

ProX™ SLS Series

Production 3D Printers



Manufacture strong, functional parts and assemblies faster than ever

The ProX™ 500 and 500 Plus are cutting-edge Selective Laser Sintering (SLS®) production 3D printers from 3D Systems that create injection molding-grade parts without expensive tooling. Designed for smooth integration with your manufacturing workflow, these production printers empower you to rethink entire production and supply chain strategies, allowing for advanced product performance, lower total manufacturing costs, and localized on-demand manufacturing.

The ProX 500 prints in DuraForm® ProX plastic material to produce parts with superior mechanical properties, precision, resolution, surface finish and edge definition compared to any other SLS system. The ProX 500 Plus prints in additional materials, including glass filled and aluminum + fiber filled, and offers faster and higher resolution modes. The included state-of-the-art Material Quality Center (MQC) module ensures unrivaled material recyclability for efficient, clean and automated production.



www.3dsystems.com

MANUFACTURING *THE* **FUTURE**

ProX™ SLS Series

Production 3D Printers



	ProX 500	ProX 500 Plus
Compatible Materials	DuraForm ProX	DuraForm ProX DuraForm ProX GF DuraForm ProX AF+
Standard Print Mode		
Scanning speed	Fill: 472 in/s (12 m/s) Outline: 138 in/s (3.5 m/s)	
Layer thickness	Range: 0.003 - 0.006 in (0.08 - 0.15 mm) Typical: 0.004 in (0.10 mm)	
Volume build rate	2 l/h	2 l/h
High-resolution print mode		
Scanning speed	N/A	TBD
Layer thickness	N/A	TBD
Volume build rate	N/A	TBD
High-speed print mode		
Scanning speed	N/A	TBD
Layer thickness	N/A	TBD
Volume build rate	N/A	TBD
Print Envelope Capacity	15 x 13 x 18 in (381 x 330 x 457 mm)	
Powder Layout	Variable Speed Counter Rotating Roller	
Imaging System	ProScan™ DX Digital High Speed	
Laser Power/Type	100 W / CO ₂	
Accessories	ProX Material Quality Center (MQC) for automated material handling and recycling	
Electrical Requirements		
Printer	208 VAC/7.5kVA, 50/60Hz, 3 PH	
MQC	100-240VAC, 50/60Hz, 1 PH	
Dimensions Uncrated (W x D x H)	68.7 x 48.3 x 90.3 in (1744 x 1226 x 2295 cm)	
Weight Uncrated	3000 lbs (1360 kg)	

Selective Laser Sintering (SLS)

An additive manufacturing technology, SLS involves the use of a high-power laser to fuse small particles of plastic into a three-dimensional part. The laser selectively fuses powdered material by scanning cross sections generated from a 3D model of the part (for example from a CAD file or scan data) on the surface of a powder bed. After each cross section is scanned, the powder bed is lowered by one layer thickness, a new layer of material is applied on top, and the process is repeated until the part is completed.

Production-tough thermoplastic parts. High throughput. Low part cost.

- **Manufacture strong end-use parts and functional prototypes faster** – ProX SLS printers combine exceptional 3D mechanical properties with additive manufacturing speeds.
- **Be confident in your process and results** – ProX SLS manufactured parts show outstanding resolution, surface finish and edge definition.
- **Streamline your workflow** – Automated production tools, powder handling and recycling functions, and mobile production controls allow you to get the most from every second.
- **Maximize your investment** – With remarkably high throughput, material efficiency and process consistency, the ProX 500 and 500 Plus lower your total cost of ownership.
- **Take advantage of complete design freedom** – It's easy to directly produce short runs of complex or one-off customized products.

Features:

- Strong parts with excellent mechanical properties
- Consistent mechanical properties independent of build position
- Smooth surface finish, with the highest resolution and edge definition of any SLS system
- More economical and environmentally friendly, with unrivaled material recyclability rates
- Streamlined production control, including automated powder handling
- Lower Total Cost of Ownership (TCO)
- Fast build speed and high throughput with 3D part nesting

Available Materials:

- DuraForm® ProX – Extra strong and durable engineered production plastic
- DuraForm® ProX GF – Glass filled plastic that is stiffer and offers higher heat deflection
- DuraForm® ProX AF+ – A unique aluminum and fiber filled plastic with higher heat deflection and cast-metal appearance



UK
Tel: +44 1442 282 600
info@3dsystems-europe.com

USA
Tel: +1 803.326.3900
moreinfo@3dsystems.com

**Germany, Scandinavia,
Eastern Europe, Middle East**
Tel: +49 6151 357 0
info@3dsystems-europe.com

Asia-Pacific
Melbourne Tel: +61 3 9819 4422
Sydney Tel: +61 2 9516 5571
3dprinters.asiapac@3dsystems.com

Warranty/Disclaimer: The performance characteristics of these products may vary according to product application, operating conditions, material combined with, or with end use. 3D Systems makes no warranties of any type, express or implied, including, but not limited to, the warranties of merchantability or fitness for a particular use.

© 2014 by 3D Systems Inc. All rights reserved. Specifications subject to change without notice. ProX and ProScan are trademarks and SLS, DuraForm, 3D Systems and the 3D Systems logo are registered trademarks of 3D Systems, Inc.