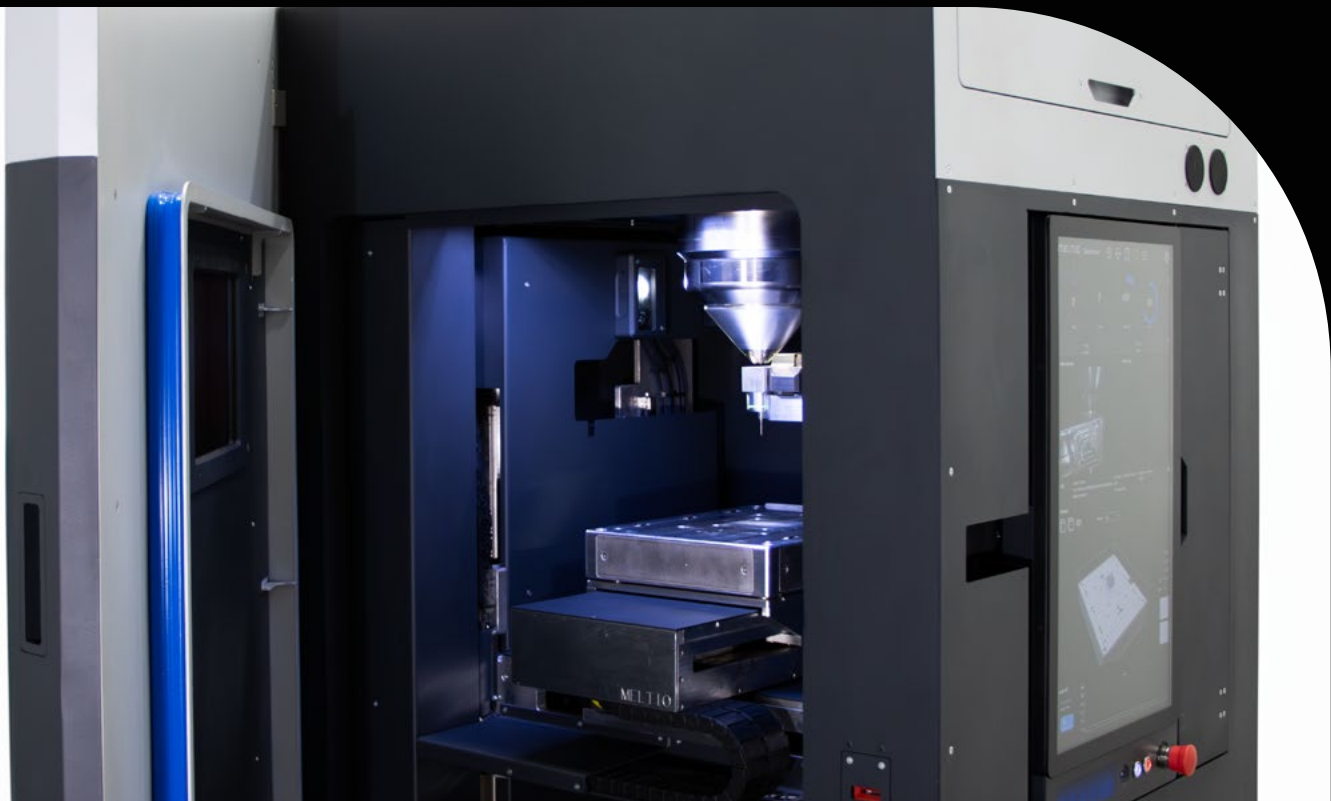


# MELTIO

## Meltio M600

Industrial Metal 3D Printer



# Why Choose Meltio M600?

## 1. Production Ready

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Bigger parts, higher deposition rate, larger material range, inert print chamber, less maintenance, and built-in workholding solutions make for a production ready system.

## 2. Ease of Use

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Advanced sensor solutions, simplified UI, dedicated slicer, zero point clamping system, and probe system. All designed to minimize operator interaction.

## 3. Reduced Maintenance

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The newly developed deposition head removes the need for laser alignment, while the motion system has been improved and over-sized to ensure maximum life-time.

## 4. Stability, Repeatability, Reliability

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Improved wire feeding system, fiber free deposition head, improved process control systems, and many more making for an extremely reliable machine.

## 5. Automated Integration

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

## 6. Increased Working Volume

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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.

## 7. Cost Saving

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Thanks to the high efficiency Blue Laser diodes and the increased absorption, the energy consumption per component is reduced significantly, resulting in a greener and more cost efficient process.

# Technical Details

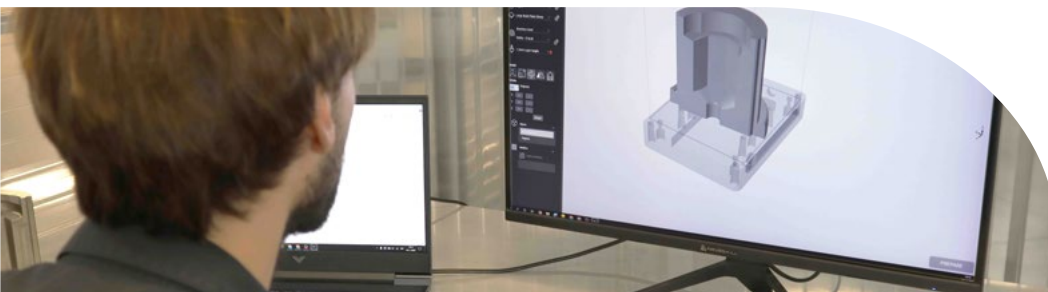
<b>Dimensions (WxDxH):</b>	1050 x 1150 x 1950 mm	<b>Total Laser Power:</b>	1000 W
<b>Build Envelope (WxDxH):</b>	300 x 400 x 600 mm	<b>Power Input:</b>	400V Three Phase
<b>System Weight:</b>	800-1000 kg (depending on options)	<b>Power Consumption:</b>	4-6 kW Peak Depending on selected options
<b>Movement System:</b>	Servo Motor Linear axis with Absolute encoder on all axis	<b>Process Control:</b>	Closed Loop, Laser and wire Modulation
<b>Filtration System:</b>	3 Stage Particulate and Chemical Filtration included	<b>Touch Probe:</b>	Automated XYZ Touch Probe integrated
<b>Environment Control:</b>	Control O2 and Humidity level	<b>Enclosure:</b>	Laser safe, Controlled inert atmosphere
<b>Laser Type:</b>	9x Direct Diode Lasers	<b>Interface:</b>	USB, Ethernet, WiFi
<b>Laser Wavelength:</b>	450 nm (Blue)	<b>Cooling:</b>	Active water-cooled chiller included
		<b>Wire Feedstock:</b>	Diameter: 0.8-1.2 mm / Spool Type: BS300 External wire drum ready

## Meltio Horizon

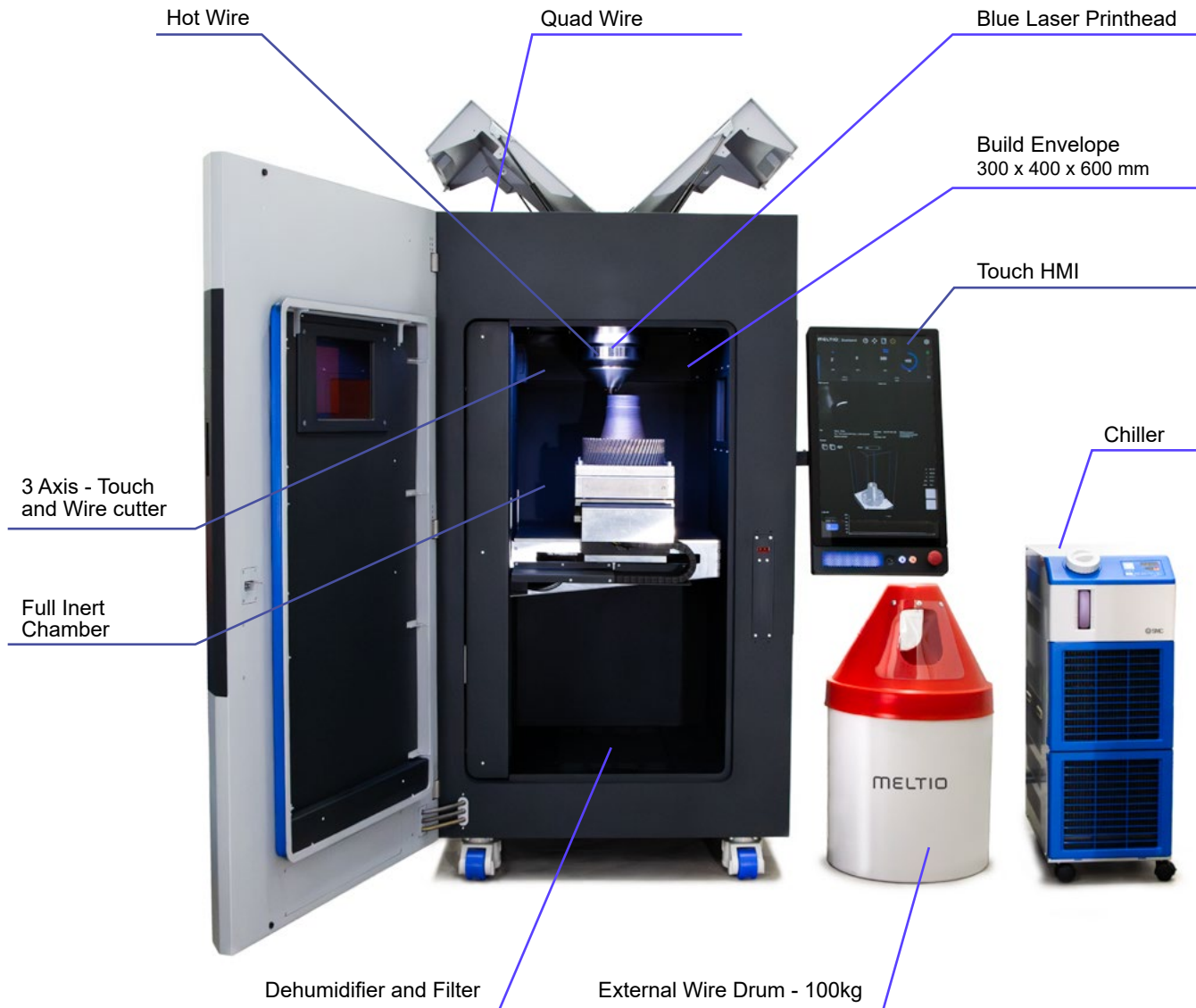
### Metal 3D Printer Slicer

Meltio Horizon is a proprietary toolpath generator software for 3-axis metal 3D printing, tailored specifically to our laser-wire deposition process with the Meltio M450 and Meltio M600 metal 3D printers.

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



# Meltio M600 Configuration



# Blue Laser

## 1. Blue Light

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

## 2. Hotwire Compatible

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The deposition head is developed for use with an optional hotwire supply to increase the deposition rate and allow for more materials to be processed.

## 3. No Calibration

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The new head doesn't require calibration between material changes and arrives aligned from the factory for maximum printing repeatability and minimal maintenance.



# Material and Feeding System

## 1. Aluminum and Copper Ready

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

## 2. Dual and Quadruple Wire

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

## 3. Wire Drum Ready

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

## 4. Hot Wire

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

MELTIO



Get to know us!

[www.meltio3d.com](http://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.

