

# Production System™ P-50 Specifications

Created by leading inventors of binder jetting and single-pass inkjet technology, the Production System™ P-50 is designed to be the fastest way to 3D print metal parts at scale.

The Production System™ P-50 Printer leverages Desktop Metal's patent pending Single Pass Jetting™ technology to achieve print speeds up to 12,000 cc/hr, producing parts at costs competitive with conventional mass production techniques. Designed with an inert environment to process low cost MIM powders across non-reactive and reactive metals, the Production System™ P-50 offers the reliability and consistency required for high-volume, end-use applications.

## Key benefits

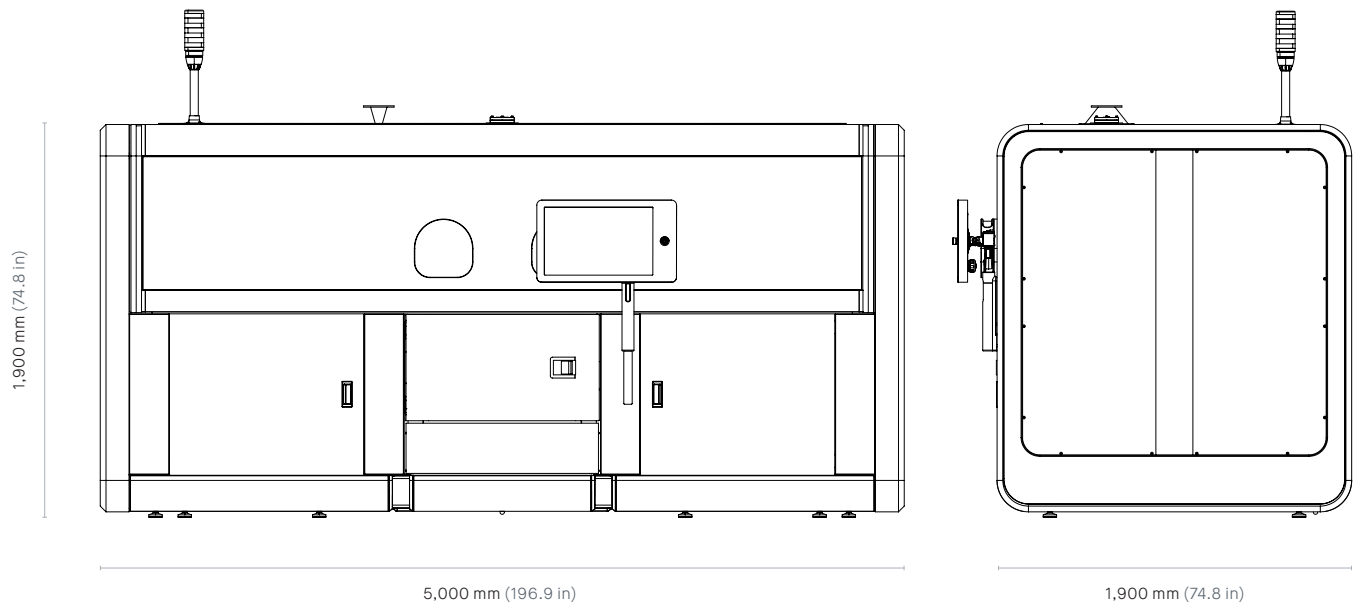
- Patent pending Single Pass Jetting™ technology
- Bi-directional printing enables speeds up to 12,000 cc/hr
- Constant wave spreading enhances print bed uniformity and density
- Patented anti-ballistics technology drives printhead longevity and part quality
- Anti-banding technology improves reliability through printhead redundancy
- Inert build chamber provides reactive metal support and powder consistency
- Real-time optical bed inspection
- Open material platform

|             |  |   |
|-------------|--|---|
| TECHNOLOGY  | Print technology                       | Single Pass Jetting™                              |
|             | Print direction                        | Bi-directional                                    |
|             | Binder jetting module                  | 8 piezo-electric printheads (16,384 nozzles)      |
| PERFORMANCE | Max build rate (65 µm layer thickness) | 12,000 cc/hr (732 in <sup>3</sup> /hr)            |
|             | Resolution                             | Native 1,200 dpi                                  |
|             | Layer thickness <sup>1</sup>           | 30 µm – 200 µm (green)                            |
|             | Part tolerance                         | ± 0.5%  |
| PHYSICAL    | External dimensions                    | 1,900 x 5,000 x 1,900 mm (74.8 x 196.9 x 74.8 in) |
|             | Weight                                 | 4,751 kg (10,476 lb)                              |
|             | Build box envelope                     | 490 x 380 x 260 mm (19.2 x 15.0 x 10.2 in)        |
|             | Chamber environment                    | CDA or Nitrogen inerting (< 2% Oxygen)            |
|             | Onboard controls                       | 24-inch touchscreen display                       |
| ELECTRICAL  | Power requirements                     | 380 – 480 V, 50/60 Hz, 3-phase, 4 wire 60 Amp     |
| POWDERS     | Material platform                      | Open platform (third party MIM powders)           |

1. Default profiles available for 50 µm – 100 µm; 30 µm – 200 µm layer thickness is material and powder dependent.

## Production System™ P-50 Specifications

### DIMENSIONS



### RIVENDITORE AUTORIZZATO

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