SLM additive manufacturing system
EOS M 290

Powder–bed–based laser additive manufacturing system for the production of high-quality serial metallic components with reproducible homogeneous properties.

Features and benefits

- Combination of open and standardised parameter sets
- Improved filter system specially designed for industrial production
- The powerful 400-W fibre laser enables higher build rates
- Beam quality and detail resolution ideal for manufacturing of highly complex components
- Wide range of validated materials including Stainless Steel 316L, Aluminium Alloy AlSi10Mg, Nickel Alloy HX, Nickel Alloy IN625, Nickel Alloy IN718, Maraging Steel MS1, Cobalt Chrome MP1
- Preheat capability up to 200°C

Some applications

- Manufacture of heat exchangers and/or components featuring inner channels and other complex geometric features
- Manufacture of bespoke, patient-specific medical and dental implants
- Manufacture of complex single-part geometries re-designed from conventional multi-part assemblies for improving performance and reducing costs
- Lightweight components with complex designs unachievable by using conventional manufacturing techniques

Technical specification

- Build volume: 250 mm × 250 mm × 325mm
- Laser type: Yb fibre laser; 400 W
- Scanning speed: up to 7 m/s
- Focus diameter: 100 µm
- Compressed inert gas supply: 7,000 hPa; 20m³/h