

MARKFORGED

PX100 - INDUSTRIAL METAL 3D PRINTER



DMP/PRO

Metal additive manufacturing reaches new levels of productivity, precision and versatility, with Digital Metal's DMP/PRO series. Its metal binder jetting technology is controlled by custom software to enable volume production of everything from industrial components to medical and consumer products.

Outstanding productivity

- Capable of printing up to 1,000 cm³ per hour
- Printhead with 70,400 nozzles delivering 2pL droplets at 15.5 kHz
- Easy exchangeable powder magazine for fast material change

Outstanding productivity

Detailed precision and quality

Maximum reliability, accuracy and repeatability

- Linear motor, air bearings and diabase stone base ensure a stable printing environment
- Robust design minimizes downtime and unscheduled stops

Adaptable modular design

- Equipped for future updates, such as inertization and automation modules

Accessible and easy to use

- Preloaded with parameters for a wide range of materials
- Fully customizable open system

Smart connectivity and software

- Custom software solution that allows remote monitoring of status, performance and KPIs.
- Based on Siemens MindSphere cloud IoT OS for a reliable, secure connection.
- Full traceability and backup of production data.

Printing without support structures

- Minimizes post-processing and increases productivity
- Optimizes powder utilization: close to 100% of excess powder is recycled

No lasers or high temperatures

- Far lower energy usage than alternative 3D printing technologies
- Suitable for standard conditions; no protective atmosphere required

Digital Metal's proprietary metal binder jetting technology has been used for serial production since 2013. In partnership with Höganäs AB – the world-leading manufacturer of metal powders – Digital Metal combines experience and innovation to build reliable, accurate systems for real manufacturing.



Technical Specifications

Machine facts

Printing system	Page-wide print system with 70,400 ink nozzles
Machine footprint	2700 x 1000 x 1700 mm (L x W x H)
Recommended installation space	4000 x 4000 x 2700 mm (L x W x H)
Build volume	250 × 217 × 70 mm or 250 × 217 × 186 mm (L x W x H)
Weight	2000 kg
Typical productivity	500 – 1,000 cm ³ /h
Accuracy	Static accuracy better than 1µm
Power consumption	3.5 kW (average)
Gas supply	Gas tight. Prepared for future inertization module.
Material deposition	Recoating with powder applicator
Material recirculation	Yes, with no degradation
Changeover time between prints	15–25 min

Design guidelines

Maximum length	Depends on geometry. Typically < 150 mm.
Minimum length	< 1 mm
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