DMP Flex/Factory 350 Series
Expanded mid-frame direct metal printing configurations for rapid serial production

High Precision, High Throughput
The DMP Flex/Factory 350 Series combines high throughput and high repeatability to generate precision quality parts from a broad range of alloys. The metal AM system integrates metal 3D printing with 3DXpert® software, thoroughly qualified materials and expert application support. With two-laser configurations, the DMP Flex 350 Dual and DMP Factory 350 Dual continue to deliver high quality parts while boosting productivity for lower operational costs.

DMP Flex 350 and DMP Factory 350
HIGH QUALITY POWDER* & PROCESS MANAGEMENT
• Integrated powder handling and automatic sieving*
• Consistent, low O₂ environment (<25 ppm)
• High powder recyclability—improved powder usability lifetime

DESIGNED FOR SCALING METAL AM PRODUCTION
• Small footprint for reduction of overall required floor space*
• Automated workflow steps
• Material-type dedicated*
• Real-time process monitoring with DMP Monitoring

HIGH THROUGHPUT METAL 3D PRINTING
• Fast bidirectional material deposition
• Short change-over time—high printer utilization
• Optimized scan strategies for maximum productivity

HIGH REPEATABILITY FOR HIGH QUALITY PARTS
• Purest atmosphere during printing, consistent, low O₂ environment (<25 ppm)
• Excellent microstructure, very high density
• Repeatable, stable mechanical properties
• Consistent accuracy—part to part—machine to machine
• Thoroughly developed and tested print settings

FLEXIBLE APPLICATION USE
• Ideal for application development, production and R&D
• Easily scalable, due to consistent machine to machine performance

* DMP Factory 350 only
DMP Flex 350 Dual and DMP Factory 350 Dual

DMP Flex 350 and DMP Factory 350 systems now come in a two-laser configuration, reducing build times by up to 50 percent. The Dual configuration boosts productivity while maintaining high quality and repeatability, yielding lower operational costs.

Our Dual configurations feature our signature vacuum chamber with industry-leading O₂ handling and an intuitive user interface with guided print cycles. Additionally, the DMP Factory 350 Dual integrates powder management into the printer.

**LOW TOTAL COST OF OPERATION (TCO) FOR AFFORDABLE PER PART COSTS**

- Automated processes
- High powder recyclability
- Low usage of consumables
- Small footprint

<table>
<thead>
<tr>
<th>SPECIFICATIONS</th>
<th>DMP Flex 350 Series</th>
<th>DMP Factory 350 Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laser power type</td>
<td>DMP Flex 350: 500W Fiber laser¹</td>
<td>DMP Factory 350: 500W Fiber laser¹</td>
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<tr>
<td></td>
<td>DMP Flex 350 Dual: 2 x 500W Fiber laser</td>
<td>DMP Factory 350 Dual: 2 x 500W Fiber laser</td>
</tr>
<tr>
<td>Build volume (X x Y x Z) Height inclusive of build plate</td>
<td>275 x 275 x 420 mm (10.82 x 10.82 x 16.54 in)</td>
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<tr>
<td>Layer thickness</td>
<td>Adjustable, min. 5 μm, typical: 30, 60, 90 μm</td>
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<tr>
<td>Repeatability</td>
<td>Δx (3σ) = 60μm, Δy (3σ) = 60μm, Δz (3σ) = 60μm</td>
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</tr>
<tr>
<td>Minimum feature size</td>
<td>200 μm</td>
<td>200 μm</td>
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<tr>
<td>Typical accuracy</td>
<td>± 0.1-0.2% with ± 100 μm minimum</td>
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</tbody>
</table>

**QUALITY CONTROL**

DMP Monitoring: Optional  
Optional

**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

DMP Flex/Factory 350 LaserForm metal alloy choices with developed print parameters:

- LaserForm Ti Gr1 (A)²
- LaserForm Ti Gr5 (A)²
- LaserForm Ti Gr23 (A)²
- LaserForm AlSi10Mg (A)³
- LaserForm AlSi7Mg0.6 (A)³
- LaserForm Ni718 (A)³
- LaserForm 17-4PH (A)³
- LaserForm 316L (A)³
- LaserForm Maraging Steel (A)³
- LaserForm CoCrFe75 (A)²
- Certified Scalmalloy²
- Certified M789³

DMP Flex/Factory 350 Dual Metal alloy options for dual laser configurations:

- LaserForm Ti Gr5 (A)³
- LaserForm AlSi10Mg (A)³
- LaserForm AlSi7Mg0.6 (A)³

¹Maximum laser power at powder layer is typical 450W for 500W lasers  
²Set up A  
³Set up B

+GF+  
GF Machining Solutions  
Roger-Federer-Allee 7  
2504 Biel/Bienne  
Switzerland  
www.gfms.com

3D Systems Corporation  
333 Three D Systems Circle  
Rock Hill, SC 29730  
United States  
www.3dsystems.com

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