



# Stratasys J5 DentaJet

Level Up Dental Production with Colour

Offering speed and accuracy, J5 DentaJet printers are ideal for rapid prototyping of dental implant designs, surgical guides and much more.





# Stratasys Dental Level up manufacturing capacity

Leverage Stratasys' smart digital workflow, multi-material unattended printing, and minimal post-processing to increase output while producing higher-quality dental parts. PolyJet 3D printing technology delivers key advantages for a wide set of dental applications, such as extreme accuracy for implantology cases, best in class aesthetics for removables, realistic color models, and flexibility to support your production needs with high volume, mixed-tray printing.

# J5 DentaJet

The Stratasys J5 DentaJet™ professional-grade, multi-material dental printer is designed to address the evolving production needs of dental labs.

# Print in multiple materials simultaneously

Produce of a wide variety of parts in the same job, maximizing productivity and throughput.

# Harness the power of color

Achieve the highest degree of realism with a full-color, monolithic 3D printing process.

# Level up production

High-volume unattended operation saves time and requires less manual post-processing.

# Achieve precision accuracy

High resolution droplet printing and full curing during the print process eliminates post processing distortions for unrivaled accuracy of parts.

# Safer working Environment

The closed cartridge system eliminates uncured resin handling. Operators simply load one tray and walk away.

www.sys-uk.com

+

# Best in class solution for each application

### **Implantology**

Simplify the complexity of implantology case production. Print highly accurate opaque and rigid implant models, transparent surgical guides, and soft gingiva masks— all on one biocompatible tray — in a single, unattended print job.

# Removables

Choose aesthetics, precision, and customization in a monolithic polychromatic denture with predictable and repeatable results that reduce chair time. Expand your denture offering with TrueDent, FDA cleared (Class II) resin matching a varied patient demographic on one tray.

### Crown and Bridge

Produce a large volume of higher-quality crown and bridge models with fewer remakes. Leverage realistic color models using 3Shape's color workflow to improve color matching of restorations with increased accuracy.

# Orthodontics

Increase your lab capacity offering 3D printed indirect bonding trays or producing clear aligners from 3D printed arches in high-speed mode.



# TrueDent:

# True aesthetics made possible

Our unique denture material is specially designed for J5 DentaJet 3D PolyJet printer. It enables batch production of highly-aesthetic, monolithic, multi-colour full dentures on a single high-capacity tray. These high-fidelity polychromatic prosthetics eliminate the need to bond teeth and streamline the digital workflow reducing labour and materials. Click here to learn more about the specific properties and benefits of TrueDent solution.

# Monolithic, full-colour 3D printed dentures

TrueDent is an FDA cleared (Class II) resin developed for 3D printing of dentures and temporary crowns and bridges on the J5 DentaJet platform. It enables batch production of highly-aesthetic, monolithic, multi-colour dental appliances on a single mixed-part, high-capacity tray.

# High aesthetics

Proprietary PolyJet multi-material technology delivers natural looking gums and mimics tooth structure with optimal translucency. Print mixed batches of highly-customised dentures and temporaries, matching patient demographic diversity on one tray.

# Unmatched quality and accuracy

Stratasys TrueDent $^{\text{TM}}$  is a light-curable resin indicated for the fabrication of dental appliances including removable full and partial dentures, denture bases, denture teeth, bridges, crowns, inlays and onlays.

# Accurate print from design to fit

A high-fidelity match between design and print ensures repeatable, consistent production of accurate well-fitting dentures. This means less chair time; a win-win for patients, dentists and labs.





╁

# Powered by PolyJet™

PolyJet, a technology pioneered by Stratasys, is ideal for producing multi-material mixed trays and applications requiring high accuracy as well as full color realism. The J5 DentaJet was ultimately designed to eliminate the need for multiple 3D printers each intended for specific applications.

### How it works

PolyJet printers create models through a similar process to that used by inkjet printers, but instead of jetting ink, the printers jet layers of curable liquid photopolymer (resin) onto a build tray.

The printer is loaded with several resins at the same time, each intended for a different application with diverse material properties. The print heads work in tandem to print different dental parts simultaneously.

Each layer of curable liquid photopolymer is hardened with UV light before the next layer is laid. Layer thickness can be as thin as 0.019 mm, allowing the technology to produce complex geometries and intricate details that result in highly aesthetic, extremely accurate applications like crown and bridge models, implant models, and surgical guides. PolyJet technology can also print thicker layers, and by doing so, increase throughput for applications requiring less accuracy.

To print in color, the printer is loaded with base color resins. Each print head jets the correct color in the desired location on the part creating the desired shade or hue. This allows the printer to create parts with full color gradients and smooth color transitions ideal for color models, monolithic dentures, or temporaries.

### **Driving efficiency**

The sizable print tray enables high-volume output in large batches. Unattended printing allows for a much higher equipment and personnel utilization without costly automation add-ons. The PolyJet printers are unique in that the operator does not come in contact with uncured resin, ensuring a safer and cleaner working environment.







+

# A Full 3D printing workflow.

Streamline your 3D print workflow for all Stratasys printers with GrabCAD Print™ software platform and integrations to leading Dental CAD platforms such as 3Shape and ExoCAD.

- Get started fast
  - Easy-to-use and minimal training is required to master the.
- Manage the fleet
  - Organize 3Dprinting jobs on all your Stratasys printers (PolyJet and  $P3^{TM}$ )
- Arrange trays automatically
   Simplify pre-production with automatic support,

part orientation, and optimized capacity.

- Harness a color workflow
  - Shade selection exported from 3Shape Dental System and assigned automatically.
- Analyse performance
  - Monitor material usage and utilization of your printer with in-depth reports and dashboards.
- Print from anywhere
  - Schedule and monitor prints remotely

# See the specs.

J5 DentaJet Printer and Material Specifications		
	Biocompatible materials:	Vibrant colors including:
Model Materials	<ul> <li>Biocompatible Clear MED610™</li> <li>VeroGlaze™ (MED620)</li> <li>Flexible clear biocompatible material MED625FLX™</li> </ul>	<ul> <li>VeroCyanV™ (RGD845)</li> <li>VeroMagentaV™ (RGD852)</li> <li>VeroYellowV™ (RGD838)</li> <li>VeroDent™ PureWhite (DEN847)</li> </ul>
Digital Model Materials	Unlimited number of composite materials including:  Over 500,000 colors  Separator Digital Material	
Support Materials	SUP711™ (Water Jet removable)	
Build Tray	Printing area: 1,174cm2 Max Part Size: Up to 140 x 200 x 190mm (5.51 x 7.87 x 7.48in.)	
Layer Thickness	Horizontal build layers down to 18 microns (0.0007 in.)	
Network Connectivity	LAN - TCP/IP	
System Size and Weight	651 x 661 x 1511mm (25.63 x 26.02 x 59.49 in.); 228 kg (503 lbs.)	
Operating Conditions	Temperature 18 – 25 °C (64 – 77 °F); relative humidity 30 – 70% (non-condensing)	
Power Requirements	100 - 240 VAC, 50 - 60 HZ, 10A, 1 phase	
Regulatory Compliance	CE, FCC, EAC	
Software	GrabCAD Print	
Build Modes	High Quality Speed (HQS) – 18.75μm High Quality High Speed (HQHS) – 20.625μm	





# Master Dentistry challenges

Learn more about the J5 DentaJet 3D printer at sys-uk.com.





