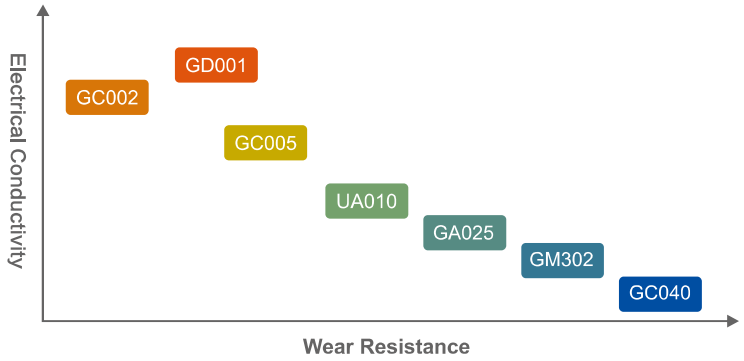
PCD Product Range

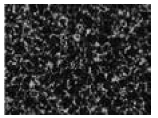
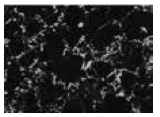
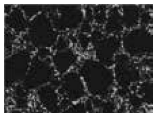


Available Sizes and Specifications

Grade	Grain size (μm)	Diameter / Usable area (mm)	Standard PCD layer (mm)	Overall thickness (mm) 0.8	1.0	1.2	1.6	2.0	3.2	PCD layer thickness (mm)
GD001	1	51	0.3	√	√	√	√			0.20 to 0.45
		55/51	0.5		√	√	√	√	√	0.40 to 0.60
GC002	2	58	0.5		√	√	√	√	√	0.40 to 0.60
GC005	5	51	0.3	√	√	√	√			0.20 to 0.45
		58	0.5		√	√	√	√	√	0.40 to 0.60
UA010	10	51	0.3	√	√	√	√			0.20 to 0.45
		58	0.5		√	√	√	√	√	0.40 to 0.60
GA025	25	58	0.5		√	√	√	√	√	0.40 to 0.60
GM302	30+2	51	0.3	√	√	√	√			0.20 to 0.45
		58	0.5		√	√	√	√	√	0.40 to 0.60
GC040	40	58	0.5				√	√	√	0.40 to 0.60

Non-standard sizes available upon request

PCD Product Range and Characteristics

Grade	Applications	Characteristics	Microstructure
GD001	Automotive aluminum alloy parts, precision engineering applications that require ultra precision, very fine surface finish and high degree of abrasion resistance.	1 μm average grain size, with ultra-fine grain structure for clean, sharp cutting edges. GD001 is the ideal grade for the applications where mirror finishes are required.	
GC002	Aluminum alloys < 12% Si, copper alloys, fine surface finish turning, reaming etc.	2 μm average grain size, with good wear resistance, high wire cutting machinability and high precision accuracy.	
GC005	Aluminum alloys < 12% Si and copper alloys, composites with good finish.	5 μm average grain size, GC005 has an optimal balance of wear and chipping resistance.	
UA010	General applications (turning, milling, drilling, reaming, etc.) in non-ferrous metal-working. Aluminum alloys < 12% Si, composite materials, etc.	10 μm average grain size, UA010 has a balance of wear and chipping resistance,surface finish and ease of fabrication that make it very widely used.	
GA025	Aluminum alloys > 12% Si, metal matrix composites, ceramic, graphite and carbon fiber material, etc.	25 μm average grain size, GA025 is the main grade for good wear resistance applications.	
GM302	Aluminum alloys > 12% Si, carbon fiber composites, silicon carbide-reinforced aluminum alloys, stone, asphalt, concrete, graphite, etc.	A mixed grain size of 2 μm to 30 μm,with better wear resistance. GM302 is a complementary grade for applications where high wear resistanceis required.	
GC040	Highest wear resistance for machining MMC,graphite, stone, asphalt, concrete,etc.	40 μm average grain size. GC040 is recommended for applications requiring the highest wear resistance.