

## MULTI JET FUSION (MJF)

offers short run production capabilities at lower cost & high quality. MJF uses a fine-grained PA12 material that allows for ultra-thin layers of 80 microns. This leads to parts with high density and low porosity, compared to PA12 parts produced with laser sintering.



### Applications

- Low-volume production of complex parts
- Prototypes for form, fit & function testing
- Prototypes with mechanical properties to rival those of injection-molded parts
- Series of small components as a cost-effective alternative to injection molding



### Materials

- PA12
- Polyamide
  - High density & low porosity
  - Lead time: 5 working days
  - Max part dimensions: 256x340x360 mm



### Design Guidelines

- Min hole diameter at 1mm thickness 0.5mm
- Min shaft diameter at 10mm height 0.5mm
- Min printable font size for embossed or debossed letters or numbers 6 pt
- Min clearance at 1mm thickness 0.5mm
- Min slit between walls 0.5 mm



### Output Details

Lead Time: Minimum 4 working days  
Surface finish: Smooth outer surface, which can be further enhanced



### Post Processing

Basic: Sand Blasting  
Add On: Primer, Coating / Painting



### Other Details

- Lead Time: Depends on part.  
(Min 3-4 days for dispatch. More for larger parts)
- Variants: High Quality



## MJF - HP JET FUSION 3D 4200 PRINTER

The Jet Fusion 3D 4200 may be one of the largest and most expensive 3D printers on the market, but it starts small – it builds a variety of objects at the molecular level. This printer creates functional pieces that not only look good but can be used for a variety of purposes from prototypes to commercial items.

HP's 3D printers utilizing the Multi Jet Fusing (MJF) technology are capable of producing fully functional quality parts, at a high rate of speed. This is done by using fusing agents and accurate temperature control to ensure a precise selective fusing process of the powder material.

The HP Jet Fusion Processing Station makes the post processing a simple and clean procedure, as well as mixing the unused material for reuse. At the same time a new Build Unit can be placed right back into the printer, securing maximal printing up time and efficiency.

The MJF technology offers a wide range of possible materials with different qualities, and will also open up to innovative use of material combinations. By having a detailed control of each and every printed “voxel”, different qualities such as color, texture, translucency, elasticity and conductivity can be included in a single part.

## HP Jet Fusion 3D 4200 Printer Specifications

<b>Printer performance</b>	Technology	HP Multi Jet Fusion technology
	Effective building volume	380 x 284 x 380 mm (15 x 11.2 x 15 in)
	Building speed	4115 cm <sup>3</sup> /hr (251 in <sup>3</sup> /hr) <sup>14</sup>
	Layer thickness	0.08 mm (0.003 in)
	Print resolution (x, y)	1200 dpi
<b>Dimensions (w x d x h)</b>	Printer	2210 x 1200 x 1448 mm (87 x 47 x 57 in)
	Shipping	2300 x 1325 x 2068 mm (91 x 52 x 81 in)
	Operating area	3700 x 3700 x 2500 mm (146 x 146 x 99 in)
<b>Weight</b>	Printer	750 kg (1653 lb)
	Shipping	945 kg (2083 lb)
<b>Network<sup>15</sup></b>	Gigabit Ethernet (10/100/1000Base-T), supporting the following standards: TCP/IP, DHCP (IPv4 only), TLS/SSL	
<b>Hard disk</b>	2TB (AES-256 encrypted, FIPS 140, disk wipe DoD 5220M)	
<b>Software</b>	Included software	HP SmartStream 3D Build Manager, HP SmartStream 3D Command Center
	Supported file formats	3MF, STL, OBJ, and VRML (v2.0)
	Certified third-party software	Autodesk® Netfabb® Engine for HP, Materialise Magics with Materialise Build Processor for HP Multi Jet Fusion, Siemens NX AM for HP Multi Jet Fusion
<b>Power</b>	Consumption	9 to 11 kW (typical)
	Requirements	Input voltage three phase 380-415 V (line-to-line), 30 A max, 50/60 Hz / 200-240 V (line-to-line), 48 A max, 50/60Hz
<b>Certification</b>	Safety	IEC 60950-1+A1+A2 compliant; United States and Canada (UL listed); EU (LVD and MD compliant, EN 60950-1, EN 12100-1, EN 60204-1, and EN 1010)
	Electromagnetic	Compliant with Class A requirements, including: USA (FCC rules), Canada (ICES), EU (EMC Directive), Australia (ACMA), New Zealand (RSM)
	Environmental	REACH
<b>Warranty &amp; Service coverage included</b>	One-year limited hardware warranty	

## HP Jet Fusion 3D 4200 Processing Station

<b>Features</b>	Automated mixing, sieving, and loading; semi-manual unpacking; fast cooling; <sup>1</sup> external storage tank	
<b>Dimensions (w x d x h)</b>	Processing station with fast cooling <sup>1</sup>	2990 x 934 x 2400 mm (117.7 x 36.8 x 94.5 in)
	Shipping	3499 x 1176 x 2180 mm (137.8 x 46.3 x 85.8 in)
	Operating area	3190 x 2434 x 2500 mm (125.6 x 95.8 x 99 in)
<b>Weight</b>	Processing station with fast cooling <sup>1</sup>	480 kg (1058 lb)
	Loaded	810 kg (1786 lb)
	Shipping	620 kg (1367 lb)
<b>Power</b>	Consumption	2.6 kW (typical)
	Requirements	Input voltage single phase 200-240 V (line-to-line), 19 A max, 50/60Hz or 220-240 V (line-to-neutral), 14 A max, 50Hz
<b>Certification</b>	Safety	UL 2011, UL508A, NFPA, C22.2 NO. 13-14 compliant; United States and Canada (UL listed); EU (MD compliant, EN 60204-1, EN 12100-1 and EN 1010)
	Electromagnetic	Compliant with Class A requirements, including: USA (FCC rules), Canada (ICES), EU (EMC Directive), Australia (ACMA), New Zealand (RSM)
	Environmental	REACH
<b>Warranty &amp; Service coverage included</b>	One-year limited hardware warranty	



**INDIA HEAD OFFICE**

T3D Labs Pvt Ltd  
C/O AP Med Tech Zone,  
S.No. 480/P, Nadupuru  
Village, Pedagantyada,  
Visakhapatnam - 530044  
Ph: +91 81428 96564

**SINGAPORE OFFICE**

think3D Labs Pte Ltd  
10 Anson Road, #10-11  
International Plaza  
Singapore (079903)  
Ph: +65-62252028

**OUR BRANCH OFFICES****DELHI**

think3D  
c/o 91SpringBoard  
E-43/1, Okhla Phase II  
New Delhi  
Delhi - 110020  
Ph: (011) 3958 5958

**MUMBAI**

think3D  
c/o The Playce  
1st Floor, Marathon Maxima  
Lal Bahadur Shastri Marg  
Mulund West, Mumbai  
Maharashtra 400080  
Ph: (022) 3372 1372

**CHENNAI**

think3D  
Startup Centre and Management Pvt Ltd  
#8 First Seaward Road, Valmiki Nagar  
Thiruvanmiyur, Chennai  
Tamil Nadu 600041, India  
Ph: (044) 3083 3583

**BANGALORE**

think3D  
c/o Alpha Lab /C  
1316, 9th Cross Rd  
2nd Phase, J P Nagar  
Bengaluru, Karnataka 560078  
Ph: (080) 3951 3950

**HYDERABAD**

think3D  
C/o Dwaraka Business Centre  
1st Floor, Dwaraka Heights,  
Plot no:17, Jubilee Enclave,  
Madhapur, Hitech City  
Hyderabad - 500081  
Ph: 80082068531

**COIMBATORE**

think3D  
Site No. 51st Cut  
Kurunthachal Nagar  
K. Vadamadurai Post  
Coimbatore  
Tamil Nadu - 641017  
Ph: +91-9944227616