WHAT IS

Multi Jet Fusion 3D Printing?

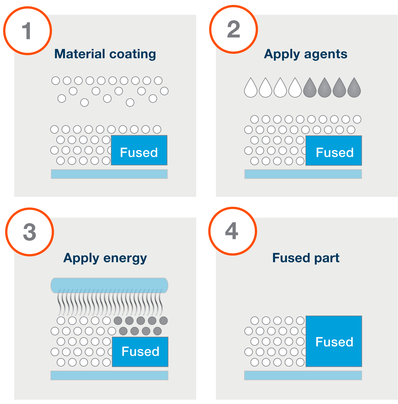
Multi Jet Fusion (MJF) 3D printing offers more possibilities for complex, lower-cost parts. Whether used for single parts, batch manufacturing of multiple part numbers, or serial production, MJF is a fast, cost-effective 3D printing process.

5x faster* than other 3D printing production technologies, per application requirements

10% better performance* over similar 3D printing technologies in both lead time & isotropic properties

*Validated in a 4 month study over 84 builds at Stratasys Direct

How MJF 3D printing works



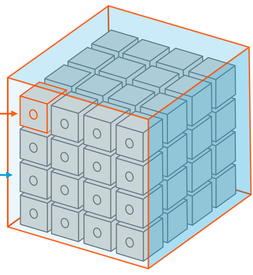
LS vs. MJF

Laser Sintering	Multi Jet Fusion
Build volume 30 x 20 x 20 in.	Build volume 16 x 12 x 16 in.
Minimum wall thickness 0.040 in. (1 mm)	Minimum wall thickness 0.020 in. (0.5 mm)
Accuracy ±0.015 in. (0.4 mm) or ±0.003 in/in (0.1 mm/mm), whichever is greater	Accuracy 0.02 in. (0.5 mm)
Minimum feature size 0.03 in. (0.8 mm)	Minimum feature size 0.020 in. (0.5 mm)

MJF economies of scale

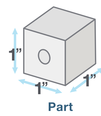
The main factors driving part cost & production time in MJF are:

1. **Extents volume** of the part
2. **Pack density** of the build



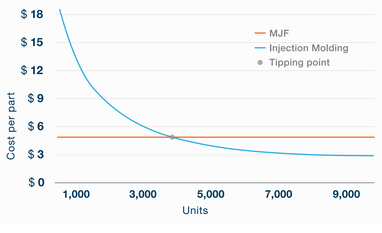
Example illustration

The tipping point between MJF and Injection Molding is 4,000 units



Injection Molding	Multi Jet Fusion
Cost per part $1.25	Cost per part $5*
Tool cost $15,000	Tool cost —

*When building at full pack density



Benefits of MJF

Batch manufacturing

Build time is constant based on build height, so the greatest value is delivered by packing as many parts as possible into the build chamber.

Detailed features

MJF has some of the best surface feature details of thermoplastic 3D printing technologies.

Isotropic properties

MJF provides near iso-tropic properties with 10% better performance in the Z orientation.