

Meltio Engine Robot Integration kit

For Industrial Robots - Hybrid Manufacturing Integration

Turn a robot arm into a metal 3D printing system with no inherent size constraints. It is the perfect platform for large and complex 3D printing, repair, cladding and feature addition.

The Meltio Engine integrates with any robot arm manufacturer and interface on the market. Meltio Space slicer software for robots is compatible with ABB, Kuka, Fanuc, Yaskawa and Siemens.



Engine Blue Integration kit



Engine Blue Integrated on a ABB IRB4600 robot

Technical Specifications

| | | | |
|---------------------------|--|-------------------------|--|
| Laser System: | 1000 W 9 x 450 nm direct diode lasers | Print Envelope (WxDxH): | Depending on robot's reach |
| Printhead: | Robot Mounted 20.5 to 23 kg | Feeder System: | Quad-point traction servo feeders, frictionless liners |
| Printhead Size (WxDxH): | 262 x 272 x 572 mm | Process Control: | Melt Pool Camera & Closed-loop wire modulation |
| Control Unit: | Wall mounted, air-cooled 80.5 kg 600 x 300 x 800 mm | Power Input: | 200/240 V 3W+PE 380/415 V 3W+N+PE |
| Human Machine Interface: | Wall mounted 27" tactile screen | Power Consumption: | 9.2 kW peak 1.0 / 1.4 kW avg cons: 3.93 / 4.56 kW |
| Cooling: | Water-cooled deposition head. Chiller Included | Wire Feedstock: | Diameter: 0.8-1.2 mm / Spool Type: BS300 External wire drum ready |
| Slicer Software: | Meltio Space 1-year subscription included | Product Configurations: | Single or Dual Wire |
| Integration Requirements: | Requirements Robot | Compatible Materials: | Stainless Steels, Carbon Steels, Tool Steels, Nickel Alloys, Titanium, Copper Alloys, Gold alloys and more |

Meltio Engine CNC Integration kit

For vertical machining centers - Hybrid Manufacturing Integration

The most affordable hybrid manufacturing solution, fitting almost any Vertical Machining Center in the market. Enable metal 3D printing and machining of complex geometries in a single process step.

The Meltio Engine is the ideal complement for near-net shape manufacturing, repair and feature addition.



Engine Blue Integration kit



Engine Blue Integrated on a Haas VF4

Technical Specifications

| | | | |
|--|---|--------------------------------|--|
| Laser System: | 1.0/1.4 kW 9 x 450 nm direct diode lasers | Print Envelope (WxDxH): | Depending on the Machining Center |
| Printhead: | Mounted on the right side of the spindle 32.5 to 35 kg | Feeder System: | Quad-point traction servo feeders, frictionless liners |
| Printhead Retracted Size (WxDxH): | 280 x 332 x 684 mm | Process Control: | Melt Pool Camera & Closed-loop wire modulation |
| Printhead Unretracted Size (WxDxH): | 280 x 332 x 943 mm | Power Input: | 200/240 V 3W+PE 380/415 V 3W+N+PE |
| Control Unit: | Wall mounted, air-cooled 80.5 kg 600 x 300 x 800 mm | Power Consumption: | 9.2 kW peak 1.0 / 1.4 kW avg cons: 3.93 / 4.56 kW |
| Human Machine Interface: | Wall mounted 17" tactile screen | Wire Feedstock: | Diameter: 0.8-1.2 mm / Spool Type: BS300 External wire drum ready |
| Cooling: | Water-cooled deposition head. Chiller Included | Product Configurations: | Single or Dual Wire |
| Software: | Meltio relies on its Software Partners Ecosystem for the Hybrid process, including additive and subtractive Visit Meltio Software Partners for more info | Compatible Materials: | Stainless Steels, Carbon Steels, Tool Steels, Nickel Alloys, Titanium, Copper Alloys, Gold alloys and more |

Integration Requirements: [Requirements CNC](#)