## 🐌 3D SYSTEMS

# ProJet<sup>®</sup> 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

Developed for the investment casting professional, the ProJet MJP 2500 IC produces hundreds of RealWax<sup>™</sup> patterns at a lower cost and in less time than traditional pattern production. Delivering quality, accuracy and repeatability, it 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<sup>™</sup> 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.

#### LOWER COSTS

Have hundreds of your small to mediumsize 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.

#### 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.

#### 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<sup>®</sup> MJP 2500 IC and VisiJet<sup>®</sup> M2 ICast

3D Systems' MultiJet RealWax<sup>™</sup> industrial printing solution consistently generates sacrificial patterns in hours at a lower total cost of operation for production runs of up to several hundred with no tooling investment.



#### **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.

#### 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<sup>™</sup> 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.



#### **Our People Know**

For more than three decades, 3D Systems has demonstrated its industry leadership and expertise to help manufacturers across a variety of industries redefine their workflows to realize the benefits of additive manufacturing. Contact a 3D Systems expert to learn how the ProJet MJP 2500 IC can deliver the benefits of a digital workflow to your business.

ProJet <sup>®</sup> MJP 2500 IC Printer Properties		
Printer size	112 x 74 x 107 cm (44.1 x 29.1 x 42.1 in)	
Weight	211 kg (465 lbs)	
Included Software	3D Sprint™	
Warranty	1 year parts and labor	

#### **Printing Specifications**

Net Build Volume	295 x 211 x 142 mm (11.6 x 8.3 x 5.6 in)*
Resolution	600 x 600 x 600 DPI; 42 μm layers
Typical Accuracy	±0.1016 mm/25.4 mm (±0.004 in/in) of part dimension across printer population ±0.0508 mm/25.4 mm (±0.002 in/in) of part dimension typical for any single printer
Volumetric print speed	189 to 205 cm <sup>3</sup> /hour (11.6 to 12.5 in <sup>3</sup> /hour)
Build Material	VisiJet <sup>®</sup> M2 ICast – 100% RealWax™
Support material	VisiJet M2 IC SUW - Dissolvable non-toxic wax support material with easy break-away structure for bulky parts

#### **VisiJet M2 ICast Material Properties**

Composition	100% wax
Color	Green
Density @ 80 °C (liquid)	0.80 g/cm³ (ASTM D3505)
Melting Point	61-66 °C
Softening Point	40-48 °C
Volumetric Shrinkage, from 40 °C to RT	2%
Linear Shrinkage, from 40 °C to RT	0.70%
Needle Penetration Hardness	12 (ASTM D1321)
Ash Content	< 0.05 % (ASTM 2584)

\* Maximum part size is dependant on geometry, among other factors



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