

MoldJet Technology

Industrial Metal & Ceramic AM

- ▶ High Productivity
- ▶ Safe, Powder-Free Environment
- ▶ Industry Standard Material Properties
- ▶ Lowest Cost Per Part

Key Advantages



Enabling serial production

- ▶ Uniform, repeatable manufacturing across trays, high density (>99%), and accuracy of parts
- ▶ AI powered real-time quality inspection and correction
- ▶ Range of sizes; 0.2mm up to 350mm
- ▶ High productivity & lowest cost per part



Wide variety of materials

- ▶ System supports both metal and ceramic
- ▶ Based on standard MIM powders
- ▶ Quick, safe, and clean materials changeover



Green & safe industrial environment

- ▶ A powder-free process, enabled by a paste-based feedstock
- ▶ A hands-free post process
- ▶ Low energy consumption, operates in standard industrial environment
- ▶ Easy and safe handling of green parts

Tritone Dominant // System Specifications



Number of trays:
6, simultaneous and independent



Each build tray dimension:
400 x 240 x 120 mm (L x W x H)



Throughput:
1,600 cc/h



Total build volume:
70,000 cc



Nominal layer thickness:
Adjustable 25 - 150 μ m



Machine footprint:
3200 x 3500 x 2200 mm (L x W x H)



Tritone Dim // System Specifications



Number of trays:
4, simultaneous and independent



Each build tray dimension:
220 x 120 x 90 mm (L x W x H)



Throughput:
220 cc/h



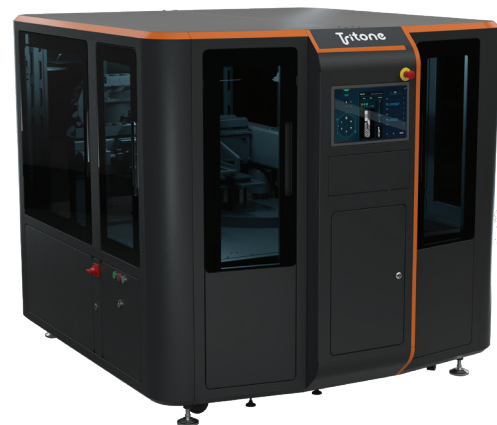
Total build volume:
10,000 cc



Nominal layer thickness:
Adjustable 25 - 150 μ m



Machine footprint:
2100 x 1965 x 1935 mm (L x W x H)



Technologies Comparison

	Legacy AM Technologies		Tritone
	Powder Bed Fusion (Laser / EBeam)	Powder Bed Binder Jet	MoldJet
Accuracy & Repeatability	●	●	●
Throughput	●	●	●
Exposure to Powders	●	●	●
Material Variety	●	●	●
Parts Size	●	●	●
Post Processes	●	●	●
Labor Intensity	●	●	●

- ▶ Existing AM technologies still face challenges and do not meet **market requirements of mass production** and accuracy.
- ▶ Tritone's MoldJet technology is the only solution in the market which offers **accuracy combined with high throughput at production scale**.
- ▶ MoldJet technology is **highly flexible**, allowing to switch between different materials in under 30 minutes.

Materials

Family	Type	Applications examples
Stainless Steel	316L	
	17-4PH	
	15-5PH	
	420	
Tool Steel	H13	
	M2	
Low Alloy Steel	4340	
	4140	
Super Alloys	Inconel 718	
Titanium	6-4	
Copper Alloys	Pure Copper	
Ceramic	Alumina	

* Tritone evaluates new materials on an ongoing basis. Please inquire if your material of interest is not listed.