3D SYSTEMS

# MultiJet Plastic Printers

## High part quality, speed and simplicity made accessible with the ProJet® MJP 2500 Series

| | ProJet MJP 2500 | ProJet MJP 2500 Plus |
|---|---|---|
| **Printing Mode** | HD - High Definition | HD - High Definition |
| **Net Build Volume (xyz)*** | 11.6 x 8.3 x 5.6 in (294 x 211 x 144 mm) | 11.6 x 8.3 x 5.6 in (294 x 211 x 144 mm) |
| **Resolution (xyz)** | 800 x 900 x 790 DPI, 32 µ layers | 800 x 900 x 790 DPI, 32 µ layers |
| **Accuracy (typical)** | ±0.001-0.002 inch per inch (0.025-0.05 mm per 25.4 mm) of part dimension (on platform)<br>Accuracy may vary depending on build parameters, part geometry and size, part orientation and post processing. | |
| **Build Materials** | VisiJet ProFlex M2G-DUR – Tough, clear polypropylene-like<br>VisiJet M2R-WT** – Rigid white<br>VisiJet M2R-BK** – Rigid black | VisiJet Armor M2G-CL – Tough, clear ABS-like<br>VisiJet ProFlex M2G-DUR – Tough, clear polypropylene-like<br>VisiJet M2R-GRY – Rigid gray<br>VisiJet M2R-WT** – Rigid white<br>VisiJet M2R-BK** – Rigid black<br>VisiJet M2R-CL** – Rigid clear<br>VisiJet M2 EBK – Elastomeric black<br>VisiJet M2 ENT – Elastomeric natural |
| **Support Material** | VisiJet M2 SUP | VisiJet M2 SUP |
| **Material Packaging**<br>Build Materials<br>Support Material | In clean 3.30 lbs (1.5 kg) bottles (printer holds up to 2 build materials bottles with auto-switching)<br>In clean 3.08 lbs (1.4 kg) bottles (printer holds up to 2 support material bottles with auto-switching) | |
| **Electrical** | 100-127 VAC, 50/60 Hz, single-phase, 15A<br>200-240 VAC, 50 Hz, single-phase, 10A<br>Single C14 receptacle | |
| **Dimensions (WxDxH)**<br>3D Printer Crated<br>3D Printer Uncrated | <br>55 x 36.5 x 51.7 in (1397 x 927 x 1314 mm)<br>44.1 x 29.1 x 42.1 in (1120 x 740 x 1070 mm) | <br>55 x 36.5 x 51.7 in (1397 x 927 x 1314 mm)<br>44.1 x 29.1 x 42.1 in (1120 x 740 x 1070 mm) |
| **Weight**<br>3D Printer Crated<br>3D Printer Uncrated | <br>716 lb (325 kg)<br>465 lb (211 kg) | <br>716 lb (325 kg)<br>465 lb (211 kg) |
| **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 | |
| **E-mail Notice Capability** | Yes | Yes |
| **Internal Hard Drive Capacity** | 500 Gb minimum | 500 Gb minimum |
| **Connectivity** | Network ready with 10/100/1000 BaseT Ethernet interface<br>USB port | |
| **Client Hardware Recommendation** | • 3 GHz multiple core processor (2 GHz Intel® or AMD® processor mini) with 8 GB RAM or more (4 GB mini)<br>• OpenGL 3.2 and GLSL 1.50 support (OpenGL 2.1 and GLSL 1.20 mini), 1 GB video RAM or more, 1280 x 1024 (1280 x 960 mini) screen resolution or higher<br>• SSD or 10,000 RPM hard disk drive (30 GB of available hard-disk space for cache mini)<br>• Google Chrome or Internet Explorer 11 (Internet Explorer 9 mini)<br>• Other: 3 button mouse with scroll, keyboard, Microsoft .NET Framework 4.5 installed with application | |
| **Client Operating System** | Windows® 7, Windows 8 or Windows 8.1 (Service Pack) | |
| **Input Data File Formats Supported** | STL, CTL, OBJ, PLY, ZPR, ZBD, AMF, WRL, 3DS, FBX, IGES, IGS, STEP, STP, MJPDDD | |
| **Post Processing** | MJP EasyClean System for easy removal of eco-friendly wax supports | |
| **Operating Temperature Range** | 64-82 °F (18-28 °C), reduced print speed at > 77 °F (25 °C) | |
| **Operating Humidity** | 30-70 % Relative Humidity | 30-70 % Relative Humidity |
| **Noise** | < 65 dBa estimated (at medium fan setting) | |
| **5-Year Printhead Warranty** | Optional | Optional |
| **Certifications** | CE | CE |

* Maximum part size is dependent on geometry, among other factors.
** Respectively replaces former VisiJet® M2 RWT, RBK and RCL materials

# VisiJet® M2 Materials

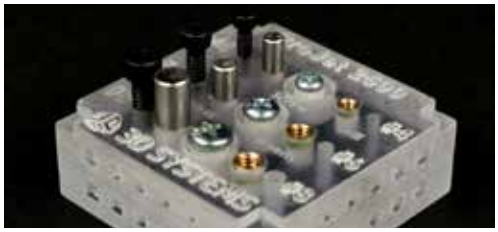
Functional precision plastic and elastomeric parts with the ProJet® MJP 2500 Series

VisiJet Armor M2G-CL

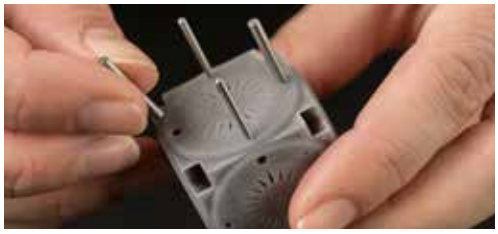
VisiJet M2R-WT

VisiJet M2 ENT

VisiJet M2 EBK



VisiJet M2R-CL



VisiJet M2R-GRY

| Properties | ASTM | VisiJet Armor M2G-CL | VisiJet ProFlex M2G-DUR | VisiJet M2R-GRY | VisiJet M2R-WT* | VisiJet M2R-BK* | VisiJet M2R-CL* | VisiJet M2 ENT | VisiJet M2 EBK | VisiJet M2 SUP |
|---|---|---|---|---|---|---|---|---|---|---|
| Composition | | UV curable plastic | | | | | | UV curable elastomeric | | Wax support |
| Color | | Clear | Clear | Opaque gray | Opaque white | Opaque black | Translucent clear | Translucent natural | Opaque black | White |
| USP Class VI Certified** | | No | No | Yes | Yes | No | Yes | No | No | No |
| Bottle Quantity (kg) | | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.4 |
| Density @ 20 °C (solid) (g/cm³) | D792 | 1.14 | 1.14 | 1.16 | 1.16 | 1.16 | 1.16 | 1.12 | 1.12 | N/A |
| Tensile Strength (MPa) | D638 | 30-35 | 15-20 | 35-45 | 35-45 | 45-55 | 35-45 | 0.2-0.4 | 0.2-0.4 | N/A |
| Tensile Modulus (MPa) | D638 | 1500-2000 | 250-350 | 1500-2000 | 1500-2000 | 2000-2500 | 1500-2000 | 0.27-0.43 | 0.27-0.43 | N/A |
| Elongation at Break | D638 | 55-65 | 65-75 | 20-30 % | 20-30 % | 6-12 % | 20-30 % | 160-230 % | 160-230 % | N/A |
| Flexural Strength (MPa) | D790 | 40-45 | N/A | 50-60 | 50-60 MPa | 80-90 | 50-60 | N/A | N/A | N/A |
| Flexural Modulus (MPa) | D790 | 1000-1200 | N/A | 1700-2200 | 1700-2200 | 2400-3000 | 2000-2500 | N/A | N/A | N/A |
| Impact Strength (Notched Izod) (J/m) | D256 | 40-50 | 70-80 | 20-25 | 20-25 | 15-18 | 20-25 | N/A | N/A | N/A |
| Shore A Hardness | 2240 | N/A | N/A | N/A | N/A | N/A | N/A | 28-32 | 28-32 | N/A |
| Shore D Hardness | 2240 | 70 | 60 | 77 | 77 | 81 | 77 | N/A | N/A | N/A |
| Water Absorption (24 hr) | D570 | 0.5 % | 0.6 % | 0.5 % | 0.5 % | 0.5 % | 0.5 % | 0.9 % | 0.6 % | N/A |
| Heat Distortion Temp @ 0.45 MPa | D648 | 47 °C | N/A | 51 °C | 51 °C | 61 °C | 51 °C | N/A | N/A | N/A |
| Heat Distortion Temp @ 1.82 MPa | D648 | 43 °C | N/A | 45 °C | 45 °C | 53 °C | 45 °C | N/A | N/A | N/A |
| Melting Point | | NA | NA | N/A | N/A | N/A | N/A | N/A | N/A | 60 °C |
| Softening Point | | NA | NA | N/A | N/A | N/A | N/A | N/A | N/A | 40 °C |
| Printer Compatibility | | ProJet MJP 2500 Plus | ProJet MJP 2500/2500 Plus | ProJet MJP 2500 Plus | ProJet MJP 2500/2500 Plus | ProJet MJP 2500/2500 Plus | ProJet MJP 2500 Plus | ProJet MJP 2500 Plus | ProJet MJP 2500 Plus | ProJet MJP 2500/2500 Plus |
| Description | | Transparent clear | Transparent clear | Rigid gray, high contrast | High modulus, rigid white plastic | High modulus, rigid black plastic | Transparent clear | Flexible, rubber-like | Flexible, rubber-like | Non-toxic wax for hands-free melt-away supports |

* Respectively replaces former VisiJet® M2 RWT, RBK and RCL materials

** Suitable for use in certain medical applications when post-processed following 3D Systems guidelines

DISCLAIMER: It is the responsibility of each customer to determine that its use of any VisiJet® material is safe, lawful and technically suitable to the customer's intended applications. The values presented here are for reference only and may vary. Customers should conduct their own testing to ensure suitability for their intended application.

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# VisiJet® M2 Materials

Functional precision plastic and elastomeric parts with the ProJet® MJP 2500 Series

| Properties | Condition | VisiJet M2R-WT** | VisiJet M2 RWT | VisiJet M2R-BK** | VisiJet M2 RBK | VisiJet M2R-CL** | VisiJet M2 RCL | VisiJet M2R-TN | VisiJet M2 ENT | VisiJet M2 EBK | VisiJet M2 SUP |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Composition | | UV curable plastic | | | | | | | UV curable elastomeric | | Wax support |
| Color | | Opaque White | Opaque White | Opaque Black | Opaque Black | Translucent Clear | Translucent Clear | Opaque Tan | Translucent Natural | Opaque Black | White |
| Bottle Quantity (kg) | | 1.5 kg | 1.5 kg | 1.5 kg | 1.5 kg | 1.5 kg | 1.5 kg | 1.5 kg | 1.5 kg | 1.5 kg | 1.4 kg |
| Density @ 20 °C (solid) | ASTM D792 | 1.16 g/cm³ | 1.19 g/cm³ | 1.16 g/cm³ | 1.19 g/cm³ | 1.16 g/cm³ | 1.18 g/cm³ | 1.16 g/cm³ | 1.12 g/cm³ | 1.12 g/cm³ | N/A |
| Tensile Strength | ASTM D638 | 35-45 MPa | 37-47 MPa | 45-55 MPa | 29-37 MPa | 35-45 MPa | 40-50 MPa | 60-70 MPa | 0.2-0.4 MPa | 0.2-0.4 MPa | N/A |
| Tensile Modulus | ASTM D638 | 1500-2000 MPa | 1000-1600 MPa | 2000-2500 MPa | 600-1100 MPa | 1500-2000 MPa | 1000-1600 MPa | 2500-3000 MPa | 0.27-0.43 MPa | 0.27-0.43 MPa | N/A |
| Elongation at Break | ASTM D638 | 20-30 % | 7-16 % | 6-12 % | 11-21 % | 20-30 % | 9-18 % | 6-12 % | 160-230 % | 160-230 % | N/A |
| Flexural Strength | ASTM D790 | 50-60 MPa | 59-69 MPa | 80-90 MPa | 44-60 MPa | 50-60 MPa | 73-83 MPa | 90-100 MPa | N/A | N/A | N/A |
| Flexural Modulus | ASTM D790 | 1700-2200 MPa | 1400-2000 MPa | 2400-3000 MPa | 900-1500 MPa | 2000-2500 MPa | 1700-2300 MPa | 2400-3000 MPa | N/A | N/A | N/A |
| Impact Strength (Notched Izod) | ASTM D256 | 20-25 J/m | 14-17 J/m | 15-18 J/m | 14-17 J/m | 20-25 J/m | 14-17 J/m | 14-17 J/m | N/A | N/A | N/A |
| Shore A Hardness | ASTM 2240 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 28-32 | 28-32 | N/A |
| Shore D Hardness | ASTM 2240 | 77 | 77-80 | 81 | 77-80 | 77 | 77-80 | 72 | N/A | N/A | N/A |
| Water Absorption | ASTM D570 24 hr | 0.50 % | 0.50 % | 0.50 % | 0.50 % | 0.50 % | 0.50 % | 0.50 % | 0.90 % | 0.60 % | N/A |
| Heat Distortion Temp @ 0.45 MPa | ASTM D648 | 51 °C | 52 °C | 61 °C | 48 °C | 51 °C | 54 °C | 71 °C | N/A | N/A | N/A |
| Heat Distortion Temp @ 1.82 MPa | ASTM D648 | 45 °C | 46 °C | 53 °C | 43 °C | 45 °C | 47 °C | 61 °C | N/A | N/A | N/A |
| Melting Point | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 60 °C |
| Softening Point | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 40 °C |
| Printer Compatibility | | ProJet MJP 2500 and 2500 Plus | ProJet MJP 2500 and 2500 Plus | ProJet MJP 2500 and 2500 Plus | ProJet MJP 2500 and 2500 Plus | ProJet MJP 2500 Plus | ProJet MJP 2500 Plus | ProJet MJP 2500 Plus | ProJet MJP 2500 Plus | ProJet MJP 2500 Plus | ProJet MJP 2500 and 2500 Plus |
| Description | | High modulus, rigid plastic (white) | Rigid white | High modulus, rigid plastic (black) | Rigid black | High modulus, rigid plastic (clear) | Rigid translucent Clear | High modulus, rigid plastic (tan) for dental models | Flexible rubber-like | Flexible rubber-like | Non-toxic wax for hands-free melt-away supports |

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