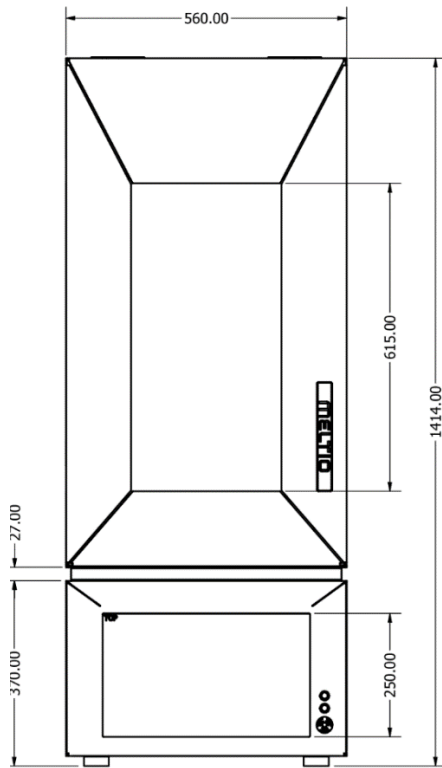


Meltio M450



Dimensions (W*D*H):
560*600*1400mm

Print Envelope (X*Y*Z):
150*170*425mm

Weight:
250kg

Laser Power:
1200W

Laser Type:
multiple 200W direct
diode lasers

Laser Wavelength:
976nm

Enclosure:
laser-safe, sealed,
controlled atmosphere

Process Control:
closed-loop laser and
wire modulation

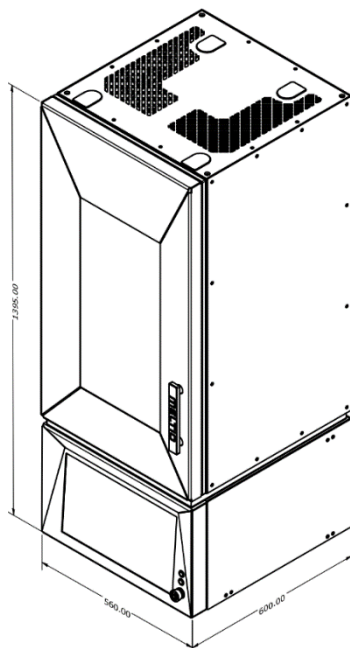
Power Input:
208/230V single phase
or 400V three phase

Power Consumption:
2-5kW peak depending
on selected options

Interface:
USB, ethernet, wireless
datalink

Cooling:
active water-cooled
chiller included

Materials



Wire Materials:
stainless steel, carbon
steel, titanium alloys,
inconel

Powder Materials*:
stainless steel, carbon
steel, inconel

In development:
copper, aluminum

In development:
copper

Wire Feedstock:
0.8-1.2mm diameter

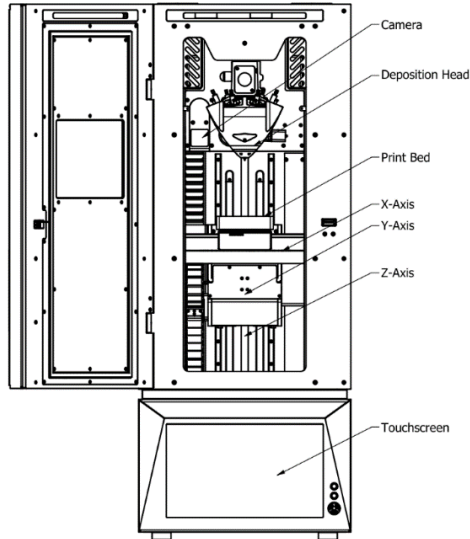
Powder Feedstock:
49 to 90µm particle size

Wire Feeds:
up to two K300 spools

Powder Feeds:
multiple plug and play
powder feeders

*Powder deposition in DED systems result in contamination of equipment surfaces requiring thorough cleaning. To reduce powder contamination, its recommended to reserve powder deposition for printing fine details, creating new alloys and generating material functional gradients. For health and safety, Meltio recommends only using wire feedstock for 3D printing reactive materials such as titanium and aluminum alloys.

Meltio M450



Upgrades and Accessories

Hot Wire:

programmable power supply that preheats the material before it enters the melt pool.

Powder Feeder:

necessary to 3D print from powder feedstock, unlocks on the fly metal alloying.

Dual Wire:

this option allows to 3D print two wire materials sequentially with very quick wire switches.

Station:

sturdy wheeled stand made from stainless steel and aluminum. Contains tool and material drawers.