

# **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, aluminum 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

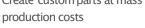
Precise wax patterns create high integrity castings — every time

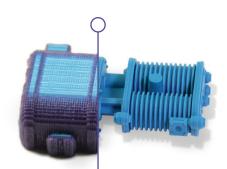


### ELIMINATE TOOLING Manufacture perfect production parts in a fraction of the time



INCREASED PROFITABILITY Create custom parts at mass





# 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:	$\pm 0.005$ inch (127 $\mu\text{m})$ for 1st inch (25.4 mm), $\pm 0.001$ inch/inch (25.4 $\mu\text{m})$ 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%
Agency Compliance:	CE Certified, FCC Class B approved, TUV certified EN 60950 Compliant

#### MATERIAL PROPERTIES

Midas Castable Material:	Proprietary model material formulated for clean burnout, producing 100% direct casting results
Melt-IDissolvable 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

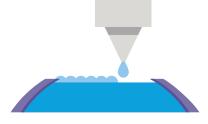
#### SOFTWARE AND SYSTEM REQUIREMENTS

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**<sup>™</sup> **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  $44\mu$ m, impossibly complex builds and unbeatable, repeatable accuracy.



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