

DM P2500

The DM P2500 high-precision metal binder jetting printer is sturdy and reliable, ensuring minimal deviation and consistent repeatability from one build to another. All moving parts are automatically calibrated, and are accurate to a single micron. Built for real-life production, it features a stable platform that minimizes vibration.

BENEFITS

- High accuracy and repeatability
 - Optimal combination for serial production
 - Delivers high precision manufacturing
- Robust machine design
 - Developed and tested in real high volume serial production
- Excellent surface finish
 - Average surface quality of Ra6 µm directly after completion
 - Post-processing is kept at a minimum
- Prints parts without need for support structures
 - Minimizes the need for post processing and increases productivity
 - Optimizes powder utilisation.
- Recycling of metal powder
 - Close to 100% of powder not used for components is recycled
- Component stacking
 - Enables multiple component layers to be printed in a single print box
- Fast change-over time
 - Only 15 min needed to start the next print job
- Operates at room temperature
 - Eliminates time consuming heating and cooling cycles
- No protective atmosphere needed
- Easy to clean and maintain

Digital Metal's proprietary, inhouse developed, metal binder jetting technology has been used for serial production since 2013. The long and indepth experience within powder metallurgy combined with excellent reliability and accuracy makes the system ideal for real manufacturing.



THE DM P2500

MACHINE FACTS

Printing system	Digital Metal technology, a high-precision binder jetting technology
Machine footprint	2900 × 1000 × 1700 mm (L × W × H)
Recommended installation space	4600 × 4100 mm (L × W)
Build volume	250 × 217 × 70 mm or 250 × 217 × 186 mm (L × W × H)
Weight	2000 kg
Typical productivity	50–500 cm ³ /h
Power consumption	3.5 kW (average)
Gas supply	No protective gas needed
Material deposition	Recoating with powder applicator
Material recirculation	Yes, with no degradation
Change over time between prints	15–25 min

DESIGN GUIDELINES

Geometrical capability	Typical
Maximum length	See buildbox sizes below
Minimum length	1 mm
Minimum size	1 × 1 × 3 mm
Corner R	35 µm
Chamfer	Steps of 35 µm in Z-direction
Wall thickness	Preferably >300 µm. Minimum >150 µm
Resolution	Maximum 35 µm in z direction
Holes	>200 µm depending on hole length
Accepted file formats	STL, STEP