# DENTAL CAD/CAM 3D PRINTERS

Production of accurate, highly detailed dental prostheses, precision working models, drill guides and orthodontic thermoforming models







## Enter the Digital Dentistry Era

#### **ENHANCE QUALITY**

Reduce the need for remakes with the digital precision, detail resolution and the design freedom of 3D Systems dental printing solutions. Printing unique feathered edges and crisp grooves that are commonly found on tooth anatomy, with verified accuracy and consistency for dental applications, ensures you can get the perfect fit every time.

#### **ACCELERATE YOUR CYCLE TIMES**

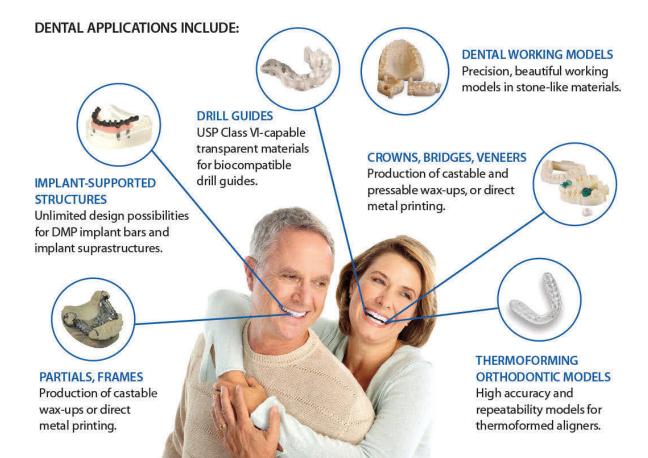
Achieve a 50% increase in throughput with no additional labor. From highly flexible bench-top personal printers to high-capacity printers with round-the-clock operation and same-day cycle times, our dental CAD/CAM printers dramatically reduce lead times.

#### INCREASE MANUFACTURING AGILITY

3D printing provides more flexibility and throughput to develop your business and access the digital dentistry world, while reducing resource dependency. Our dental solutions are designed for use in laboratories, making production methods faster, easier and more effective.

#### REDUCE COSTS

With uniformly thin walls, users enjoy an average of 20% savings on alloy consumption and 50% savings on framework finishing time with extremely smooth surface finish, adding to the remakes savings. For high volumes, Direct Metal Printing eliminates multiple steps and reduces the unit cost per restoration.



### Pro Jet® MJP 3600 Dental

#### Exceptional quality, unmatched throughput

The 3D Systems Dental MultiJet Printer quickly and consistently produces accurate wax-ups for the production of prosthetic devices, and manufactures precision working models in a stone-like material, as well as drill guides or orthodontic thermoforming models in durable plastic material.



Partials and working models printed on the ProJet MJP 3600 Dental



With a biocompatible material that has passed USP Class VI testing, you can produce drill guides, parts for medical devices and more.

Wax-ups production

少

#### LOW TOTAL COST OF OWNERSHIP

Optimize labor costs with MultiJet Printing ease-of-use and automated process—from file to finished part. In addition to limited maintenance requirements, it comes with a 5-year warranty on the industrial-grade print head, designed for long life and high reliability.

#### HIGH CAPACITY FOR THE BROADEST RANGE OF DENTAL LAB APPLICATIONS

Designed for 24/7 use, laboratories can boast same-day cycle times, reduced lead times and diminished costs. Delivering new levels of productivity, this printer can produce hundreds of units per cycle and up to 24 quad cases in a single build.

#### **EASY POST-PROCESSING**

Finishing MJP parts is as easy as melting wax away from even the tightest spaces, preserving the finest details and smooth surface quality. No hand scraping, highpressure water jets, caustic chemical baths, or special facilities requirements.

#### **Open Solutions**

3D Systems' dental printing solutions work with any open STL-compatible intraoral, plaster or impression scanner.







USP Class VI capable drill guides

## Formlabs Form 2

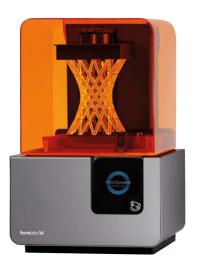
## Low cost 3D printer for dental applications

The Form 2-SLA 3D printer puts the high precision of a professional dental 3D printer right on your lab bench, so you can make:

accurate wax-ups, Surgical guides, Retainers and aligners, Educational and study models, Surgical practice fasters with no 3D printing experience required.

#### FOR EVERY DENTAL STUDIO

Form 2 desktop 3D printer is designed to bring the power of 3D printing to dental professionals. Its speed, precision, and compact footprint make it perfect for dental offices and labs. It takes as little as 15 minutes to get set up and printing.



- High speed
- High-resolution 3D Printing
- Automated Resin System
- wi-f
- Integrated cleaning system

## ProJet® & ProX™ SLA Printers

#### Unrivaled precision and surface quality

These highly productive printers offer all the benefits of legendary stereolithography, fine-tuned for even greater speed, cost-efficiency and reliability for dental models and drill guides production.

#### ### B

## HIGHEST PRODUCTIVITY Advance your dental model manufacturing workflow with the fastest print technology for large production

runs. With swappable material delivery modules, get 24/7 utilization.

#### **ENGINEERED SPECIALTY MATERIALS**

Using our advanced SLA materials, you can produce accurate dental models that are ideal for crown and bridge restorations, working models for partial frameworks and orthodontic thermoforming models. With the USP Class VI capable biocompatible material, you can produce drill guides, parts for medical devices and more.





Dental models for thermoformed aligners

ProX<sup>™</sup> DMP 100, 200 & 320

#### High productivity, exceptional quality

3D Systems' Direct Metal Printing process builds fully dense, chemically pure complex metal parts in hours, providing industry leading quality, fine details, precision and repeatability for dental applications.



Dental frames



Partials, copings and bridges production in Cobalt Chrome (CoCr)



Implant bar and removable suprastructure in titanium alloy

#### **EXCEPTIONAL SURFACE FINISH**

Reduced machining or polishing to get final parts.

#### UNMATCHED ACCURACY

Print the finest features at the tightest tolerances in Direct Metal Printing.

#### **PRODUCTION READY**

Offering unmatched precision and consistency, the ProX DMP printers are the proven standard with tens of thousands of in-mouth dentures produced all around the world.

#### SUPERIOR MECHANICAL PROPERTIES

Produce exceptionally strong dental parts with uniform mechanicals, higher density and chemical purity.

#### HIGH PERFORMANCE DENTAL ALLOYS

Used by the ProX DMP 100 and 200 printers, the nickel and beryllium free CoCrMo alloy is suitable for biomedical applications, including dental frames, partials, copings and bridges. The ProX DMP 320 selection of high strength LaserForm™ Titanium alloys is ideal for dental implant bars and suprastructures.

#### Unlimited Design Freedom - Unparalleled Retention

The Direct Metal Printing capability to accurately produce unlimited complexity parts, including tailored surface textures that are not possible by milling, provides the ideal retention structure as an integral part of the implant suprastructure production.



	Form 2	ProJet MJP 3600 Dental	ProJet 6000 MP	ProJet 7000 MP	ProX 800
Technology		MultiJet Printing (MJP)		– Stereolithography (SI	_A)
Build Envelope Capacity (W x D x H) <sup>1</sup>	5,7 x 5,7 x 6,9 in 145 x 145 x175 mm	11.75 x 7.2 x 8 in (298 x 183 x 203 mm)	10 x 10 x 10 in (250 x 250 x 250 mm)	15 x 15 x 10 in (380 x 380 x 250 mm)	25.6 x 29.5 x 21.65 in (650 x 750 x 550 mm)
Recommended dental specialty materials	- Standard Grey Resin (Tought vacuum- forming plastic) - Standard Castable Resin (Wax and plastic Hybrid) - Dental SG Resin (certified Class 1 biocompatible material)	VisiJet M3 Dentcast (Wax-up castable material)	VisiJet SL e-Stone™ (High-contrast color, dental stone)		Accura® e-Stone™ (High-contrast color, dental stone)
		VisiJet M3 PearlStone (Solid stone appearance) VisiJet M3 Stoneplast (USP Class VI capable, trans lucent or stone finish)	polycarbonate-like)	(USP Class VI capable, crystal-clear appearance,	
Resolution	56 micron (xy) (effective 585 DPI)	<u>UHD Mode</u> : 750 x 750 x 890 DPI <u>HDX and HDP Modes</u> : 375 x 450 x 790 DPI	—————————————————————————————————————		
Layer thickness	0,025 - 0,05 - 0,1 mm	29 or 32 μm	50-100 μm	50-100 μm	50-100 μm
Typical accuracy	Reference voxel size (XYZ	±0.001-0.002 ii	nch per inch (0.025-0.0	5 mm per 25.4 mm) of	oart dimension
Main dental applications	Wax-ups, working and thermoforming models, drill guides	Wax-ups, working and thermoforming models, drill guides			

	ProX DMP 100	ProX DMP 200	ProX DMP 320		
Technology	Direct Metal Printing	Direct Metal Printing	Direct Metal Printing		
Max. build envelope capacity (W x D x H) <sup>1</sup>	3.94 x 3.94 x 3.94 in (100 x 100 x 100 mm) <sup>2</sup>	5.51 x 5.51 x 4.92 in (140 x 140 x 125 mm) <sup>2</sup>	10.82 x 10.82 x 16.53 in (275 x 275 x 420 mm) <sup>2</sup>		
Dental metal alloys with developed print parameters	Cobalt-Chrome CoCr	Cobalt-Chrome CoCr	LaserForm™ Ti Gr. 1 LaserForm™ Ti Gr. 5 LaserForm™ Ti Gr. 23		
Layer thickness	Adjustable, min 5 µ Preset: 30, 40 and 5	Adjustable Preset: 30 and 60 μm			
Repeatability	x=20 μm, y=20 μm, z=20 μm				
Min. feature size	x=100 μm	100 μm			
Min. wall thickness	150 μm	150 μm	150 μm		
Typical accuracy	± 0.1-0.2% with ± 50 μm minimum				
Material loading	Manual	Semiautomatic	Manual		
Recycling system	Optional external system	Optional external system	Optional external system		
Interchangeable build modules	No	No	Yes		
Main dental applications	Partials, fr	Dental implant bars and suprastructures			
			suprastructures		

<sup>&</sup>lt;sup>1</sup>Maximum part size is dependent on geometry, among other factors.

 $Complete\ specifications\ available\ at\ www. 3 dsystems. com$ 

<sup>2</sup>Including build plate

Warranty/Disclaimer: The performance characteristics of these products may vary according to product application, operating conditions, material combined with, or with end use. 3D Systems makes no warranties of any type, express or implied, including, but not limited to, the warranties of merchantability or fitness for a particular use.



3DZ Franchising (Malta)
3DZ Treviso (Castelfranco Veneto)
3DZ Brescia (Mazzano)
3DZ Piermonte (Casale Monferrato)
3DZ Poma (Roma)
3DZ Toscana (Arezzo)
3DZ Emilia (Reggio Emilia)
3DZ Albania (Triana)
3DZ Hungría (Budapest)
3DZ Rumanía (Craiova)
3DZ Bracelona (España)
3DZ Andalucía (España)
3DZ Andrid (España)
3DZ Andrid (España)
3DZ Serbía (Gelegrade)

3DZ Serbia (Belgrade) 3DZ Dubai (Dubai) (+356) 2713 915 2 (+39) 0.423 192307 0 (+39) 0.30 6.38519 5 (+39) 0.14 2.23109 1 (+39) 0.57 590.854 2 (+39) 0.52 51695 0 (+355) 6.88 0.8783 0 (+36) 17.94343 2 (+40) 251 41976 4 (+34) 9.38 88 0.8 99 (+34) 9.12 24 30.84 (+381) 11.265109 0 (+941) 4.251773 4 info@3dz.com.mt
tv@3dz.it
bs@3dz.it
to@3dz.it
to@3dz.it
to@3dz.it
info@thnet.it
re@3dz.it
tirana@3dz.al
budapest@3dz.hu
contact@cadworks.ro
barcelona@3dz.es
info@3dz.es
info@3dz.es
info@3dz.es
info@3dz.com.mt