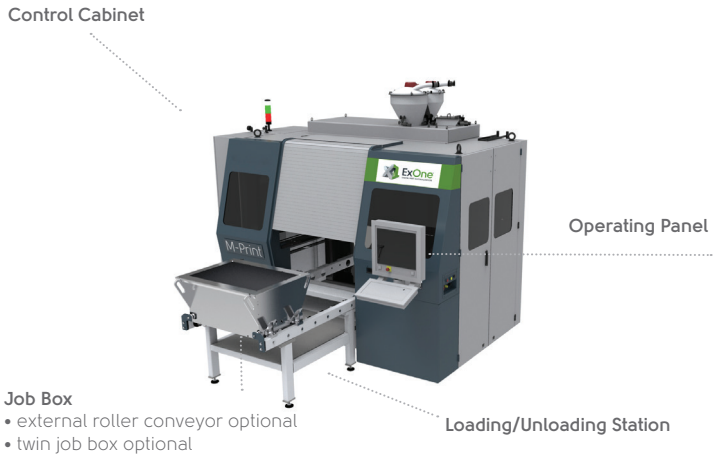
M-Print™

ExOne
DIGITAL PART MATERIALIZATION

Industrial-Grade Scale & Flexibility in Metal

The M-Print is ideally suited for large parts and for large volumes of parts, resulting in improved reaction time and productivity throughout the entire manufacturing process chain.



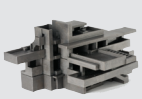
Industrial-grade additive manufacturing machine tool
- Largest build size in its class
- Industry-proven materials
- On-demand material management system
- Proven printhead technology for precise dosing of binding agent
- No support structures
- Complex internal details and structures capability, otherwise unattainable using traditional methods

Simplifies Your Operations
- One click – simple user interface
- Easy unloading

Industry-grade materials
- Print in stainless steel
- Functional parts with superior wear characteristics

High productivity
- Flexible job box can print one prototype or short runs of multiple and/or custom parts
- Changes can be made quickly

Suited for complex geometry
- Greater design freedom



TECHNICAL SPECIFICATIONS

Process cell including job box and roller conveyor	
Build volume	l x w x h 800 x 500 x 400 mm (31.5 x 19.68 x 15.75 in.)
Layer thickness	Variable with minimum 0.15 mm
Print resolution	X/Y 0.10 mm / Z 0.15 mm (Set by layer thickness)
External dimensions	l x w x h 3270 x 2540 x 2860 mm (10.7 x 8.3 x 9.4 ft.)
Weight	3500 kg (7,717 lbs)
Electrical requirements M-Print	400V 3-Phase/N/PE / 50-60 Hz, max. 6.2 kW
Electrical requirements heater	400V 3-Phase/PE / 50-60 Hz, max. 8.3 kW
Data interface	STL

CONSUMABLE MATERIALS

PM-S4-60-MP:	ExOne 420SS material for printing 0.15 mm layer thickness
PM-S3-60-MP:	ExOne 316SS material for printing 0.15 mm layer thickness
PM-I-MP:	ExOne bronze material used for infiltrating stainless steel
PM-TSP-MP:	ExOne thermal support powder used during furnace cycle
PM-B-MPrint-01:	ExOne binder–polymer based ink for use with ExOne materials
PM-C-MPrint-01:	ExOne cleaner, required for all automated and in-process maintenance routines, dissolves ExOne binder

All ExOne material systems are designed and engineered for the ExOne process and the ExOne M-Print System. Each material system comprises ExOne's patented binder and specially prepared formulated materials to ensure the highest quality.

Currently available metals include 420 & 316 stainless steel, sand and other casting media also available.

**We reserve the right to change or update the information on this datasheet at any time and without prior notice. Actual systems may differ from model shown.*

With decades of manufacturing experience and significant investment in research and product development, ExOne has pioneered the evolution of nontraditional manufacturing. This investment has yielded a new generation of rapid production technology in the field of additive manufacturing as well as advanced micromachining processes. ExOne is the optimal partner for any industrial manufacturer who is transitioning their manufacturing business to the digital age.

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