

# ProX™ 500

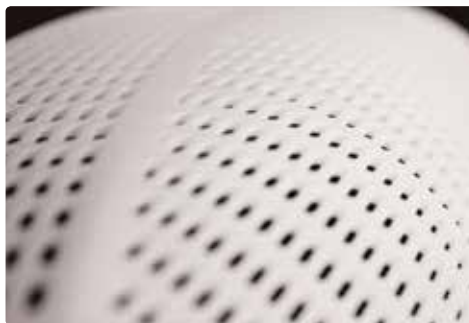
SLS® Production 3D Printer



## Manufacture strong functional parts and assemblies faster than ever.

The ProX™ 500, the new cutting-edge Selective Laser Sintering (SLS®) production 3D printer from 3D Systems, takes SLS toughness, part quality and manufacturing economics to the next level. Designed for smooth integration with your manufacturing workflow, the ProX 500 produces parts for a variety of end-use and functional prototyping applications in aerospace, medical, industrial design and more. Use the ProX 500 and DuraForm ProX plastic materials to produce parts with the most superior mechanical properties, precision, resolution, surface finish and edge definition ever seen in SLS technology before.

Ensure repeatable, consistent, tool-free manufacturing and produce durable functional parts faster. With the ability to recycle up to 80% of material with each print, the ProX 500 considerably reduces your part costs. Additionally, the ProX 500 is equipped with mature production automation and mobile production control, so it pays you back faster.



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**MANUFACTURING** *THE* **FUTURE**

# ProX™ 500

SLS® Production 3D Printer



**Real, precise thermoplastic parts.  
High throughput. Low part cost.**

- **Manufacture strong end-use parts and functional prototypes faster** – The ProX 500 combines exceptional 3D mechanical properties with additive manufacturing speeds.
- **Be confident in your process and results** – Manufactured parts from the ProX 500 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 lowers your total cost of ownership.
- **Take advantage of complete design freedom** – The ProX 500 makes it easy to directly produce low runs of complex products or one-off customized products.

## ProX 500

Print Envelope Capacity	15 x 13 x 18 in (381 x 330 x 457 mm)
Powder Layout	Variable Speed Counter Rotating Roller
Layer Thickness Range (typical)	0.003 – 0.006 in (0.08 – 0.15 mm) (0.004 in, 0.10 mm)
Imaging System	ProScan™ DX Digital High Speed
Scanning Speed (actual)	Fill - 500 in/s (12.7 m/s) Outline - 200 in/s (5 m/s)
Laser Power/Type	100 W / CO <sub>2</sub>
Volume Build Rate	2 L/hr
Electrical Requirements	
System	208 VAC/7.5 kVA, 50/60 Hz, 3 PH
MHS	100-240 VAC, 50/60 Hz, 1 PH
Accessory	ProX MQC for automated material handling and recycling

## 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 up to 80% recycled material
- Streamlined production control, including automated powder handling
- Lower Total Cost of Ownership (TCO)
- DuraForm® ProX – Extra strong and durable engineered production plastic
- Fast build speed and high throughput with 3D part nesting

## 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.



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