3D SYSTEMS
Additive Manufacturing Solutions

ProJet® MJP 2500W

High throughput production of precision jewelry RealWax™ patterns for metal casting

3D Systems' ProJet MJP 2500W MultiJet 3D Printer quickly and consistently generates micro-detail, precision, 100% wax sacrificial metal casting patterns for high capacity jewelry production, without tooling time, cost or geometric limitations, delivering reliable and repeatable direct casting efficiency.

Jewelry Wax Pattern MultiJet Printing

3D printing solution for direct production of precision metal casting patterns

The ProJet MJP 2500W 3D printer employs MultiJet Printing technology to consistently produce high fidelity, true-to-CAD wax sacrificial patterns, for precision investment casting for jewelry.

GET MORE PATTERNS FASTER

Streamline your file-to-pattern workflow with the advanced 3D Sprint® software capabilities, fast and versatile MJP print speeds and batch support removal to deliver high quality, ready-to-cast patterns.

RESULTS YOU CAN TRUST

Produce true-to-CAD patterns with exact, razor-sharp edge and fine feature definition for results you can rely on. Smooth surface and sidewall quality means less expensive hand work and a faster pattern-to-finished piece workflow. VisiJet® M2 CAST 100% wax material melts like standard casting waxes, with negligible ash content for defect free castings.

MANUFACTURING AGILITY

MultiJet Printing provides more flexibility and throughput to develop your business and access the digital manufacturing world of customized pieces and series production. ProJet MJP 2500W jewelry printer makes production methods faster, easier and more effective, dramatically reducing lead times and costs.

UNLOCK YOUR CREATIVITY

Increase geometric freedom without the limitations of hand crafting or tooling to create complex, precision patterns that cannot be made traditionally. MJP hands-free post-processing provides complete removal of supports from the tightest spaces without damaging fine feature details.

The ProJet MJP 2500W

The ProJet MJP 2500W is an affordable 100% RealWax pattern 3D printer that adjusts to your workflow, delivering from several short run batches a day to next day for larger builds. These highly accurate, fine wax patterns are directly printed, without the time, costs and geometric limitations of tooling.

HIGH THROUGHPUT

From fast short runs to high throughput, combine up to 10x faster print speeds and 3.7x larger build volume than similar class printers with rapid single lane printing for high productivity of 100% wax precision jewelry casting patterns with an affordable 3D printer. Improve the casting room efficiency and thereby the productivity, precision and possibilities of direct investment jewelry casting.

HIGH QUALITY PATTERNS

Print sharp edges, extreme crisp details and smooth surfaces with high fidelity. The ProJet MJP 2500W printers is ideal for intricate precision jewelry pieces manufacturing with reduced metal hand polishing.

EASE-OF-USE AND LOWER COSTS

Optimize part and labor costs with MJP ease-of-use, automated and efficient process—from file to finished direct casting pattern. With large volume capacity and 24/7 operation, the ProJet MJP 2500W printer allows fast amortization and a high return on your investment.

JEWELRY / WATCH MANUFACTURING

Print crisp details on small features and micro-pave settings. Consistently achieve the highest level of precision and repeatability by adopting a digital foundry workflow for jewelry manufacturing.

ART, FASHION AND COLLECTIBLES

Produce series or customized sculptures, figurines, replicas, collectibles and more without the constraint of tooling imitations. Our precision wax pattern 3D printer makes production methods faster, easier and more effective, dramatically reducing lead times.

VisiJet® M2 CAST 100% Wax Material

Best casting reliability

VisiJet M2 CAST is a 100% wax 3D printing material for the ProJet MJP 2500W printer, delivering durable, high quality patterns for reliable performance and results throughout existing lost-wax casting processes and equipment.

VisiJet M2 CAST melts like standard casting waxes, with negligible ash content for defect free castings.

It is durable for handling and casting fine features, and its high contrast deep purple color allows for easy fine details visualization.

3D Sprint®

End-to-end software solution for MultiJet Printing workflows

MultiJet Printers use 3D Sprint, 3D Systems' advanced software for file preparation, editing, printing and management from a single, intuitive interface. 3D Sprint enables the customer to significantly decrease cost of ownership of their 3D printers by reducing the need for costly software seats by third party vendors. A distinguishing feature of 3D Sprint software is its ease of use with automated part placement, support generation and tools to modify pattern geometry without the need to go back to a CAD program.

3D Connect™

A new level of management in 3D production

3D Connect Service provides a secure cloud-based connection to 3D Systems service teams for proactive and preventative support to improve uptime and deliver production assurance for your system.

Properties	Condition	**VisiJet M2 CAST**	**VisiJet M2 SUP**
Composition		100% Wax	Wax Support Material
Color		Deep Purple	White
Bottle Quantity		1.17 kg	1.3 kg
Density @ 80 °C (liquid)	ASTM D3505	0.80 g/cm³	0.87 g/cm³
Melting Point		61-66 °C	55-65 °C
Softening Point		40-48 °C	N/A
Volumetric Shrinkage, from 40 °C to RT		2 %	N/A
Linear Shrinkage, from 40 °C to RT		0.70 %	N/A
Needle Penetration Hardness	ASTM D1321	12	N/A
Ash Content	ASTM 2584	< 0.05 %	N/A
Description		High resolution, durable casting wax	Eco friendly, hands-free dissolvable wax

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PRINTER HARDWARE	
Dimensions (WxDxH)	
3D Printer Crated	1397 x 927 x 1314 mm (55 x 36.5 x 51.7 in)
3D Printer Uncrated	1120 x 740 x 1070 mm (44.1 x 29.1 x 42.1 in)
Weight	
3D Printer Crated	325 kg (716 lb)
3D Printer Uncrated	211 kg (465 lb)
Electrical	100-127 VAC, 50/60 Hz, single-phase, 15A 200-240 VAC, 50 Hz, single-phase, 10A Single C14 receptacle
Operating Temperature Range	18-28 °C (64-82 °F), reduced print speed at > 25 °C (77 °F)
Operating Humidity	30-70 % relative humidity
Noise	< 65 dBa estimated (at medium fan setting)
Certifications	CE

PRINTING SPECIFICATIONS	
Printing Mode	XHD - Xtreme High Definition
Net Build Volume (xyz)[1]	294 x 211 x 144 mm (11.6 x 8.3 x 5.6 in)
Resolution (xyz)	1200 x 1200 x 1600 DPI; 16 µ layers
Accuracy (typical)[2]	±0.0508 mm/25.4 mm (±0.002 in/in) of part dimension typical for any single printer ±0.1016 mm/25.4 mm (±0.004 in/in) of part dimension across printer population

MATERIALS	
Build Material	VisiJet M2 CAST
Support Material	VisiJet M2 SUW
Material Packaging	
Build Material	In clean 1.17 kg (2.58 lbs) bottles (printer holds up to 2 with auto-switching)
Support Material	In clean 1.3 kg (2.87 lbs) bottles (printer holds up to 2 with auto-switching)

SOFTWARE AND NETWORK	
3D Sprint® Software	Easy build job set-up, submission and job queue management; Automatic part placement and build optimization tools; Part stacking and nesting capability; Extensive part editing tools; Automatic support generation; Job statistics reporting tools
3D Connect™ Capable	3D Connect Service provides a secure cloud-based connection to 3D Systems service teams for support.
E-mail Notice Capability	Yes
Internal Hard Drive Capacity	500 Gb minimum
Connectivity	Network ready with 10/100/1000 base ethernet interface; USB port
Client Operating System	Windows® 7, Windows 8 or Windows 8.1 (Service Pack), Windows 10[3]
Input Data File Formats Supported	STL, CTL, OBJ, PLY, ZPR, ZBD, AMF, WRL, 3DS, FBX, IGES, IGS, STEP, STP, MJPDDD

[1] Maximum part size is dependent on geometry, among other factors.
[2] Accuracy may vary depending on build parameters, part geometry and size, part orientation, and post-processing.
[3] For Windows 10, make sure you have applied the most recent Windows updates for the application to run correctly.

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