

NEW: DMP Flex 200

Professional and precise—now with 500W laser source
Metal 3D printer for finest features and thinnest walls.
Outstanding accuracy, repeatability and the industry's
best surface finish, now with enlarged build platform,
suitable for fast dental application cycles for production
of next day RPDs, crowns, bridges and implant bars.



The new DMP Flex 200 is designed for professional 3D printed metal manufacturing of small, complex fine detail metal parts at high quality using Direct Metal Printing (DMP). The DMP Flex 200 features a larger build volume 140 x 140 x 115 mm (5.51 x 5.51 x 4.53 in) with a new build plate clamping mechanism eliminating screw management inside the process chamber. Unloading build plates has never been easier! The DMP Flex 200 has a vacuum cleaner pass-through to the process chamber which remains sealed under inert conditions. All surfaces are cleaned without powder contact. Build plates and powder containers are passed in and out of the process chamber via an airlock avoiding exposure to powder and limiting O₂ entering the process chamber.

High performance at lower cost



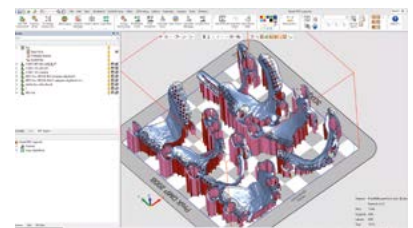
With the build volume and 500W laser source, this metal 3D printer leads to reduced cost per part and faster delivery times. Its ability to print with less supports with visibly better surface finish, results in less post processing and less material usage.

Dental materials for broader applications



3D Systems offers LaserForm® CoCr and LaserForm Ti Gr23 with extensively developed, tested and high-confidence LaserForm parameter databases suitable for a broad range of dental applications.

Streamline your workflow



3DXpert Dental software automates part orientation, support generation, labeling and nesting. Prepare quality parts in record time. Gain unprecedented control over the entire workflow, from design to manufacturing.

Build time

LT30 RPDs with contour 6:19 hrs/min - 10 units | LT30 Crowns & Bridges with contour 6:28 hrs/min - 204 units
LT30 Crowns & Bridges without contour 5:49 hrs/min - 204 units | LT40 Crowns & Bridges without contour 04:24 hrs/min - 204 units

DMP Dental

Easy-to-use professional dental metal printers for exceptional quality



Specifications	DMP Flex 100	DMP Flex 200
Laser Power Type	100 W/Fiber laser	500 W/Fiber laser
Laser Wavelength	1070 nm	1070 nm
Build Volume (X x Y x Z) Height inclusive of build plate	100 x 100 x 90 mm (3.94 x 3.94 x 3.54 in)	140 x 140 x 115 mm (5.51 x 5.51 x 4.53 in)
Layer Thickness	10 µm - 100 µm	10 µm - 120 µm
LaserForm® metal alloy choices with developed print parameters:	LaserForm CoCr (B) (C) LaserForm 17-4PH (B) LaserForm 316L (B)	LaserForm CoCr (B) LaserForm Ti Gr5 (A) LaserForm Ti Gr23 (A)
Material Deposition	Roller	Roller
Repeatability	x=20 µm, y=20 µm, z=20 µm	x=20 µm, y=20 µm, z=20 µm
Minimum Feature Size	x=100 µm, y=100 µm, z=10 µm	x=100 µm, y=100 µm, z=10 µm
Typical Accuracy	± 0.1-0.2% with ± 50 µm minimum	± 0.1-0.2% with ± 50 µm minimum
Space requirements		
Dimensions, uncrated (W x D x H)⁴	1210 x 1720 x 2100 mm (48 x 68 x 83 in)	1210 x 1720 x 2100 mm (48 x 68 x 83 in) + Chiller 377 x 521 x 650 mm (14.8 x 20.5 x 25.6 in)
Weight, uncrated	1300 kg (2870 lbs)	1400 kg (3086 lbs)
Facility requirements		
Electrical Requirements	230 V / 2.7 KVA / single phase	230 V / 4.5 KVA / single phase + chiller 1.2 KVA / single phase
Compressed Air Requirements	6-8 bar	6-8 bar
Gas Requirements	Nitrogen or Argon, 6-8 bar	Nitrogen or Argon, 6-8 bar
Water Cooling	Not required, air cooling included	Chiller supplied with printer
Quality control		
DMP Monitoring	na	na
Control system and software		
Software Tools	3DXpert® all-in-one software solution for metal additive manufacturing	3DXpert® all-in-one software solution for metal additive manufacturing
Control Software	PX Control V3	PX Control V3
Operating System	Windows 10	Windows 10
Input Data File Formats	All CAD formats, e.g. IGES, STEP, STL, native read formats incl PMI data, all Mesh format	All CAD formats, e.g. IGES, STEP, STL, native read formats incl PMI data, all Mesh format
Network Type and Protocol	Ethernet 1 Gbps, RJ-45 Plug	Ethernet 1 Gbps, RJ-45 Plug
Powder management		
Powder Management	Optional external	Optional external
Powder Loading	Manual	Manual
Certification	CE	CE

NOTE Not all products and materials are available in all countries - please consult your local sales representative for availability.

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