3D SYSTEMS
Additive Manufacturing Solutions

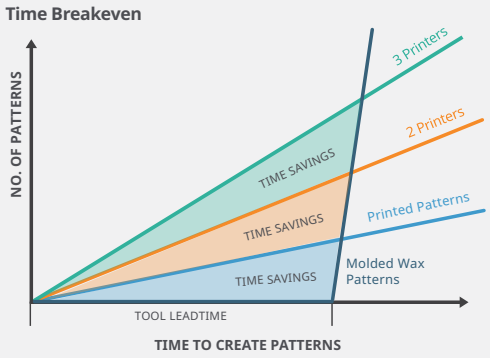
ProJet® MJP 2500 IC

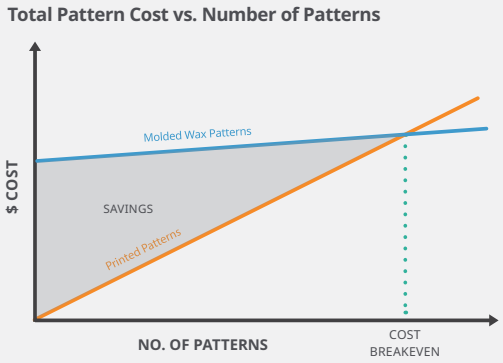
Tool-less production of 100% wax casting patterns in hours delivers design complexity at a fraction of the cost of traditional wax pattern production

Delivering quality, accuracy and repeatability, the ProJet MJP 2500 IC generates wax patterns that fit in existing investment casting processes, making it ideal for customized metal components, bridge manufacturing and low volume production.

Investment Casting with MultiJet Printing

3D printing solution for direct industrial wax patterns





UNMATCHED TURNAROUND TIME

Save weeks on wax pattern production with tool-less RealWax™ MultiJet Printing and accelerate time-to-market. The ProJet MJP 2500 IC enables a digital workflow with direct wax pattern printing, increasing productivity and enabling fast time-to-part for premium service delivery to customers.

ULTIMATE DESIGN FREEDOM

With digital design, you can produce wax patterns for parts that take advantage of topology optimization, lightweighting, and part consolidation. The ProJet MJP 2500 IC frees you to produce multiples of a complex part geometry or simultaneously make design variants, all while delivering better performing, more cost-effective components in a fraction of the time of traditional alternatives.

LOWER COSTS

Have hundreds of your small to medium- size patterns in hand quicker and at less cost compared to the time and expense to build and run a traditional injection tool. If design changes are needed, the benefits just compound. The ProJet MJP 2500 IC leverages existing investment casting processes and equipment.

MANUFACTURING AGILITY

MultiJet Printing provides more flexibility and versatility to develop your business with an efficient solution for wax patterns production. Create, iterate, produce and refine as required with just-in-time pattern production.

The ProJet® MJP 2500 IC

Developed for the investment casting professional, 3D Systems' ProJet MJP 2500 IC consistently generates RealWax™ sacrificial patterns in hours at a lower total cost of operation for production runs of up to several hundred with no tooling investment.

FAST OUTPUT AT A FRACTION OF THE COST

With fast wax pattern production, short cycle times capability and 24/7 operation, you can rely on the ProJet MJP 2500 IC output for improved casting room efficiency. Expect fast amortization and high returns on investment with this unique industrial wax pattern 3D printing solution.

HIGH QUALITY PATTERNS

Print smooth surfaces, sharp edges and extreme fine details with high fidelity and repeatability to hold tight tolerances. Ideal for complex precision metal components manufacturing with reduced or no finishing work.

OPTIMIZED RESOURCES

Streamline your file-to-pattern workflow with the advanced 3D Sprint® software capabilities for preparing and managing the additive manufacturing process, unattended high speed printing and a defined and controlled post-process methodology. MultiJet Printing ease-of-use and dependable process ensures reliable performance, yield and results.

Customized components or short run production without the cost and delay of tooling

Deliver better performing, more cost- effective components with topology optimization and part consolidation.

VisiJet® M2 ICast

Best casting reliability

VisiJet M2 ICast 100% wax material emulates the melt and burn-out characteristics of standard casting waxes. This RealWax 3D printing material drops seamlessly into existing wax casting processes.

VisiJet M2 ICast RealWax™ 3D printing material is an unfilled paraffin based wax for use with the ProJet MJP 2500 IC printer, delivering high quality and accuracy patterns for reliable performance and results throughout existing investment casting processes and equipment. Its high contrast green color allows for easy fine details visualization. This MJP 3D printing solution enables the production of hundreds of small to medium-size patterns more quickly and less expensively compared to the time and cost to build and run a traditional injection tool.

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. 3D Sprint automatically generates exceptionally efficient supports requiring far less material, which can lead to significant savings.

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 enable better service, improve uptime and deliver production assurance for your system.

Properties	Condition	VisiJet M2 ICast	VisiJet M2 IC SUW
Composition		100% Wax	Wax Support Material
Color		Green	White
Bottle Quantity		1.3 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 An unfilled paraffin based wax with added resins	Non-toxic wax support material with easy break-away structure and dissolvable hands-free removal

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PRINTER PROPERTIES

Dimensions (WxDxH)	
3D Printer Crated	55 x 36.5 x 51.7 in (1397 x 927 x 1314 mm)
3D Printer Uncrated	44.1 x 29.1 x 42.1 in (1120 x 740 x 1070 mm)
Weight	
3D Printer Crated	716 lb (325 kg)
3D Printer Uncrated	465 lb (211 kg)
Electrical	100-127 VAC, 50/60 Hz, single-phase, 15A 200-240 VAC, 50 Hz, single-phase, 10A Single C14 receptacle
Internal Hard Drive Capacity	500 Gb minimum
Operating Temperature Range	Optimal 64-75 °F (18-24 °C), not to exceed 82 °F (28 °C)
Operating Humidity	30-70 % relative humidity
Noise	< 65 dBa estimated (at medium fan setting)
Certifications	CE, UL, EAC, KCC and FCC

PRINTING SPECIFICATIONS

Printing Mode	HD - High Definition HDF – High Definition Fractal
Net Build Volume (xyz)*	11.6 x 8.3 x 5.6 in (294 x 211 x 144 mm)
Resolution (xyz)	600 x 600 x 600 DPI; 42 µm layers
Accuracy (typical)**	±0.004 in/in (±0.1016 mm/25.4 mm) of part dimension across printer population ±0.002 in/in (±0.0508 mm/25.4 mm) of part dimension typical for any single printer
Volumetric Print Speed	1 Lane 12.5 in^3/hour (205 cm^3/hour) 2 Lanes 12.1 in^3/hour (199 cm^3/hour) 3 Lanes 11.6 in^3/hour (189 cm^3/hour)

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.
Client Operating System	Windows® 7, Windows 8 or Windows 8.1 (Service Pack), Windows 10
Input Data File Formats Supported	STL, CTL, OBJ, PLY, ZPR, ZBD, AMF, WRL, 3DS, FBX, IGES, IGS, STEP, STP, MJPDDD
E-mail Notice Capability	Yes
Connectivity	Network ready with 10/100/1000 base ethernet interface; USB port

MATERIALS

Build Material	VisiJet M2 ICast
Support Material	VisiJet M2 IC SUW
Post-Processing Fluid	VisiJet Support Wax Remover (VSWR)
Material Packaging	
Build and Support Materials	In clean 2.87 lbs (1.3 kg) bottles (printer holds up to 2 of each with auto-switching)
Post-Processing Fluid	2 gallons (7.2 kg) cubitainer

* Maximum part size is dependent on geometry, among other factors.
** Across printer variation can be reduced to equal single printer variation via user calibration.
Accuracy may vary depending on build parameters, part geomenty and size, part orientation, and post-processing.

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