Production System™ P-1
Specifications

Designed to bridge the gap between bench top development and mass production, the Production System™ P-1 is an open platform binder jetting solution for process and materials development as well as serial production of small, complex parts.

The Production System™ P-1 supports both non-reactive and reactive metal powders using the same Single Pass Jetting™ technology leveraged across the Production System family of products, combining mass production-level quality and consistency with enhanced process flexibility to support serial production or direct process transfers to the Production System™ P-50.

Key Production System™ P-1 benefits

- Patent pending Single Pass Jetting™ technology enables speeds up to 1,350 cc/hr
- Constant wave spreading enhances print bed uniformity and density
- Patented anti-ballistics technology drives printhead longevity and part quality
- 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	Uni-directional
	Binder jetting module	2 Piezo-electric printheads (4,096 nozzles)
PERFORMANCE	Max build rate (65 µm layer thickness)	1,350 cc/hr (82 in^3/hr)
	Resolution	Native 1,200 dpi
	Layer thickness[1]	30 µm - 200 µm (green)
	Part tolerance	± 0.5%
PHYSICAL	External dimensions	1,770 x 2,007 x 1,150 mm (70 x 79 x 45 in)
	Weight	900 kg (1,984 lb)
	Build box size	200 x 100 x 40 mm (7.9 x 3.9 x 1.6 in)
	Chamber environment	CDA or Nitrogen inerting (<2% Oxygen)
	Onboard control	24-inch touchscreen display
ELECTRICAL	Power requirements	380 - 480 V, 50/60 Hz, 3-phase, 4 wire 11 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-1 Specifications

DIMENSIONS