# innovent™



# A Complete, Affordable Solution for Lab Environments

Offering five times the print volume of prior lab models and designed for research and educational customers, the Innovent is an excellent tool for developing powdered materials and processes, as well as training the next generation of manufacturing engineers and powdered metal scientists.



### Simple, low cost solution

- Compact size ideal for laboratory use
- Package includes printer, curing oven, furnace and starter materials
- Simple to set-up, use and maintain

#### Breakthrough technology

- No support structures
- Proven printhead technology for precise dosing of binding agent

## Industry-grade materials

- Print in stainless steel, iron, bronze, tungsten, Alloy IN 625 or glass. Optionally configure for testing with other materials
- Produce small functional prototypes

#### High accuracy

Highly-accurate printing process guarantees highly-accurate parts

#### Suited for complex geometry

• Greater design freedom

# **TECHNICAL SPECIFICATIONS**

Process cel	l inclı	uding	job	box
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Build volume	l x w x h 160 x 65 x 65 mm	
	(6.3 x 2.5 x 2.5 in.)	
Build speed	30 seconds/layer	
Layer thickness	100.0 μm (0.0039 in)	
Print resolution	X/Y/Z 63.5 µm/ 60.0 µm/ Z 100.0 µm	
	(0.0025 / 0.0024/ 0.0039 in)	
External dimensions	l x w x h 1203 x 887 x 1434 mm	
	(47.4 x 35 x 56.5)	
Weight	320 kg (700 lbs)	
Electrical requirements	120V 1P 60Hz 1.8KW	
Data interface	STL, CLI, SLC	
Operator interface	Full HD (1920 x 1080) multi-touch display	

#### **CONSUMABLE MATERIALS**

PM-R1-S4-30:	ExOne 420SS material for printing 0.10 mm layer thickness
PM-I-R1:	ExOne bronze material used for infiltrating stainless steel
PM-TSP-R116:	ExOne thermal support powder used during furnace cycle
PM-B-SR1-04:	ExOne binder, aqueous based ink for use with ExOne materials
PM-C-R1-02:	ExOne cleaner, required for all automated and in-process

maintenance routines, dissolves ExOne binder

### **AVAILABLE KITS**

Innovent Curing and Depowdering Accessory Kit (S4-30), Innovent Material Startup Kit (S4-30), Printhead Cleaning and Maintenance Starter Kit

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

\*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.