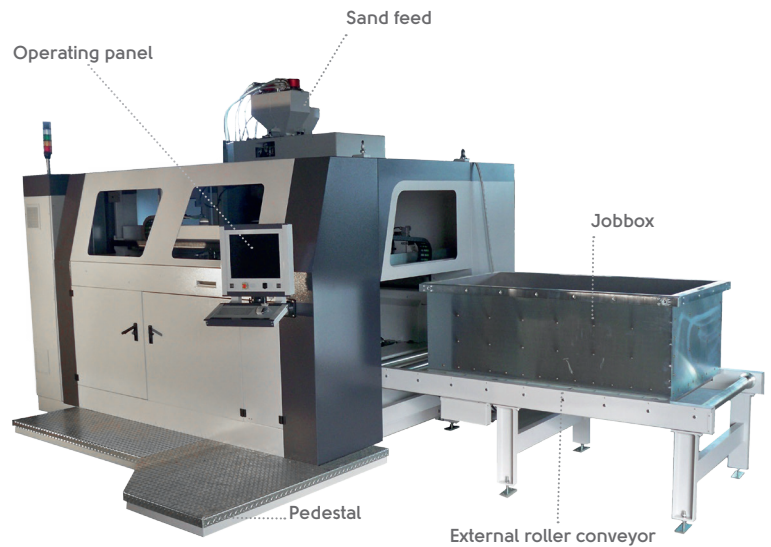


S-Max+ Phenol

The solution for large, robust, but delicate sand cores

The S-Max+ Phenol prints very large, complex sand cores and mold packages for metal casting directly from CAD data. Models or other tools are unnecessary; changes in the design can be implemented immediately. Phenol cores are suited for high-temperature casting and allow challenging casting applications. The cores' hot bending strength enables extremely thin walls or channels.



Flexible batch production

- Large cores or complete series are manufactured customer-specifically and individually in the jobbox.
- Product design changes can be implemented immediately.

High Productivity

- The new software, the new control concept, and the automated transport system are optimally oriented toward the printing process with phenolic binder.

Suited for complex geometries

- The phenol cores are cured using microwave technology. Extremely thin walls and channels can be realized with the high flexural strength of up to 800 N/cm².
- We use industry-standard, synthetic mold sand and binder based on phenol, thus foundries can combine complex, printed cores with their own conventional sand molds.
- The ability to print detailed, highly precise cores and complex geometries gives designers great design freedom.

Different casting applications

- The casting cores and molds are suited for light metals, nonferrous metals, cast iron and steel.

TECHNICAL PROPERTIES

Process cell including jobbox and roller conveyors

Build volume	L x W x H: 1800 x 1000 x 700 mm
Build speed	60,000 to 85,000 cm ³ /h
Layer height	0.28 mm to 0.50 mm
Print resolution	X/Y 0.10 mm / 0.10 mm
External dimensions	L x W x H: 3860 x 2890 (3510)* x 3470 mm
Mass	5800 kg
Electrical requirements S-Max+™	400 V/3-phase/N/PE/50–60 Hz, max. 6.2 kW
Electrical requirements heating	400 V/3-phase/PE/50–60 Hz, max. 19.2 kW
Data interface	XPrep

* 2890 mm without operating panel, 4100 mm with pedestal

CONSUMABLES

- FS052:** ExOne® Synthetic mold sand for cores with low thermal expansion
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- FA101:** ExOne® activator: suitable for FB101 specifications
- FB101:** ExOne® phenol-based binder: for low gas emission and high component strength
- FC101:** ExOne® rinsing and cleaner fluid: is used in the automated cleaning process; dissolves FB101

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