

Solidscape® S500 High Precision 3D Printer for Investment Casting

Engineered specifically for high precision investment casting, the Solidscape S500 creates ultra-accurate, directly castable industrial wax patterns with complex geometries, clean burnout and superior surface finish.





PRECISION AND ACCURACY

Exact symmetry, dimensional accuracy and detail



DIRECTLY CASTABLE

100% castability in stainless steel, aluminium and all castable alloys



COMPLEX GEOMETRIES

Thin walls, overhangs and undercuts — whatever your parts require



SUPERIOR SURFACE FINISH

Smooth wax patterns require virtually no finishing



MELT-AWAY SUPPORTS

Auto-generated supports dissolve, hands-free, in a non-toxic process



CLEAN BURNOUT

Fast melt out, no thermal expansion and no ash or residue



REPEATABLE FABRICATION

Precise wax patterns create high integrity castings — every time



ELIMINATE TOOLING

Manufacture perfect production parts in a fraction of the time



INCREASED PROFITABILITY

Create custom parts at mass production costs



Work smarter, not harder.

Speed production time, reduce labor and material costs, and produce perfect robust parts with the Solidscape S500 wax pattern 3D printer.

Solidscape® S500

PRINTING PROPERTIES

Layer Thickness: 0.002 inch (0.0508 mm) or 0.0025 inch (0.0635 mm)

Resolution: 5000 X 5000 dots/inch (197 X 197 dots/mm) in X, Y

Accuracy: ±0.005 inch (127 μm) for 1st inch (25.4 mm), ±0.001 inch/inch (25.4 μm) each additional inch X,Y and Z

Surface Finish: Layer thickness-dependent, up to 63 micro-inches (RMS)

Start Process: Fully automated, one-touch operation

Status Monitoring: Fully automated fault detection, restarts build from point of interruption

New! Calibration Capacity: Quicker calibration and ability to select calibration frequency means less wasted material

TECHNICAL SPECIFICATIONS

Dimensions: 21.4 x 18 x 16 inches (558 x 495 x 419 mm)

Build Envelope: 6 x 6 x 4 inches (152.4 x 152.4 x 101.6 mm)

Weight: 80 lbs (36 kg)

Power: 100-240 V Required

Operating Temperature: 60° to 75°F (16° to 24°C)

Humidity 40-60%

MATERIAL PROPERTIES

Midas Castable Material:

Proprietary model material formulated for clean burnout, producing 100% direct casting results

Melt-I Dissolvable Support:

Proprietary support material engineered to dissolve completely, hands-free, resulting in superior surface finish

Material Capacity:

Larger tanks require less filling and allow for longer print runs

Material Monitoring:

Display indicates build and support material levels accurately in 10% increments

CE Certified, FCC Class B approved, TUV certified EN 60950 Compliant

SOFTWARE AND SYSTEM REQUIREMENTS

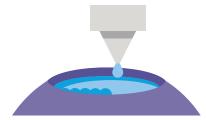
Agency Compliance:

One-Click Software: Automatically formats CAD files for 3D printing

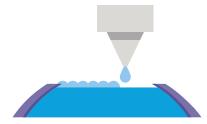
CAD File Input: .stl and .slc files

System: Windows, PC-to-printer connectivity via high-speed USB 2.0 or Ethernet

Ultra accurate, high precision 3D printing SUPERIOR WAX PATTERNS FOR SUPERIOR CASTINGS



Solidjet™ Technology builds detailed support structures infilled with solid wax, producing the highest integrity castings and surface finish in the industry.



Drop on Demand Technology positions drops of material precisely along X, Y and Z axes, resulting in high-definition details.



Rotating Milling Blade levels every print layer, delivering controllable layer thickness down to 44µm, impossibly complex builds and unbeatable, repeatable accuracy.