EOSINT P 385

EOSINT P 385

Plastic laser-sintering system for the direct manufacture of end products, spare parts, functional prototypes and patterns for investment or vacuum casting

Laser-sintering is well known as the technology of choice for ensuring the quickest route from product idea to market launch. Innovative companies from a broad range of industries are using this technology for e-Manufacturing – the fast, flexible and cost-effective production directly from electronic data for every phase of the product life cycle.

Productive Tool

With its broad range of applications, EOSINT P 385 offers economical solutions for all phases of the product life cycle. It is a highly productive system for processing thermoplastics. Plastic parts of any complexity from polyamide or polystyrene materials are built directly from CAD data within a very short time. They are suited for a variety of uses. EOSINT P 385 builds fully functional parts as well as high-quality patterns for plaster, investment and vacuum casting in a few hours. The excellent surface quality and detail resolution make the parts ideally suited for use as end products. They also fulfill the high demands of styling departments. EOSINT P 385 creates parts without support structures.
Time-consuming tasks such as the generation and removal of supports thus become redundant. The system builds different parts in one single job. New parts can be added during the building process. Once built, the parts are removed from the process chamber. The next order starts immediately.

The build volume of the EOSINT P 385 is 340 mm x 340 mm x 620 mm (13.4 x 13.4 x 24.4 in.). With these dimensions, a part length of 595 mm (23.4 in.) can be realized. This size is especially important for the household appliances industry. The volume also allows the efficient production of a broad range of parts.

Integration into an Industrial Environment

EOSINT P 385 distinguishes itself by ergonomic peripheral devices and a high level of automation. These features guarantee highest user friendliness, the optimal utilization of the machine capacity and excellent integration into an industrial environment.
In order to optimize the process flow, EOSINT P 385 offers an Integrated Process Chain Management (IPCM). This concept includes automatic powder conveying, an unpacking and sieving station with exchangeable frame docking system, as well as powder recycling.

Automatically to Highest Productivity

EOS offers different software packages for the preparation of the three-dimensional CAD data. EOSPACE is just one of them. This software places parts in a surface-oriented way. EOSPACE guarantees an optimum utilization of the build envelope and minimizes the build height. As a consequence, turn-around time and costs decrease.

EOSINT P 385

The EOSINT P 385 offers the flexibility of a Rapid Technology, combined with the automation and efficiency of mass production.

Technical Data

Effective building volume	*340 mm x 340 mm x 620 mm (13.4 x 13.4 x 24.4 in.)*
Building speed (material-dependent)	*10 - 25 mm height/h (0.4 - 1 in./h.)*
Layer thickness (material-dependent)	*typically 0.1 mm - 0.15 mm (0.004 - 0.006 in.)*
Support structure	*not necessary*
Laser type	*CO_2, 50W*
Precision optics	*F-theta lens*
Scan speed	*up to 5 m/s (16.4 ft./sec.)*
Power supply	*32 A*
Power consumption (nominal)	*2 kW*
Nitrogen generator	*integrated (optional)*
Compressed air supply	*minimum 5,000 hPa; 6 m^3/h (73 psi; 7.9 yd^3/h.)*
Dimensions (B x D x H)	
Machine incl. switchgear cabinet	*1,840 mm x 1,175 mm x 2,100 mm (72.4 x 46.3 x 82.7 in.)*
Control terminal	*950 mm x 700 mm x 1,550 mm (39.5 x 27.6 x 61 in.)*
Powder conveying system	*1,480 mm x 1,170 mm x 1,470 mm (58.3 x 46.1 x 57.9 in.)*
Unpacking station	*1,190 mm x 620 mm x 1,500 mm (46.9 x 24.4 x 59 in.)*
Recommended installation space	*4.3 m x 3.9 m x 3.0 m (169.3 x 153.5 x 118.1 in.)*
Weight	*approx. 1,060 kg (2,336 lb.)*
Data preparation	
PC	*current Windows operating system*
Software	*EOS RP Tools; Magics RP (Materialise)*
CAD interface	*STL. Optional: converter to all common formats*
Network	*Ethernet*
Certification	*CE, NFPA*

EOS has been developing technologies and processes for Rapid Prototyping since 1989. Today the company is the world´s leading manufacturer of laser-sintering systems for Rapid Prototyping, Rapid Tooling and Rapid Manufacturing. Laser-sintering is the key technology for e-Manufacturing.

EOS GmbH Electro Optical Systems

Corporate Headquarters
Robert-Stirling-Ring 1
D-82152 Krailling/Munich
Phone +49 89 893 36-0
Fax +49 89 893 36-285

EOS of North America, Inc.
28970 Cabot Drive, Ste. 700
Novi, MI 48377-2978
Phone +1 248 306 0143
Fax +1 248 306 0298

Further EOS subsidiaries
EOS France, Lyon
EOS Italy, Milan
EOS UK, Warwick

www.eos.info
info@eos.info

e-Manufacturing Solutions