## 🧶 3D SYSTEMS

### **DMP Factory 350**

Robust, high quality Metal AM with integrated powder management

High throughput, high repeatability metal 3D printer that generates precision quality parts from the most challenging alloys with high quality material management for maximum powder usage. Integrated metal 3D printing solution with DMP production metal printer, 3DXpert<sup>™</sup> software, thoroughly qualified LaserForm<sup>®</sup> materials and expert application support. For companies that are scaling their metal AM production and require closed powder handling.

### HIGH REPEATABILITY FOR HIGH QUALITY PARTS

- Purest atmosphere during printing, consistently low O<sub>2</sub> environment (<25 ppm)</li>
- Excellent microstructure, very high density
- Repeatable, stable mechanical properties
- Consistent accuracy machine to machine
- Thoroughly developed and tested print settings

### LOW TCO FOR AFFORDABLE PER PART COSTS

- High powder recyclability
- Low usage of consumables
- Long lasting and safe process filter

#### **HIGH THROUGHPUT METAL 3D PRINTING**

- Fast bidirectional material deposition
- High printer utilization, low change-over time
- Average productivity increase over previous model of 15% dependent on geometry
- · Optimized scan strategies for maximum productivity
- Short changeover times

### HIGH QUALITY POWDER AND PROCESS MANAGEMENT

- In-unit viewing panel enables visual inspection of ultrasonic sieve to ensure incident-free operation
- Ensures maximum powder usage
- Minimized user powder contact
- DMP Monitoring real-time process monitoring for informed decisions on product quality

### DMP Flex 350

# Robust, flexible metal 3D printer for 24/7 part production

Flexible, high throughput, high repeatability metal 3D printer that generates high quality precision parts with maximum part size 275 x 275 x 380 mm from the most challenging alloys. Integrated metal 3D printing solution with DMP production metal printer, 3DXpert software, thoroughly qualified LaserForm materials and expert application support. Upgradable to DMP Factory 350 solution.

### Built on the proven architecture of DMP 320 since 2008 with:

HIGH REPEATABILITY FOR HIGH QUALITY PARTS LOW TCO FOR AFFORDABLE PER PART COSTS HIGH THROUGHPUT METAL 3D PRINTING



### Flexible application use

- Ideal for application development, production and R&D
- Easily scalable, due to consistent machine to machine performance
- Upgradable to DMP Factory 350 with integrated powder management

### **Technical specifications**

	DMP Flex 350		DMP Factory 350	
Specifications				
Laser power type	500 W/Fiber laser <sup>4</sup>		500 W/Fiber laser <sup>4</sup>	
Build volume (X x Y x Z) <sup>1</sup>	10.82 x 10.82 x 14.96 in (275 x 275 x 380 mm)		10.82 x 10.82 x 14.96 in (275 x 275 x 380 mm)	
Layer thickness	10μm - 100μm preset: 30 and 60 μm		10μm - 100μm preset: 30 and 60 μm	
Repeatability	x=20 μm, y=20 μm, z=20 μm		x=20 μm, y=20 μm, z=20 μm	
Minimum feature size	100 µm		100 µm	
Typical accuracy	$\pm$ 0.1-0.2% with $\pm$ 50 $\mu m$ minimum		$\pm0.1$ -0.2% with $\pm50\mu m$ minimum	
Quality Control				
DMP Monitoring	Optional		Included	
Control System and Software Suite				
Software tool	3DXpert all-in-one software for Metal AM		3DXpert all-in-one software for Metal AM	
Control Software	DMP software suite		DMP software suite	
Powder Management				
Powder management	Optional external		Integrated	
LaserForm metal alloy choices with developed print parameters:	LaserForm Ti Gr1 (A)² LaserForm Ti Gr5 (A)² LaserForm Ti Gr23 (A)²	LaserForm AlSi10 LaserForm AlSi7M LaserForm Ni625 LaserForm Ni718	Ig0.6 (A) <sup>2</sup> (A) <sup>3</sup>	LaserForm 17-4PH (A) <sup>3</sup> LaserForm CoCrF75 (A) <sup>3</sup> LaserForm 316L (A) <sup>3</sup> LaserForm Maraging Steel (A) <sup>3</sup>

1Maximum available part size using standard build plate 2Set up A 3Set up B 4Maximum laser power at powder layer is typical 450W for 500W lasers

Learn more at

3dsystems.com/dmpfactory350

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