

3Z STUDIO

The High Precision 3D Printer for jewelry creation



One-Touch
Operation



Solidescape
High Precision 3D Printers

From Inspiration to Finished Design

The 3Z^{STUDIO} brings the jeweler's bench to the retail shop where users of any technical level can produce their own intricate wax patterns, ready for casting. The fully automated 3Z^{STUDIO} marries the passion of fine jewelry design with the power of high precision 3D printing.

Easy One-Touch Operation

Intuitive one-touch operation via a universal LCD icon display eliminates language and technical barriers.

Efficient Workflow

The 3Z^{STUDIO} empowers the jewelry creation process from design through finished wax patterns in an effortless workflow that delivers high casting yields, consistent turnarounds and low cost-per-parts.

Superior Casting Results

New 3Z[™]Model and 3Z[™]Support materials produce extremely smooth jewelry wax patterns that accurately reproduce the most intricate of geometries—without the need for manual refining. Both materials offer superior casting properties, fast meltout, no ash or residue, and no thermal expansion.

When
Precision
Counts.

System Specifications

EASE OF USE

Fully Automated	Plug and print Automatic calibration and testing
Accessible	Icon-based user interface Files, job start-up and job status can be managed and viewed remotely from PC

HIGH PRECISION RESULTS

Resolution	5000 X 5000 dpi (197 X 197 dots/mm) in X, Y 8000 dpi (158 dots/mm) in Z
Accuracy	± 0.0010 inch/inch (±.0254mm) along each axis X, Y and Z
Layer Thickness	User selectable through variable slider
Surface Finish	32-63 micro-inches (RMS)

OFFICE ENVIRONMENT

Desk-top Size	21.4" W X 18"D X 16" H (558 X 495 X 419 mm)
Weight	75 lbs. weight (34 kg)
Build Envelope	6" X 6" X 2" (152.4 X 152.4 X 50.8 mm) X, Y, Z Consistent Results over entire 6 inch x 6 inch (152.4mmx152.4mm) area
Power Requirements	90-250-v, 10A @ 230v max consumption
Ambient Operating Temp	Recommend 60° to 80° F (16° to 27° C) at a 40% to 60% range of humidity
Equipment Interface	PC to printer connectivity Hi-Speed USB 2.0

MATERIALS

3Z®Model	Model material formulated for clean burnout to produce 100% casting results.
3Z®Support	Sacrificial support material is generated automatically for each job, and later dissolved away for a labor-saving, hands-free operation.
Dewax	Liquid solution used to dissolve sacrificial support material

EFFICIENT WORKFLOW

CAD file input	.stl and .slc files
3Z®Works	Software formats CAD files for 3D printing Allows operator to visually place job suites within build envelope Automatically generates support structure, saving on design time
3Z®Touch	System Software is Windows® based
Automatic	Status monitoring and fault detection Re-start of build from point of interruption Works unattended up to 72 hours
SCP®	Smooth Curvature Printing for superior surface finish



Solidscape, Inc. is the leading manufacturer of high precision 3D printers, materials and software for the jewelry industry, able to print intricate wax patterns designed in CAD.

Solidscape systems incorporate innovative printing technology and material properties that advance the state-of-the-art in computer-controlled fabrication of jewelry master patterns, by providing the highest standards in surface finish, accuracy and material castability.

Solidscape wax patterns are ideal for investment casting and mold making applications such as fine jewelry, dental restorations, turbine blades, biomedical products, orthopedics, consumer goods, electronics, toys and many other high precision products.

These systems are true office peripherals--easy to use and residing on a desk or countertop.