

# M-Flex™



## A Complete Solution: Idea to Printed Metal Part in Record Time

The M-Flex is simple to use and contains everything you need to get started with metal printing, offering speeds 10x faster than our previous generation machine.



### Flexible & Complete Solution

- Package includes printer, recycling equipment, printing materials, curing oven and furnace
- Comprehensive multimedia training program

### Simplifies Your Operations

- One click – simple user interface
- No tooling required
- Easy unloading

### Industry-grade materials

- Print in stainless steel, bronze or tungsten
- Functional parts with superior wear characteristics

### High productivity

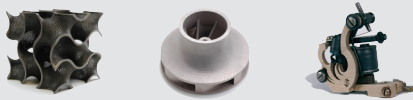
- Fastest metal printer in its class
- Flexible job box can print one prototype or short runs of multiple and/or custom parts
- Changes can be made quickly

### High accuracy

Highly-accurate printing process guarantees highly-accurate parts

### Suited for complex geometry

- Greater design freedom



### TECHNICAL SPECIFICATIONS

#### Process cell including job box and roller conveyor

**Build volume** l x w x h 400 x 250 x 250 mm  
(15.7 x 9.8 x 9.8 in.)

**Build speed** 30-60 seconds/layer

**Layer thickness** Variable with minimum of 0.15 mm

**Print resolution** X/Y 0.0635mm, Z 0.100mm  
(set by layer thickness)

**External dimensions** l x w x h 1675 x 1400 x 1855 mm  
(66 x 55 x 73 in.)

**Weight** 1,020 kg (2,250 lbs)

**Electrical requirements** 208V-240V / 3 phases

**Data interface** SLC, CLI, STL

### CONSUMABLE MATERIALS

- PM-S4-30-FX:** ExOne 420SS material for printing 0.10 mm layer thickness
- PM-S4-60-FX:** ExOne 420SS material for printing 0.15 mm layer thickness
- PM-S3-30-FX:** ExOne 316SS material for printing 0.10 mm layer thickness
- PM-S3-60-FX:** ExOne 316SS material for printing 0.15 mm layer thickness
- PM-I-FX:** ExOne bronze material used for infiltrating stainless steel
- PM-TSP-FX:** ExOne thermal support powder used during furnace cycle
- PM-B-MFlex-01:** ExOne binder, polymer based ink for use with ExOne materials
- PM-C-MFlex-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-Flex 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 & bronze, bronze and tungsten. Soda lime (semi-opaque) glass, 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.