

# The High Precision 3D Printer for jewelry creation





# From Inspiration to Finished Design

The 3ZSTUDIO 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 3ZSTUDIO 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 3ZSTUDIO 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<sup>™</sup>Model and 3Z<sup>™</sup>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.



# **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

AGENCY COMPLIANCE

CE certified; FCC Class A approved TUV approved (EN 60950 Compliant)



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.



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