

Connex350

Multi-material 3-Dimensional Printing System

# Enter the world of multi-material 3D printing

# with innovative PolyJet Matrix™ Technology

- Closer-than-ever simulation of end products combining multiple materials
  - Multi-material parts: simultaneous jetting of different model materials
  - Mixed tray: different parts made with different materials in a single build
- Wide range of FullCure® and composite materials: photopolymer model and support materials; on-the-fly composite Digital Materials™
- Variety of build process and printing modes
- Boost your creativity with multiple materials and composite materials featuring varied material properties and tones
- Outstanding quality and accuracy
- 16-micron, high-resolution layers ensure smooth surfaces and fine details
- Build tray size of 350x350x200 mm: ideal for a wide range of parts and assemblies
- Ease-of-use in an office environment



# Multi-material 3-Dimensional Printing System

# Technical Specifications

# Layer Thickness (Z-axis)

Horizontal build layers down to 16-micron

## Tray Size (X×Y×Z)

 $350 \times 350 \times 200 \text{ mm} (13.8 \times 13.8 \times 7.9 \text{ inch})$ 

## Net Build Size (X×Y×Z)

342×342×200 mm (13.4×13.4×7.9 inch)

## **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)

## Accuracy

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

# **Supported Model Materials**

- FullCure®720 General Purpose, transparent
- Vero Family opaque materials
- DurusWhite Polypropylene-like material
- Tango Family rubber-like flexible material

# **Digital Materials**

Wide range of composite materials fabricated on the fly

# Support Type

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

#### Materials Cartridges:

- Four sealed 3.6 kg (7.9 lb) cartridges
- Tango family and DurusWhite also available as 1.44kg (3.17 lb) net weight in 3.6 kg casing
- Two different model materials loaded
- · Front loading for quick replacement

#### **Power Requirements**

110-240 VAC 50/60 Hz 1.5 KW single phase

#### Machine Dimensions (W×D×H)

1420×1120×1130 mm  $(55.9 \times 44.1 \times 44.5 \text{ inch})$ 

#### Machine Weight

Net 500kg (Net 1102 lb)

#### **Operational Environment**

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

#### Compatibility

Windows XP, Windows Vista

#### Software

Objet Studio™ for Connex350 features:

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

# **Input Formats**

STL, OBJDF and SLC Files

#### CADMatrix<sup>™</sup> Add-in

CADMatrix add-in enables designers and engineers to seamlessly assign Objet model materials to multi-part, multi-material designs within CAD software\*, thus allowing for increased control of 3D model validation.

## **Special Facility Requirements**

None

#### **Print Heads**

8 Units

#### **Network Communication**

IAN - TCP/IP

\* CAD software: CADMatrix™ is compatible with the following: Pro/ENGINEER®, SolidWorks, AutoDesk Inventor







# About Objet Geometries

Objet Geometries Ltd., the innovation leader in 3D printing, develops, manufactures and globally markets ultra-thin-layer, high-resolution 3-dimensional printing systems and materials that utilize PolyJet™ polymer jetting technology, to print ultra-thin 16-micron layers.

The market-proven Eden™ line of 3D Printing Systems and the Alaris™30 3D desktop printer are based on Objet's patented office-friendly PolyJet™ Technology. The Connex $^{\text{TM}}$  family is based on Objet's PolyJet Matrix $^{\text{TM}}$ Technology, which jets multiple model materials simultaneously and creates composite Digital Materials™ on the fly. All Objet systems use Objet's FullCure® materials to create accurate, clean, smooth, and highly detailed 3D parts.

Objet's solutions enable manufacturers and industrial designers to reduce cost of product development and dramatically shorten time-to-market of new products. Objet systems are in use by world leaders in many industries, such as automotive, electronics, toy, consumer goods, and footwear industries in North America, Europe, Asia, Australia, and Japan.

Founded in 1998, Objet serves its growing worldwide customer base through offices in USA, Europe and Hong Kong, and a global network of distribution partners. Objet owns more than 50 patents and patent pending inventions. Visit www.objet.com.

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