

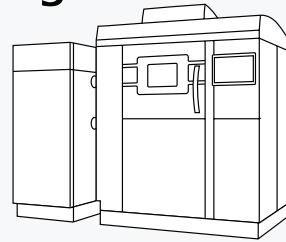


EOS M 290
Produces highest
quality metal parts in
additive manufacturing

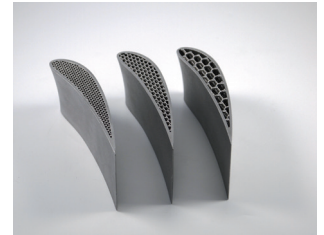
EOS M 290

DMLS quality is the benchmark in metal additive manufacturing

With a building volume of 250 x 250 x 325 mm and 400 W laser, the EOS M 290 allows a fast, flexible and costeffective production of metal parts directly from CAD data.



- The robust system design and the powerful 400-watt fiber laser enable a reliably high performance day in, day out.
- The exceptional high beam quality of the laser spot and its excellent detail resolution is ideal for manufacturing highly complex DMLS components ensuring homogeneous part properties from part-to-part, job-to-job and machine-to-machine.
- The widest range of validated materials and processes available in the market covering all customer requirements.
- The intuitive, open and productive CAM tool EOSPRINT allows optimization of CAD data ensuring a quick and easy job and workflow management. The EOS ParameterEditor module offers developers a large and open tool set ensuring a great freedom for application-specific optimization.
- An comprehensive monitoring suite enables to conduct a real-time quality assurance of all production and quality relevant data. EOSTATE is composed of five different monitoring systems – System, Laser, PowderBed, MeltPool, and Exposure OT (optical tomography).



Technical Data EOS M 290

Building volume	250 x 250 x 325 mm (9.85 x 9.85 x 12.8 in) (height incl. build plate)
Laser type	Yb fibre laser; 400 W
Precision optics	F-theta lens; high-speed scanner
Scanning speed	up to 7.0 m/s (23 ft./sec)
Focus diameter	100 µm (0.004 in)
Power supply	32 A / 400 V
Power consumption	max. 8,5 kW / average 2,4 kW / with platform heating up to 3,2 kW
Inert gas supply	7,000 hPa; 20 m³/h (102 psi; 706 ft³/h)
Dimensions (W x D x H)	2,500 x 1,300 x 2,190 mm (98.4 x 51.2 x 86.2 in)
Recommended installation space	min. 4,800 x 3,600 x 2,900 mm (189 x 142 x 114 in)
Weight	approx. 1,250 kg (2,756 lb)

Software

EOSPRINT incl. EOS ParameterEditor, EOSTATE Everywhere, EOSCONNECT Core, Materialise Magics Metal Package and modules

Materials*

* further materials on request

EOS Aluminium AlSi10Mg, EOS CobaltChrome MP1, EOS MaragingSteel MS1, EOS NickelAlloy HX, EOS NickelAlloy IN625, EOS NickelAlloy IN718, EOS StainlessSteel CX, EOS StainlessSteel PH1, EOS StainlessSteel 17-4PH, EOS StainlessSteel 316L, EOS Titanium Ti64, EOS Titanium Ti64ELI, EOS Titanium TiCP Grade 2

Optional accessories

EOSTATE Monitoring Suite (EOSTATE Laser, EOSTATE PowderBed, EOSTATE MeltPool, EOSTATE Exposure OT), Comfort Powder Module, IPCM-M extra, IPCM-M pro, wet separator, blasting cabinet