

Objet1000

Wide Format 3D Printer

Big Prototypes with Flawless Precision



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Ideal for:

- Big, 1:1 scale prototypes requiring high precision
- Wide range of fit, form and functional applications
- Simultaneous printing of large and small, finely detailed 3D models
- Manufacturers, designers and engineers
- Automotive, aerospace & defense, consumer goods, household appliances, industrial machinery and specialist service bureaus
- Small operating teams & prolonged unattended jobs

Key Benefits:

- Extremely large build envelope $-1000 \times 800 \times 500$ mm (39.3 \times 31.4 \times 19.6 inch)
- Objet Connex multi-material 3D printing technology
- Simulate standard & ABS-grade engineering plastics
- Highly reliable
- Ease of operation
- Efficient operating cost & fast ROI









Big Models at the Touch of a Button!

The Objet1000 is an easy to operate, wide format 3D printer for rapidly creating industrial size models and 1:1 scale prototypes.

Featuring an ultra-large build tray size of $1000 \times 800 \times 500$ mm (39.3×31.4×19.6 inch), it enables designers, engineers and manufacturers to quickly and accurately prototype any 3D CAD design, no matter how complex.

The system is easy to use, can work for prolonged unattended periods, and is perfectly suited to companies in automotive, defense, aerospace, consumer goods, household appliances and industrial machinery.

Precision at Every Scale

The Objet1000 is equally adept at printing large and small models with no compromise on precision. Print tough, 1:1 scale casings that can be drilled, assembled, and screwed together while also printing small-scale, multi-material product prototypes.

The system can just as easily create living hinges, embedded typography, soft-touch over molding, transparent with opaque shades and moving parts; all seamlessly joined to achieve the true look and feel of a fully-assembled consumer product.





Fit, Form & Function

The Objet1000 is able to run the full gamut of fit, form and functional prototyping requirements. The system combines the precision of inkjet-based 3D printing with Stratasys's renowned **Objet Connex** multi-material build capability. **Objet Connex** technology offers a choice of over 100 materials, simulating both standard and ABS-grade engineering plastics. In addition, you can print up to 14 materials in a single model to achieve the precise qualities of your intended end product.

The Prototyping Solution of Choice

With the Objet1000, designers and engineers can quickly prototype large 3D CAD designs, no matter how complex. There's no need to scale the model down, prepare and assemble jigsaw-puzzle pieces, or outsource to an assortment of different machines and technologies. The Objet1000 represents every prototyping solution you will ever need – within a single dedicated machine.



Bicycle frame 3D printed on the Objet1000 and assembled into a fully-functioning bicycle

Technical Specifications

Layer Thickness (Z-axis)

Horizontal build layers down to 16-micron

Tray Size $(X \times Y \times Z)$

 $1000 \times 800 \times 500$ mm (39.3×31.4×19.6 inch)

Net Build Size (X×Y×Z)

Full as tray size.

Max model weight on tray: 200kg

Build Resolution

X-axis: 600 dpi Y-axis: 600 dpi Z-axis: 1600 dpi

Printing Modes

Digital Material (DM): 30-micron (0.001 inch) High Quality (HQ): 16-micron (0.0006 inch) High Speed (HS): 30-micron (0.001 inch)

Typical Accuracy

20-85um for features below 50mm Up to 300um for full model size (for rigid materials only, depending on geometry, build parameters and model orientation)

Supported Primary Model Materials

- Vero Family opaque materials
- VeroClear clear transparent material
- Tango Family rubber-like flexible materials

Digital Materials

Wide range of composite materials fabricated on the fly including ABS-like

Support Type

- FullCure®705 Support
- Non-toxic gel-like photopolymer support easily removed by WaterJet

Materials Cartridges

- 6 sealed 18 kg (39.6 lb) cartridges
- Two different model materials loaded
- Hot-swappable replacement during print

Power Requirements

240 VAC 50/60 Hz 32 A single phase

Machine Dimensions (W×D×H)

2800×1800×1800 mm (110.3×70.9×70.9 inch)

Machine Weight

Net 1950kg (Net 4300 lb)

Operational Environment

18°C to 22°C (64.5°F to 71.5°F) Relative Humidity 30 - 70%

Compatibility

Windows 7 x64 only



Software

Objet Studio™ for Objet1000 features:

- Easy selection of materials including Digital Materials
- Part separation into sub-assemblies
- Automatic real time support structure generation
- Suggested build orientation and speed, auto-place
- · Slice on the fly
- Network version

Input Formats

STL, OBJDF and SLC Files

Special Facility Requirements

Floor withstand 750 Kg/m2

Air evacuation system

Print Heads

8 Units

Network Communication

LAN - TCP/IP



















