

S-Max+™ Phenolic



The Solution for Large and Robust but Delicate Sand Cores

The S-Max+™ prints very large, complex sand cores and molds and is designed to be used in conjunction with an industrial microwave. Phenolic cores are suited for high-temperature casting and enable challenging casting applications, such as extremely thin walls and channels.

Sand Mixer
filled with vacuum or screw conveyor

Job Box

- for building and unloading process
- on motorized roller conveyor
- additional Job Box optional



Flexible batch production

- Each part can be different (i.e., serial numbers)
- Changes can be made quickly
- Small production lots
- No tools and storage necessary

High productivity

- Large Job Box
- High-speed printing
- Easy unloading
- Cores ready for immediate casting

Varied casting applications

Suited for light metals, non-ferrous metals, cast iron and steel

S-Max+™ consumables¹

- ExOne® Phenolic Binder / Activator / Cleaner
- ExOne® Ceramic Beads
- ExOne® Chromite
- ExOne® Zircon



TECHNICAL SPECIFICATIONS

Process cell including job box and roller conveyor

Build volume	l x w x h 70.9 x 39.4 x 23.6 in. (1800 x 1000 x 600 mm)
Build speed	2.12–3.00 ft ³ /h (60–85 L/h)
Layer thickness	0.011–0.020 in. (280–500 μm)
Print resolution	X/Y/Z 0.004 in. (100.0 μm)
External dimensions	l x w x h 152.9 x 136.6 x 113.8 in.
including one job box, right - standard	(3860 x 3470 x 2890 mm)
Weight	12,787 lbs (5800 kg)
Electrical requirements S-Max	400V 3-Phase/N/PE / 50–60 Hz, max. 6.2 kW
Electrical requirements heater	400V 3-Phase/PE / 50–60 Hz, max. 19.2kW
Data interface	XPrep

PROPRIETARY INFORMATION

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¹ Other materials and particle sizes available – please contact your sales rep.

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