

SLA[®] 7000 SYSTEM

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Technology:	Stereolithography, SLA
Material Class:	Liquid; Photo Reactive



Because there's only one way to get your product to market: First

The power to shorten product development cycles. The flexibility to innovate. The capacity to draw more of your best minds into the development process. With its breakthrough technology and performance, 3D Systems' SLA 7000 system delivers all this and more.

Bring products to market faster – much faster. The SLA 7000 system is two times faster, on average, than the next fastest solid imaging system from 3D Systems. But raw speed is just the beginning. SLA 7000 systems' 0.025 mm (0.001 in) layer thickness yields a smooth finish that results in far less post-processing time. And its highly-reliable design – including fewer parts, a low vibration optical system, and revolutionary dual-spot laser technology – reduces downtime and errors that cost you time, money and opportunity.

Make limited production runs a practical reality. Use the SLA 7000 system to quickly produce parts you can use, with minimal post processing, directly in many working assemblies.

Test more options and explore new possibilities – because you can create multiple design iterations in a fraction of the time.

Improve the productivity of your entire department. Built for maximum throughput, the SLA 7000 system can support your whole department, at top speed and resolution, without bottlenecks. And 3D Systems' Lightyear™ software comes bundled with the system. Connect as many workstations as you need, without additional software cost.

Use the SLA 7000 system for:

- Limited production runs
- Rapid tooling
- Plastics prototyping
- Precision master patterns for casting and molding
- Form, fit, and function testing
- Concept communication modeling



SLA 7000 System Specifications

Standards and Regulations: This SLA system conforms to Federal Laser Product Performance Standards 21CFR1040.10 Class I laser in normal operation. During field service emission levels can correspond to Class IV laser product. The SLA 7000 system complies with CE requirements.

LASER	
Type	Solid state frequency tripled Nd:YVO ₄
Wavelength	354.7 nm
Power at vat	800 mW
Laser Warranty	5000 hours or 18 months (whichever comes first)
RECOATING SYSTEM	
Process	Zephyr™ recoating system
EXACT™ build style	0.076 mm (0.003 in) *
QuickCast™ build style	0.101 mm (0.004 in) *
FAST™ build style	0.127 mm (0.005 in) *
Thin Layer™ build style	0.025 mm (0.001 in) *
OPTICAL & SCANNING	
Beam (diameter @ 1/e ²)	Small spot 0.23 - 0.28 mm (0.009 - 0.011 in) Large spot 0.685 - 0.838 mm (0.027 - 0.033 in)
Maximum part drawing speed	Small spot 2.54 m/sec (140 ips) Large spot 9.52 m/sec (525 ips)
ELEVATOR	
Vertical resolution	0.001 mm (0.00004 in)
Position repeatability	± 0.01 mm (0.0004 in)
Maximum part weight	68 kg (150 lb)
VAT CAPACITY	
(Note: Other vat sizes available)	
Volume	253.6 L (67 U.S. gal)
Maximum build envelope	508 x 508 x 584 mm XYZ (20 x 20 x 23 in)
Interchangeable vat	Yes
SYSTEM CONTROLLER & SOFTWARE	
Control software	Buildstation software
Operating system	Windows NT (4.0)
Input data file format	.stl .slc
Network type and protocol	Ethernet, IEEE 802.3 using TCP/IP and NFS
POWER	
200 - 240 VAC 50/60 Hz, single phase, 20 amps	
AMBIENT TEMPERATURE	
Temperature range	20 - 26°C (68 - 79°F)
Maximum change rate	1°C/hour (1.8°F/hour)
Relative humidity	10 - 50% non condensing
SIZE	
Crated machine	W2.10 x D1.55 x H2.36 m (W83 x D61 x H93 in)
Accessory kit	W1.12 x D1.22 x H1.02 m (W44 x D48 x H40 in)
Uncrated machine	W1.88 x D1.63 x H2.03 m (W74 x D64 x H80 in)
WEIGHT	
Crated machine	1451 kg (3200 lb)
Accessory kit	181 - 204 kg (400 - 450 lb)
Uncrated machine	1193 kg (2630 lb)
OPTIONS	
Additional interchangeable vats	
Additional build platforms	
Post Curing Apparatus (PCA™) equipment	
SYSTEM WARRANTY	
One year from installation date. Includes parts, labor, and 3D Systems' software upgrades.	

* Dependent upon part geometry, build parameters and material.



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