER25-15	15-14	ER32-15	15-14	ER40-19	19-18
ER25-16	16-15	ER32-16	16-15	ER40-20	20-19
		ER32-17	17-16	ER40-21	21-20
		ER32-18	18-17	ER40-22	22-21
		ER32-19	19-18	ER40-23	23-22
		ER32-20	20-19	ER40-24	24-23
				ER40-25	25-24
				ER40-26	26-25

◇ If high-precision collets are required, please add "AA" after the model number, for example, ER16-10AA

◇ Within a 4x diameter range, standard collet accuracy is less than 0.01mm, while high-precision collet accuracy is less than 0.005mm.

ER Sealing Collet

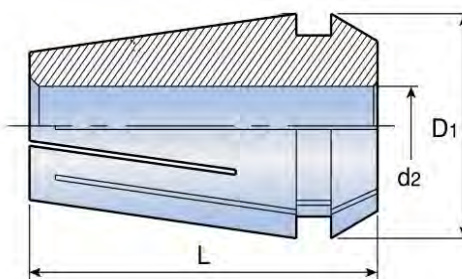
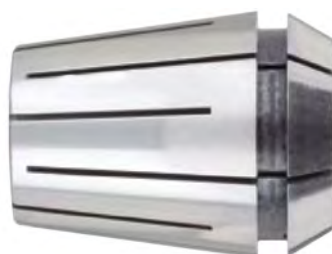
Sealing Collet



ER11C		ER16C		ER20C	
Model	Clamp. Range	Model	Clamp. Range	Model	Clamp. Range
ER11-3C	3-2.9	ER16-3C	3-2.9	ER20-3C	3-2.9
ER11-4C	4-3.9	ER16-4C	4-3.9	ER20-4C	4-3.9
ER11-4.5C	4.5-4.4	ER16-4.5C	4.5-4.4	ER20-5C	5-4.9
ER11-5C	5-4.9	ER16-5C	5-4.9	ER20-5.5C	5.5-5.4
ER11-5.5C	5.5-5.4	ER16-5.5C	5.5-5.4	ER20-6C	6-5.5
ER11-6C	6-5.9	ER16-6C	6-5.5	ER20-6.5C	6.5-6
ER11-6.5C	6.5-6.4	ER16-6.5C	6.5-6	ER20-7C	7-6.5
ER11-7C	7-6.9	ER16-7C	7-6.5	ER20-7.5C	7.5-7
		ER16-7.5C	7.5-7	ER20-8C	8-7.5
		ER16-8C	8-7.5	ER20-8.5C	8.5-8
		ER16-8.5C	8.5-8	ER20-9C	9-8.5
		ER16-9C	9-8.5	ER20-9.5C	9.5-9
		ER16-9.5C	9.5-9	ER20-10C	10-9.5
		ER16-10C	10-9.5	ER20-10.5C	10.5-10
				ER20-11C	11-10.5
				ER20-11.5C	11.5-11
				ER20-12C	12-11.5
				ER20-12.5C	12.5-12
				ER20-13C	13-12.5

ER Sealing Collet

Sealing Collet

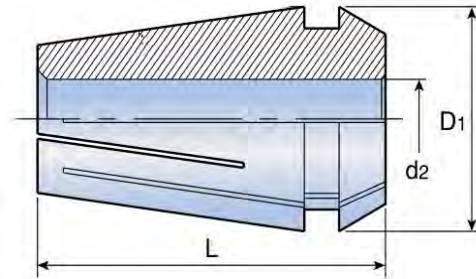


ER25C		ER32C		ER40C	
Model	Clamp. Range	Model	Clamp. Range	Model	Clamp. Range
ER25-3C	3-2.9	ER32-3C	3-2.9	ER40-4C	4-3.9
ER25-4C	4-3.9	ER32-4C	4-3.9	ER40-5C	5-4.9
ER25-5C	5-4.9	ER32-5C	5-4.9	ER40-6C	6-5.9
ER25-6C	6-5.5	ER32-6C	6-5.9	ER40-7C	7-6.9
ER25-6.5C	6.5-6	ER32-7C	7-6.9	ER40-8C	8-7.9
ER25-7C	7-6.5	ER32-8C	8-7.5	ER40-9C	9-8.9
ER25-7.5C	7.5-7	ER32-8.5C	8.5-8	ER40-10C	10-9.5
ER25-8C	8-7.5	ER32-9C	9-8.5	ER40-10.5C	10.5-10
ER25-8.5C	8.5-8	ER32-9.5C	9.5-9	ER40-11C	11-10.5
ER25-9C	9-8.5	ER32-10C	10-9.5	ER40-11.5C	11.5-11
ER25-9.5C	9.5-9	ER32-10.5C	10.5-10	ER40-12C	12-11.5
ER25-10C	10-9.5	ER32-11C	11-10.5	ER40-12.5C	12.5-12
ER25-10.5C	10.5-10	ER32-11.5C	11.5-11	ER40-13C	13-12.5
ER25-11C	11-10.5	ER32-12C	12-11.5	ER40-13.5C	13.5-13
ER25-11.5C	11.5-11	ER32-12.5C	12.5-12	ER40-14C	14-13.5
ER25-12C	12-11.5	ER32-13C	13-12.5	ER40-14.5C	14.5-14
ER25-12.5C	12.5-12	ER32-13.5C	13.5-13	ER40-15C	15-14.5
ER25-13C	13-12.5	ER32-14C	14-13.5	ER40-15.5C	15.5-15
ER25-13.5C	13.5-13	ER32-14.5C	14.5-14	ER40-16C	16-15.5
ER25-14C	14-13.5	ER32-15C	15-14.5	ER40-16.5C	16.5-16
ER25-14.5C	14.5-14	ER32-15.5C	15.5-15	ER40-17C	17-16.5
ER25-15C	15-14.5	ER32-16C	16-15.5	ER40-17.5C	17.5-17
ER25-15.5C	15.5-15	ER32-16.5C	16.5-16	ER40-18C	18-17.5
ER25-16C	16-15.5	ER32-17C	17-16.5	ER40-18.5C	18.5-18
		ER32-17.5C	17.5-17	ER40-19C	19-18.5

ER Sealing Collet



Sealing Collet

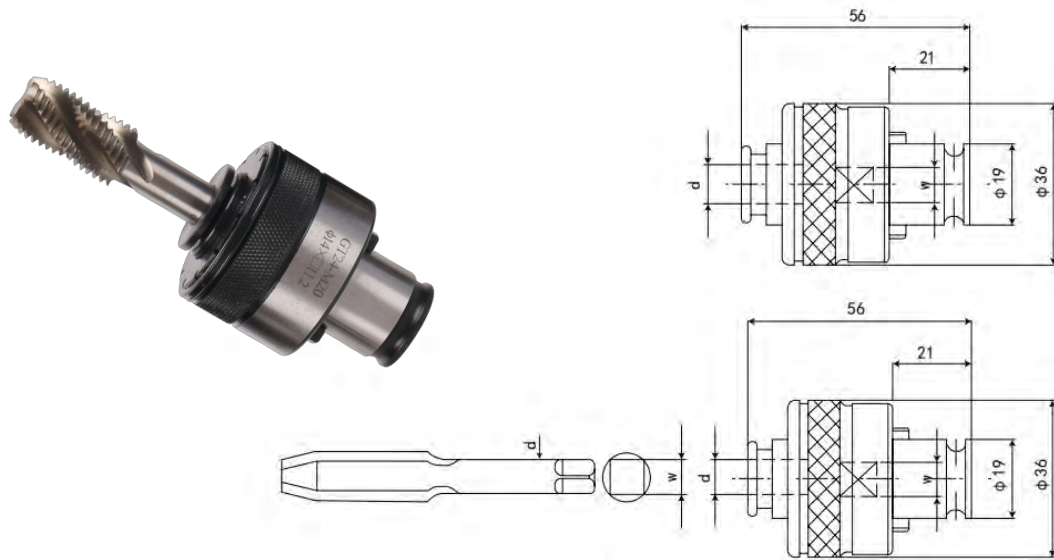


ER25C		ER32C		ER40C	
Model	Clamp. Range	Model	Clamp. Range	Model	Clamp. Range
		ER32-18C	18-17.5	ER40-19.5C	19.5-19
		ER32-18.5C	18.5-18	ER40-20C	20-19.5
		ER32-19C	19-18.5	ER40-20.5C	20.5-20
		ER32-19.5C	19.5-19	ER40-21C	21-20.5
		ER32-20C	20-19.5	ER40-21.5C	21.5-21
				ER40-22C	22-21.5
				ER40-22.5C	22.5-22
				ER40-23C	23-22.5
				ER40-23.5C	23.5-23
				ER40-24C	24-23.5
				ER40-24.5C	24.5-24
				ER40-25C	25-24.5
				ER40-25.5C	25.5-25
				ER40-26C	26-25.5

GT12 Overload Protection Tapping Collet



GT12 (load protection tapping collet international standard)



Model (ISO)	Tapping Tool Holder (ISO)	Tap Shank Diameter	Tap square
ISO-GT12-M3	M3	3.15	2.5X2.5
ISO-GT12-M4	M4	4	3.15X3.15
ISO-GT12-M5	M5	5	4X4
ISO-GT12-M6	M6	6.3	5X5
ISO-GT12-M8	M8	6.3	5X5
ISO-GT12-M10	M10	8	6.3X6.3
ISO-GT12-M12	M12	9	7.1X7.1
ISO-GT12-M14	M14	11.2	9X9
ISO-GT12-M16	M16	12.5	10X10

Model (INCH/JIS)	Tapping Tool Holder (JIS)	Tapping Tool Holder (INCH)	Tap Shank Diameter	Tap square
JIS-GT12-M3	M3	1/5	4	3.2X3.2
JIS-GT12-M4	M4	5/32	5	4X4
JIS-GT12-M5	M5	3/16	5.5	4.5X4.5
JIS-GT12-M6	M6	1/4	6	4.5X4.5
JIS-GT12-M8	M8	—	6.2	5X5
JIS-GT12-M10	M10	3/8	7	5.5X5.5
JIS-GT12-M12	M12	—	8.5	6.5X6.5
JIS-GT12-M14	M14	9/16	10.5	8X8
JIS-GT12-M16	M16	—	12.5	10X10

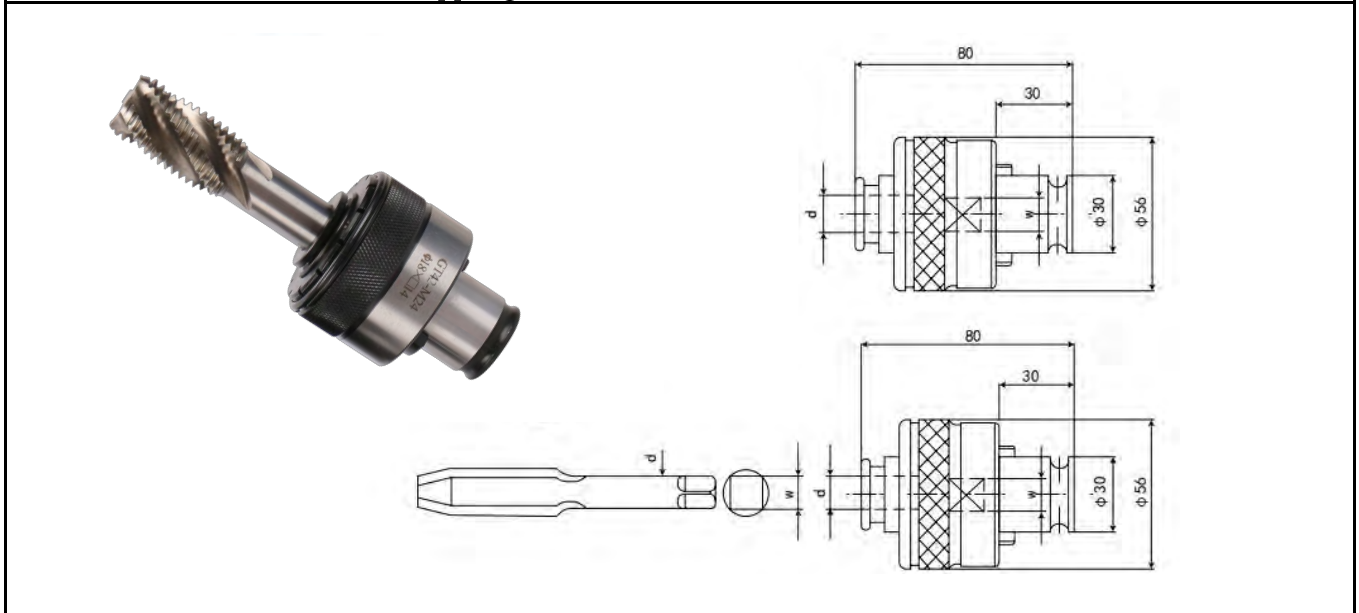
©This product features torque overload protection, high precision, high sensitivity, and a long service life.

©The torque variation responds sensitively and can be adjusted to set the corresponding torque for different materials.

GT24 Overload Protection Tapping Collet



GT24 Overload Protection Tapping Collet (International Standard)



Model (ISO)	Tapping Tool Holder (ISO)	Tap Shank Diameter	Tap square
ISO-GT24-M5	M5	5	4X4
ISO-GT24-M6	M6	6.3	5X5
ISO-GT24-M8	M7	6.3	5X5
ISO-GT24-M10	M10	8	6.3X6.3
ISO-GT24-M12	M12	9	7.1X7.1
ISO-GT24-M14	M14	11.2	9X9
ISO-GT24-M16	M16	12.5	10X10
ISO-GT24-M18	M18	14	11.2X11.2
ISO-GT24-M20	M20	14	11.2X11.2
ISO-GT24-M22	M22	16	12.5X12.5
ISO-GT24-M24	M24	18	14X14
ISO-GT24-M27	M27	20	16X16
ISO-GT24-M30	M30	20	16X16

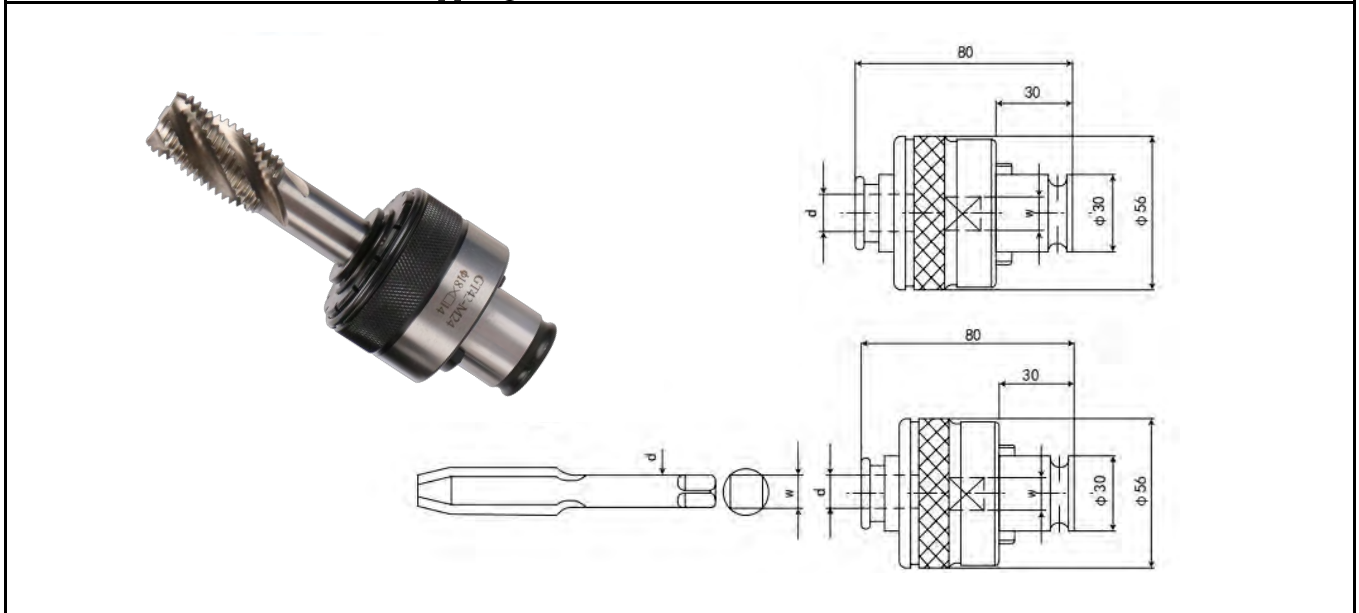
©This product features torque overload protection, high precision, high sensitivity, and a long service life.

©The torque variation responds sensitively and can be adjusted to set the corresponding torque for different materials.

GT24 Overload Protection Tapping Collet



GT24 Overload Protection Tapping Collet (INCH/JIS)



Model (INCH/JIS)	Tapping Tool Holder (JIS)	Tapping Tool Holder (INCH)	Tap Shank Diameter	Tap square
JIS-GT24-M5	M5	3/16	5.5	4.5X4.5
JIS-GT24-M6	M6	1/4	6	4.5X4.5
JIS-GT24-M8	M7	—	6.2	5X5
JIS-GT24-M10	M10	3/8	7	5.5X5.5
JIS-GT24-M12	M12	—	8.5	6.5X6.5
JIS-GT24-M14	M14	9/16	10.5	8X8
JIS-GT24-M16	M16	—	12.5	10X10
JIS-GT24-M18	M18	3/4	14	11X11
JIS-GT24-M20	M20	—	15	12X12
JIS-GT24-M22	M22	7/8	17	13X13
JIS-GT24-M24	M24	—	19	15X15
JIS-GT24-M27	M27	—	20	15X15
JIS-GT24-M30	M30	—	23	17X17

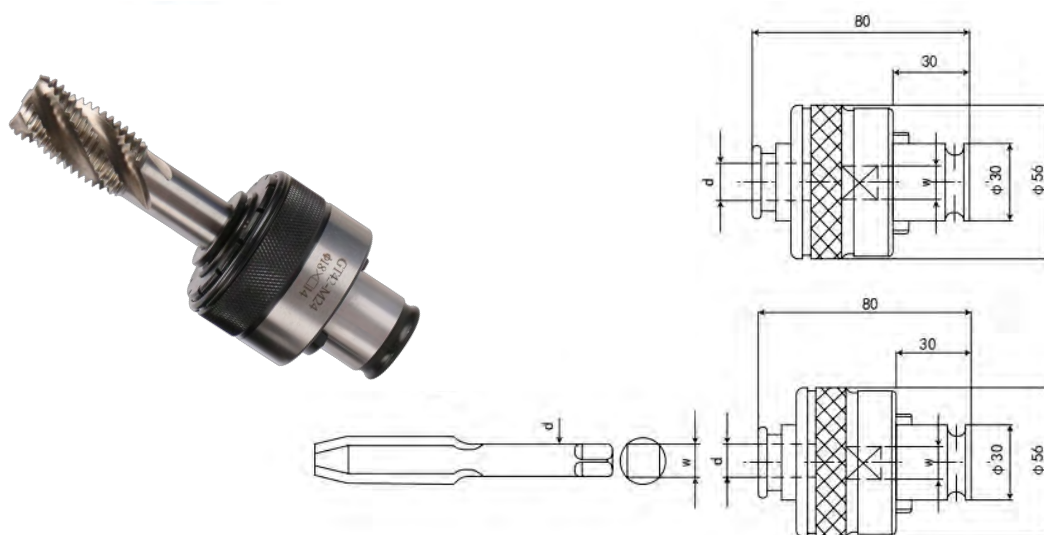
©This product features torque overload protection, high precision, high sensitivity, and a long service life.

©The torque variation responds sensitively and can be adjusted to set the corresponding torque for different materials.

GT24 Overload Protection Tapping Collet



GT24 Overload Protection Tapping Collet (International Standard)



Model (ISO)	Tapping Tool Holder (ISO)	Tap Shank Diameter	Tap square W
ISO-GT42-M24	M24	18	14X14
ISO-GT42-M27	M27	20	16X16
ISO-GT42-M30	M30	20	16X16
ISO-GT42-M33	M33	22.4	18X18
ISO-GT42-M36	M36	25	20X20
ISO-GT42-M39	M39	28	22.4X22.4
ISO-GT42-M42	M42	28	22.4X22.4
ISO-GT42-M45	M45	31.5	25X25
ISO-GT42-M48	M48	31.5	25X25

Model (JIS)	Tapping Tool Holder (JIS)	Tap Shank Diameter	Tap square
JIS-GT42-M24	M24	19	15X15
JIS-GT42-M27	M27	20	15X15
JIS-GT42-M30	M30	23	17X17
JIS-GT42-M33	M33	25	19X19
JIS-GT42-M36	M36	28	21X21
JIS-GT42-M39	M39	30	23X23
JIS-GT42-M42	M42	32	26X26
JIS-GT42-M45	M45	35	26X26
JIS-GT42-M48	M48	38	29X29

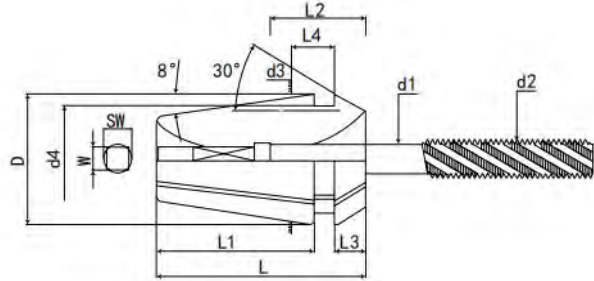
©This product features torque overload protection, high precision, high sensitivity, and a long service life.

©The torque variation responds sensitively and can be adjusted to set the corresponding torque for different materials.

ERG Rigid Tapping Chuck



Tapping Chuck (Metric)



Model	Dimension (mm)						Tapping angle	W.KG
	D	d3	d4	L	L3	L4		
ER16G	17	16	13.8	27.5	4.0	6.26	M3-M10	0.003
ER20G	21	20	17.4	31.5	4.8	6.36	M3-M17	0.04
ER25G	26	25	22	34	5.0	3.66	M3-M22	0.06
ER32G	33	32	29.2	40	5.5	7.16	M3-M27	0.10
ER40G	42	40	36.2	46	7.0	7.66	M3-M27	0.25
ER50G	52	50	46	60	8.5	12.6	M3-M36	0.40

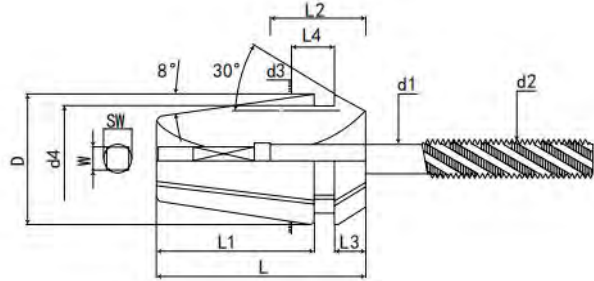
E16G Model	E20G Model	E25G Model	Dimension (mm)			General Standards				L2
			d1	SW	W	ISO	JIS	DIN371	DIN376	
ER16G-2.24	ER20G-2.24	ER25G-2.24	2.24	2	1.8	M3				15
ER16G-2.5	ER20G-2.5	ER25G-2.5	2.5	2.2	2.1				M3.5	
					2	M3.5				
ER16G-2.8	ER20G-2.8	ER25G-2.8	2.8	2.6	2.1				M4	18
ER16G-3	ER20G-3	ER25G-3	3	2.8	2.5		M2			
ER16G-3.15	ER20G-3.15	ER25G-3.15	3.15	2.9	2.5	M3/M4				
ER16G-3.5	ER20G-3.5	ER25G-3.5	3.5	3.3	2.7			M3	M5	
ER16G-3.55	ER20G-3.55	ER25G-3.55	3.55	3.3	2.8	M3.5/M4.5				
ER16G-4	ER20G-4	ER25G-4	4	3.8	3				M3.5	
					3.1		M3			
					3.15	M4/M5				
ER16G-4.5	ER20G-4.5	ER25G-4.5	4.5	4.3	3.4			M4	M6	
					3.55	M6				
ER16G-5	ER20G-5	ER25G-5	5	4.7	4	M5	M4/M5.5			

©When ordering, please pay attention to the standards and the dimensions d2, d1, and W.

ERG Rigid Tapping Chuck



Tapping Chuck (Metric)



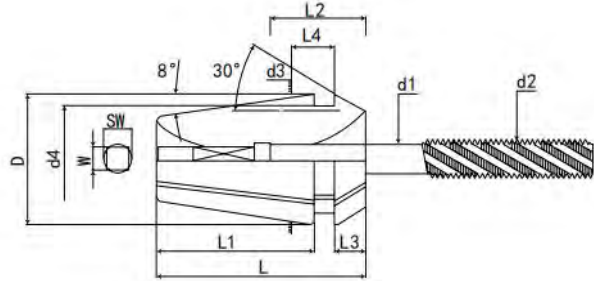
E16G Model	E20G Model	E25G Model	Dimension (mm)			General Standards				L2
			d1	SW	W	ISO	JIS	DIN371	DIN376	
ER16G-5.5	ER20G-5.5	ER25G-5.5	5.5	4.37	4.3				M7	18
					4.5		M5/ M5.5			
ER16G-6	ER20G-6	ER25G-6	6	5.09	4.5		M6			
					4.9			M5/M6	M8	
ER16G-6.2	ER20G-6.2	ER25G-6.2	6.2	5.21	5		M7/M8			
ER16G-6.3	ER20G-6.3	ER25G-6.3	6.3	5.21	5	M6/M8				
ER16G-7	ER20G-7	ER25G-7	7	5.84	5.5		M9/M10	M7	M10	22
ER16G-8	ER20G-8	ER25G-8	8	6.88	6		M11			
					6.2			M8	M11	
					6.3	M8/M10				
ER16G-8.5	ER20G-8.5	ER25G-8.5	8.5	7.14	6.5		M12			
ER16G-9	ER20G-9	ER25G-9	9	7.95	7				M12	
					7.1	M12				25
ER16G-10	ER20G-10	ER25G-10	10	9.16	8	M10		M10		
	ER20G-10.5	ER25G-10.5	10.5	9.16	8		M14/ M15			
	ER20G-11	ER25G-11	11	10.53	9				M14	
	ER20G-11.2	ER25G-11.2	11.2	10.53	9	M14				
	ER20G-12	ER25G-12	12	10.53	9				M16	
	ER20G-12.5	ER25G-12.5	12.5	11.91	10	M16	M16			
	ER20G-13	ER25G-13	13	11.91	10		M17			

©When ordering, please pay attention to the standards and the dimensions d2, d1, and W.

ERG Rigid Tapping Chuck



Tapping Chuck (Metric)



E16G Model	E20G Model	E25G Model	Dimension (mm)			General Standards				L2
			d1	SW	W	ISO	JIS	DIN371	DIN376	
		ER25G-14	14	12.97	11		M18		M18	28
					11.2	M18/M20				
		ER25G-15	15	14.06	12		M20			
		ER25G-16	16	14.06	12				M20	
					12.5	M22				

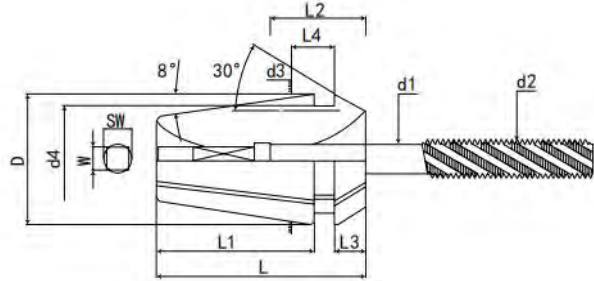
E32G Model	E40G Model	E50G Model	Dimension (mm)			General Standards				L2
			d1	SW	W	ISO	JIS	DIN371	DIN376	
ER32G-2.24	ER40G-2.24		2.24	2	1.8	M3				15
ER32G-2.5	ER40G-2.5		2.5	2.2	2.1				M3.5	
					2	M3.5				
ER32G-2.8	ER40G-2.8		2.8	2.6	2.1				M4	
ER32G-3	ER40G-3		3	2.8	2.5		M2			18
ER32G-3.15	ER40G-3.15		3.15	2.9	2.5	M3/M4				
ER32G-3.5	ER40G-3.5		3.5	3.3	2.7			M3	M5	
ER32G-3.55	ER40G-3.55		3.55	3.3	2.8	M3.5/M4.5				
ER32G-4	ER40G-4		4	3.8	3				M3.5	
					3.1		M3			
					3.15	M4/M5				
ER32G-4.5	ER40G-4.5		4.5	4.3	3.4			M4	M6	
					3.55	M6				
ER32G-5	ER40G-5		5	4.7	4	M5	M4/ M5.5			

©When ordering, please pay attention to the standards and the dimensions d2, d1, and W.

ERG Rigid Tapping Chuck



Tapping Chuck (Metric)



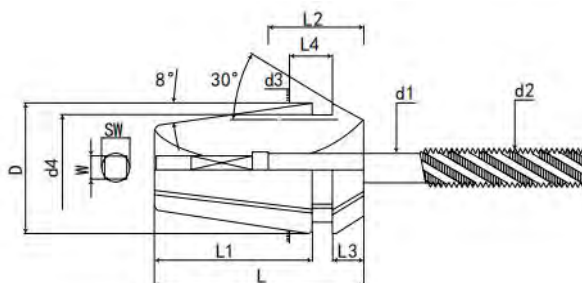
E32G Model	E40G Model	E50G Model	Dimension (mm)			General Standards				L2
			d1	SW	W	ISO	JIS	DIN371	DIN376	
ER32G-5.5	ER40G-5.5		5.5	4.37	4.3				M7	18
					4.5		M5/M5.5			
ER32G-6	ER40G-6	ER50G-6	6	5.09	4.5		M6			
					4.9			M5/M6	M8	
ER32G-6.2	ER40G-6.2	ER50G-6.2	6.2	5.21	5		M7/M8			
ER32G-6.3	ER40G-6.3	ER50G-6.3	6.3	5.21	5	M6/M8				22
ER32G-7	ER40G-7	ER50G-7	7	5.84	5.5		M9/M10	M7	M10	
ER32G-8	ER40G-8	ER50G-8	8	6.88	6		M11			
					6.2			M8	M11	
					6.3	M8/M10				
ER32G-8.5	ER40G-8.5	ER50G-8.5	8.5	7.14	6.5		M12			
ER32G-9	ER40G-9	ER50G-9	9	7.95	7				M12	25
					7.1	M12				
ER32G-10	ER40G-10	ER50G-10	10	9.16	8	M10		M10		
ER32G-10.5	ER40G-10.5	ER50G-10.5	10.5	9.16	8		M14/M15			
ER32G-11	ER40G-11	ER50G-11	11	10.53	9				M14	
ER32G-11.2	ER40G-11.2	ER50G-11.2	11.2	10.53	9	M14				
ER32G-12	ER40G-12	ER50G-12	12	10.53	9				M16	
ER32G-12.5	ER40G-12.5	ER50G-12.5	12.5	11.91	10	M16	M16			
ER32G-13	ER40G-13	ER50G-13	13	11.91	10		M17			

©When ordering, please pay attention to the standards and the dimensions d2, d1, and W.

ERG Rigid Tapping Chuck



Tapping Chuck (Metric)



E32G Model	E40G Model	E50G Model	Dimension (mm)			General Standards				L2
			d1	SW	W	ISO	JIS	DIN371	DIN376	
ER32G-14	ER40G-14	ER50G-14	14	12.97	11	M18/M20	M18		M18	—
					11.2					
ER32G-15	ER40G-15	ER50G-15	15	14.06	12		M20			
ER32G-16	ER40G-16	ER50G-16	16	14.06	12	M22			M20	
					12.5					—
ER32G-17	ER40G-17	ER50G-17	17	11.91	13		M22			
ER32G-18	ER40G-18	ER50G-18	18	12.97	14.5				M22/ M24	
					14	M24				
ER32G-19	ER40G-19	ER50G-19	19	14.06	15		M24/ M25			—
ER32G-20	ER40G-20	ER50G-20	20	14.06	15		M26/ M27			
		ER50G-21	21	20.5	17		M28			
		ER50G-22	22	21.6	18				M30	
		ER50G-22.4	22.4	21.6	18	M33				—
		ER50G-23	23	20.5	17		M30			
		ER50G-25	25	24.53	19		M33			
					20	M36				
		ER50G-28	28	27	21		M36			

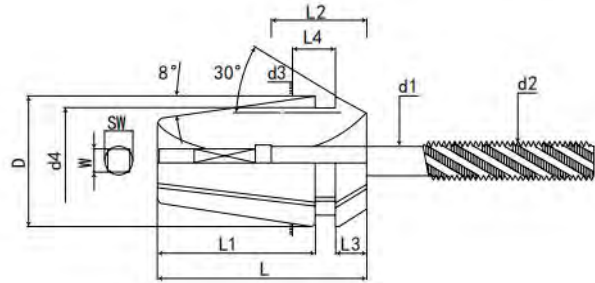
©When ordering, please pay attention to the standards and the dimensions d2, d1, and W.

©For the value of L2, please refer to the table below. .

ERG Rigid Tapping Collet



Tapping Collet (Metric)



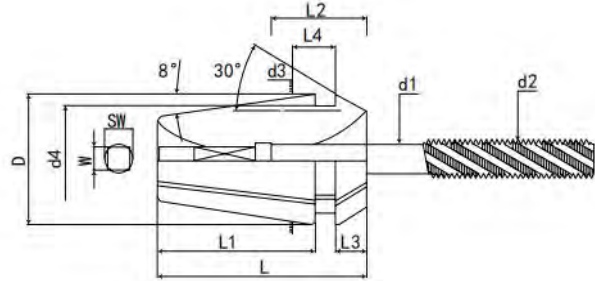
E32G Model	E40G Model	L2
ER32G-14	ER40G-14	28
ER32G-15	ER40G-15	
ER32G-16	ER40G-16	
ER32G-17	ER40G-17	33
ER32G-18	ER40G-18	
ER32G-19	ER40G-19	
ER32G-20	ER40G-20	

E50G Model	L2	E50G Model	L2
ER50G-14	25	ER50G-20	40
ER50G-15		ER50G-21	
ER50G-16		ER50G-22	
ER50G-17	28	ER50G-22.4	
ER50G-18		ER50G-23	
ER50G-19		ER50G-25	
		ER50G-28	

ERG Rigid Tapping Collet

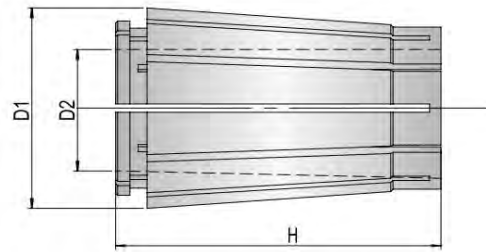


Tapping Chuck (Imperial)



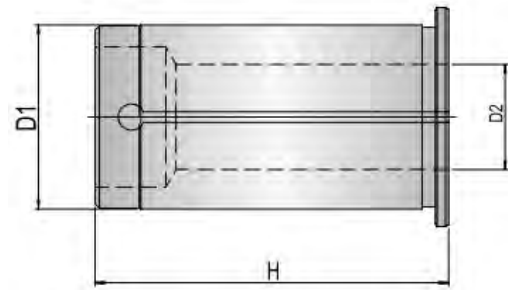
E16G (d2)	E20G (d2)	E25G (d2)	E32G (d2)	E40G (d2)	Dimension (mm)		
					d1	SW	W□
5/32	5/32	5/32	5/32		0.168"	0.151"	0.131"
3/16	3/16	3/16	3/16		0.194"	0.180"	0.152"
7/32	7/32	7/32	7/32		0.220"	0.198"	0.165"
1/4	1/4	1/4	1/4		0.255"	0.198"	0.191"
	5/16	5/16	5/16	5/16	0.318"	0.258"	0.238"
	7/16	7/16	7/16	7/16	0.323"	0.263"	0.242"
	1/2	1/2	1/2	1/2	0.367"	0.307"	0.275"
	3/8	3/8	3/8	3/8	0.381"	0.321"	0.286"
	9/16	9/16	9/16	9/16	0.429"	0.370"	0.322"
		1/8PT	1/8PT	1/8PT	0.437"	0.378"	0.328"
		5/8	5/8	5/8	0.480"	0.422"	0.360"
			11/16	11/16	0.542"	0.486"	0.406"
			1/4PT	1/4PT	0.562"	0.483"	0.421"
			3/4	3/4	0.590"	0.512"	0.442"
			13/16	13/16	0.649"	0.576"	0.489"
				1/2PT	0.687"	0.612"	0.515"
				7/8	0.697"	0.623"	0.523"
				3/8PT	0.700"	0.634"	0.531"
				15/16	0.760"	0.389"	0.570"
				1	0.800"	0.730"	0.600"

GSK Precision Collet



GSK 06		GSK 10		GSK 16		GSK 25	
Model	Clamp. Range	Model	Clamp. Range	Model	Clamp. Range	Model	Clamp. Range
GSK06-2	2-1.75	GSK10-2	2-1.75	GSK16-3	3-2.75	GSK25-6	6-5.5
GSK06-2.5	2-2.25	GSK10-2.5	2-2.25	GSK16-3.175	3.175-2.7	GSK25-8	8-7.5
GSK06-3	3-2.75	GSK10-3	3-2.75	GSK16-3.5	3.5-3	GSK25-10	10-9.5
GSK06-3.5	3.5-3	GSK10-3.175	3.175-2.7	GSK16-4	4-3.5	GSK25-12	12-11.5
GSK06-4	4-3.5	GSK10-3.5	3.5-3	GSK16-4.5	4.5-4	GSK25-14	14-13.5
GSK06-4.5	4.5-4	GSK10-4	4-3.5	GSK16-5	5-4.5	GSK25-16	16-15.5
GSK06-5	5-4.5	GSK10-4.5	4.5-4.4	GSK16-5.5	5.5-5	GSK25-16.5	16.5-16
GSK06-5.5	5.5-5	GSK10-5	5-4.5	GSK16-6	6-5.5	GSK25-17	17-16.5
GSK06-6	6-5.5	GSK10-5.5	5.5-5	GSK16-6.5	6.5-6	GSK25-17.5	17.5-17
		GSK10-6	6-5.5	GSK16-7	7-6.5	GSK25-18	18-17.5
		GSK10-6.5	6.5-6	GSK16-7.5	7.5-7	GSK25-18.5	18.5-18
		GSK10-7	7-6.5	GSK16-8	8-7.5	GSK25-19	19-18.5
		GSK10-7.5	7.5-7	GSK16-8.5	8.5-8	GSK25-19.5	19.5-19
		GSK10-8	8-7.5	GSK16-9	9-8.5	GSK25-20	20-19.5
		GSK10-8.5	8.5-8	GSK16-9.5	9.5-9	GSK25-20.5	20.5-20
		GSK10-9	9-8.5	GSK16-10	10-9.5	GSK25-21	21-20.5
		GSK10-9.5	9.5-9	GSK16-10.5	10.5-10	GSK25-21.5	21.5-21
		GSK10-10	10-9.5	GSK16-11	11-10.5	GSK25-22	22-21.5
				GSK16-11.5	11.5-11	GSK25-22.5	22.5-22
				GSK16-12	12-11.5	GSK25-23	23-22.5
				GSK16-12.5	12.5-12	GSK25-23.5	23.5-23
				GSK16-13	13-12.5	GSK25-24	24-23.5
				GSK16-13.5	13.5-13	GSK25-24.5	24.5-24
				GSK16-14	14-13.5	GSK25-25	25-24.5
				GSK16-14.5	14.5-14		
				GSK16-15	15-14.5		
				GSK16-15.5	15.5-15		
				GSK16-16	16-15.5		

SC Power Collet

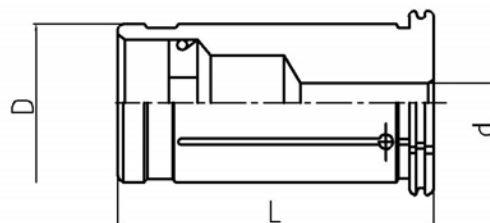


Model	Dimension (mm)		
	D1	D2	H
SC12	12	3, 4, 5, 6, 7, 8, 9, 10	40
SC16	16	4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14	
SC20	20	6, 8, 10, 12, 14, 16	64
SC25	25	6, 8, 10, 12, 16, 20	
SC32	32	6, 8, 10, 12, 16, 20, 25	71
SC42	42	6, 8, 10, 12, 16, 20, 25, 32	

DHC



D-Type End Face Water Outlet Hydraulic Tool Holder Adapter Collet.



Model	Dimension (mm)			
	d	D	L	
DHC12-3	3	12	45	
DHC12-4	4	12	45	
DHC12-5	5	12	45	
DHC12-6	6	12	45	
DHC12-8	8	12	45	

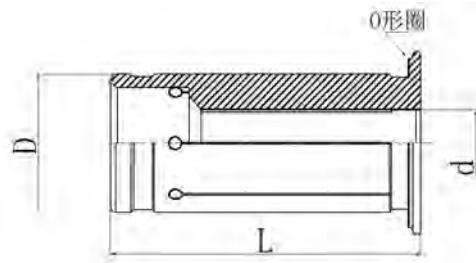
DHC20-3	3	20	50.5	
DHC20-4	4	20	50.5	
DHC20-5	5	20	50.5	
DHC20-6	6	20	50.5	
DHC20-8	8	20	50.5	
DHC20-10	10	20	50.5	
DHC20-12	12	20	50.5	
DHC20-14	14	20	50.5	
DHC20-16	16	20	50.5	

DHC32-6	6	32	60.5	
DHC32-8	8	32	60.5	
DHC32-10	10	32	60.5	
DHC32-12	12	32	60.5	
DHC32-14	14	32	60.5	
DHC32-16	16	32	60.5	
DHC32-18	18	32	60.5	
DHC32-20	20	32	60.5	
DHC32-25	25	32	60.5	

ODHC



OD-Type nter ater utlet ydraulic ool older apter ollet



Model	Dimension (mm)			
	d	D	L	
ODHC12-3	3	12	45	
ODHC12-4	4	12	45	
ODHC12-5	5	12	45	
ODHC12-6	6	12	45	
ODHC12-8	8	12	45	

ODHC20-3	3	20	50.5	
ODHC20-4	4	20	50.5	
ODHC20-5	5	20	50.5	
ODHC20-6	6	20	50.5	
ODHC20-8	8	20	50.5	
ODHC20-10	10	20	50.5	
ODHC20-12	12	20	50.5	
ODHC20-14	14	20	50.5	
ODHC20-16	16	20	50.5	

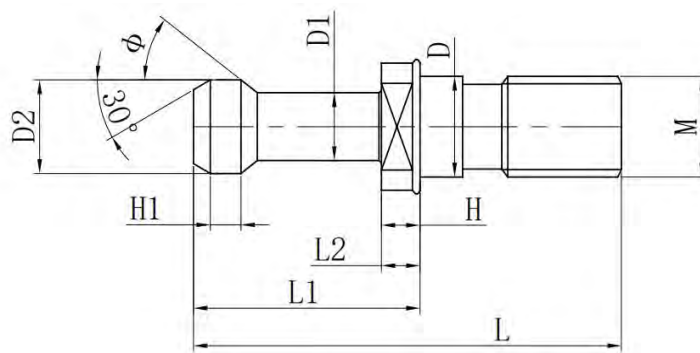
ODHC32-6	6	32	60.5	
ODHC32-8	8	32	60.5	
ODHC32-10	10	32	60.5	
ODHC32-12	12	32	60.5	
ODHC32-14	14	32	60.5	
ODHC32-16	16	32	60.5	
ODHC32-18	18	32	60.5	
ODHC32-20	20	32	60.5	
ODHC32-25	25	32	60.5	

BT-1982 / DIN 69872 SK



Pull Pin

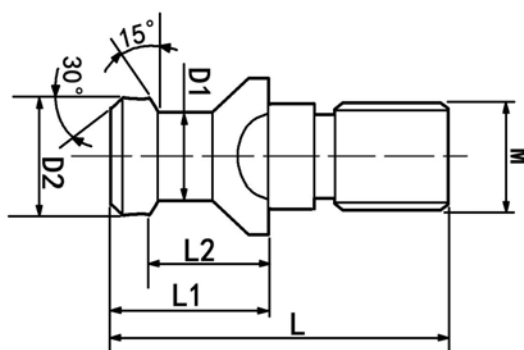
BT-1982 BT Pull Pin



Model	Dimension (mm)									ϕ
	D	D1	D2	M	L	L1	L2	H	H1	
LD-BT30	12.5	7	11	M12	43	23	18	5	2.5	45° 60° 90°
LD-BT40	17	10	15	M16	60	35	28	6	3	
LD-BT50	25	17	23	M24	85	45	35	10	5	

©If internal cooling pull studs are required, use .C, for example: BT50-45° .C

DIN69872 SK Pull Pin



Model	Dimension (mm)						
	D	D1	D2	M	L	L1	L2
SK-30A	13	9	13	M12	44	24	19
SK-40A	17	14	19	M16	54	26	20
SK-50A	25	21	28	M24	74	34	25
SK-30B	13	9	13	M12	44	24	19
SK-40B	17	14	19	M16	54	26	20
SK-50B	25	21	28	M24	74	34	25

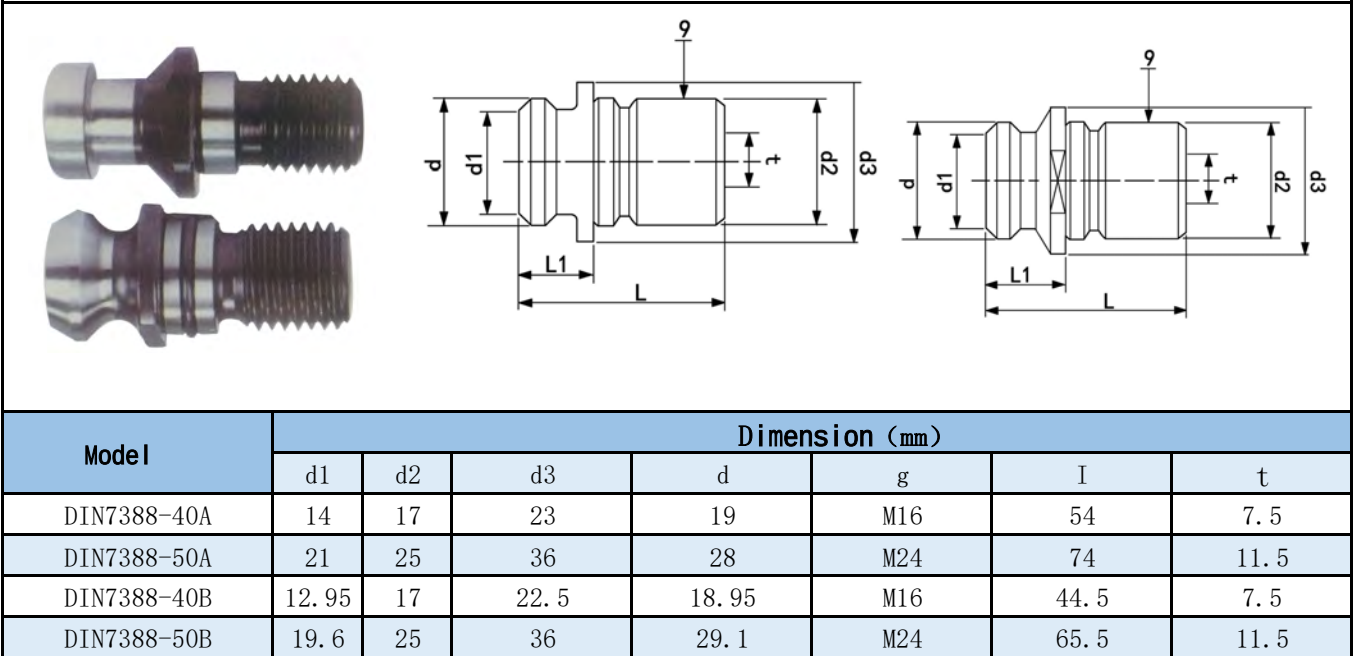
©If internal cooling pull studs are required, use .C, for example: SK-50B.C; Type A comes with internal cooling.

ISO 7388 / ISO



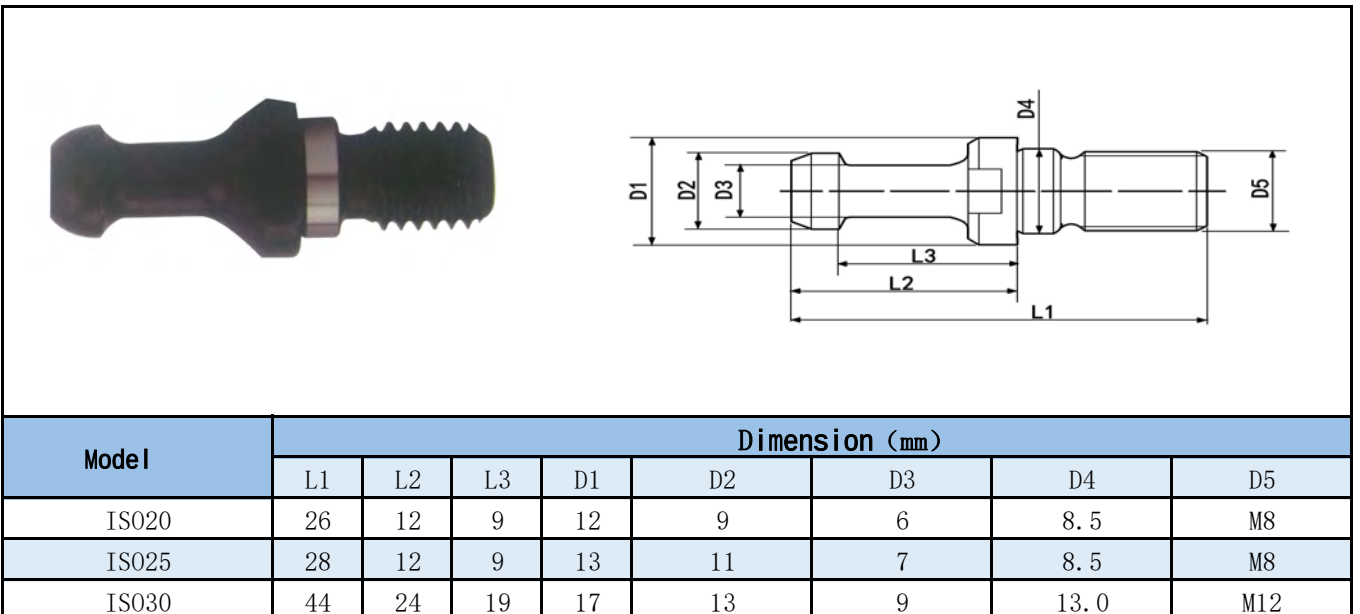
Pull Pin

ISO7388 Pull Pin



©If internal cooling pull studs are required, use .C, for example:DIN7388-50B.C

ISO Pull Pin

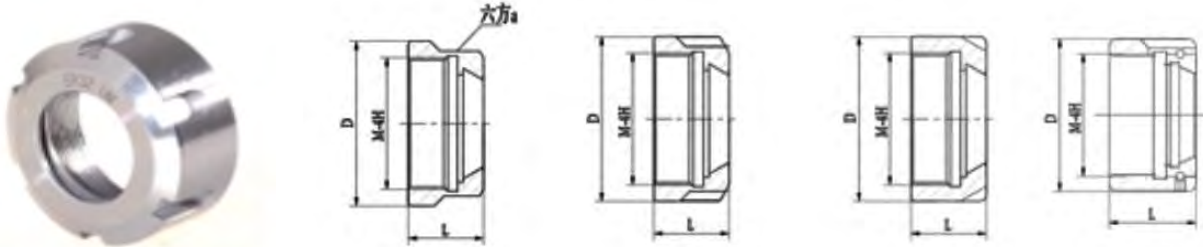


©If internal cooling pull studs are required, use .C, for example:ISO20.C

ER/GSK NUT



ER Nut

				
Model	Dimension (mm)			FIG
	M	D	L	
ER11-A	M14x0.75	19	13	Fig. 1
ER16-A	M22x1.52	28	17.5	Fig. 1
ER20-A	M25x1.5	34	19	Fig. 1
ER25-UM	M32x1.5	42	20	Fig. 2
ER32-UM	M40x1.5	50	22.5	Fig. 2
ER40-UM	M50x1.5	63	29	Fig. 2
ER8-M	M10x0.75	12	12	Fig. 3
ER11-M	M13x0.75	16	12	Fig. 3
ER16-M	M19x1	22	18	Fig. 3
ER20-M	M24x1	28	19	Fig. 3
ER25-M	M30x1	35	20	Fig. 3
ER25-KM	M32x1.5	42	20	Fig. 4
ER32-KM	M40x1.5	50	22.5	Fig. 4
ER40-KM	M50x1.5	63	29	Fig. 4

©The coaxiality between the thread and the clamping taper surface is 0.003.

GSK Nut

				
Model	Dimension (mm)			FIG
	M	D	L	
GSK06	M15x1	20	15	Fig. 1
GSK10	M21.5x1	27	18	Fig. 1
GSK16	M32x1.5	40	25	Fig. 1
GSK25	M45x1.5	54	32	Fig. 1

©The coaxiality between the thread and the clamping taper surface is 0.003.

Wrench



Tool Holder Wrench

ER Wrench

							
Model	K	L	Nut	Model	D	L	Nut
OW/ER11	17	100	ER11-A	UM/ER25	42	206	ER25-UM
OW/ER16	25	128	ER16-A	UM/ER32	50	253	ER32-UM
OW/ER20	30	138	ER20-A	UM/ER40	63	289	ER40-UM

GSK Wrench

		
Model	D	Nut
OB/SK06	20	GSK06
OB/SK10	27	GSK10
OB/SK16	40	GSK16
OB/SK25	54	GSK25

MLC Special Wrench for Power Collet

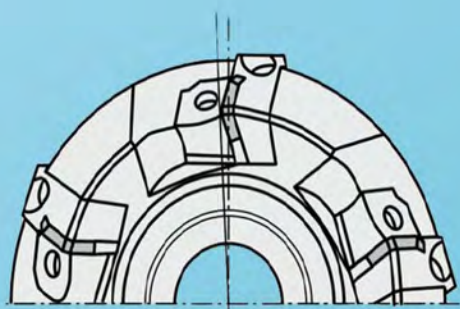
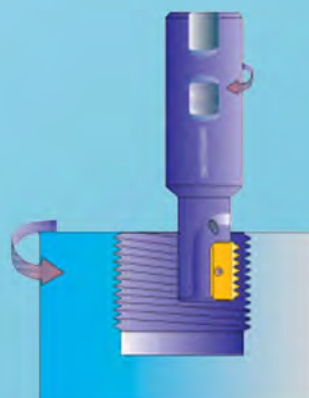
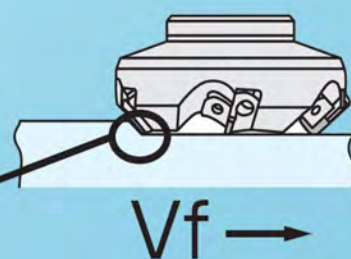
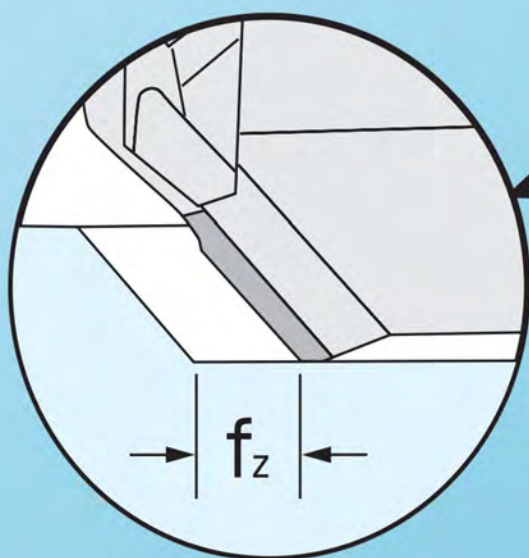
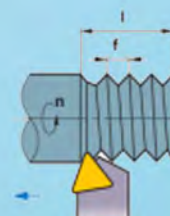
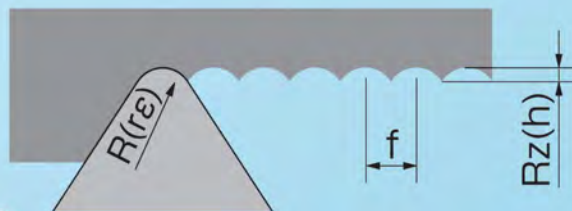
		
Model	Body	W. KG
SP-MLC 20	MLC20/HPC20	0.20
SP-MLC 32	MLC32/HPC32	0.30
SP-MLC 42	MLC42/HPC42	0.45

技术资料

TECHNICAL
DATE



技术资料



技术资料目录

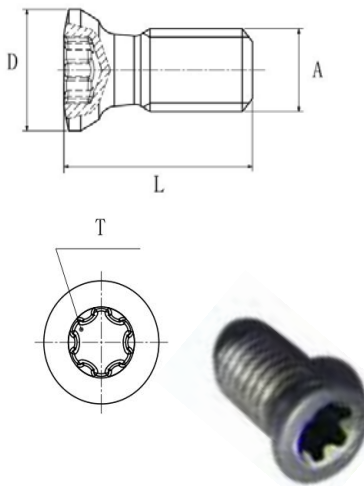
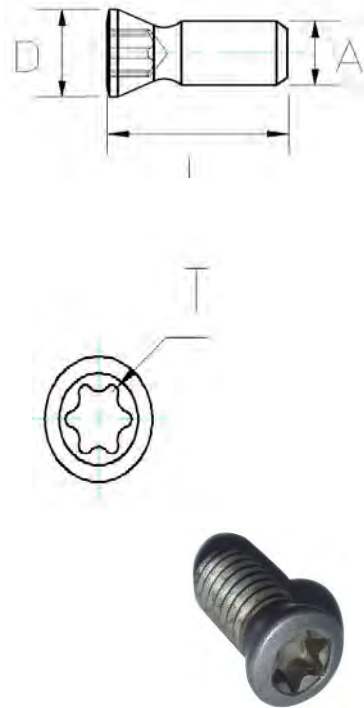


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螺 钉



对 照 表

	SFS施特劳加强星型螺钉					威汉 加强星型匙型 手柄扳手(T)	
	型号	D	L	角度	A		
	CSG2049-P	2.6	4.9	60°	M2*0.4	CTS06W-P	
	CSG2252-P	3.15	5.2	60°	M2.2*0.45	CTS07W-P	
	CSG2565-P	3.45	6.4	60°	M2.5*0.45	CTS08W-P	
	CSG3085-P	4.46	8.5	60°	M3*0.5	CTS08W-P	
	CSX3011-P	5.3	10.8	—	M3*0.35细牙	CTS15W-P	
	CSG3585-P	5.1	8.4	60°	M3.5*0.6	CTS10W-P	
	CSG4011-P	5.5	11.0	60°	M4*0.7	CTS15W-P	
	CSG4013-P	5.5	13.0	60°	M4*0.7	CTS15W-P	
	CSG5012-P	7.0	11.35	60°	M5*0.8	CTS20W-P	
	◇请注意此类型-P螺钉需配对应CTS*W-P扳手，其它扳手不适用此款螺钉						
	其它螺钉					适配扳手(T)	
	型号	D	L	角度	A	威汉星型匙型 手柄扳手	其它 扳手
	CSS2005	2.8	5.0	50°	M2*0.4	CTS06W	CTQ06
	CSC2250	3.0	5.0	60°	M2.2*0.45	CTS07W	CTQ07
	CSX2553	3.5	5.3	60°	M2.5*0.35细牙	CTS08W	CTQ08
	CSC2560	3.5	5.9	55°	M2.5*0.45	CTS08W	CTQ08
	CSD3070	4.0	7.2	60°	M3*0.5	CTS08W	CTQ08
	CSC3080	4.2	8.0	55°	M3*0.5	CTS10W	CTQ10
	CSC3580	5.0	7.9	60°	M3.5*0.6	CTS15W	CTQ15
	CSX4080	5.45	8.0	60°	M4*0.5细牙		
	CSC4090	5.4	9.0	50°	M4*0.7		
	CSD4010	5.7	9.9	60°	M4*0.7		
	CST4010	6.0	10.0	—	M4*0.7圆头	CTS20W	CTQ20
	CSC4511	6.55	10.5	65°	M4.5*0.75		
	CSC5012	7.1	12.0	46°	M5*0.8		
	CST5010	6.25	10.5	35°	M5*0.8圆头		
	CSD5012	6.9	12.0	64°	M5*0.8		
	CSY5012	7.0	12.0	70°	M5*0.8		
	CSG5016	7.05	16.1	60°	M5*0.8	—	CTQ25
	CSS6016	8.37	15.6	60°	M6*1		
	◇此类型螺钉可选用CTS*W扳手或CTQ扳手						



施特劳加强星型螺钉系列

- ◇该系列螺钉，硬度高，抗冲击力能力强，锁紧能力强，具有更高的使用寿命
- ◇该系列螺钉与其它星型螺钉最大的区别在于头部星角加宽结构设计此结构使用特定扳手，能获得更精确更牢固的贴合，使其扳手扭力比其它扳手高25%，从而使拆装更稳固更轻松



旗型和匙型手柄扳手

- ◇ 手柄的形状符合人体工程学原理，并提供拇指和食指的支撑区。从此大扭力传输变的十分简单
- ◇ 圆柱形手柄轴便于快速转动螺钉
- ◇ 创新型扭力起子包含T6-T20各种尺寸，不会损坏昂贵的紧固螺钉或手柄花纹。如果施加的扭力超过所需扭矩，起子杆可以做出弹性反应
- ◇ 薄型刀杆，可轻松扭动螺杆轴上的覆盖螺钉

扳 手



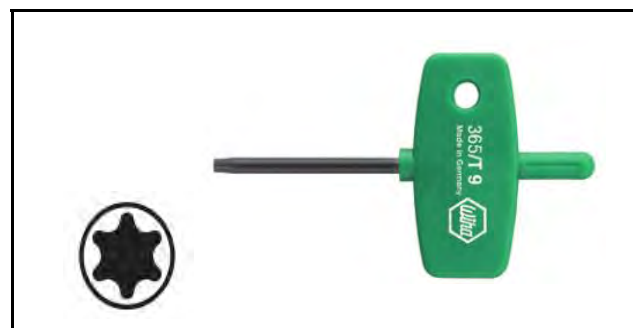
对 照 表



威汉-加强星型匙型手柄扳手

型号					
CTS06W-P	6IP	35	2.0	70	40
CTS07W-P	7IP	35	2.5	70	40
CTS08W-P	8IP	40	2.5	75	40
CTS10W-P	10IP	40	3.0	75	40
CTS15W-P	15IP	45	3.5	80	40
CTS20W-P	20IP	45	4.0	80	40

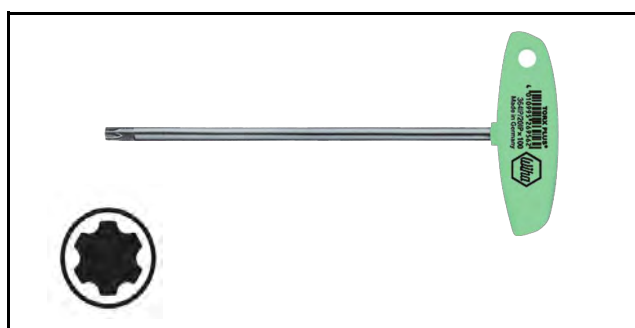
- ◇起子杆：铬钒钢，经过热处理，发黑处理
- ◇应 用：适用于需用大扭力转动的小型螺钉
特别适用于更换铣削头上的可转位式刀片
- ◇其 它：加强星型扳手的扭力比星型扳手高25%
- ◇注 意：加强星型扳手不能用于星型螺钉



威汉-星型匙型手柄扳手

型号					
CTS06W	T6	35	2.0	70	40
CTS07W	T7	35	2.5	70	40
CTS08W	T8	40	2.5	75	40
CTS10W	T10	40	3.0	75	40
CTS15W	T15	45	3.5	80	40
CTS20W	T20	45	4.0	80	40

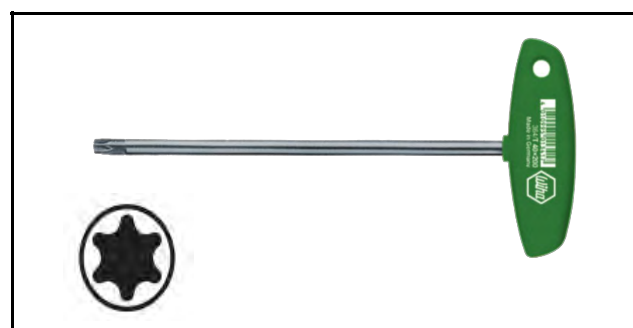
- ◇起子杆：铬钒钢，经过热处理，发黑处理
- ◇应 用：适用于需用大扭力转动的小型螺钉
特别适用于更换铣削头上的可转位式刀片



威汉-加强星型T型手柄扳手

型号					
CTT15W-P	15IP	100	4.0	126	80
CTT20W-P	20IP	100	4.0	132	100

- ◇起子杆：铬钒钢，经过热处理，发黑处理
- ◇其 它：加强星型扳手的扭力比星型扳手高25%
高精度的镀铬起子头
- ◇注 意：加强星型扳手不能用于星型螺钉



威汉-星型T型手柄扳手

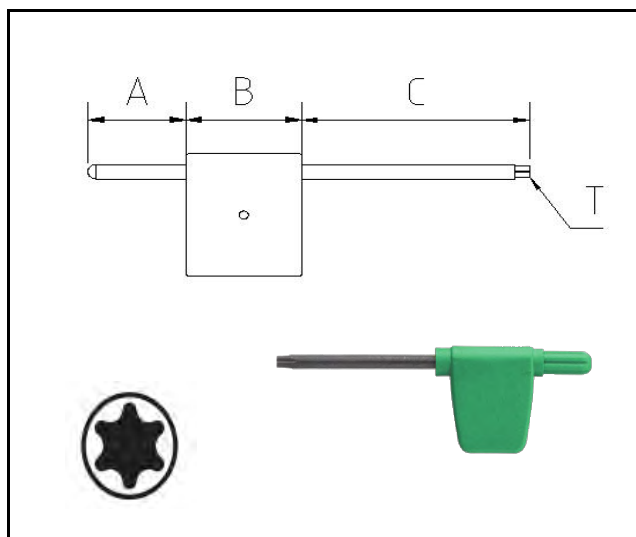
型号					
CTT15W	T15	100	4.0	126	80
CTT20W	T20	100	4.0	132	100

- ◇起子杆：铬钒钢，经过热处理，发黑处理
- ◇应 用：用最小的力传递大扭力
- ◇其 它：高精度的镀铬起子头

扳 手

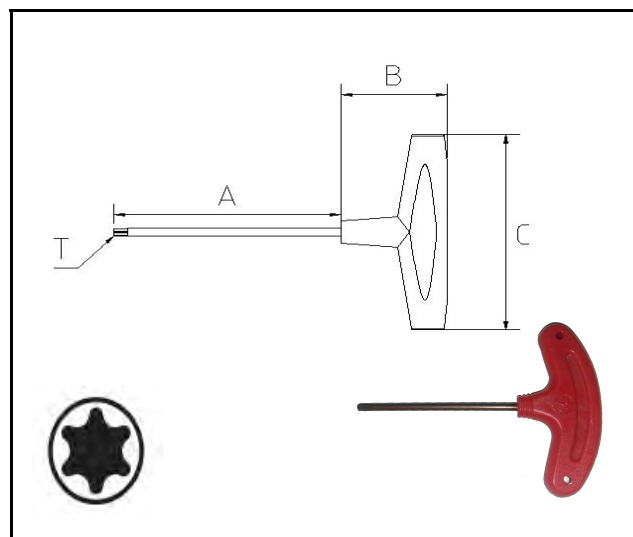


对 照 表



其它旗型手柄星形扳手

型号	A	B	C	T
CTQ06	13	15	34	T6
CTQ07	13	15	34	T7
CTQ08	13	19	39	T8
CTQ10	14	42	42	T10
CTQ15	15	45	45	T15
CTQ20	15	49	49	T20

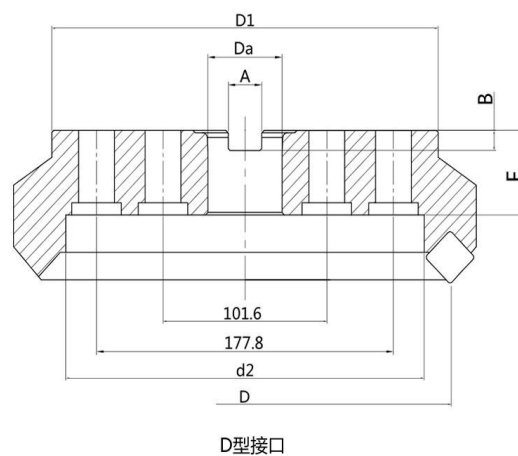
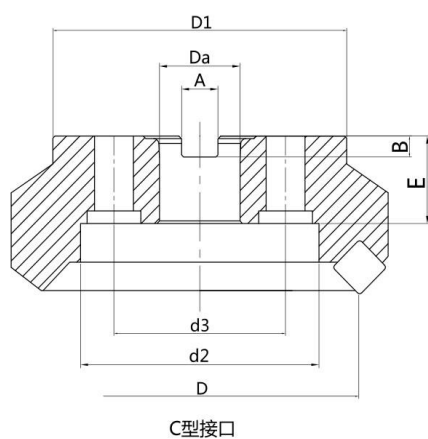
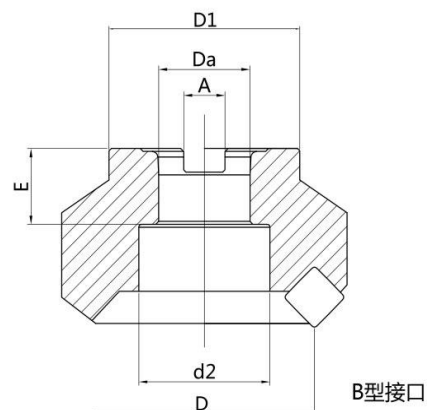
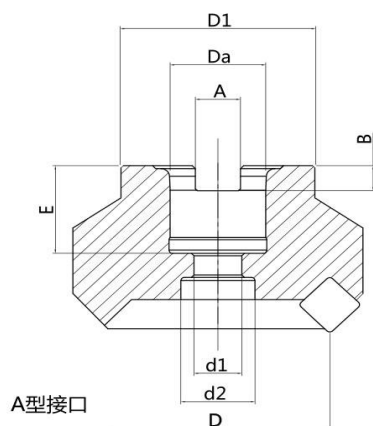


其它旗型T柄星形扳手

型号	A	B	C	T
CTT15	95	45	80	T15
CTT20	100	45	80	T20

Interface Type

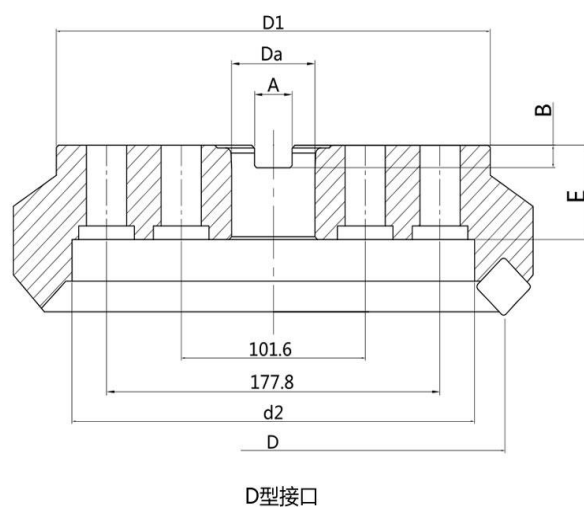
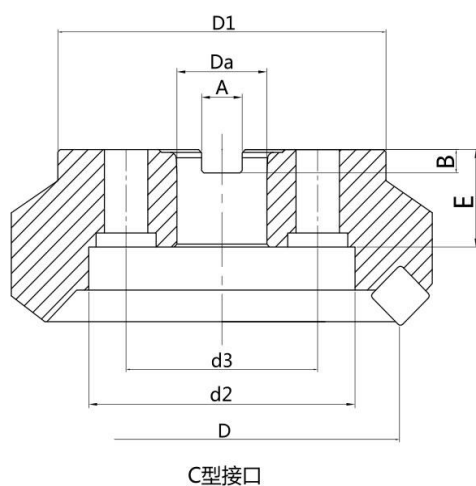
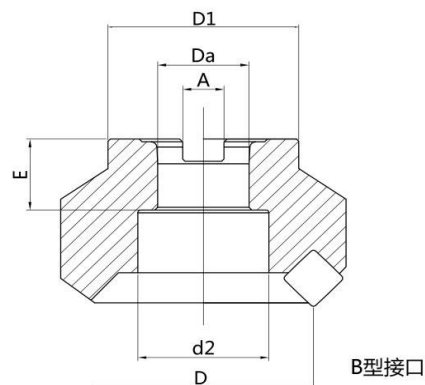
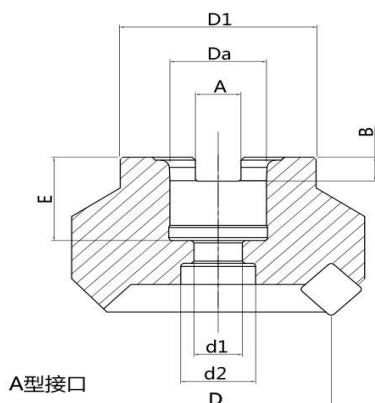
公制刀柄



Dimension (mm)										I/T Type
D	Da	A	B	E	D1		d1	d2	d3	
					模具铣	普通铣				
32	16	8.4	5.6	20	30	—	9	13.5	—	
40	16	8.4	5.6	20	35	—	9	13.5	—	A
40	22	10.4	6.3	22	38	—	11	17	—	A
50	22	10.4	6.3	22	40	45	11	17	—	A
63	22	10.4	6.3	22	47	—	11	17	—	A
80	27	12.4	7	28	58	70	13	22	—	A
100	32	14.4	8	26	66	85	18	26	—	A
100	32	14.4	8	26	66	85	—	46	—	B
125	40	16.4	9	32	85	—	22	32	—	A
125	40	16.4	9	32	85	—	—	56	—	B
160	40	16.4	9	32	110	—	—	90	66.7	C
200	60	25.7	14	40	130	—	—	132	101.6	C
250	60	25.7	14	40	160	—	—	150	101.6	C
315	60	25.7	14	40	220	—	—	220	—	D

Interface Type

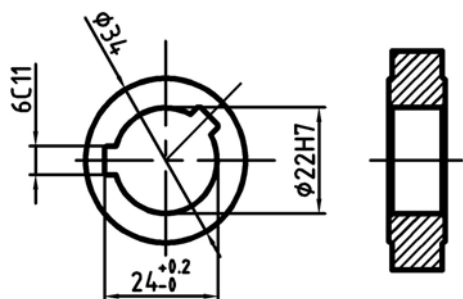
英制刀柄



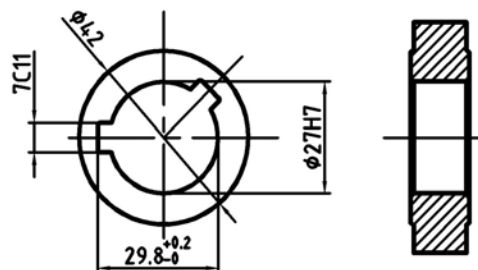
Dimension (mm)									I/F Type
D	Da	A	B	E	D1	d1	d2	d3	
32	16	8.4	5.6	20	30	9	13.5	—	
40	16	8.4	5.6	20	35	9	13.5	—	A
40	22	10.4	6.3	22	38	11	17	—	A
50	22	10.4	6.3	22	45	11	17	—	A
63	22	10.4	6.3	22	47	11	17	—	A
80	25.4	9.526	6	26	70	13	22	—	A
100	31.75	12.7	8	32	80	18	26	—	A
100	31.75	12.7	8	32	80	—	46	—	B
125	38.1	15.876	10	38	80	—	56	—	B
160	50.8	19.05	11	38	100	—	72	—	B
200	47.625	25.4	14	38	130	—	132	101.6	C
250	47.625	25.4	14	38	160	—	150	101.6	C
315	47.625	25.4	14	38	220	—	224	—	D

对照表

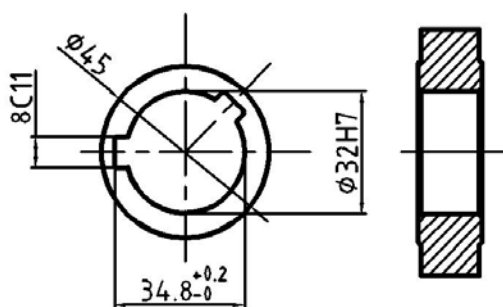
接口直径 D22



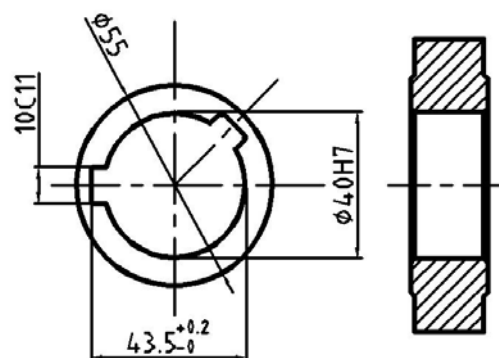
接口直径 D27



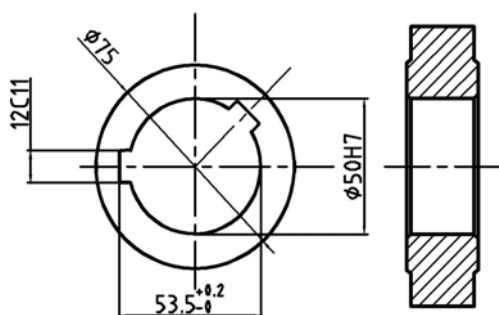
接口直径 D32



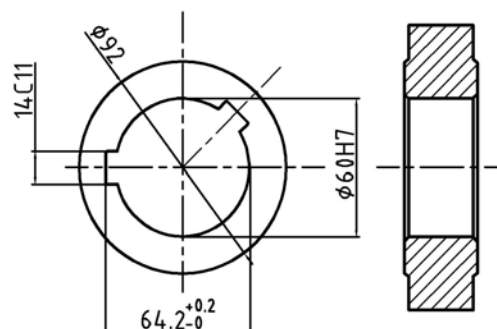
接口直径 D40



接口直径 D50

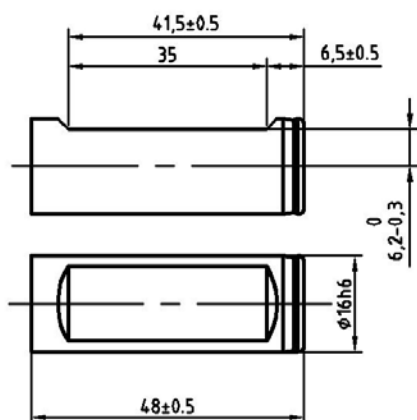


接口直径 D60

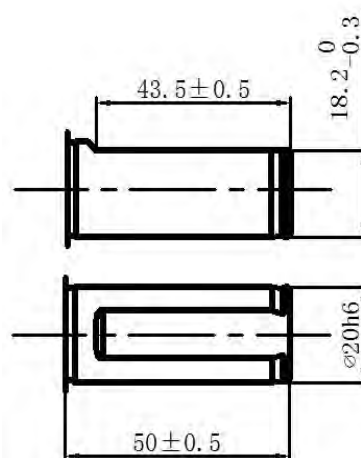


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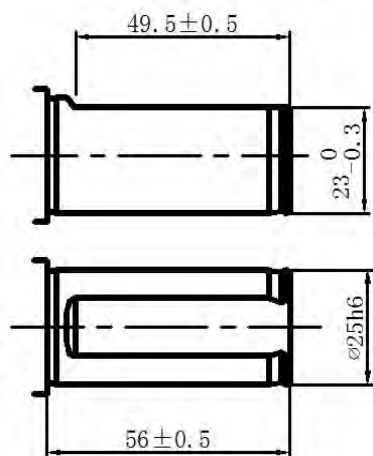
柄部直径 D16



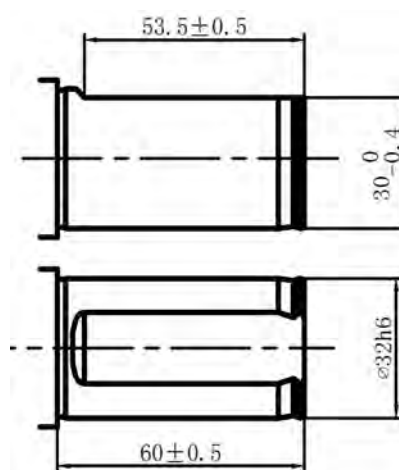
柄部直径 D20



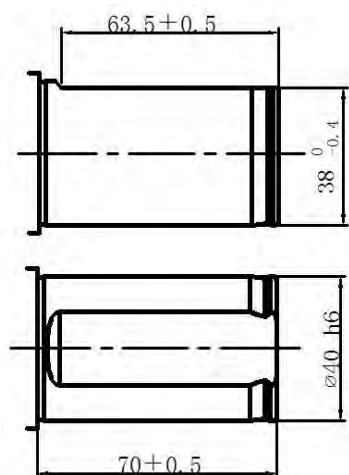
柄部直径 D25



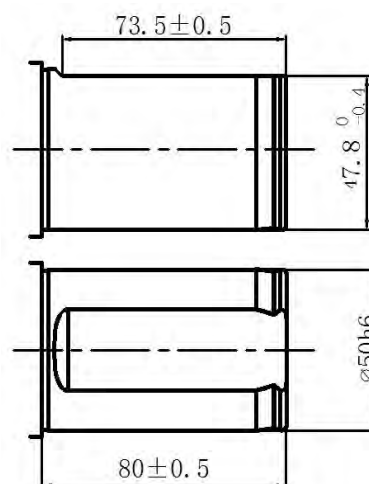
柄部直径 D32



柄部直径 D40

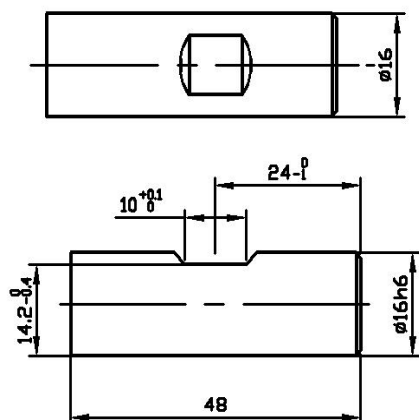


柄部直径 D50

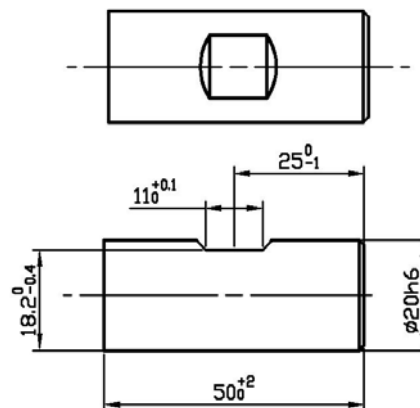


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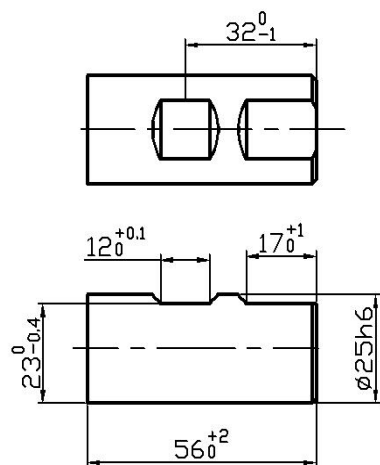
柄部直径 D16



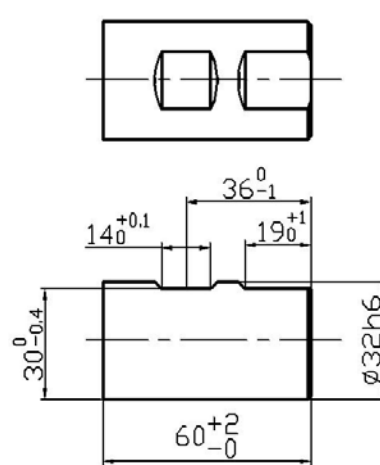
柄部直径 D20



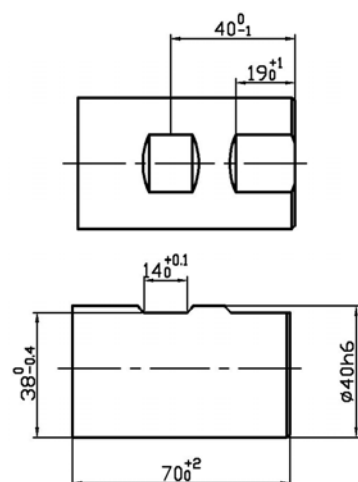
柄部直径 D25



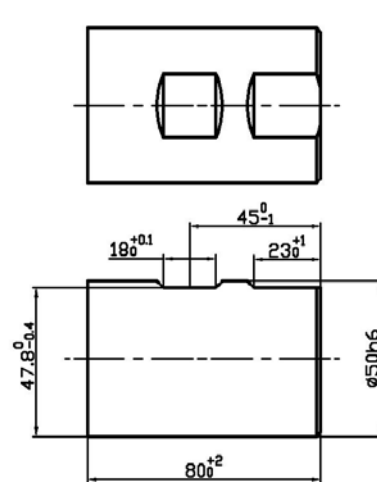
柄部直径 D32



柄部直径 D40



柄部直径 D50



内孔车刀柄削平标准

对 照 表

柄部直径 D12	
柄部直径 D16	
柄部直径 D20	
柄部直径 D25	
柄部直径 D32	
柄部直径 D40	

常用螺纹头规格

对 照 表

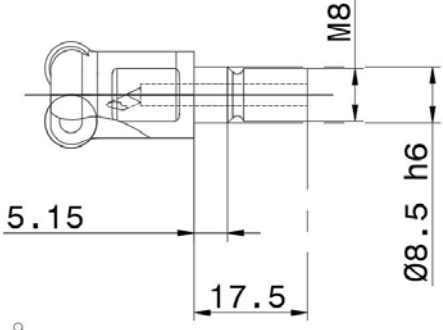
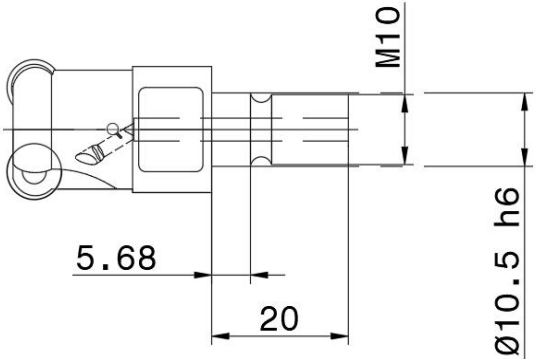
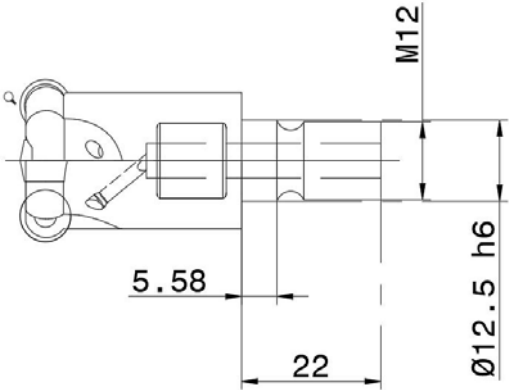
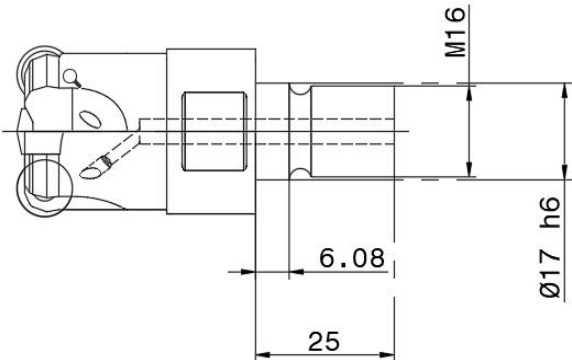
M8	
M10	
M12	
M16	

图1

Technical drawing of a mechanical part (Figure 1). The drawing includes a side view and a top view. The side view shows a complex profile with various dimensions: 30, 16.6 ± 0.1, L2, L1, L3, Ma-6H, 9 +0.5/0, 1, 63°, ø17 +0.027/0, ø44.45, 7:24, 2 ± 0.1, 21 +0.2/0, 25, 65.4 ± 0.15, L, ø45, D1, D. The top view shows a circular cross-section with concentric circles and dimensions: 22.6 +0/0.2, 22.6 +0/0.2, ø16.1 ± 0.018, 16.1 ± 0.018.

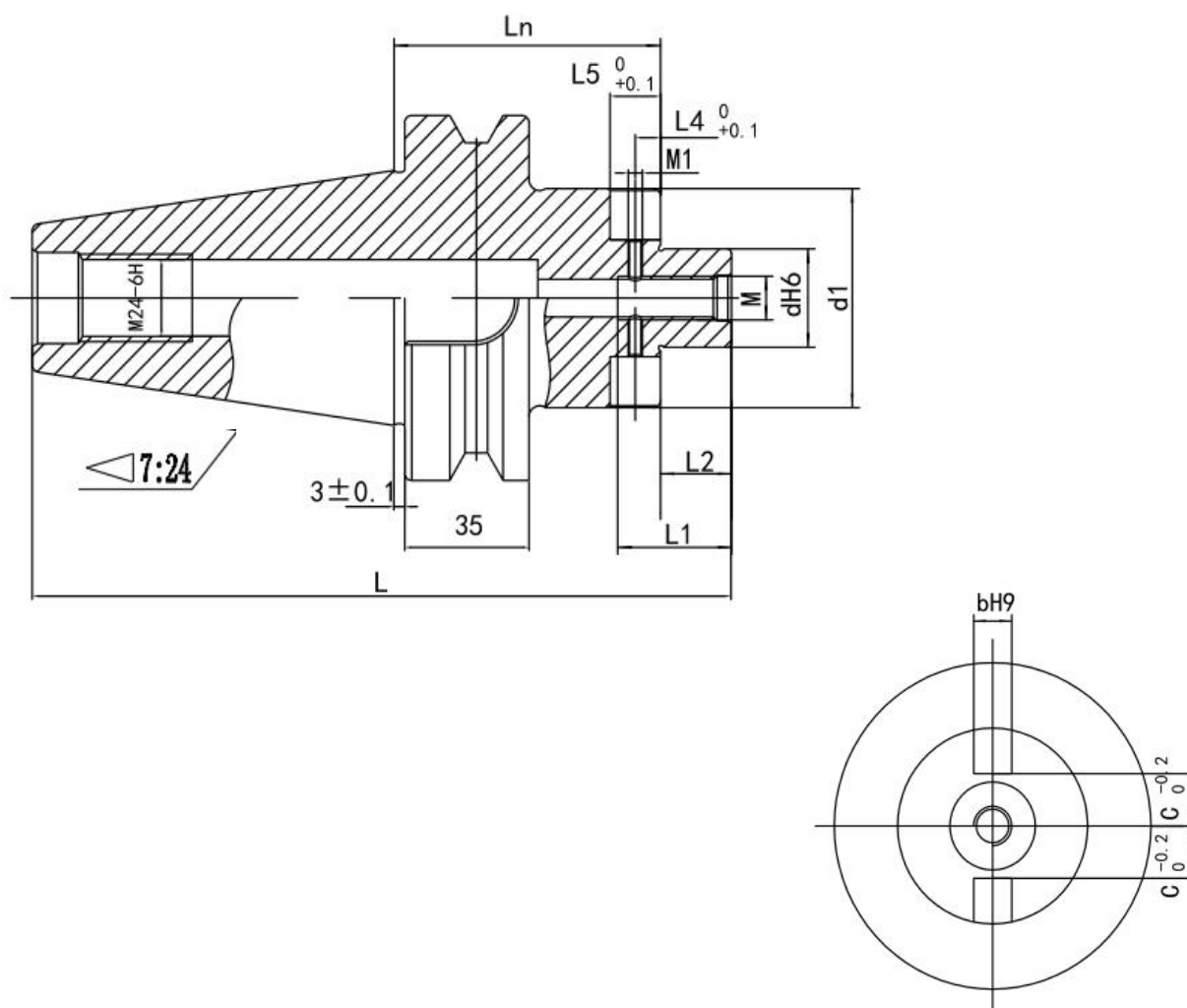
图2

Technical drawing of a mechanical part (Figure 2). The drawing includes a side view and a top view. The side view shows a complex profile with various dimensions: 30, 16.6 ± 0.1, H, H1, L2, L1, 2-Ma-6H, 9 +0.5/0, 1, 63°, ø17 +0.027/0, ø44.45, 7:24, 2 ± 0.1, 21 +0.2/0, 25, 65.4 ± 0.15, L, ø45, D1, D, L3X0.5. The top view shows a circular cross-section with concentric circles and dimensions: 22.6 +0/0.2, 22.6 +0/0.2, ø16.1 ± 0.018, 16.1 ± 0.018.

Model	Dimension (mm)									
	dH5	D	Ma	D1	L1	L2	L3	H1	H	Fig.
BT40-SLN16	16 (0/+0.008)	48	M14	36	47	52	24	—	—	1
BT40-SLN20	20 (0/+0.009)	52	M16	40	49	54	25	—	—	1
BT40-SLN25	25 (0/+0.009)	65	M18	45	24	25	—	54	62	2
BT40-SLN32	32 (0/+0.011)	72	M20	56	24	28	—	58	66	2
BT40-SLN40	40 (0/+0.011)	80	M20	60	30	32	—	68	76	2

标准刀柄详情图

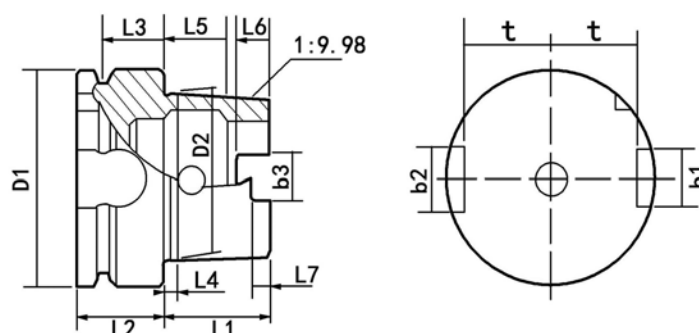
常用BT50-FMB标准柄



Model	Dimension (mm)										
	dH6	D	Ma	D1	L2	L3XD	bH9	L4	L5	L1	M1
BT50-FMB22	22	48	M10	48细/60粗	16.5	2.5X11	16.5	6.2	12.4	28	M4
BT50-FMB27	27	52	M12	60	18.5	4X12.5	18.5	7.1	14.2	32	M4
BT50-FMB32	32	65	M16	63	20.0	4X16.5	20.0	9	18	42	M5
BT50-FMB40	40	72	M16	80	23.0	4X16.5	23.0	10	20	45	M6

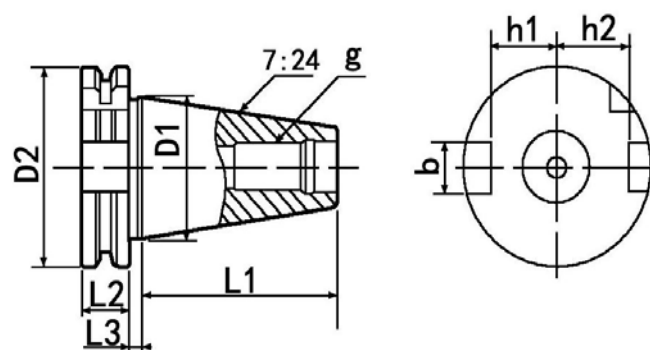
标准刀柄详情图

HSK柄详细图 DIN69893



Model	Dimension (mm)												
	D1	D2	L1	L2	L3	L4	L5	L6	L7	b1	b2	b3	t
HSK40A	40	30.007	20	20	16	4	11.42	6	3.5	11	9	8.05	17
HSK50A	50	38.009	25	26	18	5	14.13	7.5	4.5	14	12	10.54	21
HSK63A	63	48.010	32	26	18	6.3	18.13	10	6	18	16	12.5	26.5
HSK100A	100	75.013	50	29	20	10	28.56	15	10	22	20	20	44

SK柄详细图 DIN69871



Model	Dimension (mm)								
	D1	D2	L1	L2	L3	b	h1	h2	g
SK30	31.75	50	47.8	15.9	3.2	16.1	16.4	19	M12
SK40	44.45	63.55	68.4	15.9	3.2	16.4	22.8	25	M16
SK50	69.85	97.50	101.75	15.9	3.2	25.7	35.5	32.7	M24

螺丝攻牙钻孔径对照表



公制粗螺纹

规格		标准径	2级牙钻孔径	
公称直径	牙距		最大	最小
M1.0	0.25	0.75	0.785	0.729
M1.1	0.25	0.85	0.885	0.829
M1.2	0.25	0.95	0.985	0.929
M1.4	0.30	1.10	1.142	1.075
M1.6	0.35	1.25	1.321	1.221
M1.7	0.35	1.35	1.421	1.321
M1.8	0.35	1.45	1.521	1.421
M2.0	0.40	1.60	1.679	1.567
M2.2	0.45	1.75	1.838	1.713
M2.3	0.40	1.90	1.979	1.867
M2.5	0.45	2.10	2.138	2.013
M2.6	0.45	2.20	2.238	2.113
M3.0	0.50	2.50	2.599	2.459
M3.5	0.60	2.90	3.010	2.850
M4.0	0.70	3.30	3.422	3.242
M4.5	0.75	3.80	3.878	3.688
M5.0	0.80	4.20	4.334	4.134
M6.0	1.00	5.00	5.153	4.917
M7.0	1.00	6.00	6.153	5.917
M8.0	1.25	6.80	6.912	6.647
M9.0	1.25	7.80	7.912	7.647
M10	1.50	8.50	8.676	8.376
M11	1.50	9.50	9.676	9.376
M12	1.75	10.30	10.441	10.106
M14	2.00	12.00	12.210	11.835
M16	2.00	14.00	14.210	13.835
M18	2.50	15.50	15.744	15.294
M20	2.50	17.50	17.744	17.294
M22	2.50	19.50	19.744	19.294
M24	3.00	21.00	21.252	20.752
M27	3.00	24.00	24.252	23.752
M30	3.50	26.50	26.771	26.211
M33	3.50	29.50	29.771	29.221
M36	4.00	32.00	32.270	30.670
M39	4.00	35.00	35.270	34.670

公制细螺纹

规格		标准径	2级牙钻孔径	
公称直径	牙距		最大	最小
M1.0	0.2	0.80	0.821	0.786
M1.1	0.2	0.90	0.921	0.883
M1.2	0.2	1.00	1.021	0.983
M1.4	0.2	1.20	1.221	1.183
M1.6	0.2	1.40	1.421	1.383
M1.7	0.2	1.50	1.521	1.483
M1.8	0.2	1.60	1.621	1.583
M2.0	0.25	1.75	1.785	1.729
M2.2	0.25	1.95	1.985	1.929
M2.3	0.25	2.05	2.061	2.001
M2.5	0.35	2.20	2.221	2.121
M2.6	0.35	2.20	2.246	2.186
M3.0	0.35	2.70	2.721	2.621
M3.5	0.35	3.20	3.221	3.121
M4.0	0.50	3.50	3.599	3.459
M4.5	0.50	4.00	4.099	3.959
M5.0	0.50	4.50	4.599	4.459
M5.5	0.50	5.00	5.099	4.959
M6.0	0.75	5.30	5.378	5.188
M6.0	0.50	5.50	5.550	5.400
M7.0	0.75	6.30	6.378	6.188
M7.0	0.50	6.50	6.550	6.400
M8.0	1.00	7.00	7.153	6.917
M8.0	0.75	7.30	7.378	7.188
M8.0	0.50	7.50	7.520	7.400
M9.0	1.00	8.00	8.153	7.917
M9.0	0.75	8.30	8.378	8.188
M10	1.25	8.80	8.912	8.647
M10	1.00	9.00	9.153	8.917
M10	0.75	9.30	9.378	9.188
M10	0.50	9.50	9.520	9.400
M11	1.00	10.00	10.153	9.917
M11	0.75	10.30	10.378	10.188
M12	1.50	10.50	10.676	10.376
M12	1.25	10.80	10.912	10.647

螺丝攻牙钻孔径对照表



公制细螺纹

公制细螺纹				
规格		标准径	2级牙钻孔径	
公称直径	牙距		最大	最小
M12	1.00	11.00	11.153	10.917
M12	0.50	11.50	11.520	11.400
M14	1.50	12.50	12.676	12.376
M14	1.00	13.00	13.153	12.917
M15	1.50	13.50	13.676	13.376
M15	1.00	14.00	14.153	13.917
M16	1.50	14.50	14.676	14.376
M16	1.00	15.00	15.153	14.917
M17	1.50	15.50	15.676	15.376
M17	1.00	16.00	16.153	15.917
M18	2.00	16.00	16.210	15.835
M18	1.50	16.50	16.676	16.376
M18	1.00	17.00	17.153	16.917
M20	2.00	18.00	18.210	17.835
M20	1.50	18.50	18.676	18.376
M20	1.00	19.00	19.153	18.917
M22	2.00	20.00	20.210	19.835
M22	1.50	20.50	20.676	20.376
M22	1.00	21.00	21.153	20.917
M24	2.00	22.00	22.210	21.835
M24	1.50	22.50	22.676	22.376
M24	1.00	23.00	23.153	22.917
M25	2.00	23.00	23.210	22.835
M25	1.50	23.50	23.676	23.376
M25	1.00	24.00	24.153	23.917
M26	1.50	24.50	24.676	24.376
M27	2.00	25.00	25.210	24.835
M27	1.50	25.50	25.676	25.376
M27	1.00	26.00	26.153	25.917
M28	2.00	26.00	26.210	25.835
M28	1.50	26.50	26.676	26.376
M28	1.00	27.00	27.153	26.917
M30	3.00	27.00	27.252	26.752
M30	2.00	28.00	28.210	27.835
M30	1.50	28.50	28.676	28.376
M30	1.00	29.00	29.153	28.917

G16

公制细螺纹

公制细螺纹				
规格		标准径	2级牙钻孔径	
公称直径	牙距		最大	最小
M32	2.00	30.00	30.210	29.835
M32	1.50	30.50	30.676	30.376
M33	3.00	30.00	30.252	29.752
M33	2.00	31.00	31.21	30.835
M33	1.50	31.50	31.676	31.376
M35	1.50	33.50	33.676	33.376
M36	3.00	33.00	33.252	32.752
M36	2.00	34.00	34.210	33.835
M36	1.50	34.50	34.676	34.376

英制螺纹

规格		钻孔径	
		硬材	软材
W1/8 -40		2.65	2.60
W5/32 -32		3.25	3.20
W3/16 -24		3.75	3.70
W1/4 -20		5.10	5.00
W5/16 -18		6.60	6.50
W3/8 -16		8.00	7.90
W7/16 -14		9.400	9.30
W1/2 -12		10.70	10.50
W9/16 -12		12.30	12.00
W5/8 -11		13.70	13.50
W3/4 -10		16.70	16.50
W7/8 -9		19.50	19.30
W1 -8		22.40	22.00
W1-1/8 -7		25.00	24.80
W1-1/4 -7		28.30	28.00

螺丝攻牙钻孔径对照表



美制粗螺纹

规格 (UNC)	标准径	2级牙钻孔径	
		最大	最小
NO. 1 —64	1.55	1.582	1.425
NO. 2 —56	1.80	1.871	1.695
NO. 3 —48	2.10	2.146	1.941
NO. 4 —40	2.30	2.385	2.157
NO. 5 —40	2.60	2.697	2.487
NO. 6 —32	2.80	2.895	2.642
NO. 8 —32	3.40	3.530	3.302
NO. 10 —24	3.90	3.962	3.683
NO. 12 —24	4.50	4.597	4.344
1/4 —20	5.10	5.257	4.979
5/16 —18	6.60	6.731	6.401
3/8 —16	8.00	8.153	7.798
7/16 —14	9.40	9.550	9.144
1/2 —13	10.90	11.023	10.592
9/16 —12	12.20	12.446	11.989
5/8 —11	13.60	13.868	13.386
3/4 —10	16.60	16.840	16.307
7/8 —9	19.60	19.761	19.177
1 —8	22.30	22.606	21.971
1-1/8 —7	25.00	25.349	24.638
1-1/4 —7	28.20	28.524	27.813
1-3/8 —6	30.80	31.115	30.353
1-1/2 —6	34.00	34.290	33.528
1-3/4 —5	39.50	39.827	38.964
2 —4-1/2	45.20	45.593	44.679

美制细螺纹

规格 (UNF)	标准径	2级牙钻孔径	
		最大	最小
NO. 0 —80	1.25	1.305	1.182
NO. 1 —72	1.55	1.612	1.474
NO. 2 —64	1.85	1.912	1.756
NO. 3 —56	2.10	2.197	2.025
NO. 4 —48	2.40	2.458	2.271
NO. 5 —44	2.70	2.740	2.551
NO. 6 —40	2.90	3.022	2.820
NO. 8 —36	3.50	3.606	3.404
NO. 10 —32	4.10	4.165	3.963
NO. 12 —28	4.60	4.724	4.496
1/4 —28	5.50	5.588	5.360
5/16 —24	6.90	7.035	6.782
3/8 —24	8.50	8.636	8.382
7/16 —20	9.90	10.033	9.729
1/2 —20	11.50	11.607	11.329
9/16 —18	12.90	13.081	12.751
5/8 —18	14.50	14.681	14.351
3/4 —16	17.50	17.678	17.323
7/8 —14	20.50	20.675	20.270
1 —12	23.30	23.571	23.114
1-1/8 —12	26.50	26.746	26.289
1-1/4 —12	29.60	29.921	29.464
1-3/8 —12	32.80	30.096	32.639
1-1/2 —12	36.00	36.271	35.814

英制电器螺纹

规格	钻孔径
2BA	4.0-4.2
3BA	3.4-3.6
4BA	3.0-3.2
5BA	2.7-2.8
6BA	2.4-2.5

螺 丝 攻 牙 钻 孔 径 对 照 表



美制挤压丝攻钻孔

规格 (UNC)	精度	2级牙钻孔径	
		最大	最小
1 -64UNC	GH5	1.76	1.68
2 -56	GH4	2.04	1.96
3 -48	GH4	2.35	2.25
4 -40	GH5	2.64	2.54
5 -40	GH5	2.97	2.87
6 -32	GH5	3.22	3.11
8 -32	GH6	3.89	3.78
10 -24	GH6	4.44	4.30
12 -24	GH6	5.07	4.96
1/4 -20	GH7	5.86	5.73
5/16 -18	GH7	7.38	7.23
3/8 -16	GH7	8.89	8.72
7/16 -14	GH8	10.40	10.02
1/2 -13	GH8	11.92	11.70
0 -80UNF	GH5	1.45	1.39
1 -72	GH5	1.77	1.70
2 -64	GH4	2.06	1.98
3 -56	GH4	2.37	2.29
4 -48	GH5	2.68	2.59
5 -44	GH5	2.99	2.90
6 -40	GH5	3.29	3.19
8 -36	GH5	3.91	3.81
10 -32	GH6	4.53	4.44
12 -28	GH6	5.13	5.03
1/4 -28	GH7	6.00	5.91
5/16 -24	GH7	7.53	7.42
3/8 -24	GH7	9.10	8.99
7/16 -24	GH8	10.62	10.48
1/2 -24	GH8	12.20	12.06

公制挤压丝攻钻孔

规格 (UNF)	精度	2级牙钻孔径	
		最大	最小
M1.0 0.25	GH4	0.92	0.89
M1.2 0.25	GH4	1.11	1.09
M1.4 0.30	GH4	1.305	1.26
M1.6 0.30	GH4	1.47	1.43
M1.7 0.35	GH4	1.57	1.52
M1.8 0.35	GH4	1.67	1.62
M2.0 0.40	GH4	1.84	1.79
M2.2 0.45	GH5	2.04	1.98
M2.3 0.40	GH4	2.14	2.09
M2.5 0.45	GH5	2.34	2.27
M2.6 0.45	GH5	2.44	2.37
M3.0 0.50	GH5	2.82	2.75
M3.5 0.60	GH5	3.27	3.19
M4.0 0.70	GH6	3.72	3.65
M5.0 0.80	GH6	4.67	4.59
M6.0 1.00	GH7	5.59	5.49
M7.0 1.00	GH7	6.59	6.48
M8.0 1.25	GH7	7.49	7.36
M10 1.50	GH7	9.34	9.22
M10 1.25	GH7	9.49	9.35
M12 1.75	GH8	11.23	11.09
M12 1.25	GH9	11.50	11.36

美制特细牙螺旋

规格UNEF	标准径	最大	最小
N0.12 -32	4.70	4.826	4.623
1/4 -32	5.60	5.689	5.487
5/16 -32	7.10	7.264	7.087
3/8 -32	8.70	8.864	8.662
7/16 -28	10.20	10.337	10.135
1/2 -28	11.80	11.938	11.710
9/16 -24	13.20	13.385	13.132
5/8 -24	14.80	14.968	14.732
3/4 -20	17.80	17.957	17.679
7/8 -20	21.00	21.132	20.854
1 -20	24.10	24.307	24.029

螺丝攻牙钻孔径对照表



美制管螺纹

规格	钻孔径		
	NPT		NPS
	使用铰刀	不使用铰刀	
1/16 -27	5.94	6.15	6.35
1/8 -27	8.33	8.43	8.74
1/4 -18	10.72	11.13	11.13
3/8 -18	14.27	14.27	14.68
1/2 -14	17.48	17.86	18.26
3/4 -14	22.63	23.01	23.42
1 -11-1/2	28.58	28.98	29.36
1-1/4-11-1/2	37.31	37.69	38.10
1-1/2-11-1/2	43.26	43.66	44.45
2 -11-1/2	55.17	55.58	53.36

英制管螺纹

PS规格 (新规格Rp)	标准径	最大	最小
1/16 -28	6.50	6.632	6.490
1/8 -28	8.50	8.637	8.495
1/4 -19	11.4	11.549	11.341
3/8 -19	14.9	15.054	14.846
1/2 -14	18.6	18.773	18.489
3/4 -14	24.00	24.259	23.975
1 -11	30.2	30.472	30.110
1 1/4 -11	38.8	39.133	38.771
1 1/2 -11	44.7	45.026	44.664
2 -11	56.5	56.837	56.475

美制管螺纹

PT规格 (新规格Rc)	标准径		有效牙部之长度 (最小) 中之 母螺牙内径	标准长度 (最小) 中之母螺牙 内径
	使用铰刀	不使用 铰刀		
1/16 -28	6.10	6.20	6.244	6.384
1/8 -28	8.10	8.20	8.249	8.388
1/4 -19	10.7	11.0	10.962	11.174
3/8 -19	14.2	14.5	14.448	14.658
1/2 -14	17.6	18.0	17.979	18.263
3/4 -14	23.0	23.5	23.378	23.663
1 -11	29.0	29.5	29.459	29.822
1 1/4 -11	37.5	38.0	37.976	38.339
1 1/2 -11	43.4	44.0	43.869	44.232
2 -11	54.9	55.5	55.412	55.844

PF规格 (新规格G)

PF规格 (新规格G)	标准径	最大	最小
1/16 -28	6.70	6.843	6.561
1/8 -28	8.70	8.848	8.566
1/4 -19	11.7	11.890	11.445
3/8 -19	15.2	15.395	14.950
1/2 -14	19.00	19.172	18.631
5/8 -14	21.00	21.128	20.587
3/4 -14	24.50	24.658	24.117
7/8 -14	28.20	28.418	27.877
1 -11	30.6	30.931	30.291
1 1/8 -11	35.2	35.579	34.939
1 1/4 -11	39.2	39.592	38.952
1 1/2 -11	45.0	45.485	44.845
1 3/4 -11	51.0	51.428	50.788
2 -11	57.0	57.296	56.656

螺丝攻牙钻孔径对照表



英制螺纹标准规格表55°

GB/T 7307-2001

(in英寸) 代号	(n) 牙数	(p) 螺距	大径D	小径d1
G1/16"	28	0.907	7.723	6.561
G1/8"	28	0.907	9.728	8.566
G1/4"	19	1.337	13.157	11.445
G3/8"	19	1.337	16.662	14.95
G1/2"	14	1.814	20.955	18.631
G5/8"	14	1.814	22.911	20.587
G3/4"	14	1.814	26.441	24.117
G7/8"	14	1.814	30.201	27.877
G1"	11	2.309	33.249	30.291
G1-1/8"	11	2.309	37.897	34.939
G1-1/4"	11	2.309	41.91	38.952
G1-1/2"	11	2.309	47.803	44.845
G1-3/4"	11	2.309	53.746	50.788
G2"	11	2.309	59.614	56.656
G2-1/4"	11	2.309	65.71	62.752
G2-1/2"	11	2.309	75.184	72.226
G2-3/4"	11	2.309	81.534	78.578
G3"	11	2.309	87.884	84.926
G3-G1/2"	11	2.309	100.33	97.372
G4"	11	2.309	113.03	110.072
G5"	11	2.309	138.43	135.472
G6"	11	2.309	163.83	160.872

注：1英寸 (in) =25.4mm

螺丝攻牙钻孔径对照表



英制螺纹标准规格表55°（密封用圆锥管螺纹）

(GB/T 7306.1 、 7306.2-2000)

(in英寸) 代号	(n) 牙数	(p) 螺距	基准平面上的基准直径		牙高h (mm)	装备 余量 mm	外螺纹长度mm	
			大径D	小径d1			有效长度	基准 距离
ZG1/16"	28	0.907	7.723	6.561	0.581	2.5	6.5	4
ZG1/8"	28	0.907	9.728	8.566				
ZG1/4"	19	1.337	13.157	11.445	0.856	3.7	9.7	6
ZG3/8"	19	1.337	16.662	14.95			10.1	6.4
ZG1/2"	14	1.814	20.955	18.631	1.162	5	13.2	8.2
ZG3/4"	14	1.814	26.441	24.117			14.5	9.5
ZG1"	11	2.309	33.249	30.291	1.479	6.4	16.8	10.4
ZG1-1/4"	11	2.309	41.91	38.952			19.1	12.7
ZG1-1/2"	11	2.309	47.803	44.845			19.1	12.7
ZG2"	11	2.309	59.614	56.656		7.5	23.4	15.9
ZG2-1/2"	11	2.309	75.184	72.226		9.2	26.7	17.5
ZG3"	11	2.309	87.884	84.926			29.8	20.6
ZG4"	11	2.309	113.03	110.072		10.4	35.8	25.4
ZG5"	11	2.309	138.43	135.472		11.5	40.1	28.6
ZG6"	11	2.309	163.83	160.872			40.1	28.6

注：1英寸（in）=25.4mm

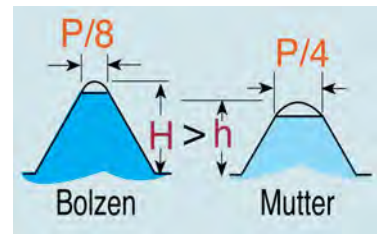
Rc是新代号，专指英制螺纹密封锥管内螺纹

而ZG是旧代号，他是指的英制螺纹密封锥管内或外螺纹

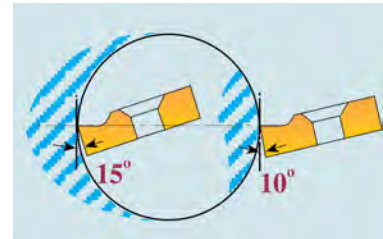
R是新代号，专指英制螺纹密封锥管外螺纹

采用螺纹车刀片的重要提示

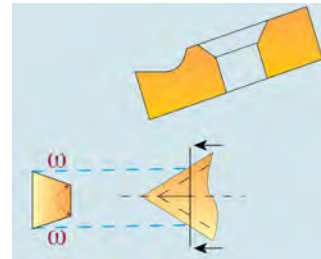
1. 在多数螺纹截面中，内螺纹和外螺纹有着不同的深度和圆角半径，故不能置换



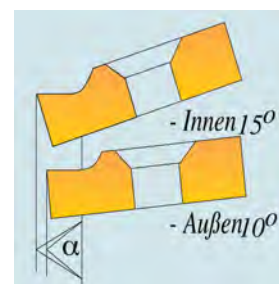
2. 标准外螺纹刀杆所用的后角为 10° ，内螺纹所用的刀片的后角为 15° 。这 5° 的差别用来调整径向间隙



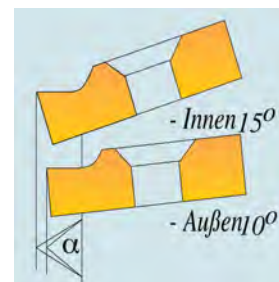
3. 刀片的后角自动保证了齿形角的间隙



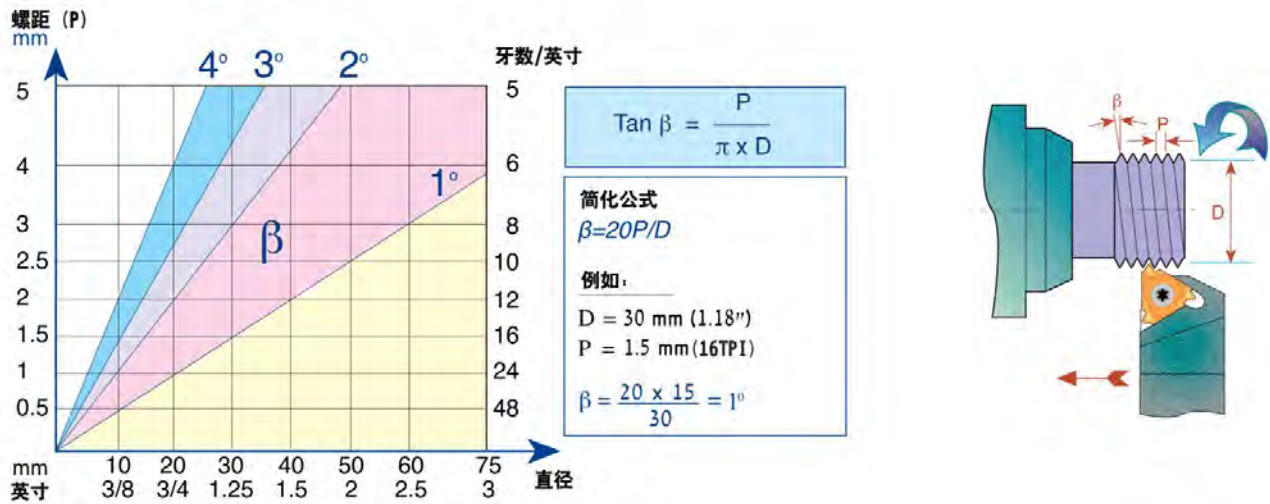
4. 精磨内外螺纹刀片应与其相符的刀杆配合使用 以保证螺纹的精确度。如果将内螺纹刀片和外螺纹刀杆混用，将会损坏刀片的几何形状和角度，造成不利的影响



5. 刀片及刀杆应配合使用。也就是说，右旋内螺纹刀片必须安装在右旋内螺纹刀杆上使用，绝对禁止错位使用



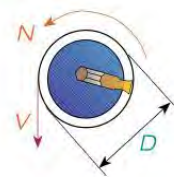
螺纹螺旋角



螺纹铣刀切削速度与转速

使用以下公式将切削速度转换成转速

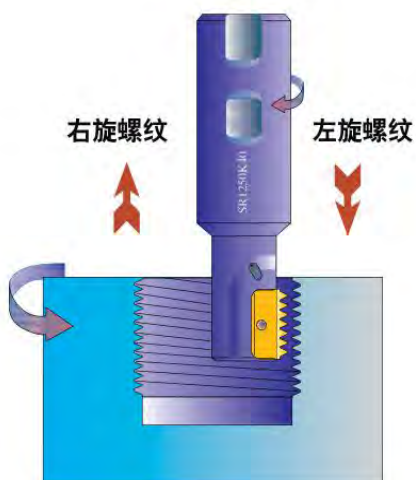
$$N = \frac{V \times 1000}{\pi \times D} = \frac{120 \times 1000}{3.14 \times 30} = 1274 \text{ UPM}$$



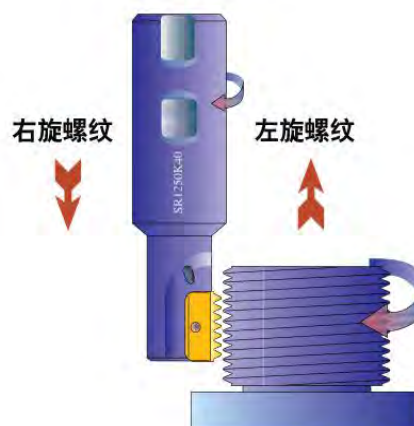
例如: $V=120 \text{ m/min}$
 $D=30 \text{ mm}$

D=切削直径

内螺纹



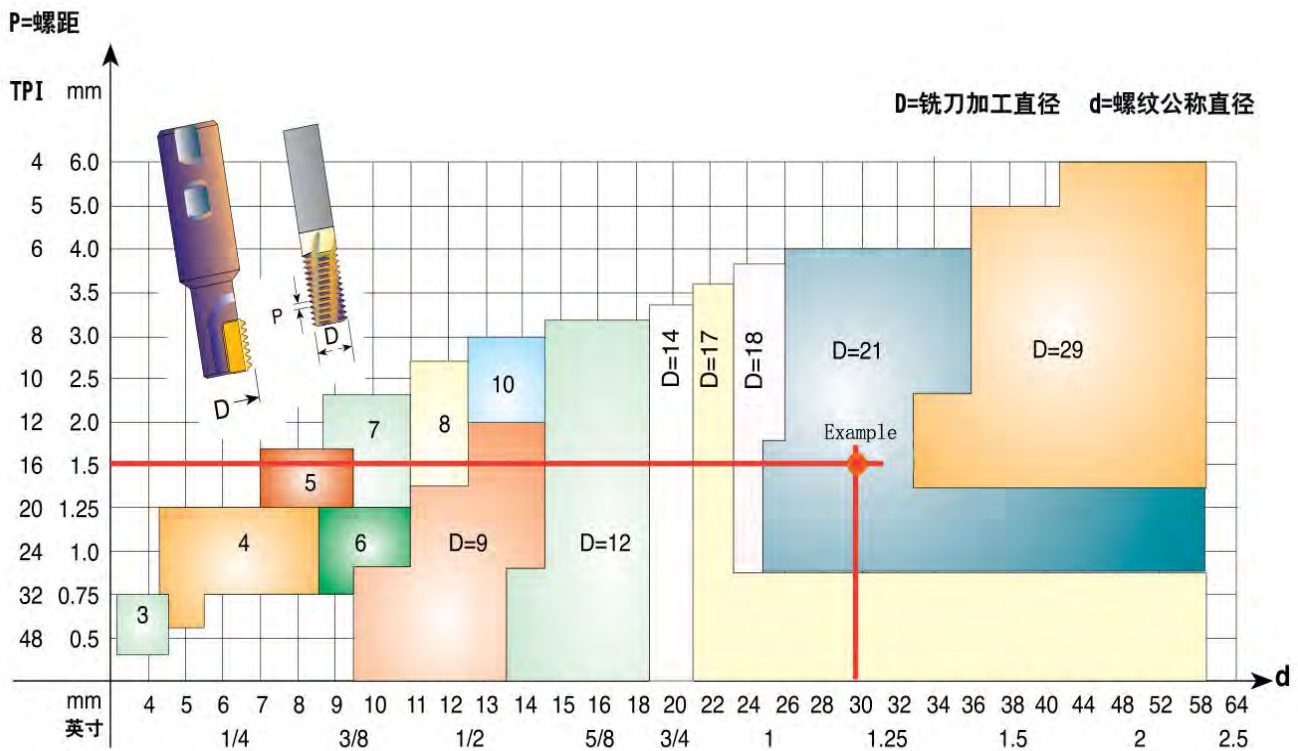
外螺纹



螺纹铣刀选用指南

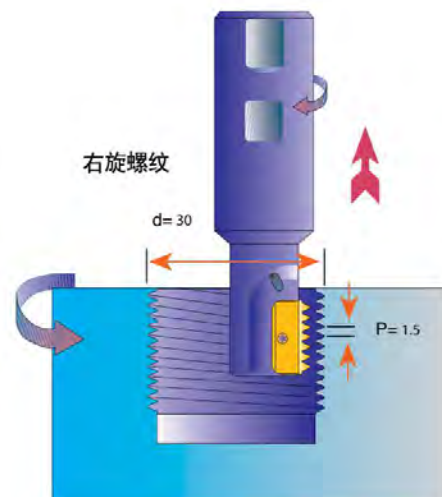
带可转位刀片及整体硬质合金螺纹铣刀

以下图标提供了相对应准确的内螺纹加工时刀具选择方案
以下图片适用于以下螺纹：ISO, UN, WHI T, NPT, NPTF, BSPT



原则上，任何小直径刀具都可以用来加工大直径螺纹

例如：要选择一款螺纹铣刀，能够加工直径为30mm，螺距为1.5mm的右内螺纹。如图所示，纵横两条红线的相交点落在D=21的范围内，即应选择刀具加工直径为21



所选刀杆为：SR0021H21

刀片为：SR0021H21

根据JIS B 0601-2001

理论（几何学）粗糙度

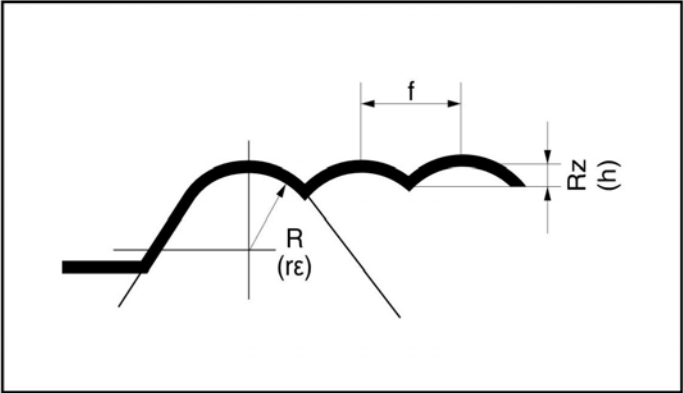
车削加工的理论粗糙度，是指在设定切削条件下所得的最小值，以公式表示如下：

$$R_z=h=\frac{f^2}{8R(r\epsilon)}\times10^3$$

Rz(h):理论表面粗糙度（μm）

f:每转进给量（mm/rev）

R(rε):刀尖角直径（mm）



表面粗糙度的计算方法

种类	符号	计算方法	说明图
最大高度	Rz	从粗曲线上沿平均线方向选取基准长度，在这部分中的最高峰高度与最低谷深度的和以微米（μm）表示即Rz值 备注：计算Rz时，从没有最高峰和最低谷部分选取基准长度。 $R_z=R_p=R_v$	
十点平均粗糙度	RzJIS	从粗曲线上沿平均线方向选取基准长度，在这部分中，分别算出5个最高峰的平均值（Yp）和5个最低谷的平均值（Yv）求和，以微米（μm）表示即Rz值。 $R_{zJIS}=\frac{(Y_{p1}+Y_{p2}+Y_{p3}+Y_{p4}+Y_{p5})+(Y_{v1}+Y_{v2}+Y_{v3}+Y_{v4}+Y_{v5})}{5}$	Yp1、Yp2、Yp3、Yp4、Yp5： 在基准长度内的5个最高峰到中心线距离的和 Yv1、Yv2、Yv3、Yv4、Yv5： 在基准长度内的5个最低谷到中心线距离的和
算术平均粗糙度	Ra	从粗曲线上沿平均线方向选取基准长度，把中心线方向看成X轴，与其垂直的方向为Y轴方向，若粗曲线由y=f(x)表示。则以微米（μm）表示Ra值可以由下式求得。 $Ra=\frac{1}{l}\int_0^l f(x) dx$	

表面粗糙度

根据JIS B 0601-2001

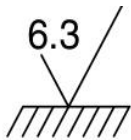
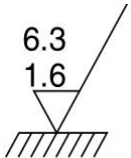
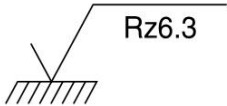
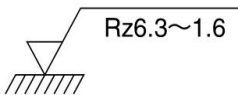
与三角符号的关系

算术平均粗糙度 Ra (μm)	最大高度 Rz (μm)	十点平均粗糙度 RzJIS (μm)	*三角符号
0.025	0.1	0.1	
0.05	0.2	0.2	
0.1	0.4	0.4	
0.2	0.8	0.8	
0.4	1.679	1.6	
0.8	3.2	3.242	
1.6	6.3	6.3	
3.0	12.5	12.5	
6.3	25	25	
12.5	50	50	
25	100	100	

表示方法:

- 1: Ra为1.6 μm时→1.6 μmRa
- 2: Rz为6.3 μm时→6.3 μmRz
- 3: RzJIS为6.3 μm时→6.3 μmRzJIS

JIS表示例

Ra的符号表示例	Rz的符号表示例
①仅指示上限时 (上限为6.3 μmRa时)  ②仅指示上限和下限时 上限为6.3 μmRa时 下限为1.6 μmRa时 	①仅指示上限时 在参数符号后记入表面粗糙度的指示值  ②指示上、下限时 在参数符号后按照(上限~下限)的形式记入表面粗糙度指定值 

注: Ra和Rz的表示方法不同请注意

表面粗糙度符号的注意点

上表根据JIS B 0601-200记载

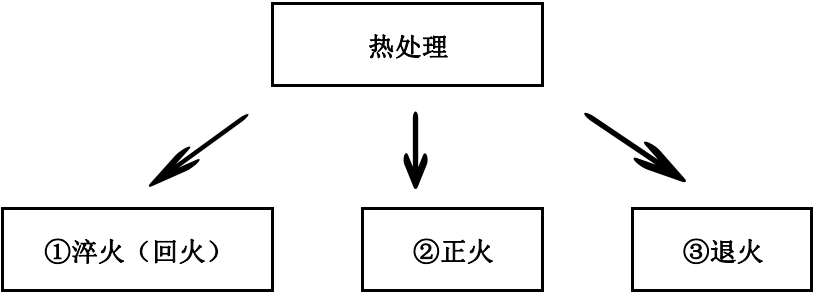
为了与ISO标准一致,从JIS B 0601-2001版开始,变更为右表符号。

十点平均粗糙度(Rz)从2001年版本开始不再使用,但由于它在日本比较普及依然作为RzJIS参考值保留下来

种类	JIS B 0601-1994的符号	JIS B 0601-2001的符号
最大高度	Ry →	Rz
十点平均粗糙度	Rz →	(RzJIS)
算术平均粗糙度	Ra →	Ra

热处理

改变钢的软硬即热处理，可以大体分3类

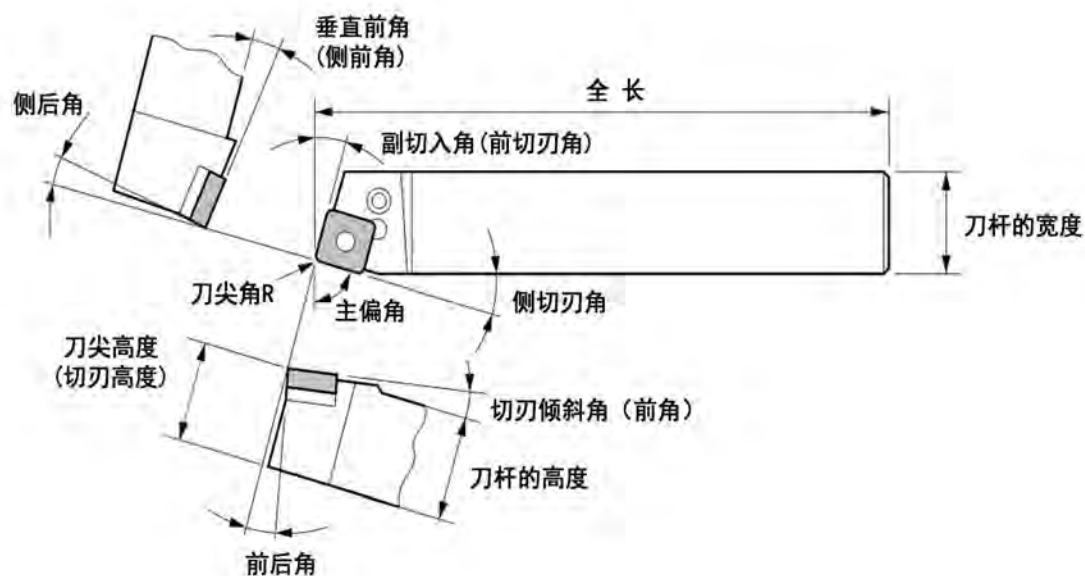


	淬火回火	加热到727° C以上后，以水或油迅速冷却至550° C	变硬改善耐磨损性。 淬火为将火热的钢铁急剧冷却（加水或油）硬化，内部残留硬块。要取出硬块就要使用回火程序。（一次冷却后重新加热到200° C～600° C）
	正火	加热到727° C以上后，较快冷却到600° C后常温条件下冷却	结晶细微化（铁也是由小细胞一样的东西构成。）可使机械性质与可加工性提高。
	退火	加热到727° C以上后，慢慢冷却到600° C后常温条件下冷却	与正火一样会使结晶细微化，但是比正火的 结晶稍大。 以改善可加工性、纠正变形为目的

硬度的表示法

硬度名称	参照规格型号	记入例	记入例的说明
布氏硬度	JIS Z 2243: 1992	250HB	硬度值：250，硬度符号：HB
		200～250HB	硬度值有上下限时（下同）
维氏硬度	JIS Z 2244: 1998	640HV	硬度值：640，硬度符号：HV
洛氏硬度	JIS Z 2245: 1992	60HRC	硬度值：60，硬度符号：HRC
萧氏硬度	JIS Z 2246: 1992	50HS	硬度值：50，硬度符号：HS

刀杆各部分的名称和角度



刀尖角度的功能

刀尖角度	名称	机 能	效 果
前角	侧前角	影响切削阻力、切削热、切屑排出、工具寿命	- 使用正角 (+) 时，切刃锋利度好。切削阻力减少，刀尖强度下降。 - 可切削性好的材料或细工件加工时，推荐使用正角 (+) - 类似黑皮或继续加工需要刀尖强度时变小 (或负角)
	切刃倾斜角 (前角)		
后角	前后角	避免切刃以外的部分与加工面的接触	若后角变小刀尖强度变大，但后刀面磨损在短时间内变大，工具寿命缩短
	侧后角		
切刃角	主偏角	影响切削处理性能、切削力方向	切刃角大时，切屑变厚且切屑控制能力提高
	侧切刃角	影响切削处理性能、切削力方向	- 侧切刃角大时，切屑变薄且控制能力变弱，但是切削力由于被分散了，故刀尖强度提高 - 侧切刃角变小，切屑处理能力提高
	前切刃角	防止刀尖与切削面的磨损	前切刃角变大，刀尖强度降低

切削速度 (vc)

$$vc = \frac{\pi \cdot Dm \cdot n}{1000} \text{ (m/min)}$$

vc (m/min) : 切削速度
Dm (mm) : 工件材料直径
 π (3.14) : 圆周率
n (min^{-1}) : 主轴转速

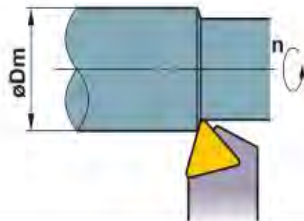
★用1000去除, 为将mm换算成m

(例题) 主轴转速 700min^{-1} 、工件直径 $\phi 50$, 求此时的切削速度

(答) $\pi=3.14$, $Dm=50$, $n=700$ 代入公式

$$vc = \frac{\pi \cdot Dm \cdot n}{1000} = \frac{3.14 \times 50 \times 700}{1000} = 110\text{m/min}$$

切削速度为 110m/min



进给量 (f)

$$f = \frac{l}{n} \text{ (mm/rev)}$$

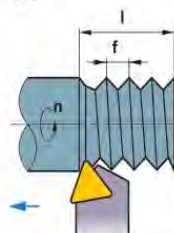
f (mm/rev) : 每转进给量
l (mm/min) : 每分钟切削长度
n (min^{-1}) : 主轴转速

(例题) 主轴转速 500min^{-1} 、每分钟切削长度 120mm/min 求此时的每转进给量

(答) $n=500$, $l=120$ 代入公式

$$f = \frac{l}{n} = \frac{120}{500} = 0.24\text{mm/rev}$$

每转进给量为 0.24mm/rev



切削时间 (Tc)

$$Tc = \frac{lm}{l} \text{ (min)}$$

Tc (min) : 切削时间
lm (mm) : 工件长度
l (mm/min) : 每分钟的切削长度

(例题) 长度 100mm 的工件, 主轴转速 1000min^{-1} , 进给量 0.2mm/rev , 求此时的切削时间

(答) 首先根据进给量与主轴转速, 求出每分钟切削长度

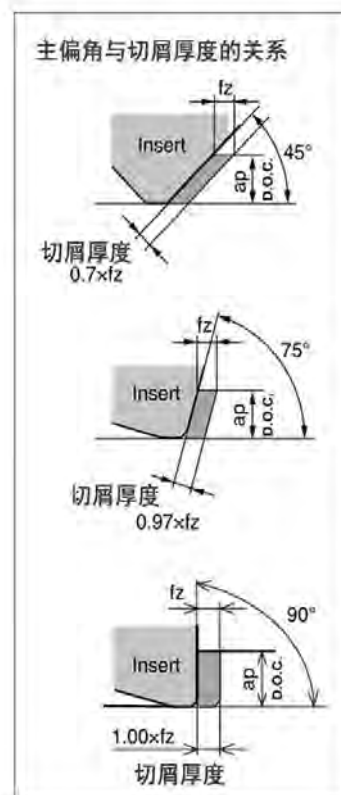
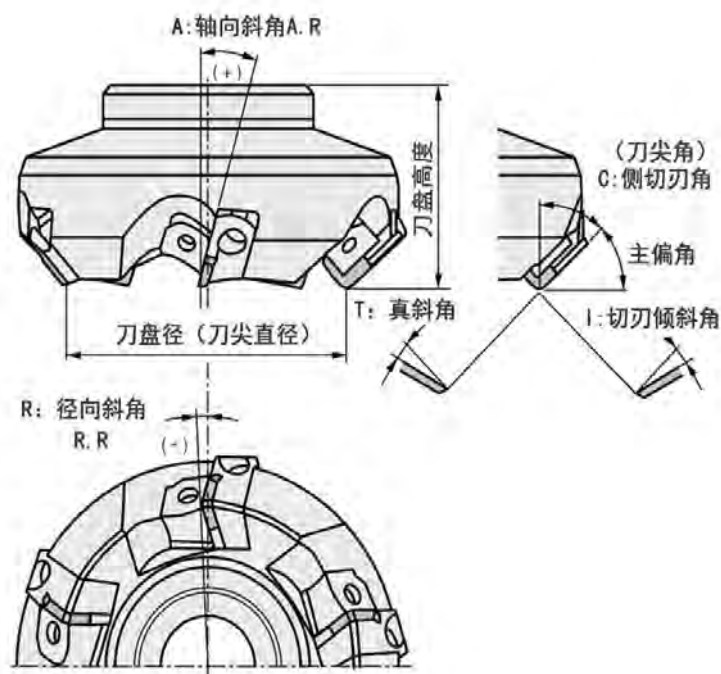
$$l = f \times n = 0.2 \times 1000 = 200\text{mm/min}$$

将l代入公式

$$Tc = \frac{lm}{l} = \frac{100}{200} = 0.5\text{min}$$

$0.5 \times 60 = 30$ (秒)

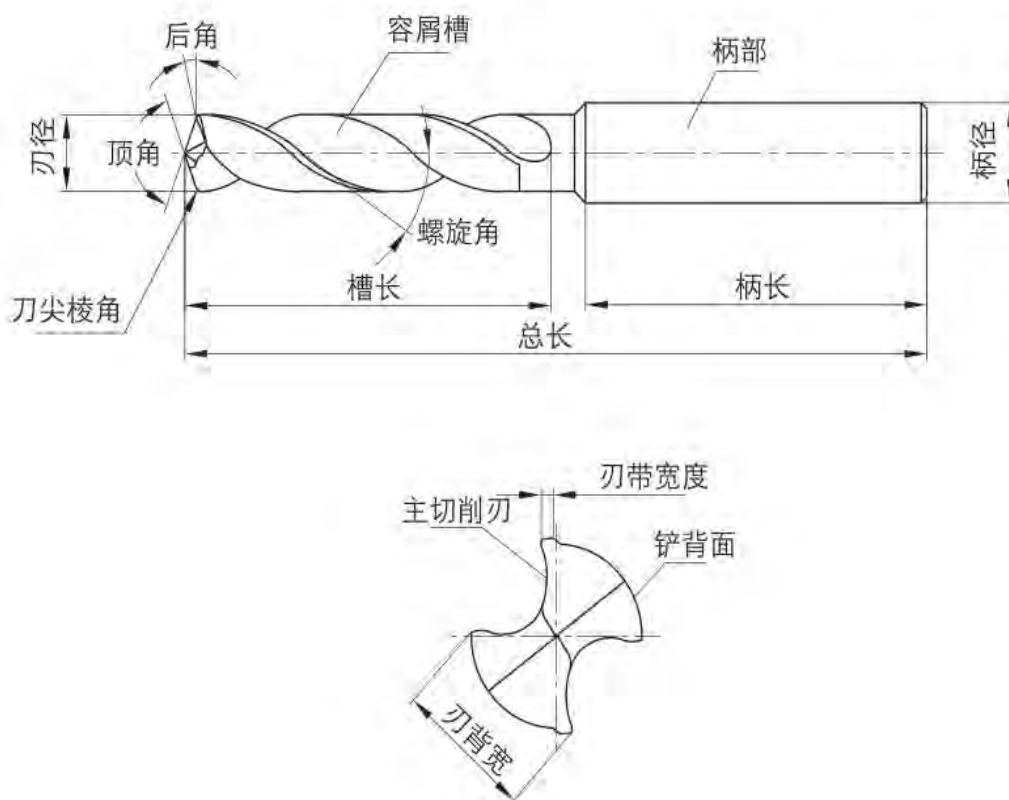
刀盘各部分的名称和角度



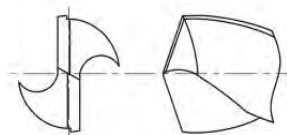
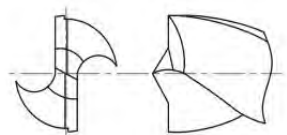
刀尖角度的功能

符号	名称	机能	效果
A	轴向斜角: A. R.	控制切屑排出方向、切屑力等	正角时: 切削性能好、且不易发生熔着
R	径向斜角: A. R.	控制切屑排出方向、切屑力等	负角时: 切屑排出性良好
C	侧切刃角	控制切屑的厚度、切屑力等	角度大时: 切屑厚度减少, 缓和切削负荷
T	真斜角	实际的前角	正角 (大) 时: 切削性好, 不易着, 切刃强度变弱 负角 (小) 时: 切刃强度高, 但易发生切屑熔着
I	切刃倾斜角	控制切屑排出方向	正角 (大) 时, 切屑排出良好, 切削阻力较小, 刀尖强度较小

整体硬质合金钻头各部分名称



具有代表性的几种主后刀面形式

形状	 (圆锥型)	 (双平面型)	 (烛台型)
特征	- 后刀面呈圆锥面，越向钻头中心处，后角越大。 - 应用范围较广，软材料及高硬度材料均可加工。	- 后刀面为双平面的钻头，磨削方便，且切入性能良好。 - 小直径钻头常用	- 双重顶角的钻头，具有良好的定心性，钻通孔时毛刺较少。 - 是加工薄板的首选钻头。

铣削参数表



推荐切削参数 切削速度：Vc (m/min)						
ISO	材料		条件	拉伸度(N/mm)	硬度 HB	材料号
P	非合金钢，碳钢 铸铁，易切削钢	<0.25%C	退火	420	125	1
		>=0.25%C	退火	650	190	2
		<0.55%C	淬火和调质	850	250	3
		>=0.55%C	退火	750	220	4
			淬火和调质	1000	300	5
	低碳合金钢， 铸钢（合金成份低于5%）		退火	600	200	6
			淬火和调质	930	275	7
				1000	300	8
				1200	350	9
	高碳合金钢， 铸钢，工具钢		退火	680	200	10
			淬火和调质	1100	325	11
M	不锈钢，铸钢		铁素体 / 马氏体	680	200	12
			马氏体	820	240	13
			奥氏体	600	180	14
K	灰铸铁（GG）		铁素体		160	15
			珠光体		250	16
	球墨铸铁（GGG）		铁素体		180	17
			珠光体		260	18
	可锻铸铁		铁素体		130	19
			珠光体		230	20
N	锻铝合金		未固化		60	21
			固化		100	22
	铸铝合金	<=12% Si	未固化		75	23
			固化		90	24
		>12% Si	高温处理		130	25
	铜合金	>1% Pb	易切		110	26
			黄铜		90	27
			电解铜		100	28
	有色金属		硬质塑料，纤维			29
			硬橡胶			30
S	高温合金	铁基	退火		200	31
			固化		280	32
		镍基或 钴基	退火		250	33
			固化		350	34
			铸造		320	35
	钛，钛合金			Rm 400		36
			a+β 合金固化	Rm 1050		37
H	高硬钢		淬硬		55HRC	38
			淬硬		60HRC	39
	冷硬铸铁		铸造		400	40
	球墨铸铁		淬硬		55HRC	41

铣削参数表



推荐切削参数 切削速度: Vc (m/min)						
未涂层	涂层					金属陶瓷
CT101	CT5320/ CT5420	CT9320	CT8520	CT8320/ CT8420	CT7320/CT7420	CT4100
	220-370	250-410	170-250	150-210		270-510
	180-310	200-380	130-220	120-200		230-450
	115-195	140-230	90-170	70-140		150-370
	130-210	160-250	100-190	90-150		210-430
	115-175	135-195	70-160	60-130		150-280
	175-265	190-290	150-220	130-170		150-285
	130-215	150-240	110-190	70-150		100-190
	105-185	135-225	80-160	60-110		90-170
	95-160	120-190	70-120	50-100		80-130
	85-155	100-150	70-110	50-80		100-170
	75-135	90-140	60-100	40-80		80-120
	115-270		90-200	75-170		
	100-230		70-160	60-130		
	120-275		100-210	80-180		
70-130	130-300				150-300	
50-110	120-280				140-280	
45-90	110-220				115-230	
40-85	100-200				100-200	
70-140	150-250				190-310	
55-115	100-250				120-260	
550-700						
600-750						
800-900						
650-800						
250-320						
300-400						
300-400						
210-280						
150-250						
150-250						
	40-80		30-65			
	30-60		20-45			
	35-70		25-50			
	30-60		20-40			
	35-65		20-45			
	90-130		60-100			
	35-70		25-55			
	40-75				60-90	
	30-55				50-90	
					60-100	
					60-80	

浅孔钻参数表



2-4倍径

推荐切削参数（U钻2D, 3D, 4D加工数据）

ISO	材料		条件	拉伸度 (N/mm)	硬度 HB	材料号	切削速度 Vc (m/min)	XOMX 05 φ14-φ16
P	非合金钢，碳钢 铸铁 易切削钢	<0.25%C	退火	420	125	1	220-350	0.04-0.06
		>=0.25%C	退火	650	190	2	180-280	0.06-0.10
		<0.55%C	淬火和调质	850	250	3	140-240	0.08-0.12
		>=0.55%C	退火	750	220	4	140-240	0.08-0.12
			淬火和调质	1000	300	5	140-240	0.08-0.12
	低碳合金钢， 铸钢（合金成份低于5%）		退火	600	200	6	140-240	0.08-0.16
			淬火和调质	930	275	7	100-180	0.06-0.16
				1000	300	8	100-180	0.06-0.16
				1200	350	9	100-180	0.06-0.16
	高碳合金钢， 铸钢，工具钢		退火	680	200	10	140-200	0.06-0.12
			淬火和调质	1100	325	11	100-160	0.06-0.12
M	不锈钢，铸钢		铁素体 / 马氏体	680	200	12	150-250	0.06-0.12
			马氏体	820	240	13	150-250	0.06-0.12
			奥氏体	600	180	14	150-250	0.06-0.12
K	灰铸铁（GG）		铁素体		160	15	160-260	0.08-0.18
			珠光体		250	16	160-260	0.08-0.18
	球墨铸铁（GGG）		铁素体		180	17	160-260	0.08-0.18
			珠光体		260	18	160-260	0.08-0.18
	可锻铸铁		铁素体		130	19	120-220	0.08-0.14
			珠光体		230	20	120-220	0.08-0.14
N	锻铝合金		未固化		60	21	200-350	0.06-0.15
			固化		100	22	200-350	0.06-0.15
	铸铝合金	<=12% Si	未固化		75	23	200-350	0.06-0.15
			固化		90	24	200-350	0.06-0.15
		>12% Si	高温处理		130	25	200-350	0.06-0.15
	铜合金	>1% Pb	易切		110	26	150-250	0.06-0.15
			黄铜		90	27	150-250	0.06-0.15
			电解铜		100	28	150-250	0.06-0.15
	有色金属		硬质塑料，纤维			29	150-250	0.06-0.15
			硬橡胶			30	150-250	0.06-0.15
S	高温合金	铁基	退火		200	31	30-60	0.05-0.08
			固化		280	32	30-60	0.05-0.08
		镍基或 钴基	退火		250	33	30-60	0.05-0.08
			固化		350	34	30-60	0.05-0.08
			铸造		320	35	30-60	0.05-0.08
	钛，钛合金			Rm 400		36	50-80	0.06-0.09
			a+β 合金固化	Rm 1050		37	50-80	0.06-0.09
H	高硬钢		淬硬		55HRC	38	30-60	0.05-0.09
			淬硬		60HRC	39	30-60	0.06-0.09
	冷硬铸铁		铸造		400	40	30-60	0.06-0.09
	球墨铸铁		淬硬		55HRC	41	30-60	0.05-0.09

浅孔钻参数表



2-4倍径

推荐切削参数（U钻2D, 3D, 4D加工数据）进给（mm/rev）

XOMX 06 φ17-φ19	XOMX 07 φ20-φ22	XOMX 08 φ23-φ26	XOMX 09 φ27-φ31	XOMX 11 φ32-φ36	XOMX 13 φ37-φ43	XOMX 15 φ44-φ50
0.04-0.06	0.04-0.08	0.04-0.08	0.06-0.10	0.06-0.10	0.08-0.12	0.08-0.12
0.06-0.10	0.06-0.12	0.06-0.12	0.08-0.14	0.08-0.14	0.08-0.16	0.10-0.16
0.08-0.12	0.08-0.16	0.08-0.16	0.10-0.16	0.10-0.16	0.10-0.18	0.10-0.18
0.08-0.12	0.08-0.16	0.08-0.16	0.10-0.16	0.10-0.16	0.10-0.18	0.10-0.18
0.08-0.12	0.08-0.16	0.08-0.16	0.10-0.16	0.10-0.16	0.10-0.18	0.10-0.18
0.08-0.16	0.08-0.20	0.08-0.20	0.08-0.20	0.10-0.22	0.10-0.22	0.10-0.24
0.06-0.16	0.08-0.20	0.08-0.20	0.08-0.20	0.08-0.22	0.10-0.22	0.10-0.22
0.06-0.16	0.08-0.20	0.08-0.20	0.08-0.20	0.08-0.22	0.10-0.22	0.10-0.22
0.06-0.16	0.08-0.20	0.08-0.20	0.08-0.20	0.08-0.22	0.10-0.22	0.10-0.22
0.06-0.12	0.08-0.16	0.08-0.16	0.08-0.18	0.08-0.20	0.10-0.20	0.10-0.20
0.06-0.12	0.08-0.16	0.08-0.16	0.08-0.18	0.08-0.20	0.10-0.20	0.10-0.20
0.06-0.12	0.06-0.16	0.06-0.16	0.08-0.18	0.08-0.20	0.10-0.20	0.10-0.20
0.06-0.12	0.06-0.16	0.06-0.16	0.08-0.18	0.08-0.20	0.10-0.20	0.10-0.20
0.08-0.18	0.10-0.20	0.10-0.20	0.10-0.20	0.10-0.20	0.10-0.22	0.10-0.22
0.08-0.18	0.10-0.20	0.10-0.20	0.10-0.20	0.10-0.20	0.10-0.22	0.10-0.22
0.08-0.18	0.10-0.20	0.10-0.20	0.10-0.20	0.10-0.20	0.10-0.22	0.10-0.22
0.08-0.18	0.10-0.20	0.10-0.20	0.10-0.20	0.10-0.20	0.10-0.22	0.10-0.22
0.08-0.14	0.10-0.16	0.10-0.16	0.10-0.16	0.10-0.18	0.10-0.18	0.10-0.18
0.08-0.14	0.10-0.16	0.10-0.16	0.10-0.16	0.10-0.18	0.10-0.18	0.10-0.18
0.06-0.15	0.08-0.16	0.08-0.16	0.08-0.18	0.08-0.18	0.10-0.18	0.10-0.18
0.06-0.15	0.08-0.16	0.08-0.16	0.08-0.18	0.08-0.18	0.10-0.18	0.10-0.18
0.06-0.15	0.08-0.16	0.08-0.16	0.08-0.18	0.08-0.18	0.10-0.18	0.10-0.18
0.06-0.15	0.08-0.16	0.08-0.16	0.08-0.18	0.08-0.18	0.10-0.18	0.10-0.18
0.06-0.15	0.08-0.16	0.08-0.16	0.08-0.16	0.08-0.17	0.10-0.18	0.10-0.18
0.06-0.15	0.08-0.16	0.08-0.16	0.08-0.16	0.08-0.17	0.10-0.18	0.10-0.18
0.06-0.15	0.08-0.16	0.08-0.16	0.08-0.16	0.08-0.17	0.10-0.18	0.10-0.18
0.06-0.15	0.08-0.16	0.08-0.16	0.10-0.17	0.10-0.17	0.10-0.18	0.10-0.18
0.06-0.15	0.08-0.16	0.08-0.16	0.10-0.17	0.10-0.17	0.10-0.18	0.10-0.18
0.05-0.08	0.05-0.09	0.05-0.09	0.06-0.10	0.06-0.10	0.06-0.12	0.06-0.12
0.05-0.08	0.05-0.09	0.05-0.09	0.06-0.10	0.06-0.10	0.06-0.12	0.06-0.12
0.05-0.08	0.05-0.09	0.05-0.09	0.06-0.10	0.06-0.10	0.06-0.12	0.06-0.12
0.05-0.08	0.05-0.09	0.05-0.09	0.06-0.10	0.06-0.10	0.06-0.12	0.06-0.12
0.06-0.09	0.06-0.10	0.06-0.10	0.06-0.10	0.06-0.10	0.06-0.10	0.06-0.10
0.06-0.09	0.06-0.10	0.06-0.10	0.06-0.10	0.06-0.10	0.06-0.10	0.06-0.10
0.05-0.09	0.05-0.10	0.05-0.10	0.05-0.10	0.05-0.10	0.05-0.10	0.05-0.10
0.06-0.09	0.05-0.10	0.05-0.10	0.05-0.10	0.05-0.10	0.05-0.10	0.05-0.10
0.05-0.09	0.05-0.10	0.05-0.10	0.05-0.10	0.05-0.10	0.05-0.10	0.05-0.10

浅孔钻参数表



5倍径

推荐切削参数（U钻5D加工数据）

推荐切削参数（U钻5D加工数据）								
ISO	材料		条件	拉伸度 (N/mm)	硬度 HB	材料号	切削速度 Vc (m/min)	XOMX 05 φ14-φ16
P	非合金钢，碳钢,铸铁 易切削钢	<0.25%C	退火	420	125	1	220-350	0.04-0.05
		>=0.25%C	退火	650	190	2	180-280	0.06-0.08
		<0.55%C	淬火和调质	850	250	3	140-240	0.06-0.10
		>=0.55%C	退火	750	220	4	140-240	0.06-0.10
			淬火和调质	1000	300	5	140-240	0.06-0.10
	低碳合金钢， 铸钢（合金成份低于5%）		退火	600	200	6	140-240	0.06-0.12
			淬火和调质	930	275	7	100-180	0.06-0.12
				1000	300	8	100-180	0.06-0.12
				1200	350	9	100-180	0.06-0.12
	高碳合金钢， 铸钢，工具钢		退火	680	200	10	140-200	0.06-0.10
			淬火和调质	1100	325	11	100-160	0.06-0.10
M	不锈钢，铸钢		铁素体 / 马氏体	680	200	12	150-250	0.06-0.10
			马氏体	820	240	13	150-250	0.06-0.10
			奥氏体	600	180	14	150-250	0.06-0.10
K	灰铸铁（GG）		铁素体		160	15	160-260	0.08-0.14
			珠光体		250	16	160-260	0.08-0.14
	球墨铸铁（GGG）		铁素体		180	17	160-260	0.08-0.14
			珠光体		260	18	160-260	0.08-0.14
	可锻铸铁		铁素体		130	19	120-220	0.08-0.12
			珠光体		230	20	120-220	0.08-0.12
N	锻铝合金		未固化		60	21	200-350	0.06-0.15
			固化		100	22	200-350	0.06-0.15
	铸铝合金	<=12% Si	未固化		75	23	200-350	0.06-0.15
			固化		90	24	200-350	0.06-0.15
		>12% Si	高温处理		130	25	200-350	0.06-0.15
	铜合金	>1% Pb	易切		110	26	150-250	0.06-0.15
			黄铜		90	27	150-250	0.06-0.15
			电解铜		100	28	150-250	0.06-0.15
	有色金属		硬质塑料，纤维			29	150-250	0.06-0.15
			硬橡胶			30	150-250	0.06-0.15
S	高温合金	铁基	退火		200	31	30-60	0.05-0.07
			固化		280	32	30-60	0.05-0.07
		镍基或 钴基	退火		250	33	30-60	0.05-0.07
			固化		350	34	30-60	0.05-0.07
			铸造		320	35	30-60	0.05-0.07
	钛，钛合金			Rm 400		36	50-80	0.05-0.08
			a+β 合金固化	Rm 1050		37	50-80	0.05-0.08
H	高硬钢		淬硬		55HRC	38	30-60	0.05-0.08
			淬硬		60HRC	39	30-60	0.05-0.08
	冷硬铸铁		铸造		400	40	30-60	0.05-0.08
	球墨铸铁		淬硬		55HRC	41	30-60	0.05-0.08

浅孔钻参数表



5倍径

推荐切削参数（U钻5D加工数据）进给（mm/rev）

XOMX 06 φ17-φ19	XOMX 07 φ20-φ22	XOMX 08 φ23-φ26	XOMX 09 φ27-φ31	XOMX 11 φ32-φ36	XOMX 13 φ37-φ43	XOMX 15 φ44-φ50
0.04-0.05	0.04-0.05	0.04-0.06	0.06-0.08	0.06-0.08	0.08-0.10	0.08-0.10
0.06-0.08	0.06-0.10	0.06-0.10	0.08-0.12	0.08-0.12	0.08-0.14	0.10-0.14
0.06-0.10	0.06-0.12	0.06-0.12	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15
0.06-0.10	0.06-0.12	0.06-0.12	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15
0.06-0.10	0.06-0.12	0.06-0.12	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15
0.06-0.12	0.08-0.16	0.08-0.16	0.08-0.18	0.10-0.20	0.10-0.20	0.10-0.22
0.06-0.12	0.08-0.16	0.08-0.16	0.08-0.18	0.10-0.20	0.10-0.20	0.10-0.22
0.06-0.12	0.08-0.16	0.08-0.16	0.08-0.18	0.10-0.20	0.10-0.20	0.10-0.22
0.06-0.10	0.08-0.12	0.08-0.12	0.08-0.16	0.08-0.18	0.10-0.18	0.10-0.20
0.06-0.10	0.08-0.12	0.08-0.12	0.08-0.16	0.08-0.18	0.10-0.18	0.10-0.20
0.06-0.10	0.06-0.12	0.06-0.12	0.08-0.16	0.08-0.18	0.10-0.18	0.10-0.20
0.06-0.10	0.06-0.12	0.06-0.12	0.08-0.16	0.08-0.18	0.10-0.18	0.10-0.20
0.08-0.14	0.08-0.16	0.08-0.16	0.10-0.18	0.10-0.18	0.10-0.20	0.10-0.20
0.08-0.14	0.08-0.16	0.08-0.16	0.10-0.18	0.10-0.18	0.10-0.20	0.10-0.20
0.08-0.14	0.08-0.16	0.08-0.16	0.10-0.18	0.10-0.18	0.10-0.20	0.10-0.20
0.08-0.14	0.08-0.16	0.08-0.16	0.10-0.16	0.10-0.16	0.10-0.16	0.10-0.16
0.08-0.14	0.08-0.16	0.08-0.16	0.10-0.16	0.10-0.16	0.10-0.16	0.10-0.16
0.06-0.15	0.08-0.16	0.08-0.16	0.08-0.16	0.08-0.16	0.10-0.17	0.10-0.17
0.06-0.15	0.08-0.16	0.08-0.16	0.08-0.16	0.08-0.16	0.10-0.17	0.10-0.17
0.06-0.15	0.08-0.16	0.08-0.16	0.08-0.16	0.08-0.16	0.10-0.17	0.10-0.17
0.06-0.15	0.08-0.16	0.08-0.16	0.08-0.16	0.08-0.16	0.10-0.17	0.10-0.17
0.06-0.15	0.08-0.16	0.08-0.16	0.08-0.15	0.08-0.16	0.10-0.17	0.10-0.17
0.06-0.15	0.08-0.16	0.08-0.16	0.08-0.15	0.08-0.16	0.10-0.17	0.10-0.17
0.06-0.15	0.08-0.16	0.08-0.16	0.10-0.16	0.10-0.16	0.10-0.17	0.10-0.17
0.06-0.15	0.08-0.16	0.08-0.16	0.10-0.16	0.10-0.16	0.10-0.17	0.10-0.17
0.05-0.08	0.05-0.08	0.05-0.08	0.06-0.09	0.06-0.09	0.06-0.10	0.06-0.10
0.05-0.08	0.05-0.08	0.05-0.08	0.06-0.09	0.06-0.09	0.06-0.10	0.06-0.10
0.05-0.08	0.05-0.08	0.05-0.08	0.06-0.09	0.06-0.09	0.06-0.10	0.06-0.10
0.05-0.08	0.05-0.08	0.05-0.08	0.06-0.09	0.06-0.09	0.06-0.10	0.06-0.10
0.05-0.08	0.06-0.09	0.06-0.09	0.06-0.10	0.06-0.10	0.06-0.10	0.06-0.10
0.05-0.08	0.06-0.09	0.06-0.09	0.06-0.10	0.06-0.10	0.06-0.10	0.06-0.10
0.05-0.08	0.05-0.09	0.05-0.09	0.05-0.10	0.05-0.10	0.05-0.10	0.05-0.10
0.05-0.08	0.05-0.09	0.05-0.09	0.05-0.10	0.05-0.10	0.05-0.10	0.05-0.10
0.05-0.08	0.05-0.09	0.05-0.09	0.05-0.10	0.05-0.10	0.05-0.10	0.05-0.10

皇冠钻参数表



推荐切削参数（皇冠钻加工数据）

推荐切削参数（皇冠钻加工数据）							
ISO	材料		条件	拉伸度(N/mm)	硬度 HB	材料号	切削速度 Vc（m/min）
P	非合金钢，碳钢 铸铁 易切削钢	<0.25%C	退火	420	125	1	80-140
		>=0.25%C	退火	650	190	2	80-130
		<0.55%C	淬火和调质	850	250	3	80-120
		>=0.55%C	退火	750	220	4	70-110
			淬火和调质	1000	300	5	50-90
	低碳合金钢， 铸钢（合金成份低于5%）		退火	600	200	6	70-120
			淬火和调质	930	275	7	70-110
				1000	300	8	50-90
				1200	350	9	40-70
	高碳合金钢， 铸钢，工具钢		退火	680	200	10	50-90
			淬火和调质	1100	325	11	40-80
M	不锈钢，铸钢		铁素体 / 马氏体	680	200	12	40-70
			马氏体	820	240	13	40-70
			奥氏体	600	180	14	30-70
				K	灰铸铁（GG）		铁素体
珠光体		250	16				80-140
球墨铸铁（GGG）		铁素体			180	17	90-180
		珠光体			260	18	80-140
可锻铸铁		铁素体			130	19	90-160
		珠光体			230	20	80-140
N	锻铝合金		未固化		60	21	90-220
			固化		100	22	90-220
	铸铝合金	<=12% Si	未固化		75	23	90-220
			固化		90	24	90-220
		>12% Si	高温处理		130	25	80-160
	铜合金	>1% Pb	易切		110	26	90-220
			黄铜		90	27	90-220
			电解铜		100	28	90-220
	有色金属		硬质塑料，纤维			29	
			硬橡胶			30	
S	高温合金		铁基	退火	200	31	30-60
				固化	280	32	20-50
			镍基或 钴基	退火	250	33	20-50
				固化	350	34	20-50
				铸造	320	35	20-50
	钛，钛合金			Rm 400		36	20-50
			a+β 合金固化	Rm 1050		37	20-50
H	高硬钢		淬硬		55HRC	38	20-50
			淬硬		60HRC	39	20-50
	冷硬铸铁		铸造		400	40	
	球墨铸铁		淬硬		55HRC	41	

皇冠钻参数表



推荐切削参数（皇冠钻加工数据） 进给（mm/rev）						
φ12-φ13.9	φ14-φ15.9	φ16-φ19.9	φ20-φ25.9			
0.18-0.30	0.20-0.35	0.25-0.45	0.25-0.45			
0.18-0.30	0.20-0.35	0.25-0.45	0.25-0.45			
0.18-0.30	0.20-0.35	0.25-0.45	0.25-0.45			
0.18-0.30	0.20-0.35	0.25-0.45	0.25-0.45			
0.18-0.30	0.20-0.35	0.25-0.45	0.25-0.45			
0.16-0.32	0.18-0.35	0.23-0.40	0.25-0.45			
0.16-0.32	0.18-0.35	0.23-0.40	0.25-0.45			
0.16-0.32	0.18-0.35	0.23-0.40	0.25-0.45			
0.16-0.32	0.18-0.35	0.23-0.40	0.25-0.45			
0.15-0.25	0.18-0.28	0.20-0.30	0.22-0.33			
0.15-0.25	0.18-0.28	0.20-0.30	0.22-0.33			
0.14-0.20	0.16-0.24	0.16-0.26	0.18-0.30			
0.14-0.20	0.16-0.24	0.16-0.26	0.18-0.30			
0.14-0.20	0.16-0.24	0.16-0.26	0.18-0.30			
0.25-0.40	0.30-0.45	0.35-0.55	0.35-0.60			
0.25-0.40	0.30-0.45	0.35-0.55	0.35-0.60			
0.25-0.40	0.30-0.45	0.35-0.55	0.35-0.60			
0.25-0.40	0.30-0.45	0.35-0.55	0.35-0.60			
0.25-0.40	0.30-0.45	0.35-0.55	0.35-0.60			
0.30-0.45	0.35-0.50	0.40-0.60	0.45-0.70			
0.30-0.45	0.35-0.50	0.40-0.60	0.45-0.70			
0.30-0.45	0.35-0.50	0.40-0.60	0.45-0.70			
0.30-0.45	0.35-0.50	0.40-0.60	0.45-0.70			
0.30-0.45	0.35-0.50	0.40-0.60	0.45-0.70			
0.30-0.45	0.35-0.50	0.40-0.60	0.45-0.70			
0.30-0.45	0.35-0.50	0.40-0.60	0.45-0.70			
0.10-0.15	0.12-0.18	0.12-0.20	0.14-0.22			
0.10-0.15	0.12-0.18	0.12-0.20	0.14-0.22			
0.10-0.15	0.12-0.18	0.12-0.20	0.14-0.22			
0.10-0.15	0.12-0.18	0.12-0.20	0.14-0.22			
0.10-0.15	0.12-0.18	0.12-0.20	0.14-0.22			
0.10-0.18	0.12-0.20	0.14-0.22	0.16-0.25			
0.10-0.18	0.12-0.20	0.14-0.22	0.16-0.25			
0.10-0.18	0.12-0.20	0.14-0.22	0.16-0.25			
0.10-0.18	0.12-0.20	0.14-0.22	0.16-0.25			

硬质合金钻参数表



推荐切削参数（整体硬质合金钻加工数据）

ISO	材料		条件	拉伸度 (N/mm)	硬度 HB	材料号	切削速度 Vc (m/min)
P	非合金钢，碳钢 铸铁 易切削钢	<0.25%C	退火	420	125	1	80-120
		>=0.25%C	退火	650	190	2	80-110
		<0.55%C	淬火和调质	850	250	3	70-100
		>=0.55%C	退火	750	220	4	70-100
			淬火和调质	1000	300	5	70-100
	低碳合金钢， 铸钢（合金成份低于5%）		退火	600	200	6	70-90
			淬火和调质	930	275	7	70-90
				1000	300	8	50-80
				1200	350	9	40-70
	高碳合金钢， 铸钢，工具钢		退火	680	200	10	50-80
			淬火和调质	1100	325	11	40-70
M	不锈钢，铸钢		铁素体 / 马氏体	680	200	12	30-60
			马氏体	820	240	13	30-60
			奥氏体	600	180	14	30-60
K	灰铸铁（GG）		铁素体		160	15	65-80
			珠光体		250	16	65-80
	球墨铸铁（GGG）		铁素体		180	17	85-105
			珠光体		260	18	75-90
	可锻铸铁		铁素体		130	19	65-80
			珠光体		230	20	65-80
N	锻铝合金		未固化		60	21	70-200
			固化		100	22	70-200
	铸铝合金	<=12% Si	未固化		75	23	70-200
			固化		90	24	70-200
		>12% Si	高温处理		130	25	70-150
	铜合金	>1% Pb	易切		110	26	70-200
			黄铜		90	27	70-200
			电解铜		100	28	70-200
	有色金属		硬质塑料，纤维			29	
			硬橡胶			30	
S	高温合金		铁基	退火	200	31	15-40
				固化	280	32	15-40
			镍基或 钴基	退火	250	33	15-40
				固化	350	34	15-40
				铸造	320	35	15-40
	钛，钛合金			Rm 400		36	
			a+β 合金固化	Rm 1050		37	
H	高硬钢		淬硬		55HRC	38	10-40
			淬硬		60HRC	39	10-40
	冷硬铸铁		铸造		400	40	
	球墨铸铁		淬硬		55HRC	41	

硬质合金钻参数表

推荐切削参数（整体硬质合金钻加工数据）进给（mm/rev）

φ3-φ5	φ5.1-φ8	φ8.1-φ12	φ12.1-φ16	φ16.1-φ20		
0.10-0.20	0.15-0.25	0.20-0.30	0.20-0.35	0.25-0.40		
0.10-0.20	0.15-0.25	0.20-0.30	0.20-0.35	0.25-0.40		
0.10-0.20	0.15-0.25	0.20-0.30	0.20-0.35	0.25-0.40		
0.10-0.20	0.15-0.25	0.20-0.30	0.20-0.35	0.25-0.40		
0.10-0.20	0.15-0.25	0.20-0.30	0.20-0.35	0.25-0.40		
0.10-0.20	0.15-0.25	0.20-0.30	0.20-0.35	0.25-0.40		
0.10-0.20	0.15-0.25	0.20-0.30	0.20-0.35	0.25-0.40		
0.10-0.20	0.15-0.25	0.20-0.30	0.20-0.35	0.25-0.40		
0.10-0.20	0.15-0.25	0.20-0.30	0.20-0.35	0.25-0.40		
0.08-0.18	0.10-0.20	0.15-0.25	0.15-0.30	0.20-0.35		
0.08-0.18	0.10-0.20	0.15-0.25	0.15-0.30	0.20-0.35		
0.06-0.12	0.10-0.15	0.12-0.18	0.14-0.20	0.15-0.20		
0.06-0.12	0.10-0.15	0.12-0.18	0.14-0.20	0.15-0.20		
0.06-0.12	0.10-0.15	0.12-0.18	0.14-0.20	0.15-0.20		
0.10-0.02	0.15-0.25	0.20-0.30	0.25-0.35	0.30-0.45		
0.10-0.02	0.15-0.25	0.20-0.30	0.25-0.35	0.30-0.45		
0.10-0.02	0.15-0.25	0.20-0.30	0.25-0.35	0.30-0.45		
0.10-0.02	0.15-0.25	0.20-0.30	0.25-0.35	0.30-0.45		
0.10-0.02	0.15-0.25	0.20-0.30	0.25-0.35	0.30-0.45		
0.10-0.02	0.15-0.25	0.20-0.30	0.25-0.35	0.30-0.45		
0.10-0.25	0.15-0.35	0.25-0.45	0.30-0.50	0.35-0.55		
0.10-0.25	0.15-0.35	0.25-0.45	0.30-0.50	0.35-0.55		
0.10-0.25	0.15-0.35	0.25-0.45	0.30-0.50	0.35-0.55		
0.10-0.25	0.15-0.35	0.25-0.45	0.30-0.50	0.35-0.55		
0.10-0.25	0.15-0.35	0.25-0.45	0.30-0.50	0.35-0.55		
0.08-0.18	0.15-0.25	0.20-0.35	0.25-0.45	0.30-0.50		
0.08-0.18	0.15-0.25	0.20-0.35	0.25-0.45	0.30-0.50		
0.08-0.18	0.15-0.25	0.20-0.35	0.25-0.45	0.30-0.50		
0.02-0.08	0.04-0.10	0.06-0.12	0.08-0.15	0.08-0.18		
0.02-0.08	0.04-0.10	0.06-0.12	0.08-0.15	0.06-0.18		
0.02-0.08	0.04-0.10	0.06-0.12	0.08-0.15	0.08-0.18		
0.02-0.08	0.04-0.10	0.06-0.12	0.08-0.15	0.08-0.18		
0.02-0.08	0.04-0.10	0.06-0.12	0.08-0.15	0.08-0.18		
0.02-0.08	0.04-0.10	0.06-0.12	0.08-0.15	0.08-0.18		
0.02-0.08	0.04-0.10	0.06-0.12	0.08-0.15	0.08-0.18		

粗 镗 参 数 表



推荐切削参数（粗镗刀加工数据）

ISO	被加工材料	硬度	悬伸 (稳定性)	Ap(mm)	镗削范围D20-33		镗削范围D33-54	
					0.5-1.2	1.2-2.5	0.8-1.5	1.5-2.5
				R(Radius)	0.2	0.4	0.2-0.4	0.4
P	碳钢	HB<200	2.5（高）	Vc(m/min)	150-180	120-150	160-200	140-170
				fz(mm/z)	0.1-0.2	0.08-0.2	0.15-0.2	0.1-0.175
			4（一般）	Vc(m/min)	140-160	100-140	160-180	120-150
				fz(mm/z)	0.1-0.18	0.08-0.15	0.1-0.12	0.08-0.1
			6.0(差)	Vc(m/min)	60-80	40-60	60-90	50-60
				fz(mm/z)	0.06-0.12	0.06-0.1	0.06-0.12	0.06-0.1
	碳钢	HB>200	2.5（高）	Vc(m/min)	130-160	100-130	140-180	120-160
				fz(mm/z)	0.08-0.15	0.08-0.12	0.08-0.2	0.06-0.12
			4（一般）	Vc(m/min)	110-140	80-110	100-140	80-120
				fz(mm/z)	0.08-0.12	0.08-0.1	0.08-0.15	0.06-0.15
			6.0(差)	Vc(m/min)	70-90	60-70	80-100	60-80
				fz(mm/z)	0.08-0.1	0.06-0.08	0.06-0.1	0.06-0.08
	合金钢	HB<200	2.5（高）	Vc(m/min)	140-160	90-120	150-180	100-130
				fz(mm/z)	0.08-0.18	0.08-0.15	0.08-0.2	0.08-0.18
			4（一般）	Vc(m/min)	100-130	70-100	110-150	90-120
				fz(mm/z)	0.08-0.15	0.06-0.12	0.08-0.18	0.08-0.15
			6.0(差)	Vc(m/min)	80-100	60-90	80-100	70-90
				fz(mm/z)	0.08-0.15	0.06-0.1	0.06-0.12	0.06-0.12
	合金钢	HB>200	2.5（高）	Vc(m/min)	130-150	120-140	130-150	120-140
				fz(mm/z)	0.08-0.18	0.06-0.15	0.08-0.18	0.06-0.15
			4（一般）	Vc(m/min)	100-130	100-120	100-130	100-120
				fz(mm/z)	0.08-0.15	0.06-0.13	0.08-0.15	0.06-0.13
			6.0(差)	Vc(m/min)	80-100	70-90	80-100	70-90
				fz(mm/z)	0.08-0.12	0.06-0.11	0.08-0.12	0.06-0.11
M	不锈钢	铁素体 & 马氏体	2.5（高）	Vc(m/min)	100-150	110-130	120-160	100-150
				fz(mm/z)	0.08-0.15	0.06-0.12	0.08-0.18	0.06-0.12
			4（一般）	Vc(m/min)	90-130	90-120	100-140	90-140
				fz(mm/z)	0.08-0.12	0.06-0.1	0.08-0.12	0.06-0.1
			6.0(差)	Vc(m/min)	60-90	50-70	60-90	50-70
				fz(mm/z)	0.06-0.1	0.06-0.1	0.06-0.12	0.06-0.1
	不锈钢	奥氏体	2.5（高）	Vc(m/min)	110-130	100-130	120-150	110-140
				fz(mm/z)	0.08-0.15	0.06-0.12	0.08-0.18	0.06-0.12
			4（一般）	Vc(m/min)	80-110	80-110	90-130	90-120
				fz(mm/z)	0.08-0.12	0.06-0.1	0.08-0.12	0.06-0.1
			6.0(差)	Vc(m/min)	60-90	50-70	60-90	50-70
				fz(mm/z)	0.06-0.1	0.06-0.1	0.06-0.12	0.06-0.1
	铸造不 锈钢	铁素体 & 马氏体	2.5（高）	Vc(m/min)	90-130	100-130	120-150	110-140
				fz(mm/z)	0.08-0.15	0.06-0.12	0.08-0.18	0.06-0.12
			4（一般）	Vc(m/min)	70-110	80-110	90-130	90-120
				fz(mm/z)	0.08-0.12	0.06-0.1	0.08-0.12	0.06-0.1

粗 镗 参 数 表



推荐切削参数（粗镗刀加工数据）

镗削范围D54-70		镗削范围D70-110		镗削范围D110-150		镗削范围D150-	
0.8-1.5	1.5-3.0	0.8-1.5	1.5-3.5	0.8-2.0	2.0-3.5	0.8-2.0	2.0-4.0
0.2-0.4	0.4-0.8	0.2-0.4	0.4-0.8	0.2-0.4	0.4-0.8	0.2-0.4	0.4-0.8
160-200	140-180	160-200	150-180	180-250	160-200	220-280	200-220
0.15-0.25	0.08-0.2	0.15-0.25	0.08-0.2	0.15-0.3	0.1-0.2	0.15-0.3	0.1-0.15
160-180	120-150	140-180	120-150	160-200	140-180	-	-
0.1-0.12	0.08-0.1	0.08-0.2	0.08-0.15	0.1-0.2	0.08-0.15	-	-
70-90	50-70	70-100	50-70	-	-	-	-
0.06-0.1	0.06-0.1	0.06-0.1	0.06-0.1	-	-	-	-
140-180	120-160	140-180	120-160	150-170	100-140	100-140	80-120
0.08-0.25	0.08-0.18	0.15-0.3	0.12-0.2	0.15-0.25	0.1-0.2	0.15-0.3	0.1-0.2
100-140	80-120	120-150	100-140	100-130	80-110	-	-
0.08-0.2	0.06-0.15	0.1-0.2	0.1-0.18	0.08-0.2	0.08-0.12	-	-
80-100	60-80	80-100	60-80	-	-	-	-
0.08-0.15	0.06-0.1	0.08-0.12	0.08-0.12	-	-	-	-
160-200	140-180	160-220	140-180	160-220	140-180	160-220	140-180
0.1-0.25	0.1-0.15	0.1-0.3	0.1-0.25	0.1-0.3	0.1-0.25	0.1-0.35	0.1-0.3
140-180	100-130	150-200	120-160	120-160	120-160	-	-
0.08-0.18	0.08-0.12	0.1-0.2	0.08-0.18	0.1-0.2	0.08-0.18	-	-
100-140	80-120	100-140	100-140	-	-	-	-
0.06-0.15	0.08-0.1	0.08-0.18	0.08-0.15	-	-	-	-
140-170	120-150	160-200	140-180	140-200	140-180	140-200	140-180
0.08-0.2	0.08-0.18	0.1-0.3	0.1-0.25	0.1-0.35	0.1-0.3	0.1-0.35	0.1-0.3
120-150	100-120	140-160	120-140	150-180	120-140	-	-
0.08-0.18	0.08-0.15	0.08-0.2	0.08-0.15	0.08-0.12	0.08-0.12	-	-
100-120	70-90	100-120	70-90	-	-	-	-
0.08-0.12	0.06-0.11	0.08-0.16	0.08-0.12	-	-	-	-
120-160	110-160	120-220	120-200	140-220	120-180	150-220	120-200
0.08-0.25	0.08-0.18	0.08-0.3	0.08-0.25	0.08-0.3	0.08-0.25	0.08-0.3	0.08-0.25
100-150	80-120	100-160	90-140	120-180	90-140	-	-
0.08-0.18	0.08-0.12	0.08-0.25	0.08-0.18	0.08-0.25	0.08-0.18	-	-
70-100	50-70	70-100	50-70	-	-	-	-
0.06-0.15	0.08-0.1	0.08-0.2	0.08-0.15	-	-	-	-
110-160	100-150	120-200	100-160	120-200	100-160	120-200	100-180
0.08-0.25	0.06-0.12	0.08-0.3	0.08-0.25	0.08-0.3	0.08-0.25	0.08-0.3	0.08-0.25
100-150	90-130	100-150	90-140	100-160	90-140	-	-
0.08-0.18	0.06-0.1	0.08-0.25	0.08-0.18	0.08-0.25	0.08-0.18	-	-
70-100	50-70	70-100	50-70	-	-	-	-
0.06-0.15	0.06-0.1	0.08-0.2	0.08-0.15	-	-	-	-
120-160	100-150	130-200	120-180	140-200	120-160	140-200	120-180
0.08-0.25	0.06-0.12	0.08-0.3	0.08-0.25	0.08-0.3	0.08-0.25	0.08-0.3	0.08-0.25
100-150	90-130	110-150	90-150	100-160	90-140	-	-
0.08-0.18	0.06-0.1	0.08-0.25	0.08-0.18	0.08-0.25	0.08-0.18	-	-

粗 镗 参 数 表



推荐切削参数（粗镗刀加工数据）

ISO	被加工材料	硬度	悬伸 (稳定性)	Ap(mm)	镗削范围D20-33		镗削范围D33-54	
					0.5-1.2	1.2-2.5	0.8-1.5	1.5-2.5
				R(Radius)	0.2	0.4	0.2-0.4	0.4
M	铸造不锈钢	铁素体 马氏体	6.0(差)	Vc(m/min)	60-90	50-70	60-90	50-70
				fz(mm/z)	0.06-0.1	0.06-0.1	0.06-0.12	0.06-0.1
		奥氏体	2.5 (高)	Vc(m/min)	80-120	70-110	100-150	90-140
				fz(mm/z)	0.08-0.15	0.06-0.12	0.08-0.18	0.06-0.12
			4 (一般)	Vc(m/min)	70-100	70-100	80-130	70-120
				fz(mm/z)	0.08-0.12	0.06-0.1	0.08-0.12	0.06-0.1
K	灰铸铁	HB<200	2.5 (高)	Vc(m/min)	120-160	100-140	120-180	110-150
				fz(mm/z)	0.06-0.15	0.06-0.18	0.06-0.15	0.06-0.12
			4 (一般)	Vc(m/min)	100-140	80-120	100-150	80-120
				fz(mm/z)	0.06-0.12	0.06-0.1	0.06-0.12	0.06-0.1
			6.0(差)	Vc(m/min)	70-100	60-90	70-100	60-90
				fz(mm/z)	0.06-0.1	0.06-0.1	0.06-0.1	0.06-0.1
	灰铸铁	-	2.5 (高)	Vc(m/min)	140-200	140-200	140-220	160-250
				fz(mm/z)	0.06-0.15	0.06-0.18	0.06-0.15	0.06-0.18
			4 (一般)	Vc(m/min)	120-160	120-160	120-180	140-200
				fz(mm/z)	0.06-0.12	0.06-0.14	0.06-0.12	0.06-0.14
			6.0(差)	Vc(m/min)	70-100	60-90	70-100	60-90
				fz(mm/z)	0.06-0.1	0.06-0.1	0.06-0.1	0.06-0.1
	铸铁	球墨铸铁	2.5 (高)	Vc(m/min)	120-180	120-180	120-200	140-220
				fz(mm/z)	0.06-0.15	0.06-0.18	0.06-0.15	0.06-0.18
			4 (一般)	Vc(m/min)	120-160	120-160	120-180	140-200
				fz(mm/z)	0.06-0.12	0.06-0.14	0.06-0.12	0.06-0.14
			6.0(差)	Vc(m/min)	60-100	60-90	60-100	60-90
				fz(mm/z)	0.06-0.1	0.06-0.1	0.06-0.1	0.06-0.1
N	铝合金 / 铸造	Si>12%	2.5 (高)	Vc(m/min)	200-300	240-350	200-300	240-350
				fz(mm/z)	0.06-0.2	0.06-0.25	0.06-0.2	0.06-0.25
			4 (一般)	Vc(m/min)	150-220	150-220	150-220	150-220
				fz(mm/z)	0.06-0.2	0.06-0.2	0.06-0.2	0.06-0.2
			6.0(差)	Vc(m/min)	60-100	60-100	60-100	60-100
				fz(mm/z)	0.06-0.1	0.06-0.1	0.06-0.1	0.06-0.1
	铝合金 / 铸造	Si<12%	2.5 (高)	Vc(m/min)	180-250	220-280	180-250	220-280
				fz(mm/z)	0.06-0.2	0.06-0.25	0.06-0.25	0.06-0.25
			4 (一般)	Vc(m/min)	120-220	120-220	120-220	120-220
				fz(mm/z)	0.06-0.2	0.06-0.2	0.06-0.2	0.06-0.2
			6.0(差)	Vc(m/min)	60-100	60-100	60-100	60-100
				fz(mm/z)	0.06-0.1	0.06-0.1	0.06-0.1	0.06-0.1

粗 镗 参 数 表



推荐切削参数（粗镗刀加工数据）

镗削范围D54-70		镗削范围D70-110		镗削范围D110-150		镗削范围D150-	
0.8-1.5	1.5-3.0	0.8-1.5	1.5-3.5	0.8-2.0	2.0-3.5	0.8-2.0	2.0-4.0
0.2-0.4	0.4-0.8	0.2-0.4	0.4-0.8	0.2-0.4	0.4-0.8	0.2-0.4	0.4-0.8
70-100	50-70	70-100	50-70	-	-	-	-
0.06-0.15	0.06-0.1	0.08-0.2	0.08-0.15	-	-	-	-
110-150	100-150	130-180	120-180	120-200	100-160	120-200	100-180
0.08-0.25	0.06-0.12	0.08-0.3	0.08-0.25	0.08-0.3	0.08-0.25	0.08-0.3	0.08-0.25
90-140	90-130	100-140	90-140	100-160	90-140	-	-
0.08-0.18	0.06-0.1	0.08-0.25	0.08-0.18	0.08-0.25	0.08-0.18	-	-
70-100	50-70	70-90	50-70	-	-	-	-
0.06-0.15	0.06-0.1	0.08-0.2	0.08-0.15	-	-	-	-
120-180	110-150	120-200	110-150	150-250	180-280	150-250	180-280
0.08-0.2	0.08-0.12	0.08-0.25	0.08-0.3	0.08-0.25	0.08-0.35	0.08-0.25	0.08-0.35
100-150	80-120	100-150	80-120	120-170	120-170	-	-
0.08-0.12	0.08-0.1	0.08-0.18	0.08-0.2	0.08-0.18	0.08-0.25	-	-
70-100	60-90	70-100	60-90	-	-	-	-
0.08-0.1	0.08-0.1	0.08-0.15	0.08-0.12	-	-	-	-
180-220	220-280	250-300	250-350	250-350	250-350	250-350	250-350
0.08-0.2	0.1-0.25	0.12-0.35	0.12-0.35	0.15-0.3	0.15-0.4	0.15-0.3	0.15-0.4
140-180	180-220	200-270	230-300	200-300	200-270	-	-
0.08-0.12	0.08-0.2	0.1-0.25	0.12-0.3	0.15-0.3	0.15-0.35	-	-
60-100	60-120	70-150	60-120	-	-	-	-
0.08-0.1	0.08-0.1	0.1-0.15	0.12-0.25	-	-	-	-
180-220	180-240	200-240	200-280	200-280	220-300	220-300	220-300
0.08-0.18	0.1-0.2	0.12-0.3	0.12-0.3	0.15-0.3	0.15-0.35	0.15-0.3	0.15-0.35
140-200	160-220	160-220	180-240	180-250	200-270	-	-
0.08-0.12	0.08-0.18	0.1-0.2	0.12-0.25	0.15-0.25	0.15-0.35	-	-
60-90	60-100	60-100	60-100	-	-	-	-
0.08-0.1	0.08-0.1	0.1-0.15	0.12-0.2	-	-	-	-
200-300	240-350	200-300	240-350	200-300	240-350	200-300	240-350
0.06-0.25	0.06-0.3	0.06-0.25	0.06-0.3	0.06-0.25	0.06-0.4	0.06-0.25	0.06-0.4
150-220	150-220	150-220	150-220	150-220	150-220	-	-
0.06-0.2	0.06-0.2	0.06-0.2	0.06-0.2	0.06-0.2	0.06-0.2	-	-
60-100	60-100	60-100	60-100	-	-	-	-
0.06-0.1	0.06-0.1	0.06-0.1	0.06-0.1	-	-	-	-
180-250	220-280	180-250	220-280	180-250	220-280	180-250	220-280
0.06-0.25	0.06-0.3	0.06-0.25	0.06-0.3	0.06-0.3	0.06-0.4	0.06-0.3	0.06-0.4
120-220	120-220	120-220	120-220	120-220	120-220	-	-
0.06-0.2	0.06-0.25	0.06-0.2	0.06-0.25	0.06-0.2	0.06-0.25	-	-
60-100	60-100	60-100	60-100	-	-	-	-
0.06-0.1	0.06-0.1	0.06-0.1	0.06-0.1	-	-	-	-

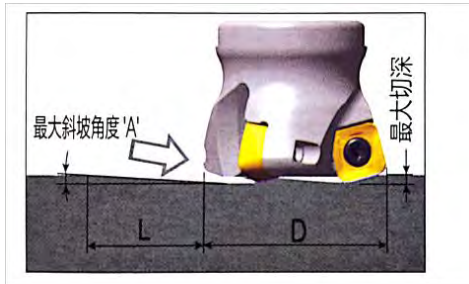
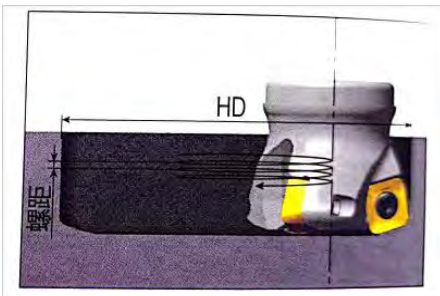
精镗参数表

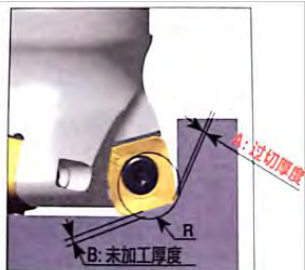


推荐切削参数（精镗刀加工数据）

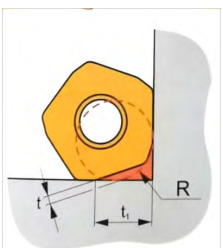
推荐切削参数（精镗刀加工数据）								
ISO	被加工材料	悬伸	稳定性	切削速度	切削进给 f=mm/rev		Ap (mm)	刀片合金 牌号
					刀片刀尖角			
					R=0.2	R=0.4		
P	碳钢 Hb≤200	2.5	高	200-300	0.05-0.08	0.08-0.1	0.1-0.25	CT4100
		4	一般	160-250	0.05-0.08	0.08-0.1		
		6	差	70-100	0.05-0.08	-		
	碳钢 Hb≥200	2.5	高	160-250	0.05-0.08	0.08-0.1	0.1-0.25	CT4100
		4	一般	150-200	0.05-0.08	0.08-0.1		
		6	差	70-100	0.05-0.08	-		
	合金钢 HB<480	2.5	高	150-200	0.05-0.08	0.08-0.1	0.1-0.25	CT4100
		4	一般	120-160	0.05-0.08	0.08-0.1		
		6	差	70-80	0.05-0.08	-		
	合金钢 HB 480-550	2.5	高	120-160	0.05-0.08	0.08-0.1	0.1-0.25	CT4100
		4	一般	100-140	0.05-0.08	0.08-0.1		
		6	差	70-100	0.05-0.08	-		
M	不锈钢	2.5	高	160-210	0.05-0.08	0.08-0.1	0.1-0.25	CT4100
		4	一般	120-160	0.05-0.08	0.08-0.1		
		6	差	70-90	0.05-0.08	-		
K	铸铁	2.5	高	120-160	0.05-0.08	0.08-0.1	0.1-0.25	CT4100
		4	一般	100-140	0.05-0.08	0.08-0.1		
		6	差	70-100	0.05-0.08	-		
N	铝合金	2.5	高	300-400	0.05-0.08	0.08-0.1	0.1-0.25	CT101
		4	一般	250-350	0.05-0.08	0.08-0.1		
		6	差	100-150	0.05-0.08	-		

快进给参数表

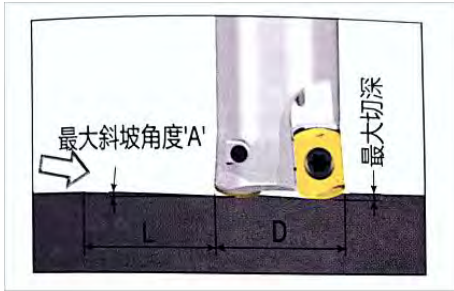
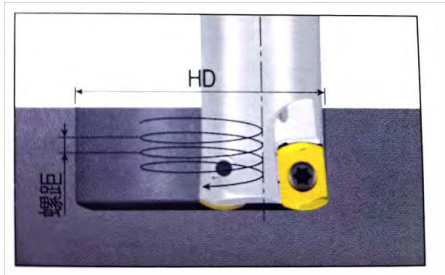
SBMT 13						
刀盘直径D	直线斜坡铣削			螺旋斜坡铣削		
	最大斜坡角度A°	最大切深	最小长度L	最小直径HD	最大直径HD	最大螺距/转
50	4.3	2.0	27	83	84	2.0
52	4.0	2.0	29	87	104	2.0
63	2.9	2.0	40	109	126	2.0
80	2.0	2.0	57	143	160	2.0
100	1.5	2.0	76	183	200	2.0

		R: 编程R角	A: 过切厚度	B: 未加工厚度
	SBMT 13	4.0	0	1.62
		4.5	0	1.51
		5.0	0.04	1.4
		5.5	0.14	1.29
		6.0	0.28	1.18
: 建议编程R角				

PDKT 13

刀盘直径D	直线斜坡铣削			螺旋斜坡铣削		
	最大斜坡角度A°	最大切深	最小长度L	最小直径HD	最大直径HD	最大螺距/转
42	8.0	2.0	16	67.5	84	2.0
50	8.0	2.0	16	83.3	100	2.0
52	8.0	2.0	16	87.3	104	2.0
63	7.0	2.0	18	109.2	126	2.0
66	6.0	2.0	21	115.2	132	2.0
80	5.0	2.0	24	143.3	160	2.0
100	30	2.0	40	183.3	200	2.0
	直 径 D		R	T		T1
	40-140		4.5	1.1		7.3

快进给参数表

BLMP 06						
	直线斜坡铣削			螺旋斜坡铣削		
刀盘/刀杆 直径D	最大斜坡角度A°	最大切深	最小长度L	最小直径HD	最大直径HD	最大螺距/转
16	2.0	0.7	13	23	32	0.7
17	2.0	0.7	15	25	34	0.7
18	2.3	0.7	16	27	36	0.7 (0.8)*
20	1.5	1.0	38	31	40	0.8 (1.0)*
21	1.5	1.0	38	33	42	1.0
22	1.5	1.0	38	35	44	1.0
25	1.3	1.0	41	41	50	1.0
26	1.2	1.0	44	43	52	1.0
30	1.0	1.0	52	51	60	1.0
32	0.9	1.0	57	55	64	1.0
33	0.9	1.0	57	57	66	1.0
35	0.8	1.0	57	61	70	1.0
40	0.7	1.0	64	71	80	1.0
42	0.7	1.0	72	75	84	1.0
50	0.6	1.0	96	91	100	1.0
52	0.6	1.0	96	95	104	1.0
63	0.5	1.0	115	117	126	1.0
66	0.5	1.0	115	123	132	1.0

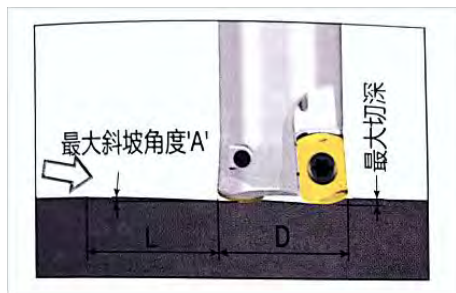
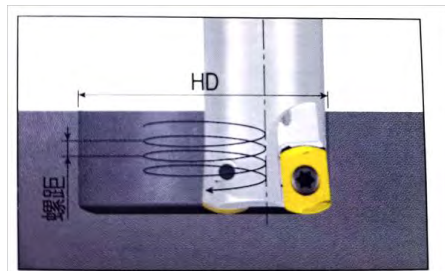
注：带0.7 (0.8)*表示最小直径螺距0.7，最大直径螺距0.8

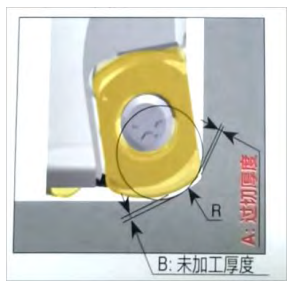
注：带0.8 (1.0)*表示最小直径螺距0.8，最大直径螺距1.0

A 3D perspective diagram of a yellow, U-shaped tool tip. The tool has a rounded outer edge and a central circular hole. Three dimensions are indicated with arrows: 'R' points to the outer radius of the tip; 'A: 过切厚度' (Overcut thickness) points to the vertical distance from the base to the top of the tip's outer edge; 'B: 未加工厚度' (Unmachined thickness) points to the horizontal distance from the base to the inner edge of the tip. The tool is shown resting on a grey surface.

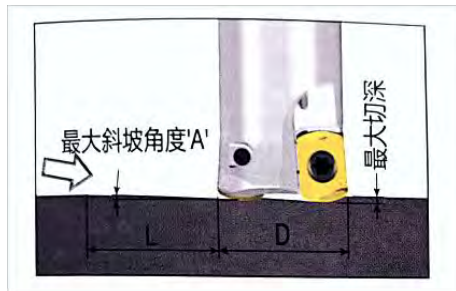
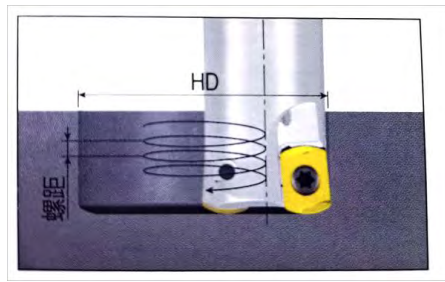
BLMP 06 直径	R: 编程R角	A: 过切厚度	B: 未加工厚度
D16/D16/D18	1.5	0	0.35
	2.0	0.14	0.22
	2.5	0.27	0.1
D20-	2.0	0	0.42
	2.5	0.12	0.26
	3.0	0.29	0.17
: 建议编程R角			

快进给参数表

BLMP 09						
	直线斜坡铣削			螺旋斜坡铣削		
刀盘/刀杆 直径D	最大斜坡角度A°	最大切深	最小长度L	最小直径HD	最大直径HD	最大螺距/转
25	2.2	1.5	39	42	50	1.5
26	2.2	1.5	39	44	52	1.5
30	2.0	1.5	43	52	60	1.5
32	2.0	1.5	43	56	64	1.5
33	2.0	1.5	43	58	66	1.5
35	2.0	1.5	43	60	70	1.5
40	1.5	1.5	57	72	80	1.5
42	1.5	1.5	57	76	84	1.5
50	1.0	1.5	86	92	100	1.5
52	1.0	1.5	876	96	104	1.5
63	0.9	1.5	96	118	126	1.5
66	0.9	1.5	96	124	132	1.5
80	0.8	1.5	107	152	160	1.5
100	0.7	1.5	123	192	200	1.5
125	0.4	1.5	215	240	250	1.5

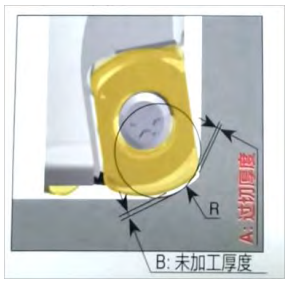
		R: 编程R角	A: 过切厚度	B: 未加工厚度
	BLMP 09	2.5	0	0.61
		3.0	0.09	0.45
		3.5	0.24	0.30
		4.0	0.41	0.17
		3.0	0.36	0.04
: 建议编程R角				

快进给参数表

BLMP 11						
	直线斜坡铣削			螺旋斜坡铣削		
刀盘/刀杆 直径D	最大斜坡角度A°	最大切深	最小长度L	最小直径HD	最大直径HD	最大螺距/转
30	0.50	2.0	229	41	60	0.3(0.7)*
32	0.50	2.0	229	45	64	0.3(0.7)*
33	0.45	2.0	255	47	66	0.3(0.7)*
35	0.50	2.0	229	51	70	0.4(0.8)*
40	0.55	2.0	208	61	80	0.5(1.0)*
42	0.50	2.0	229	65	84	0.5(1.0)*
50	0.50	2.0	229	81	100	0.7(1.2)*
52	0.45	2.0	255	85	104	0.7(1.1)*
63	0.45	2.0	255	107	126	0.9(1.3)*
66	0.40	2.0	287	113	132	0.9(1.2)*
80	0.35	2.0	328	141	160	1.0(1.3)*
100	0.30	2.0	382	181	200	1.1(1.4)*
125	0.25	2.0	459	231	250	1.2(1.5)*
160	0.20	2.0	573	301	320	1.3(1.5)*
200	0.15	2.0	764	381	400	1.3(1.4)*

注：带0.4(0.8)*表示最小直径螺距0.4，最大直径螺距0.8

注：带1.2(1.5)*表示最小直径螺距1.2，最大直径螺距1.5

		R:编程R角	A:过切厚度	B:未加工厚度
	BLMP 11	2.4	0.00	1.09
		3.0	0.00	0.90
		3.2	0.18	0.85
 ：建议编程R角				

非标展示

DISPLAY

DRAWING



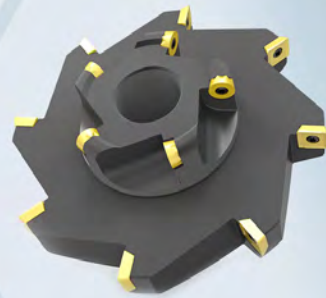
Chai Tools

非标产品展示

NONSTANDARD



精铣面铣刀



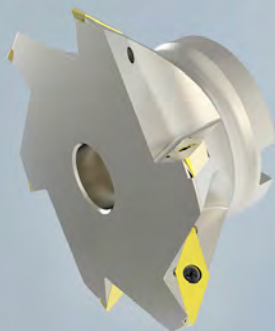
左手铣刀盘



齿轮铣刀盘



刹车钳铣刀



燕尾槽铣刀



面铣刀盘



转子铣刀



三面刃铣刀盘



三面刃



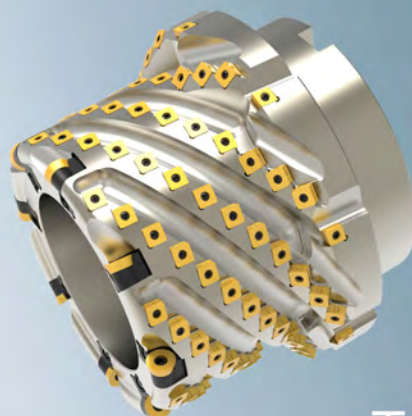
俩面刃三面刃3个叠加



内孔车刀杆组合



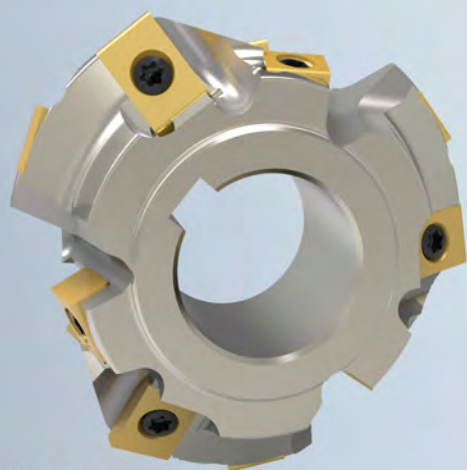
复合镗刀



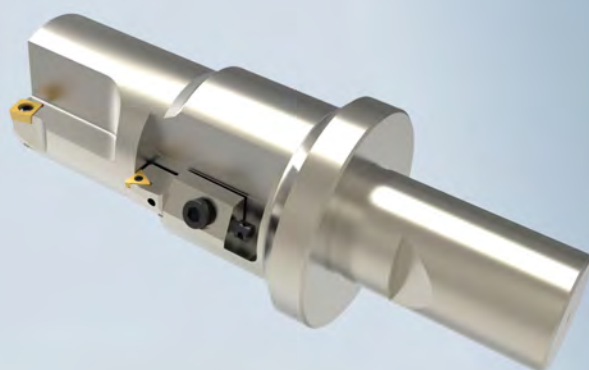
玉米铣刀盘



铝合金铣刀盘



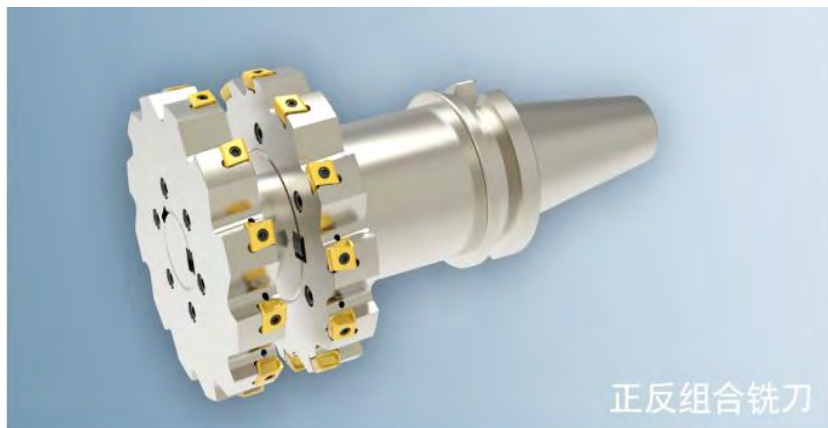
花键铣刀



粗精一体镗刀



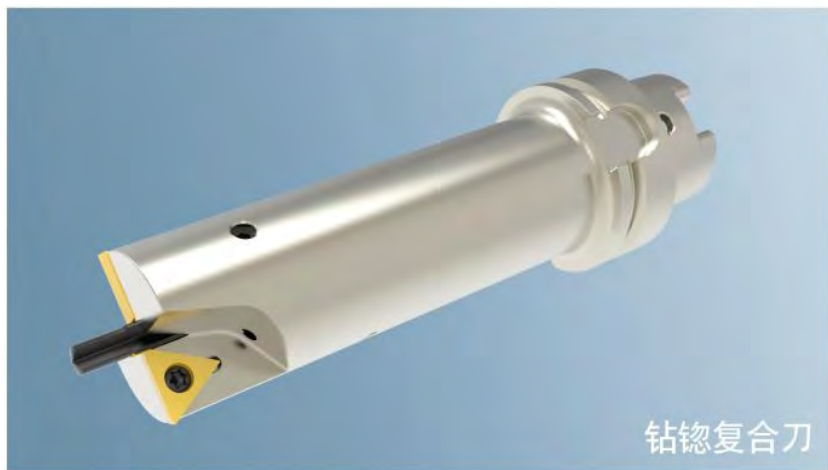
整体式组合铣刀



正反组合铣刀



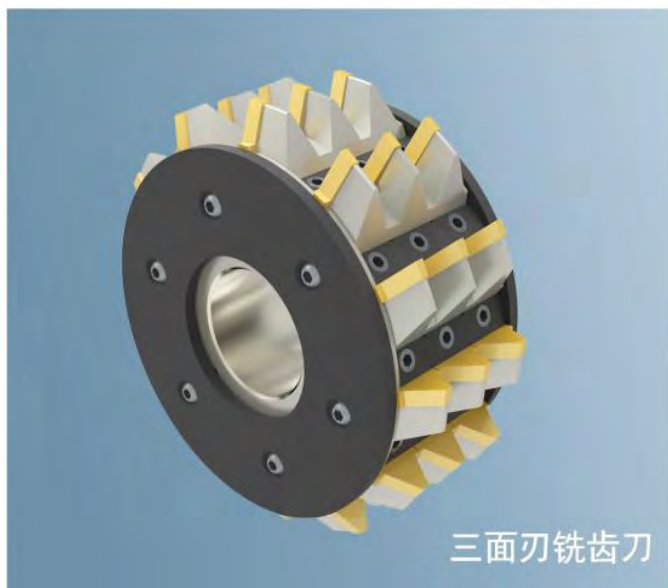
组合铣刀



钻铰复合刀



卡钳-面铣刀



三面刃铣齿刀



盘铣刀



整体式组合铣刀



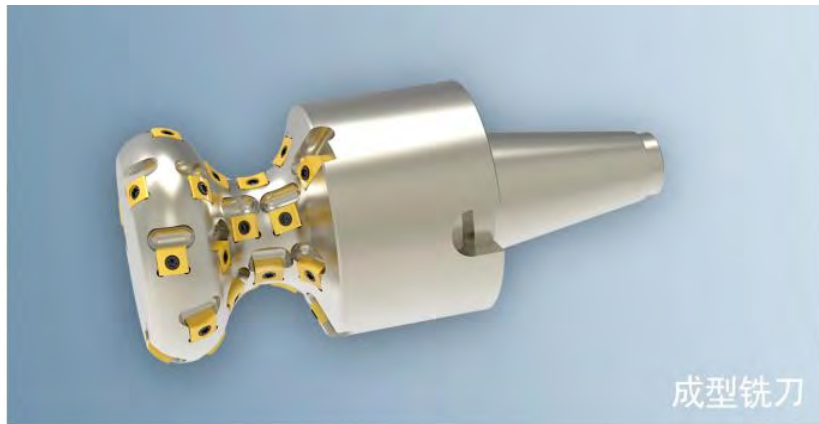
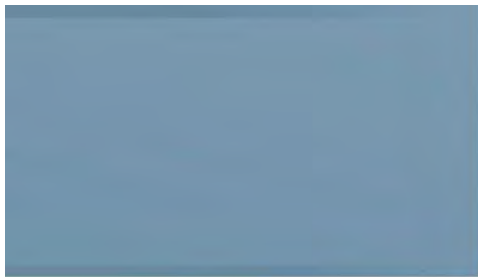
整体式组合铣刀



整体玉米铣刀



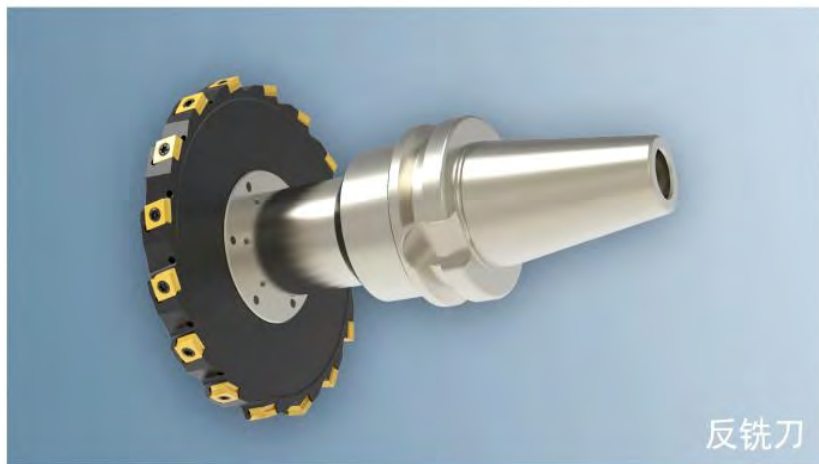
卡钳-套槽刀



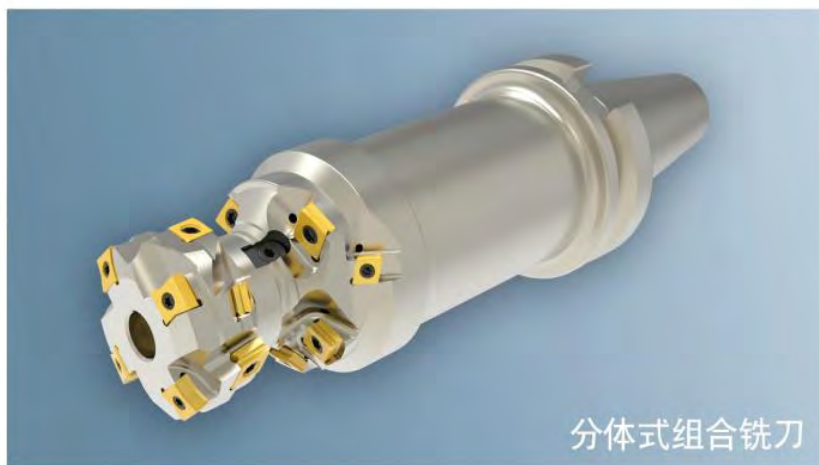
成型铣刀



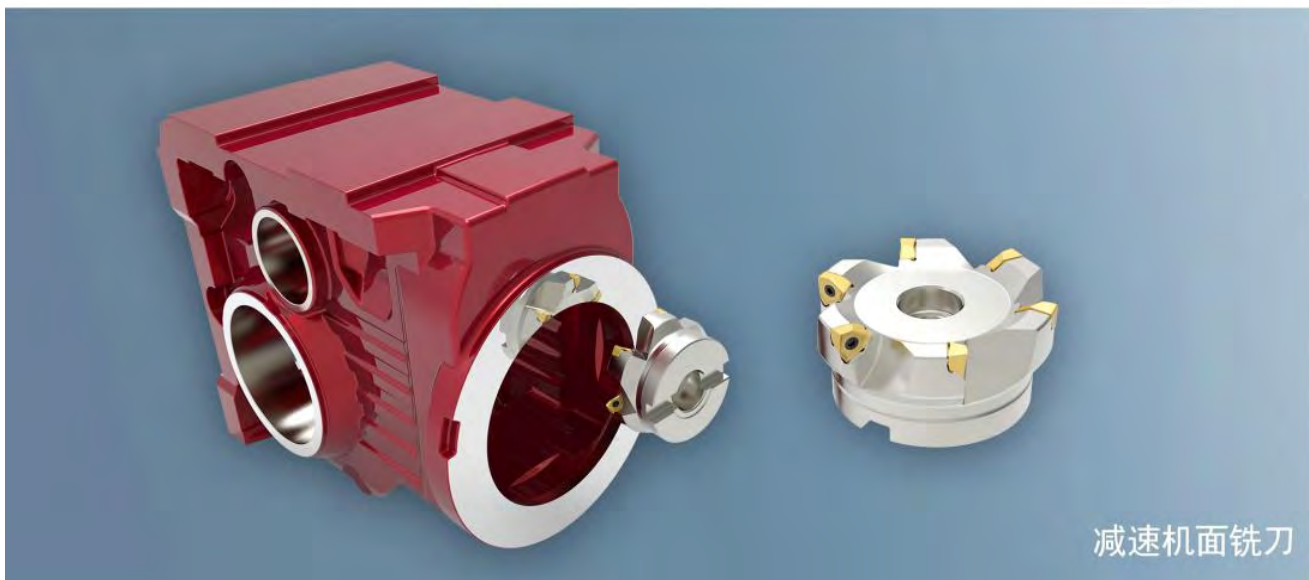
卡钳-复合钻镗刀



反铣刀



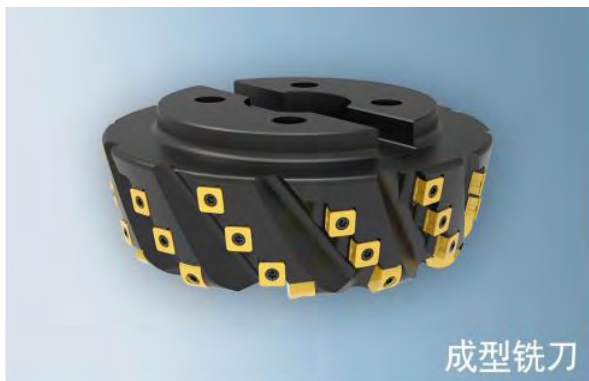
分体式组合铣刀



减速机面铣刀



面铣刀



成型铣刀



卡钳-复合镗刀



卡钳-孔口镗面刀



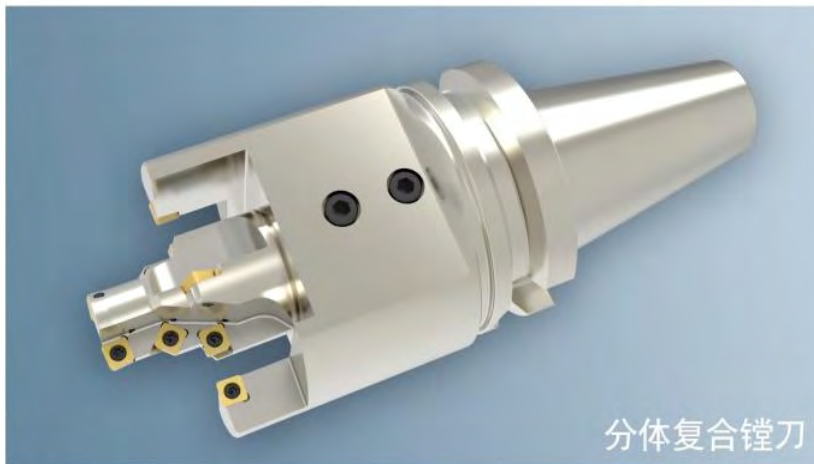
卡钳-正反铣



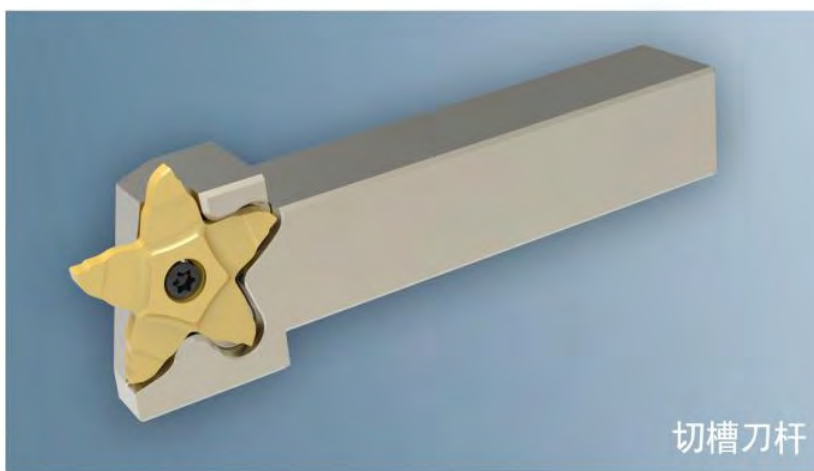
方柄内端面槽刀杆



齿轮锥度玉米铣



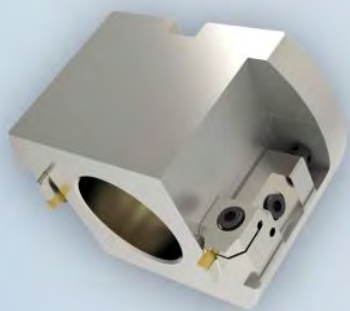
分体复合镗刀



切槽刀杆



内孔车刀杆



套槽刀



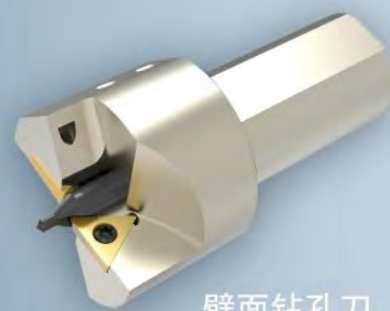
面铣刀盘



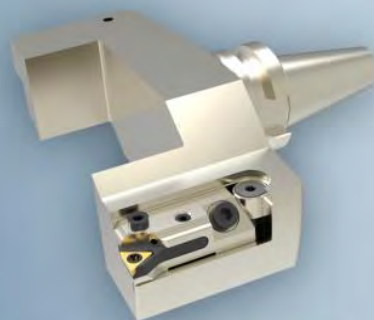
可换头玉米铣



EN组合



劈面钻孔刀



微调刀夹镗刀



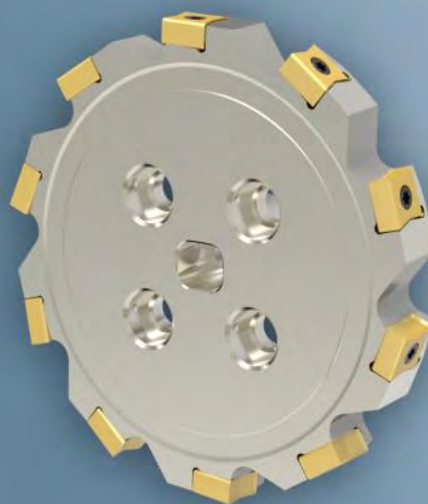
BT整体定制刀长玉米铣



精铣面铣刀



两面刀铣刀盘





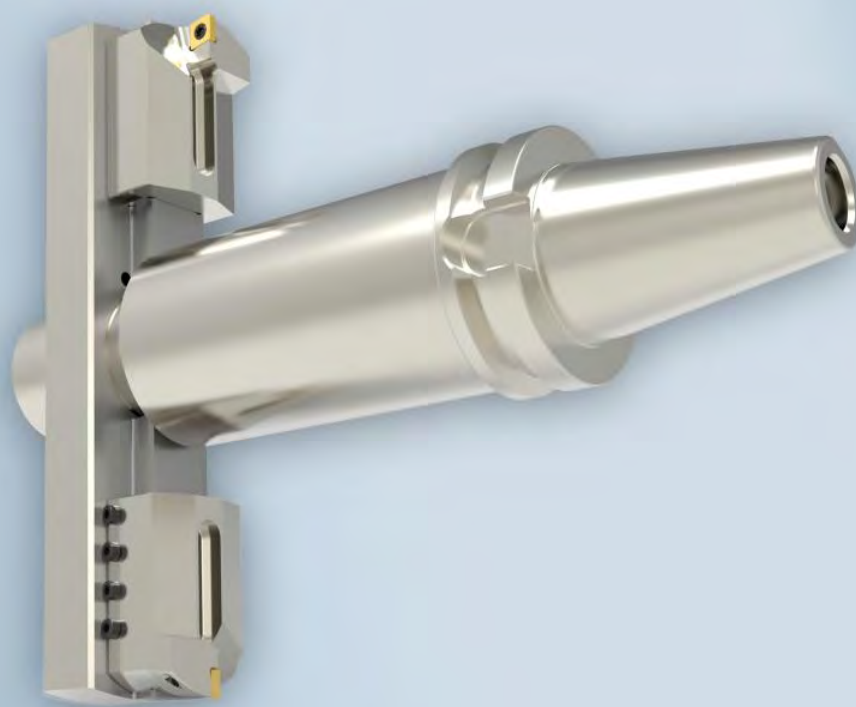
面铣刀盘



可调镗刀



制动钳铣刀



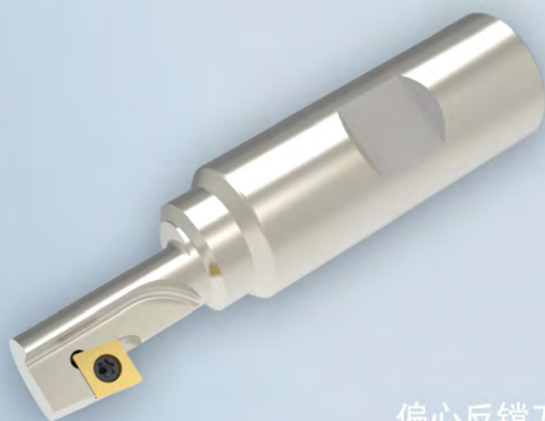
快换式桥镗



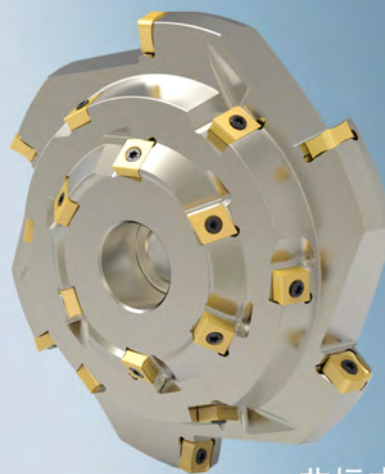
非标内孔车刀杆



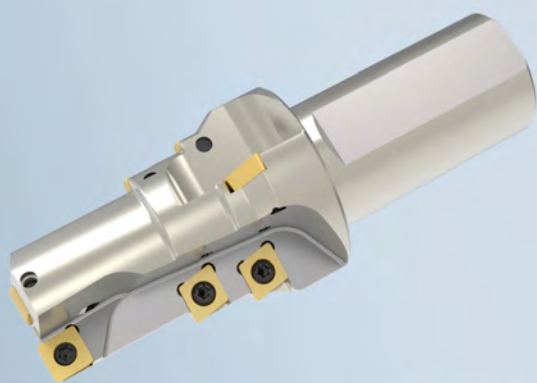
浅槽铣刀



偏心反镗刀



非标成型铣刀



钻镗复合刀



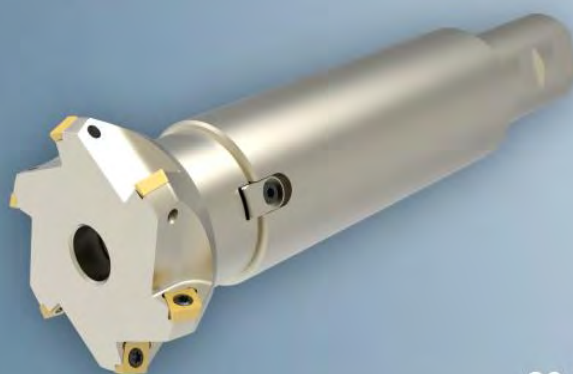
齿轮倒角刀



插槽刀



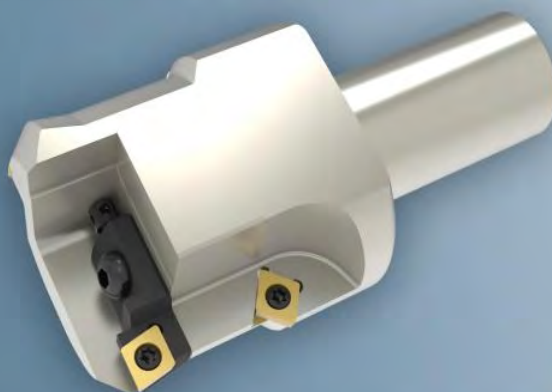
减震组合刀体



20° 倒角刀



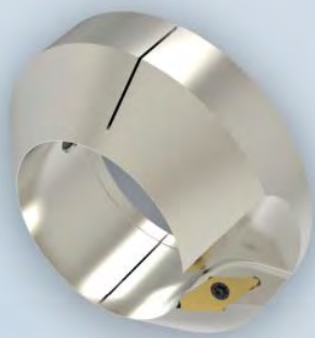
可调螺纹刀头



可调镲刀



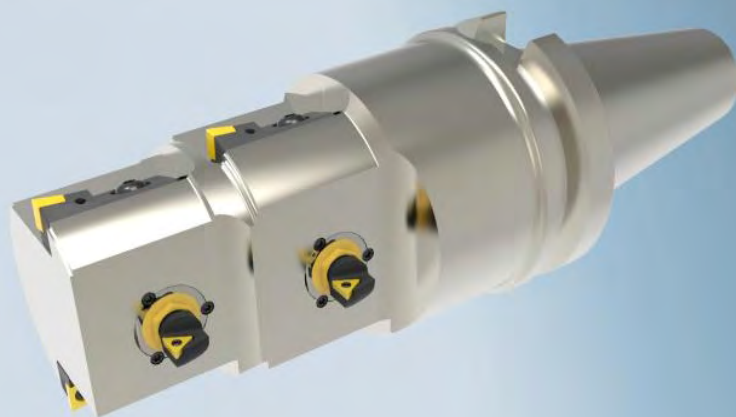
非标车刀杆



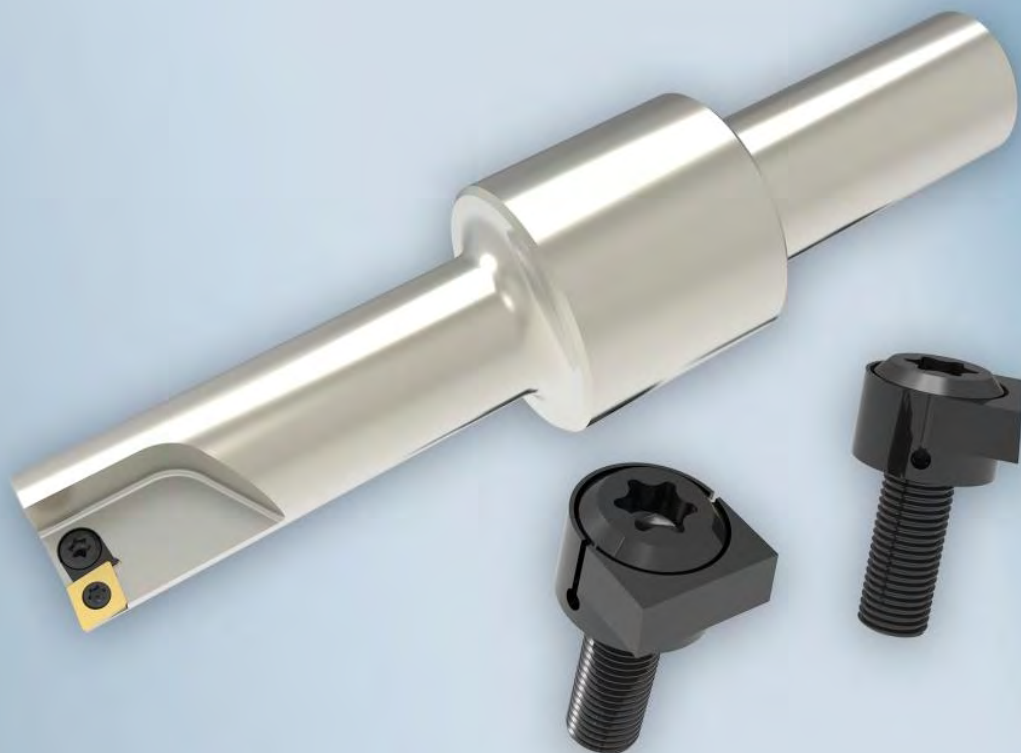
倒角环



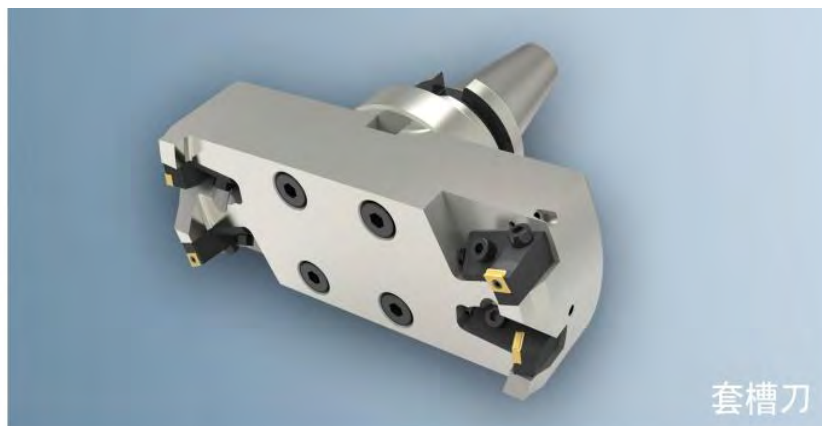
刹车钳铣刀



精镗刀



微调楔块机构



套槽刀



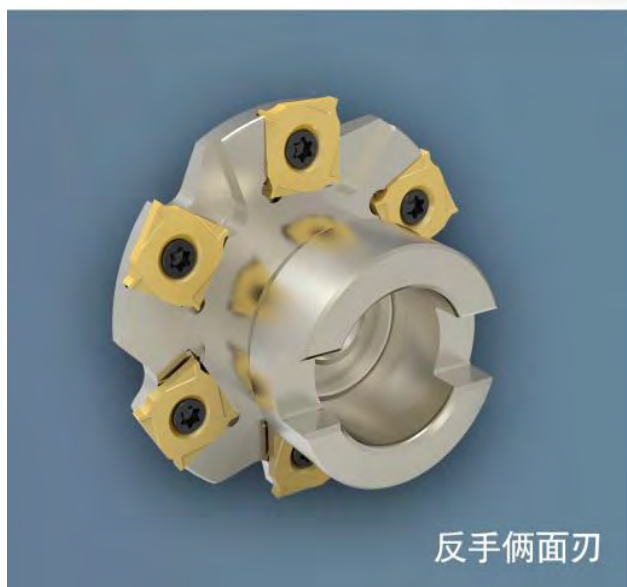
整体粗镗精镗倒角复合刀



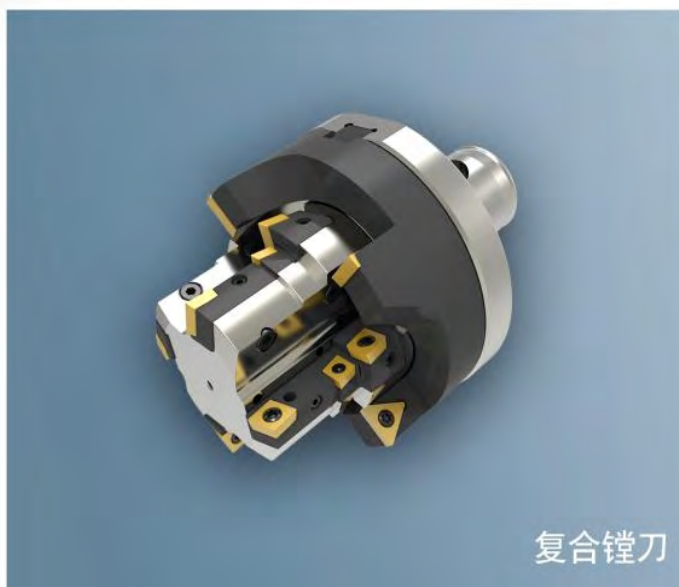
复合套镗刀带中心钻



粗精复合镗刀



反手俩面刀



复合镗刀



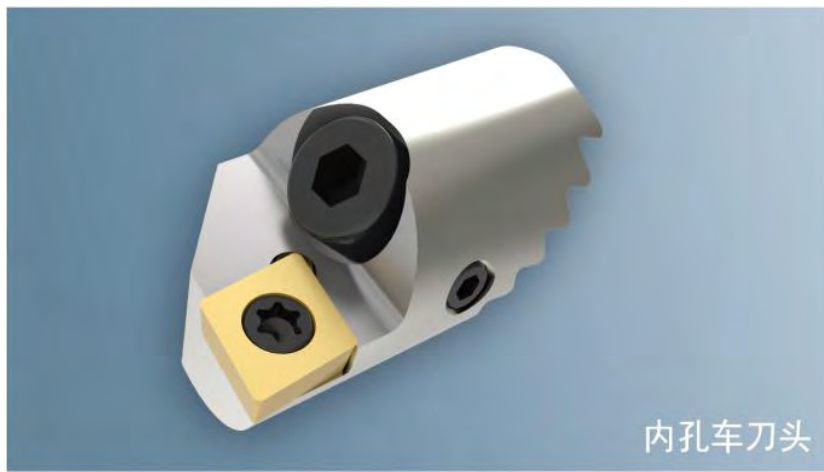
复合阶梯镗刀



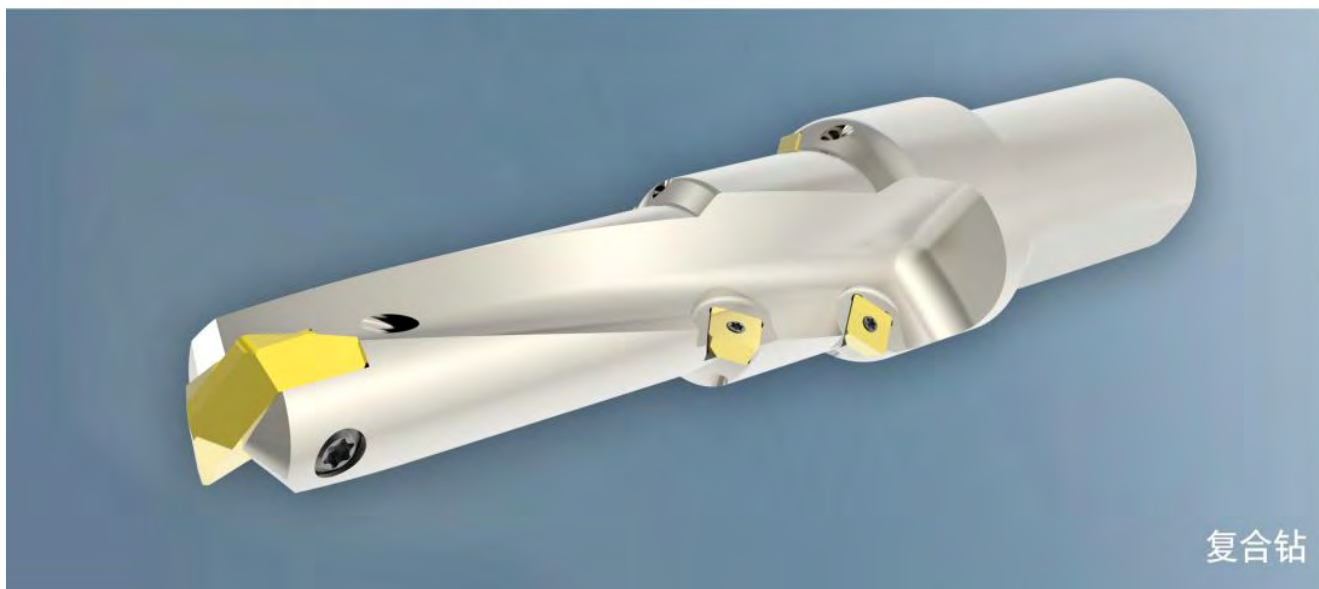
柳叶立铣刀



球头铣刀

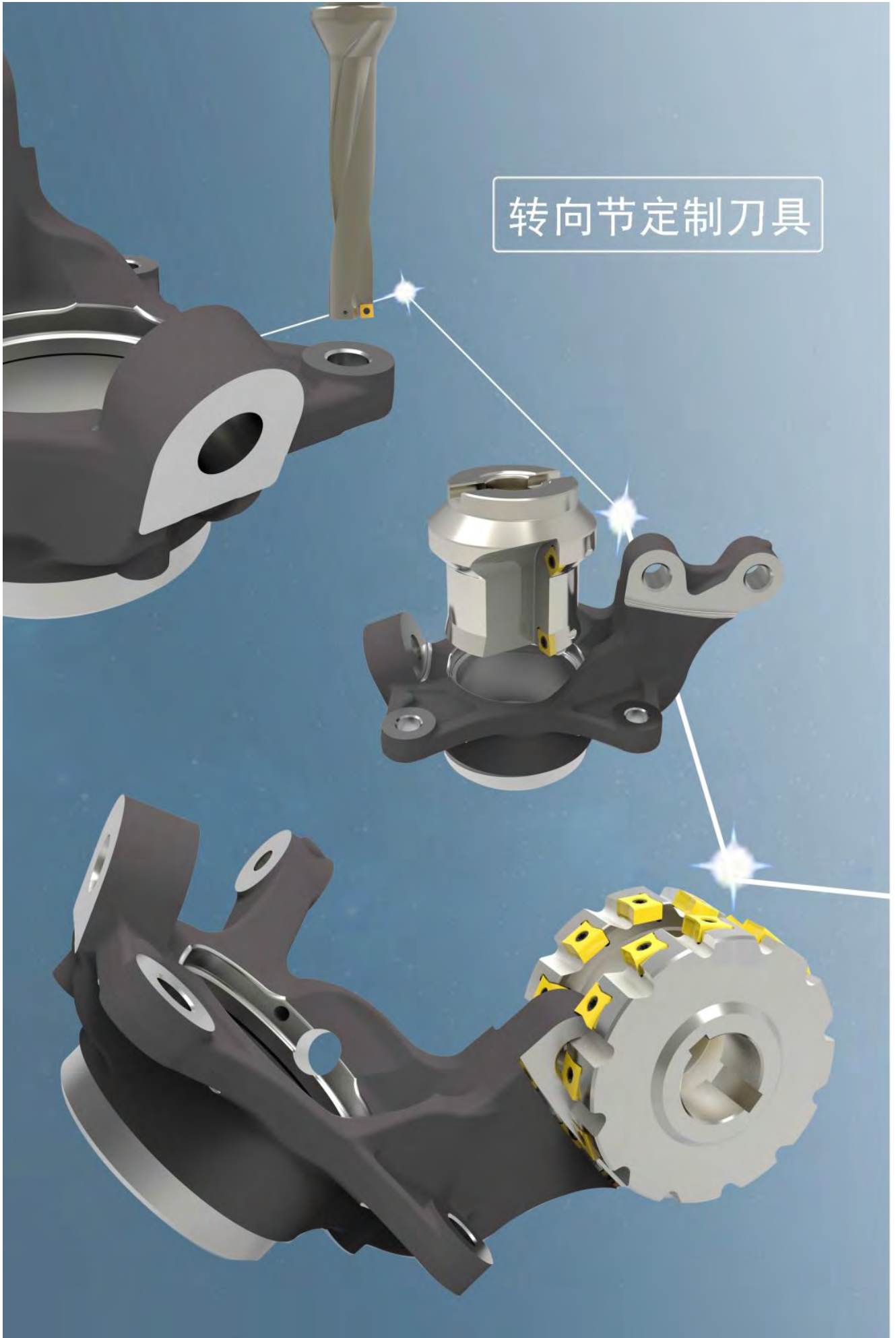


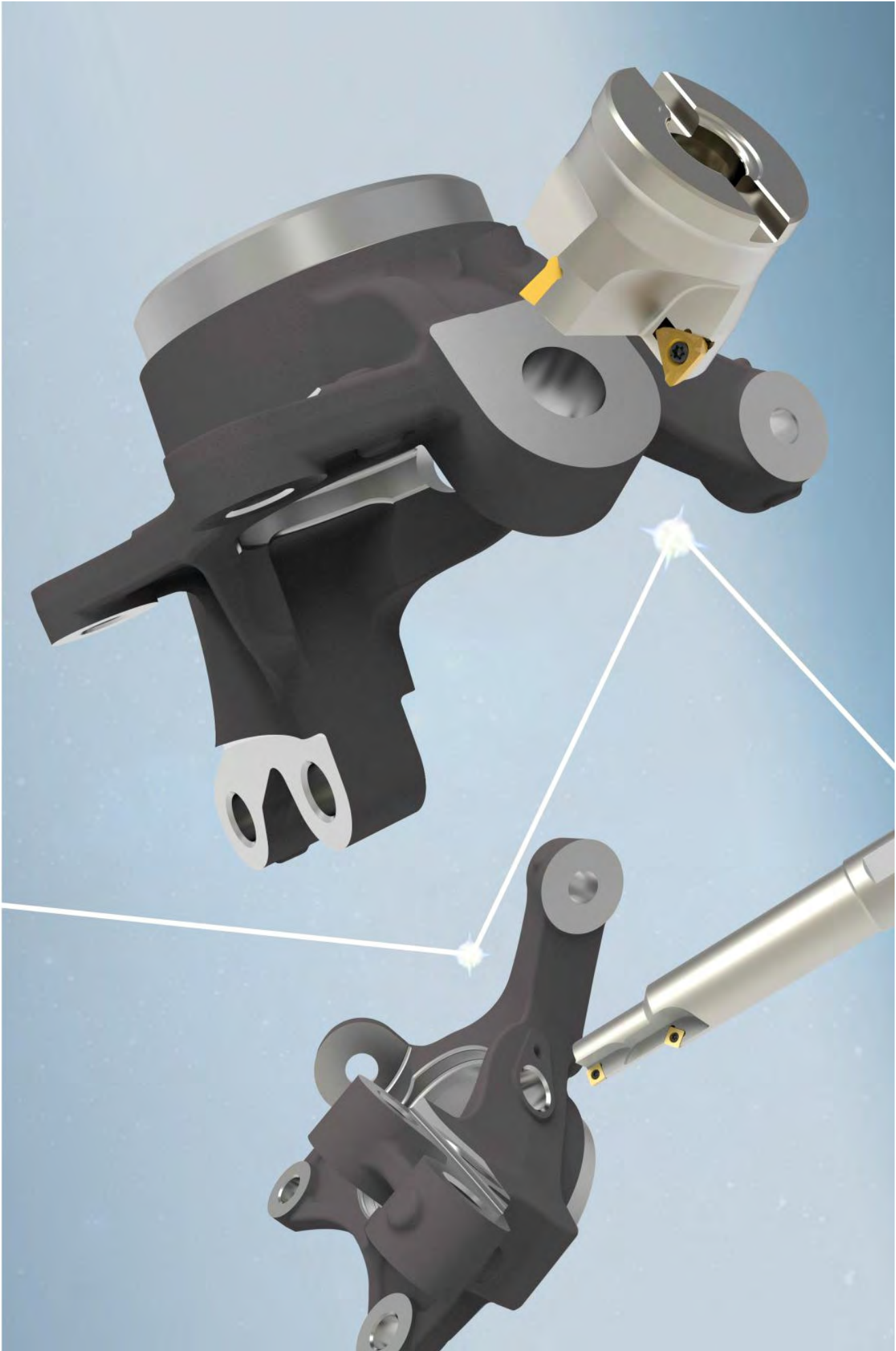
内孔车刀头



复合钻

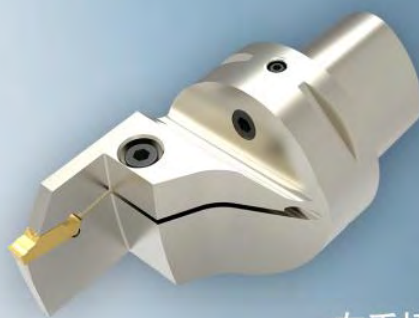
转向节定制刀具



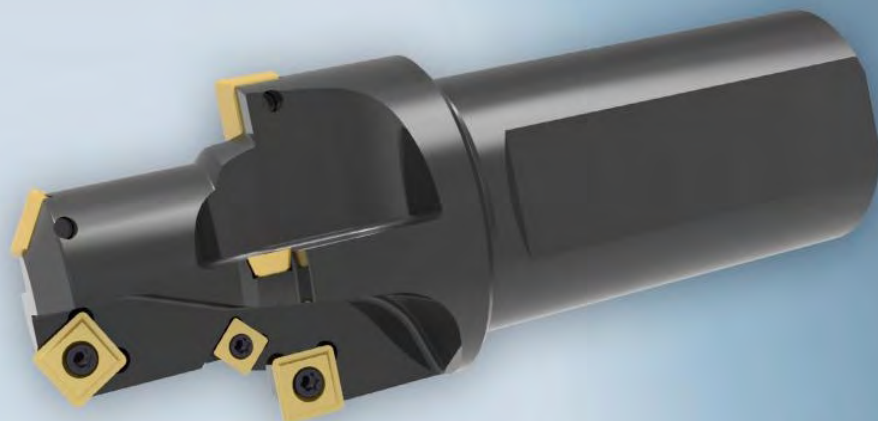




接纳器



左手切槽刀



复合镗刀



球头铣刀

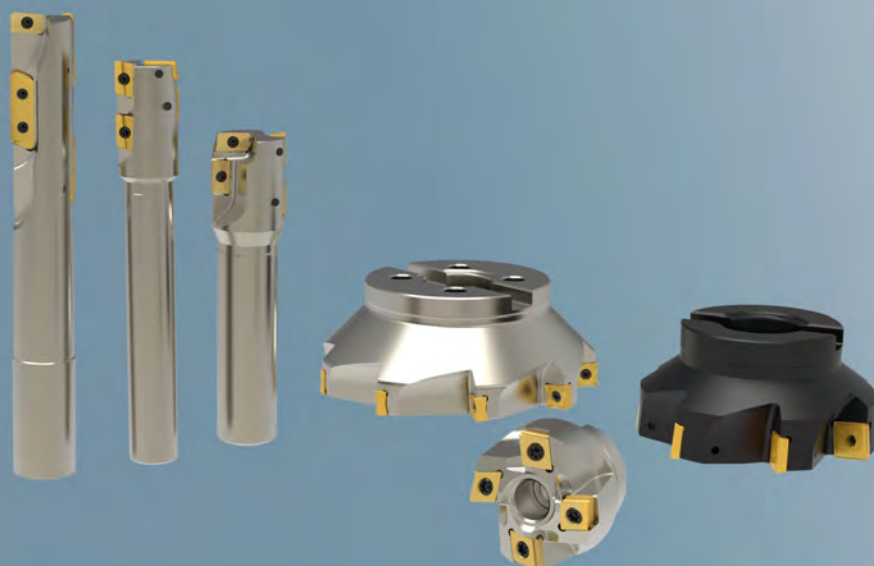


齿条刀盘



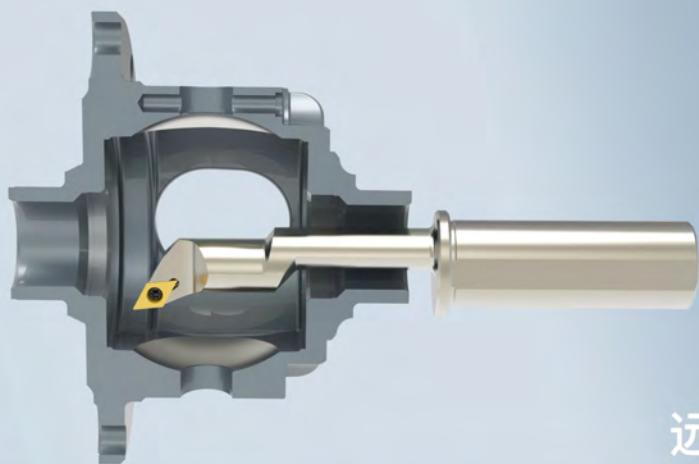
锥度玉米铣

插铣刀

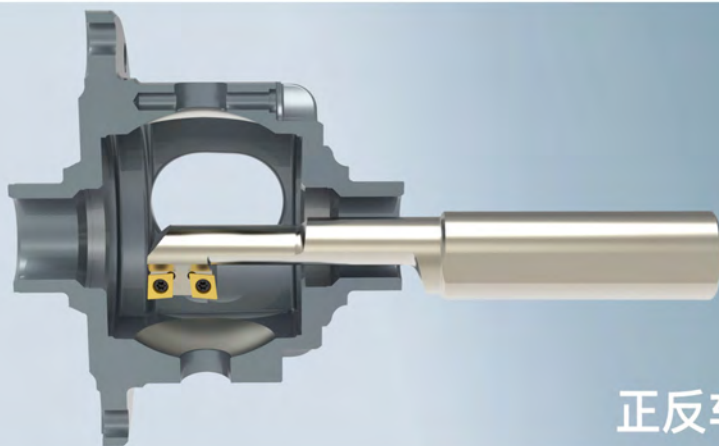


差速器刀具

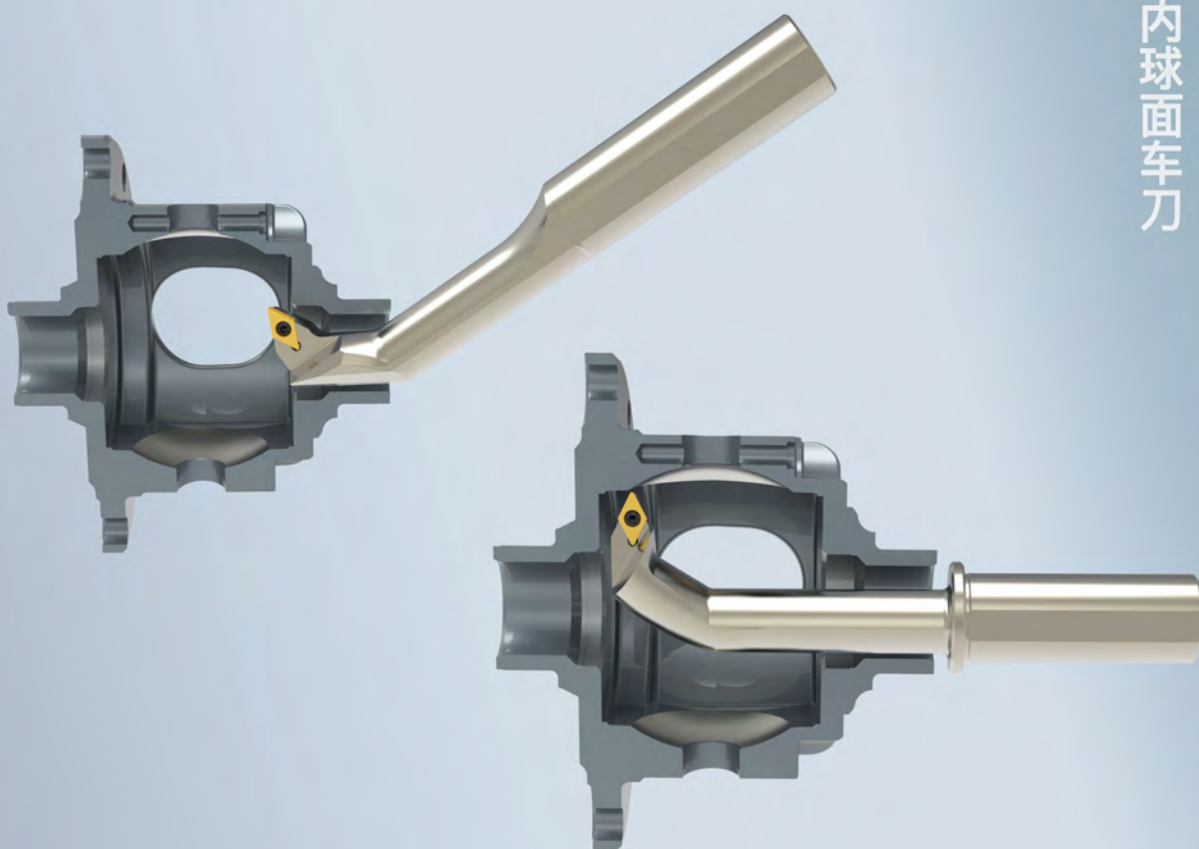




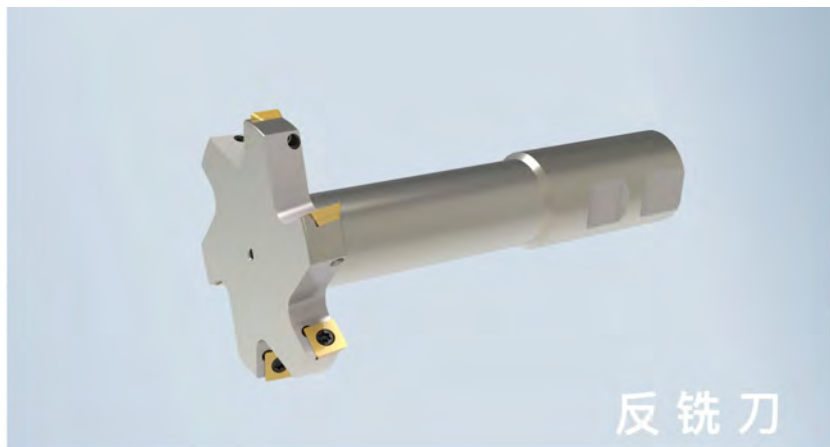
远端车刀



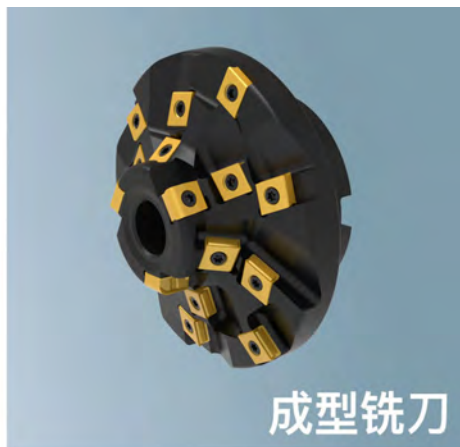
正反车刀



内球面车刀



反 铣 刀



成型铣刀

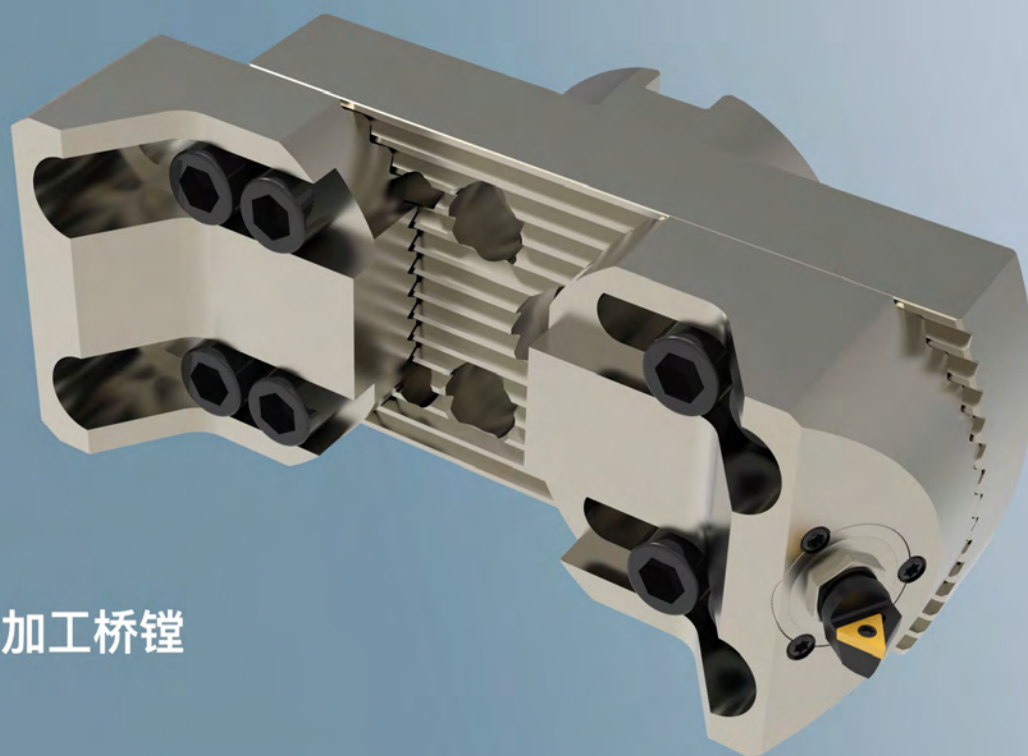


套 料 钻

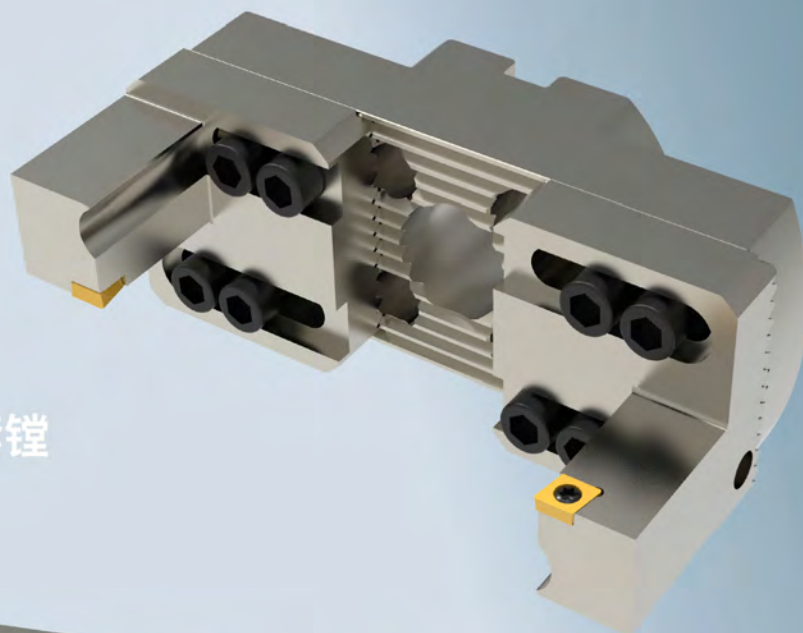


三
面
刃

桥镗刀具



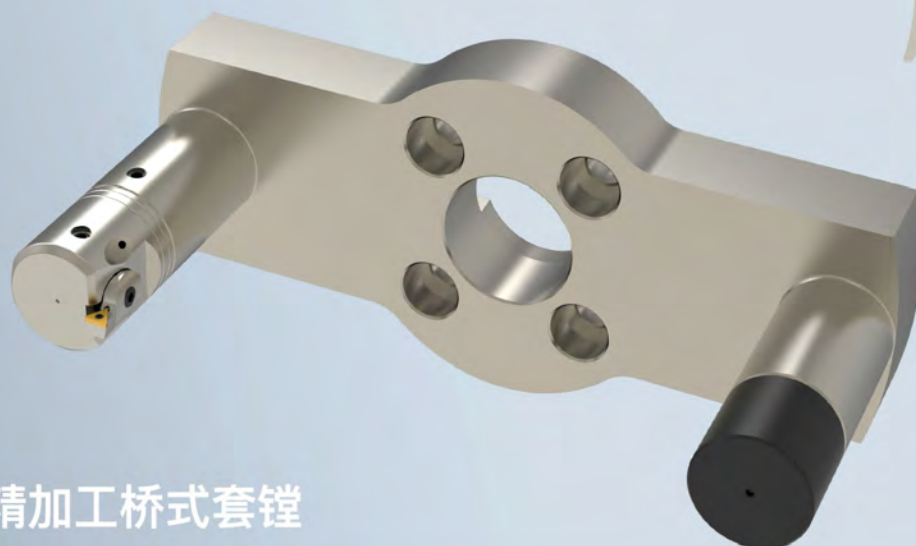
精加工桥镗



粗加工桥式套镗



槽刀式桥镗

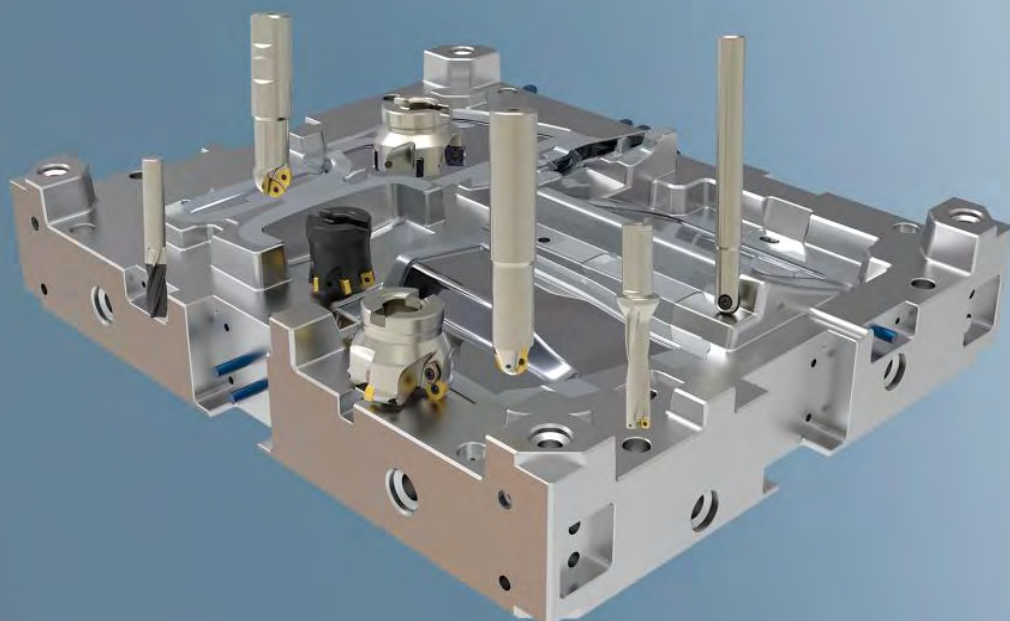


精加工桥式套镗

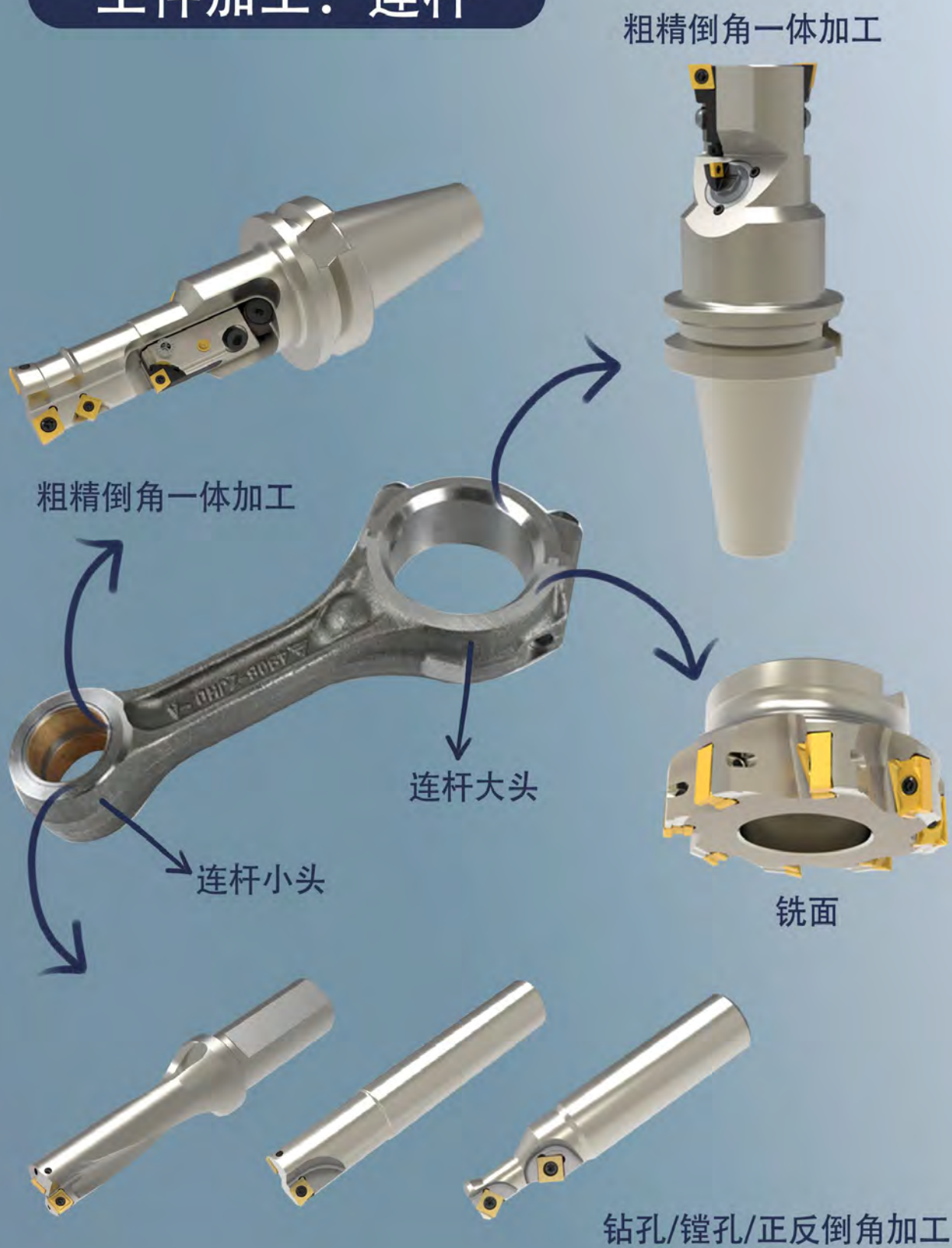
转向节定制刀具



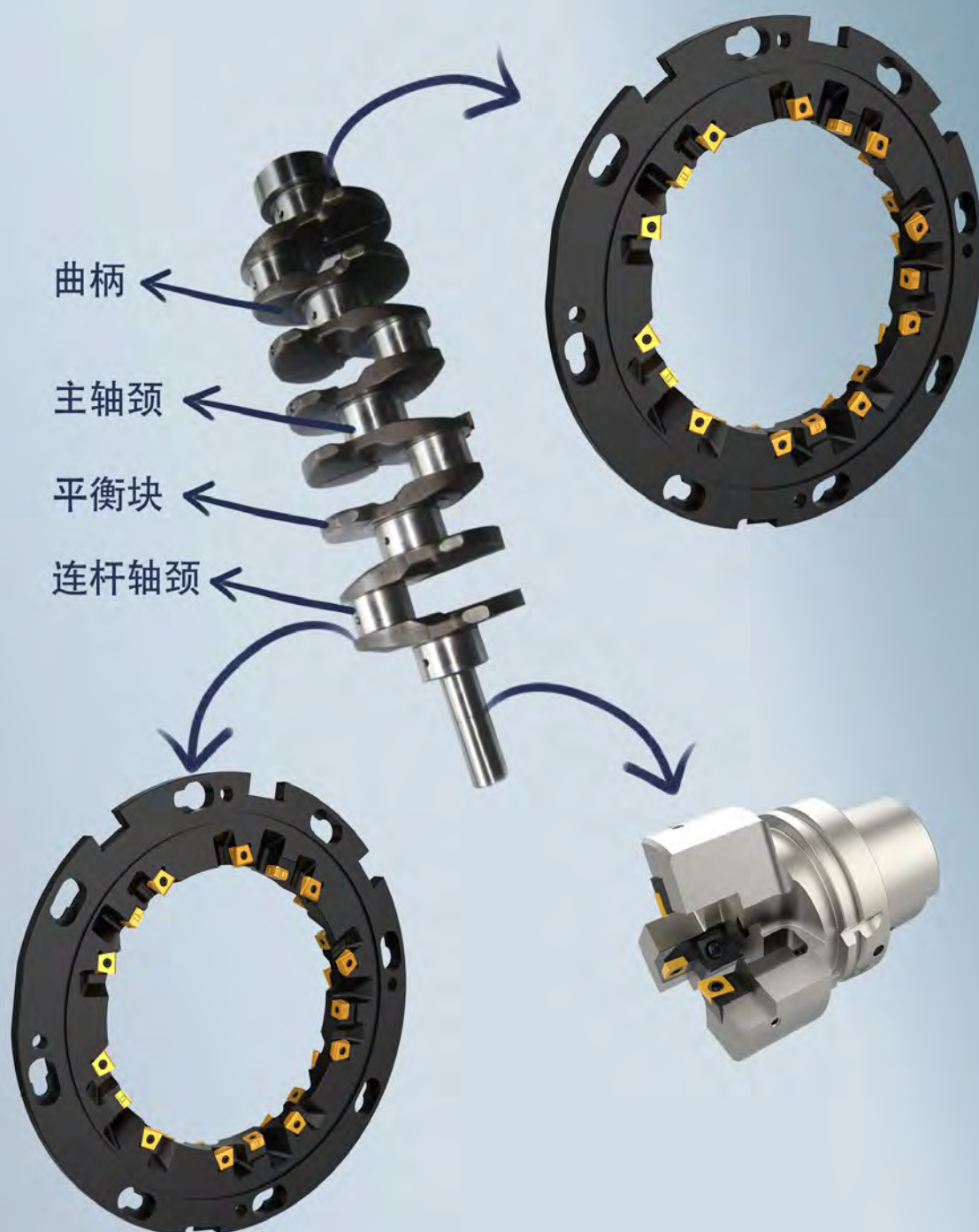
模具加工



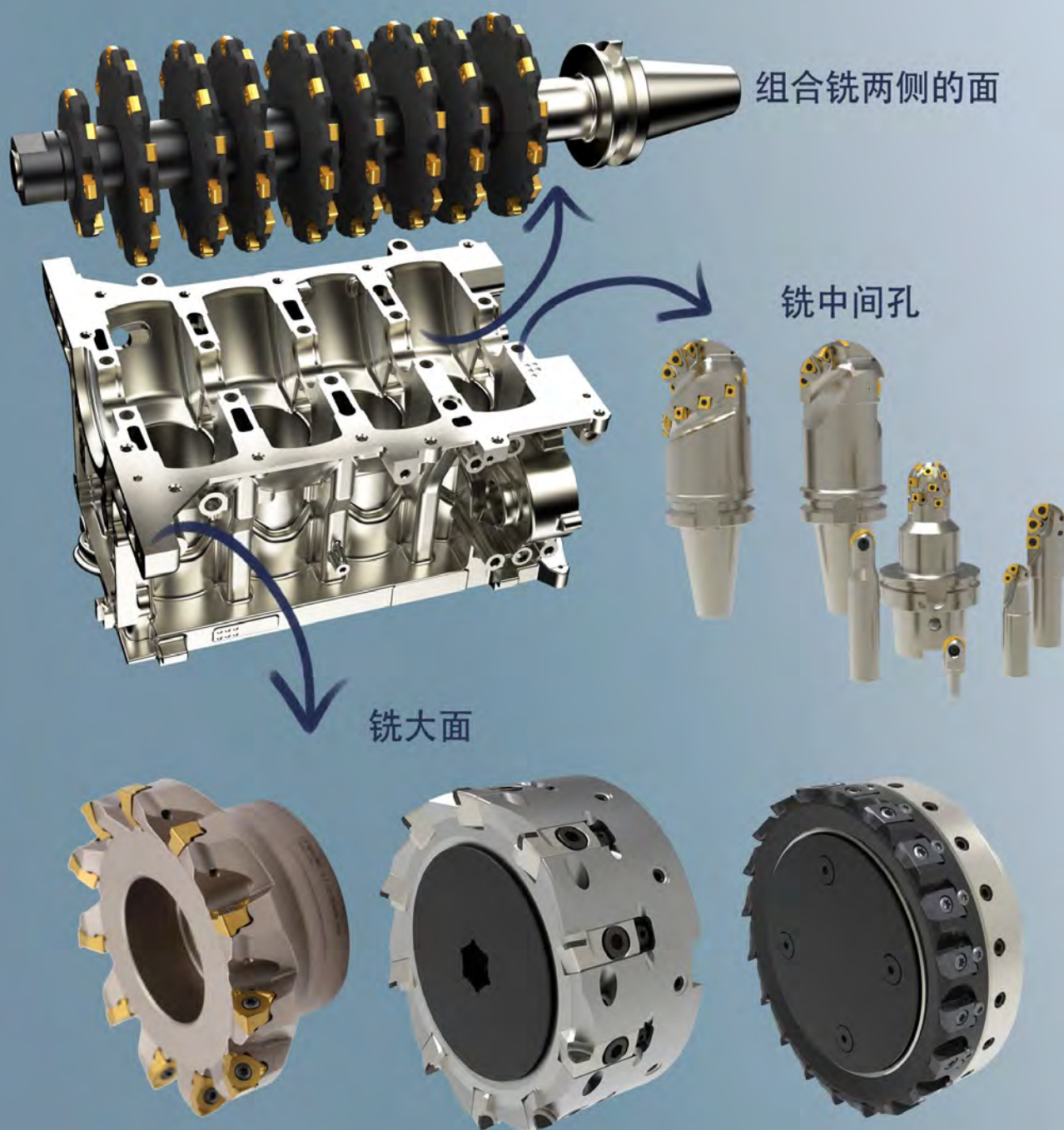
工件加工：连杆

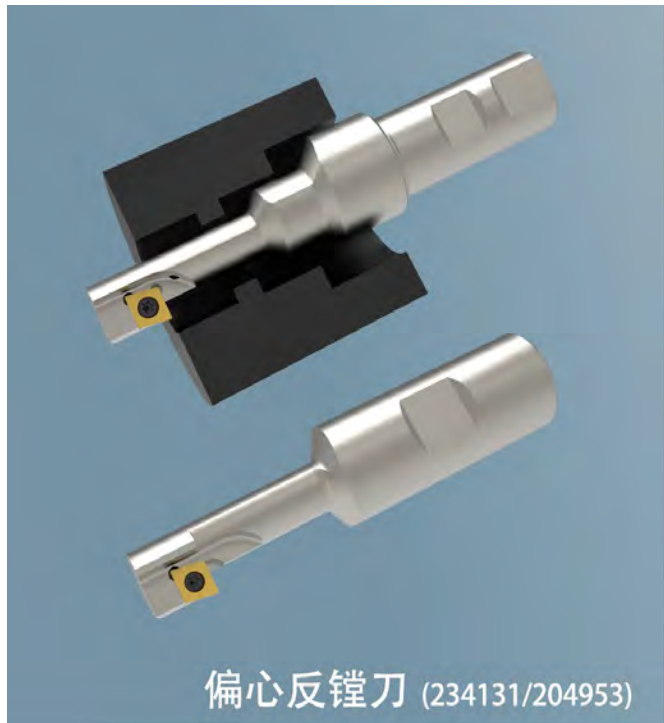


工件加工：曲轴

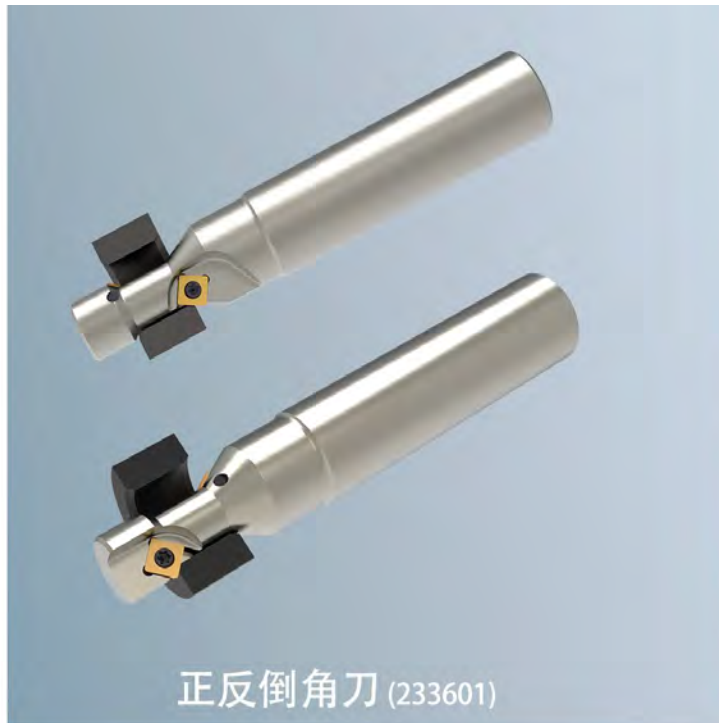


工件加工：缸体





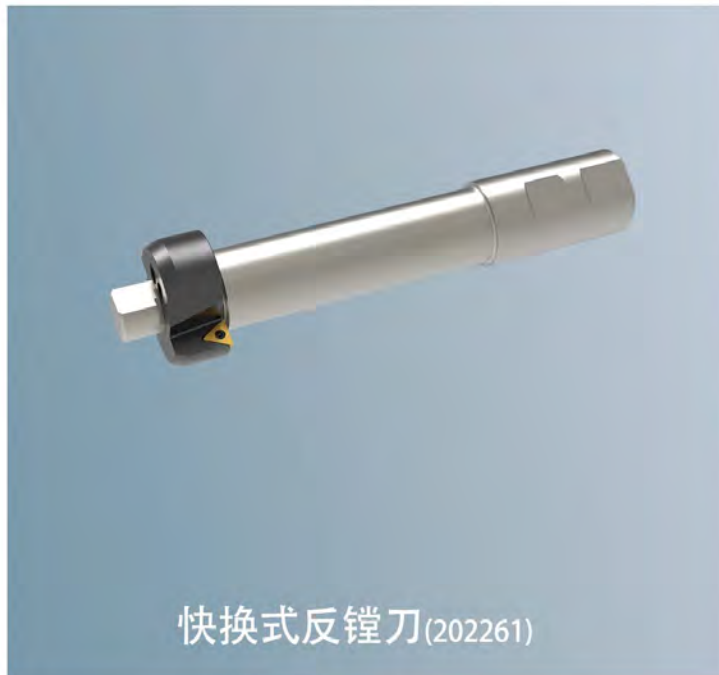
偏心反镗刀 (234131/204953)



正反倒角刀 (233601)



整体式反精镗刀 (223722/231115)



快换式反镗刀 (202261)



分体式反精镗刀 (233025)



快换式反镗刀 (221097-221098)



单齿镗刀 (183712)



双齿镗刀 (211265)



3齿倒角复合镗刀 (190984)



4齿倒角复合镗刀 (203889)



4齿双层阶梯镗刀 (223717)



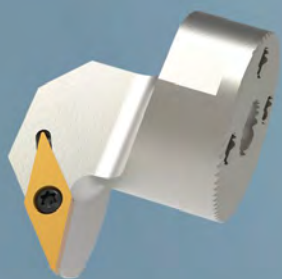
4齿粗精复合镗刀 (212515)



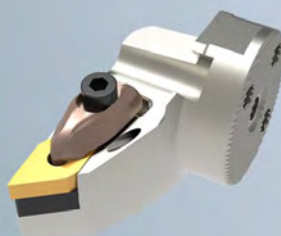
5齿复合镗刀 (233025)



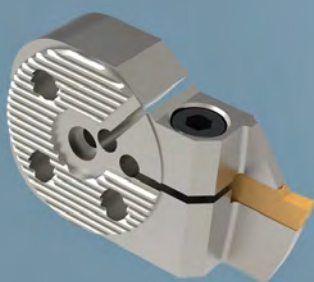
6齿复合镗刀 (210301)



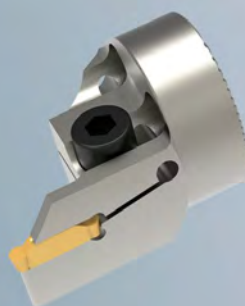
570车刀头 (193440)



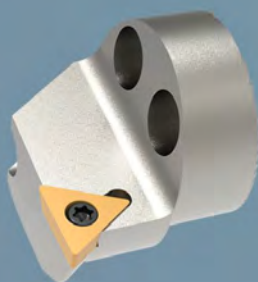
570车刀头 (211265)



570槽刀头 (190984)



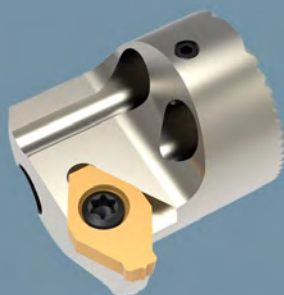
570槽刀头 (203889)



570车刀头 (223717)



570车刀头 (212515)



570车刀头 (233025)



570车刀头 (240877)



螺纹头(235034)



螺纹头(222933)



螺纹头组合图



螺纹头(230433)



螺纹头(233646)

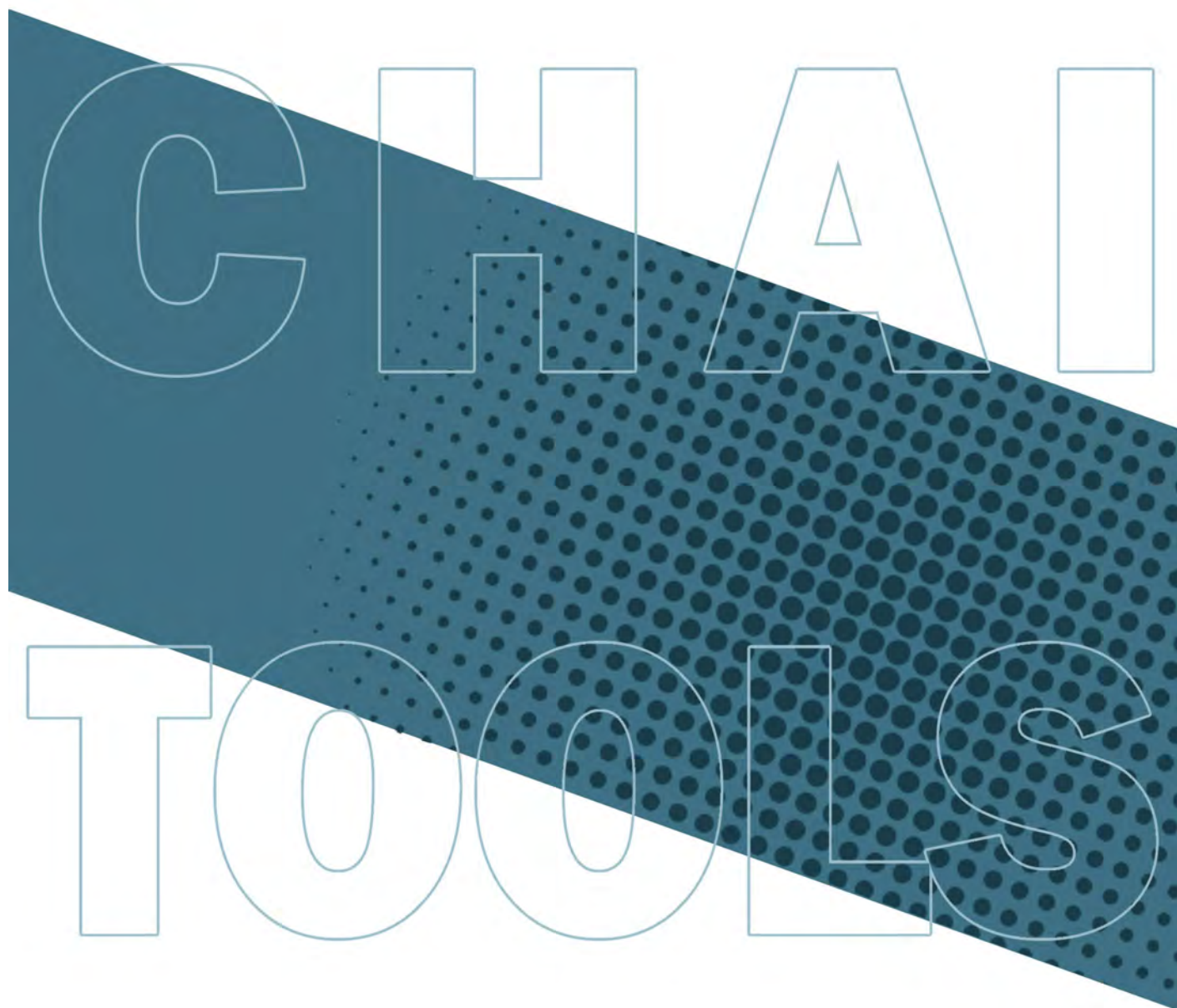
智能刀具柜

超凡脱俗 卓尔不群

- ① 弹簧柜（主柜）；型号：CA-SJ-80Z
- ② 弹簧柜（副柜）；型号：CA-SJ-80F
- ③ 抽屉柜；型号：CA-CT-138F
- ④ 回收柜；型号：CA-HS
- ⑤ 抽屉柜；型号：CA-CT-100F
- （备注：①号主柜为必选柜）



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Chai Cutting tools Co.,Ltd.