# **ProX**<sup>™</sup> 950

3DSYSTEMS

SLA® Production 3D Printer

# Large parts and legendary SLA® precision are now faster than ever.

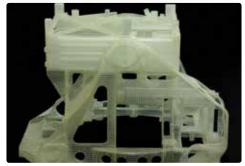
Take on more projects faster with 3D Systems' ProX™ 950 Stereolithography (SLA®) Production Printer—the revolutionary new way to quickly manufacture precise plastic parts and forgo the design limitations of CNC or injection moulding. Boost your toolset with a level of accuracy and surface quality that tops other 3D printers, so you can confidently produce low-to medium-run products at a lower per-unit cost, and build highly detailed parts and patterns as large as 1.5 metres in width.

With the industry's widest array of SLA materials, the ProX 950 delivers a range of properties, from ABS-like toughness to polycarbonate-like clarity. You can even cast directly from printed patterns using QuickCast® technology.









www.3dsystems.com

## **ProX**<sup>™</sup> 950

### SLA® Production 3D Printer



#### **ProX 950**

SteadyPower™ Imager

Solid-state frequency tripled Nd: YVO<sub>4</sub> Type

Wavelength

1450 mW (1000 mW at resin surface under nominal Power (nominal) - at head

optical path condition)

10,000 hours or 18 months (whichever comes first), Laser Warranty

replacement at 800 mW

Zephyr™ Recoating System

Process Removable blade

Adjustment Self-leveling; self-correcting

Min -0.05 mm (0.002 in); Max -0.15 mm (0.006 in) Layer thickness

0.13 mm (0.005 in)

Nominal 0.76 mm (0.030 in)

**ProScan™ Scanning System** 

Border spot (diameter @ 1/e2)

Large hatch spot

Maximum part drawing speed\*

Border spot

3.5 m/sec (150 ips) Large hatch spot 25 m/sec (1000 ips)

**Build Envelope Capacity** 

RDM 950 (ProX 950) 1500 x 750 x 550 mm (59 x 30 x 22 in)

Maximum part weight 150 kg (330 lbs)

**Electrical Requirements** 200 - 240 VAC 50/60 Hz, single-phase, 50 amps

Operating Environment\*\*

Temperature range 20-26 °C (68-79 °F) Maximum change rate 1 °C/hour (1.8 °F/hour) Relative humidity 20-50 % non-condensing

**Space Requirements** 

Size (WxDxH) 220 x 160 x 226 cm (86.6 x 63 x 89 in)

Weight, crated no RDM module 2404 kg (5300 lbs)

Accessories

Platform change carts Manual offload cart optional Processing and finishing ProCure™ 1500 UV Finisher

One-year warranty, under 3D Systems' Purchase Terms System Warranty

and Conditions

**Control System & Software** 

Software tools 3DPrint<sup>™</sup> and 3D Manage<sup>™</sup> software Windows® 7 or Windows® 8 Operating Systems

Input data file format .stl, .slc

Network type and protocol Ethernet, IEEE 802.3 using TCP/IP and NFS

\* Dependent upon part geometry, build parameters and SL material selection.

Standards and Regulations: This SLA Center conforms to Federal Laser Product Performance Standards 21CFR1040.10. Class I laser in normal operation. During field service emission, levels can correspond to

\*\* For detailed recommendation, refer to 3D Systems' ProX 950 Facility Requirements Guide (FRG).



## High accuracy and unmatched materials choice, from the inventors of SLA.

- Go big without the seams Build up to 1.5 m (5 ft) wide in one piece, no gluing or assembly required.
- Fast production Create a full-size dashboard in two days.
- Be exact The ProX 950 delivers the highest end-to-end accuracy and detail, even on huge parts.
- Use the material that meets your requirements The Accura® line of SLA production materials offers the right properties for your application, including QuickCast pattern technology.
- Print efficiently Highly efficient material use means unused material stays in the system, resulting in minimal waste.

#### **Features:**

- Two lasers work simultaneously
- Amazing speed Print a full-size dashboard in days not weeks
- Huge parts with highest detail, accuracy and edge definition in 3D printing
- · No seams Single-part durability
- Material efficient All unused material stays in the system

#### Stereolithography (SLA®)

An additive manufacturing process which employs a vat of liquid, ultraviolet curable photopolymer resin and an ultraviolet laser to build part layers one at a time. For each layer, the laser beam traces a cross section of the part pattern on the surface of the liquid resin. Exposure to the ultraviolet laser light cures and solidifies the pattern traced on the resin and joins it to the layer below.

After the pattern has been traced, the SLA's elevator platform descends by a distance equal to the thickness of a single layer. A resinfilled blade sweeps across the cross section of the part, re-coating it with fresh material. On this new liquid surface, the subsequent layer pattern is traced, joining the previous layer. A complete 3D part is formed by this process.

