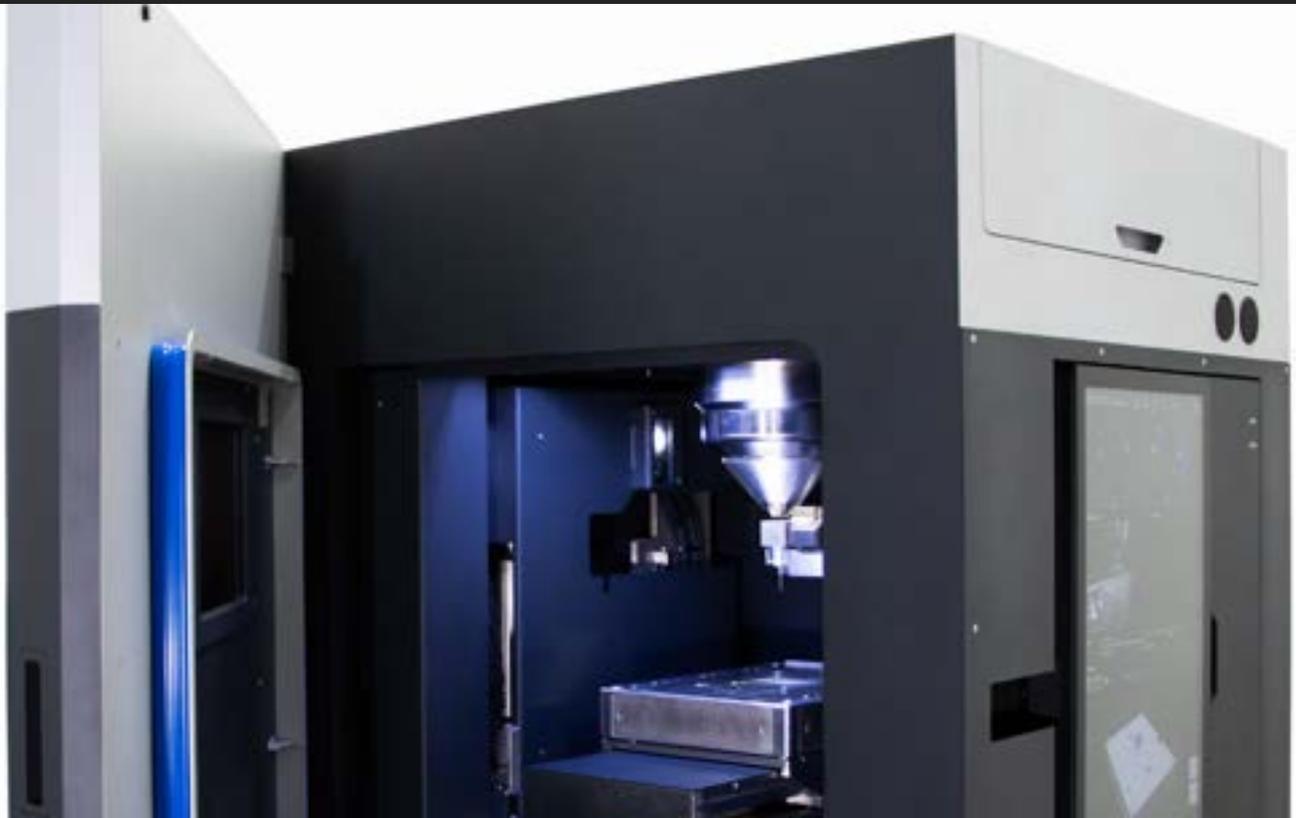


MELTIO

Meltio M600

Industrial Metal 3D Printer



Plug-and-play solution

1. Production ready

Big parts, higher deposition rate, larger material range, inert print chamber, less maintenance, and built-in workholding solutions as the zero point clamping and probing make for a production ready system.

3. Reduced maintenance

The newly developed deposition head eliminates the need for laser alignment and integrates all optical components into a single sealed assembly. Additionally, the motion system has been enhanced and oversized to ensure maximum lifetime and reliability.

5. Automated integration

Integrating the system into existing manufacturing workflows becomes easy thanks to the compact footprint and flexible workholding architecture.

7. Meltio Horizon

Meltio Horizon is a proprietary toolpath generator software for 3-axis metal 3D printing, tailored specifically to our laser-wire deposition process with our industrial 3D printer, the Meltio M600.

Simpler profile selection and premade profiles that cover a large range of geometries and qualities.

2. Ease of use

Featuring advanced sensor solutions, a simplified UI, a dedicated slicer, a zero point clamping and probing system, this setup minimizes operator interaction for a more seamless experience.

4. Stability, repeatability and reliability

With an enhanced wire feeding system, fiber-free deposition head, and advanced process control systems, this machine is designed for exceptional reliability and performance.

6. Increased working volume

Fully inert printing volume of 300 x 400 x 600 mm expands manufacturing possibilities to larger components while improving the quality for highly reactive materials like titanium.

8. Cost saving

The high-efficiency Blue Laser diodes and enhanced absorption capabilities significantly reduce energy consumption per component, resulting in a greener and more cost-effective production process.

Technical details

Dimensions (WxDxH):	1050 x 1150 x 1950 mm
Build envelope (WxDxH):	300 x 400 x 600 mm
System weight:	800-1000 kg (depending on options)
Movement system:	Servo Motor Linear axis with absolute encoder on all axis
Filtration system:	3 Stage Particulate and Chemical Filtration included
Environment control:	Control O2 and Humidity levels
Laser type:	9x Direct Diode Lasers
Laser wavelength:	450 nm (Blue)
Total laser power:	1000 W

Power input:	380-415 V Three-phase + N + PE 200-240 V Three-phase +PE
Power consumption:	4-6 kW avg. consumption, 12 kW peak
Process control:	Closed Loop, Laser and Wire Modulation
Touch probe:	Automated XYZ Touch Probe integrated
Enclosure:	Laser safe, Controlled inert atmosphere
Interface:	USB, Ethernet
Cooling:	Active water-cooled chiller included
Wire feedstock:	Diameter: 0.8-1.2 mm / Spool Type: BS300 External wire drum ready

Applications

Aerospace

Jewelry

Railway

Manufacturing Industry

Construction

Industrial

Automotive

Naval



Exhaust Manifold - Automotive

Size: 126 x 111 x 110 mm

Weight: 4.6 kg

Material: Stainless Steel 316L // Nickel 718



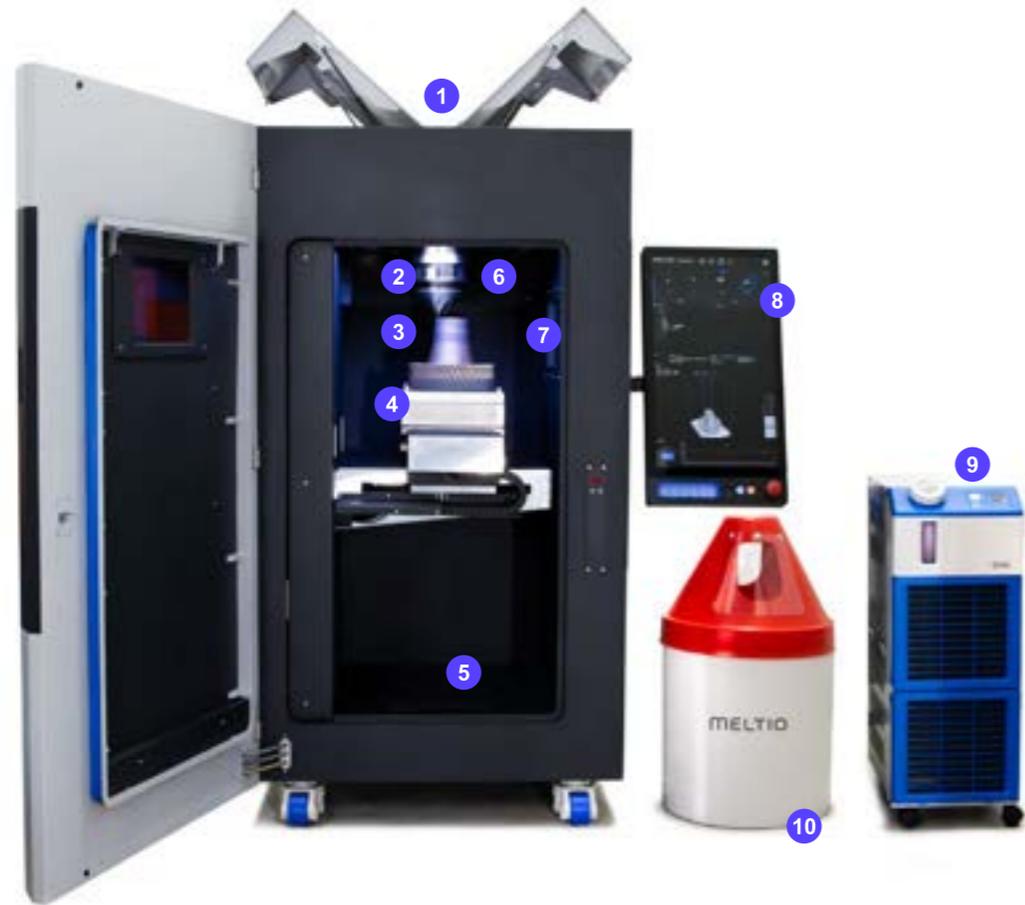
Heat Exchanger Core - Oil & Gas

Size: 120 x 120 x 395 mm

Weight: 8.7 kg

Material: CuCrZr

Meltio M600 configuration



1. Quad wire

2. Blue Laser printhead

3. Full inert chamber

4. 3 Axis - Touch and wire cutter

5. Dehumidifier and filter

6. Hot wire

7. Build envelope - 300 x 400 x 600 mm

8. Touch HMI

9. Chiller

10. External wire drum - 100kg

Blue Laser

1. Blue light

450 nm light improves energy absorption and printing efficiency across the metal material spectrum and opens new material possibilities.

3. No calibration

The new head eliminates the need for calibration between material changes and comes factory-aligned, ensuring maximum printing repeatability and minimal maintenance.

2. Hotwire compatible

The deposition head is designed for use with an optional hotwire supply, enabling increased deposition rates and expanding the range of materials that can be processed.



Material and feeding system

1. Aluminum and Copper ready

The Meltio M600 is compatible with steel, carbon steel, nickel, titanium, aluminum and copper based alloys.

3. Wire drum ready

The wire drum connector allows for a reliable and industrial feeding system for material spools of +100kg.

2. Dual and quadruple wire

Options for printing with up to four different materials in the same print sequentially with the reliability of a single wire process.

4. Hot wire

Programmable power supply that preheats the material to increase the deposition rate.



Get to know us!

www.meltio3d.com

Expand your manufacturing capabilities with Blue Lasers, a large build volume and a fully inert chamber for the best material properties. Printing is easier than ever thanks to the improved process control, advanced sensors and live monitoring allowing you to produce parts consistently 24/7.

The Meltio M600, with its built-in 3-axis probing system and work-holding solutions, is the ideal companion for your manufacturing operations.

