# MELTIO

# Meltio M450

# Turn-key Metal 3D Printer

Designed for industry without the need for industrial infrastructure; affordable, reliable, safe and easy-to-use metal 3D printer. Ideal for small to medium size part fabrication and multi-metal 3D printing research.

### Reliable

The metal 3D printing process is monitored in real time and compensated if required by process control.

### Safe

Suitable for any environment thanks to a process built around wire, a sealed chamber and a built-in 3 stage filter.

## Easy-to-use

Automatic toolpath generation and material print profiles supplied by Meltio make for a plug-and-play experience.

### **Affordable**

The low capital and running costs of the Meltio M450 make metal 3D printing of conventional parts possible.



# **Technical Specifications**

Dimensions (WxDxH):

560x600x1400 mm

Print Envelope (WxDxH):

145x168x390 mm

Weight:

250 kg

Laser Type:

6 x 200 W direct diode lasers

Laser Wavelength:

976 nm

**Total Laser Power:** 

1200W

**Power Input:** 

208/230 V single phase or 400 V three phase

**Power Consumption:** 

2-5 kW peak depending on selected options

**Process Control:** 

Closed-loop, laser and wire modulation

**Enclosure:** 

Laser-safe, sealed, controlled atmosphere

Interface:

USB, ethernet, wireless datalink

Cooling:

Active water-cooled chiller included

## **Materials**

#### Wire Materials:

Compatible with a wide range of welding wires including stainless steels, mild steels, carbon steels, titanium alloys, inconel and tool steel.

#### Wire Feedstock:

Diameter: 0.8-1.2 mm Spool Type: BS300

### **Upgrades and Accessories**



### **Hot Wire:**

Increase the print speed with a programmable power supply that preheats the material before it enters the melt pool.



#### **Dual Wire:**

Print parts in two materials using the dual wire option. Dual wire allows for the fast and automatic switching of materials within a print without cross-contamination.

