Objet Geometries

16 micron layer 3-Dimensional Printing System

EDEN350/350V™

Enjoy super-high productivity and flexibility – with outstanding model quality

Eden350/350V

- Ultra-thin-layer PolyJet™ technology
- 16 micron high resolution ensures smooth surfaces and fine details
- Tray size: 13.8×13.8×7.9 inch (350×350×200 mm)
- Wide range of materials: FullCure®720, Tango and Vero
- Single support for all model materials
- Office environment

Eden350V

- 72 hours of unattended continuous printing
- High Speed and High Quality Printing Modes

OBJET

EDEN350/350V™ 16 micron layer 3-Dimensional Printing System

Technical Specifications

Layer Thickness (Z-axis):
Horizontal build layers down to 16-micron

Tray Size (X×Y×Z):
13.8×13.8×7.9 inch (350×350×200 mm)

Net Build Size (X×Y×Z):
13.4×13.4×7.9 inch (340×340×200 mm)

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

Printing Modes:
EDEN350: High Quality (HQ): 0.0006 inch (16-micron)
EDEN350V: High Quality (HQ): 0.0006 inch (16-micron)
High Speed (HS): 0.001 inch (30-micron)

Accuracy:
0.004–0.01 inch (0.1–0.3 mm) typical
(accuracy varies according to geometry, part orientation and print size)

Material Supported
- FullCure®720 Model transparent
- VeroWhite Opaque material
- VeroBlue Opaque material
- VeroBlack Opaque material
- TangoBlack, rubber like flexible material
- TangoGray, rubber like flexible material

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

Material Cartridges
EDEN350: Sealed 2×7.9 lb. (2×3.6 kg) cartridges
EDEN350V: Sealed 4×7.9 lb. (4×3.6 kg) cartridges
Automatic switching between cartridges
Easily and instantly replaced through a front-loading door

Power Requirements
110 – 240 VAC 50/60 Hz
1.5 KW single phase

Machine Dimensions (W×D×H)
52×39×47 inch (1320×990×1200 mm)

Machine Weight
Net 727.5 lb. (410 kg)
Gross (in crate) 1102 lb. (500 kg)

Software
Objet Studio™ features:
- Suggested build orientation and speed, Auto-placement
- Automatic real time support structure generation
- Slice on the fly
- PolyLog™ Materials Management
- Network Support

Input Format
STL and SLC File

Operational Environment
Temperature 64 ˚F – 77 ˚F (18 ˚C – 25 ˚C)
Relative Humidity 30–70%

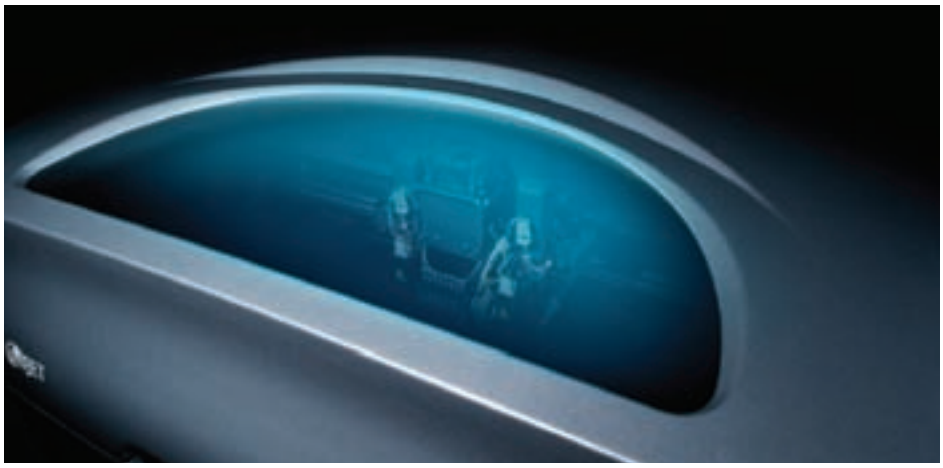
Special Facility Requirements – None

Jetting Heads
SHR (Single Head Replacement), 8 units

Network Communication
LAN – TCP/IP

Compatibility
Windows XP, Windows 2000

* All specifications are subject to change without notice



About Objet Geometries

A pioneer in jetting photopolymers, Objet Geometries Ltd. develops, manufactures and globally markets ultra-thin layer 3-Dimensional Printing Systems and materials that utilize PolyJet™ Polymer Jetting technology.
PolyJet technology and Objet's high-speed product platform offer accurate, clean, smooth and highly detailed 3-Dimensional models suitable for use in an office-type facility. PolyJet technology enables manufacturers and industrial designers to reduce product development cycles and dramatically shorten time-to-market of new products in many industries. Objet's solutions are in use by world leaders in the automotive, electronics, toy, consumer goods, and footwear industries in North America, Europe, Asia, Australia and Japan. Founded in 1998, Objet is privately owned and holds more than 40 granted and pending patents.

Objet Geometries Ltd.
Headquarters
2 Holzman St., Science Park
P.O.Box 2496,
Rehovot 76124, Israel
Tel: +972-8-931-4314
Fax: +972-8-931-4315

Objet Geometries Inc.
North America
5 Fortune Drive
Billerica,
MA 01821
USA
Tel: 1-877-489-9449
Fax: 1-866-676-1533

Objet Geometries AP
Asia Pacific
13th Floor, Unit 52A, HITEC
1 Trademart Drive, Kowloon Bay,
Hong Kong
Tel: +852-2174-0111
Fax: +852-2174-0555

Objet Geometries Ltd.
Europe
Leuvensesteenweg 388
1932 Sint-Stevens-Woluwe
Belgium
Tel: +32-2-717-6502
Fax: +32-2-717-6500

info@2objet.com
www.2objet.com

OBJET

Objet Geometries

Support your Applications

The FullCure® line of photopolymer resins open up a whole world of possibilities for users of 3-dimensional printings.

Based on Objet's unique ultra-thin-layer Polyjet™ technology, Fullcure® resins are used to create accurate, highly detailed three-dimentional models for a wide range of applications. Unlike models created by other technologies, Objet-made parts are fully cured during the build process and can be handled immediately after build.

The FullCure® line includes several types of flexible and rigid model materials. The FullCure® support material enables users to produce any geometry, including overhangs and undercuts.

The FullCure® line currently includes the following materials, with more to come in the near future:

FullCure®720 - General-purpose resin, offers excellent technical properties in a transparent color.

Vero materials - Feature opaque colors and improved machanical properties, offering users excellent detail visualization and even wider range of applications.

Tango materials - Offer users highly flexible materials with different levels of elasticity, enabling a close "touch and feel" match for any design.






Key Advantages

- **Elongation at break of 20% for rigid models enables fit and function.**
- **Excellent impact strength.**
- **Models ready to use, no extra finishing required.**
- **Models can be handled right off the tray.**
- **Easy to remove gel-like support material ensures no hard grid edges.**
- **Paint readily adheres to model surfaces**
- **High accuracy models.**

FULLCURE®

OBJET

FULLCURE® FullCure® Materials Datasheet






Properties	Standard Procedure	FullCure® 720	VeroWhite	VeroBlue	VeroBlack	TangoBlack	TangoGray
Tensile Strength MPa	D-638	60.3	49.8	55.1	50.7	-	-
Elongation at break, %	D-638	15%-25%	15%-25%	15%-25%	17.7%	-	-
Modulus of Elasticity, MPa	D-638	2,870.0	2,495.0	2,740.0	2,192.0	-	-
Flexural Strength, MPa	D790	75.8	74.6	83.6	79.6	-	-
Flexural Modulus, MPa	D790	1,718.0	2,137.0	1,983.0	2,276.0	-	-
Izod Notched Impact, J/m	D256	39.6	37.5	42.5	-	-	-
Compression Strength, MPa	D695	84.3	-	79.3	-	-	-
SHORE	Scale D	83.0	83.0	83.0	83.0	-	-
Rockwell	Scale M	81.0	81.0	81.0	-	-	-
Heat Distortion Temperature, °C	D648 @ 0.45Mpa	48.4	47.6	48.8	47	-	-
	@ 1.82Mpa	44.4	43.6	44.8	42.9	-	-
Tg, °C	DMA, E"	48.7	58.0	48.7	62.7	-	-
A sh Content		‹0.01%	‹0.40%	‹0.30%	-	-	-

Tensile Strength MPa	ASTM D - 412	-	-	-	-	2.0	4.36
Elongation at break, %	ASTM D - 412	-	-	-	-	47.7	47.0
Compression set, %	ASTM D - 395	-	-	-	-	0.8	1.0
SHORE A Hardness, Deg	ASTM D - 2240	-	-	-	-	61.0	75.0
Tensile Tear Resistance, Kg/cm	ASTM D - 624	-	-	-	-	3.8	9.5
Tg, °C	DSC (-80 °c +100 °c)	-	-	-	-	-10.7	+2.6

OBJET

Objet Geometries Ltd. Europe
Leuvensesteenweg 388
1932 Sint-Stevens-Woluwe
Belgium
Tel: +32 2 717 6502
Fax: +32 2 717 6500

Objet Geometries AP Ltd. Asia Pacific
Unit 52/A 13/F HITEC,
1 Trademart Drive,
Kowloon Bay,
Hong Kong
Tel: +852-217-40111
Fax: +852-217-40555

Objet Geometries Inc. North America
5 Fortune Drive
Billerica,
MA 01821
USA
Tel: 1-877-489-9449
Fax: 1-866-676-1533

Objet Geometries Ltd. Headquarters
2 Holtzman St.,
Science Park,
P.O. Box 2496,
Rehovot 76124, Israel
Tel: +972 8 931 4314
Fax: +972 8 931 4315

www.2objet.com info@2objet.com