EOS M 400

The additive manufacturing system for industrial production of high-quality large metal parts
EOS M 400
Proven DMLS quality for industrial production

With a building volume of 400 x 400 x 400 mm, EOS M 400 allows the production of large metal parts on an industrial scale – directly from CAD data and with no need for tools.

→ A 1 kW laser boosts productivity due to higher build rates and increased layer thickness.
→ Bilateral recoating of powder material reduces non-productive time.
→ A recirculating filter system with automated cleaning reduces filter changes and extends filter lifetime, significantly reducing filter costs.
→ Wide range of materials: from light metals to stainless and tool steels to superalloys.

→ Easy handling through a high degree of automation in workflow and operation.
→ Extensive monitoring features ensure high process stability and part quality.
→ Intuitive user interface, flexible software tools and a variety of additional equipment fulfill industrial production requirements.

Technical Data EOS M 400

Building volume 400 x 400 x 400 mm (15.8 x 15.8 x 15.8 in)
Laser type Yb-fibre laser; 1,000 W
Precision optics F-theta-lens
Scanning speed up to 7.0 m/s (23 ft/sec)
Focus diameter approx. 90 µm (0.0035 in)
Power supply 50 A
Power consumption max. 20,2 kW / typical 16,2 kW
Inert gas supply 7,000 hPa; 20 m³/h (102 psi; 706 ft³/h)
Dimensions (W x D x H) 4,181 x 1,613 x 2,355 mm (164.6 x 63.5 x 92.7 in)
Recommended installation space min. 6.5 x 6 x 3.3 m (21.4 x 19.7 x 10.8 ft)
Weight approx. 4,635 kg (10,218 lb)

Software
EOSPROMT with EOS ParameterEditor, EOSTATE Everywhere, EOSTATE PowderBed, EOSCONNECT Core, Materialise Magics Metal Package and modules

Materials*
EOS Aluminium AlSi10Mg, EOS MaragingSteel MS1, EOS NickelAlloy IN718, EOS Titanium Ti64, EOS Titanium Ti64ELI

Optional accessories
EOSTATE Laser, IPM M Powder Station L, IPM M Unpack Station L**

* further materials on request
** currently under development

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