

Objet® 1000™



Flawless precision from the world's largest multi-material 3D printer.

Create large or small production tools and full-scale prototypes.

The Objet1000 is a multi-material wide-format 3D production system that can create large, industrial-grade manufacturing fixtures, production tooling and end-use parts, and 1-to-1 scale prototypes. Its ultra-large build tray (1,000 x 800 x 500 mm [39.3 x 31.4 x 19.6 in.]) and unrivalled precision make it extraordinarily versatile, enabling designers, engineers and manufacturers to quickly and precisely print any 3D CAD design, no matter how complex or detailed.

The Objet1000 is simple to operate and can work unattended for prolonged periods. With the greatest build capacity of any PolyJet™ 3D Printer, it's especially suited for manufacturing applications such as: 3D printed injection molds, precise check gauges and large fixtures in industries like automotive, defense, aerospace, consumer goods, household appliances and industrial machinery.

Size is no object: The Objet1000 is equally adept at printing large or small prototypes with no compromise on precision. You can print tough, 1-to-1 scale casings that can be drilled, assembled and screwed together. Eliminate the need to split large parts up in CAD and then glue them together post-build: Objet1000's build tray is large enough to surmount this problem. Or, during a design phase, you can also print small-scale, multi-material prototypes that represent the look and feel of the final product.

Maximum materials for full-scale prototypes.

Along with its size, the Objet1000 offers impressive multi-material 3D printing capabilities with the power of Digital Materials. Build parts with diverse material properties in one job, and even combine as many as 14 materials in one part. Base resins include:

Transparent (VeroClear™):
a nearly colorless material for fit and form testing of detailed transparent parts and models that mimic transparent thermoplastics

Rubber-like (Tango™ family):
suitable for a range of applications requiring non-slip or soft surfaces

Rigid Opaque (Vero™ family):
in a variety of colors including white, gray, blue and black

Choose from 120 materials

Dual-jetting technology gives you the power to combine two base resins into composite Digital Materials for a wide range of precise properties. Options include:

Digital ABS™ simulates ABS engineering plastics by combining high-temperature resistance with toughness. Digital ABS2™ matches those properties and provides enhanced dimensional stability in walls thinner than 1.2 mm (.047 in).

Transparent shades and patterns

Rigid Opaque shades

Different rubber-like materials with a range of Shore A values

Learn more about
Objet1000 at
stratasys.com

Objet1000



Backed by proven PolyJet technology.

The Objet1000 employs patented PolyJet technology. PolyJet 3D Printing is similar to inkjet document printing. But instead of jetting drops of ink onto paper, PolyJet 3D Printers jet layers of liquid photopolymer onto a build tray and cure them with UV light. The layers build one at a time to create a 3D end-use part, model or prototype. Fully cured models can be handled and used immediately, without additional post-curing. Along with the selected model material, the 3D printer also jets a gel-like support material specially designed to uphold overhangs and complicated geometries.

PolyJet 3D Printing technology has many advantages for rapid prototyping and manufacturing applications, including professional quality with speed, high-precision and accommodation for a wide variety of materials. PolyJet technology is a ideal solution for precision production and prototyping needs, setting an entirely new standard for fit and finish.

Objet1000 Makes 3D Printing As Easy As 1-2-3.

- 1. Prepare the file.** Create your 3D part with 3D CAD software, then open Objet Studio™ software, upload the STL file and click “print”. Objet Studio converts your STL file into 3D model print paths, including support structures.
- 2. Print your model.** PolyJet technology makes it possible to build your 3D part and its support material, layer by layer, from the bottom up.
- 3. Remove supports.** Take your printed part out of the printer’s build chamber and easily remove support material.

With the same workflow as the tried and tested Objet500 Connex™, the Objet1000 also features three printing modes for optimal performance: Digital Material (DM): 30-micron (0.001 in.); High Quality (HQ): 16-micron (0.0006 in.) and High Speed (HS): 30-micron (0.001 in.). It also uses six sealed 18 kg (39.6 lb) cartridges and supports hot-swapping of cartridges during print.

Stratasys | www.stratasys.com | info@stratasys.com

7665 Commerce Way
Eden Prairie, MN 55344

+1 888 480-3548 (US Toll Free)

+1 952 937-3000 (Intl)

+1 952 937-0070 (Fax)

2 Holtzman St.
Science Park, PO Box 2496

Rehovot 76124, Israel

+972 74 745-4000

+972 74 745-5000 (Fax)

©2014 Stratasys Ltd. All rights reserved. Stratasys, Stratasys logo, Objet, For a 3D World, Objet Studio, Eden, Eden260, Eden260V, Eden350, Eden350V, Eden500V, Objet500 Connex1, Objet500 Connex2, Objet500 Connex3, Connex, Objet260 Connex, Connex350, Connex500, Objet1000, TangoBlack, TangoGray, TangoPlus, TangoBlackPlus, VeroBlue, VeroBlack, VeroBlackPlus, VeroClear, VeroDent, VeroGray, VeroWhite, VeroWhitePlus, Durus, Endur, Digital Materials, Digital ABS, Digital ABS2, Fullcure, Vero, Tango and PolyJet are trademarks or registered trademarks of Stratasys Ltd. and/or its subsidiaries or affiliates and may be registered in certain jurisdictions. Objet1000SpecSheet-08-14

Product Specifications

Model Material:

- Transparent rigid (VeroClear)
- Rubber-like (TangoPlus™ and TangoBlackPlus™)
- Rigid Opaque (Vero family)

Digital Model Material:

- Transparent shades and patterns
- Rigid Opaque shades
- Rubber-like blends in a range of Shore A values

Support Material:

FullCure™ 705 non-toxic gel-like photopolymer support

Build Size:

1000 x 800 x 500 (39.3 x 31.4 x 19.6 in)
Max model weight on tray: 135 kg

Build Resolution:

X-axis: 300 dpi; Y-axis: 300 dpi;
Z-axis: 1600 dpi

Accuracy:

Up to 85 microns for features smaller than 50 mm; up to 600 microns for full model size (for rigid materials only, depending on geometry, build parameters and model orientation)

Layer Thickness:

Horizontal build layers down to 16-microns (0.0006 in)

Workstation Compatibility:

Windows 7 64 bit/Windows 8

Network Connectivity:

LAN – TCP/IP

Size and Weight:

Objet1000:
2800 x 1800 x 1800 mm
(110.3 x 70.9 x 70.9 in)
1950 kg (4300 lbs)

Power Requirements:

240 VAC 50/60 Hz; 32 A single phase

Regulatory Compliance:

CE, FCC

Special Facility Requirements:

Floor withstands 750 Kg/m²,
air evacuation system