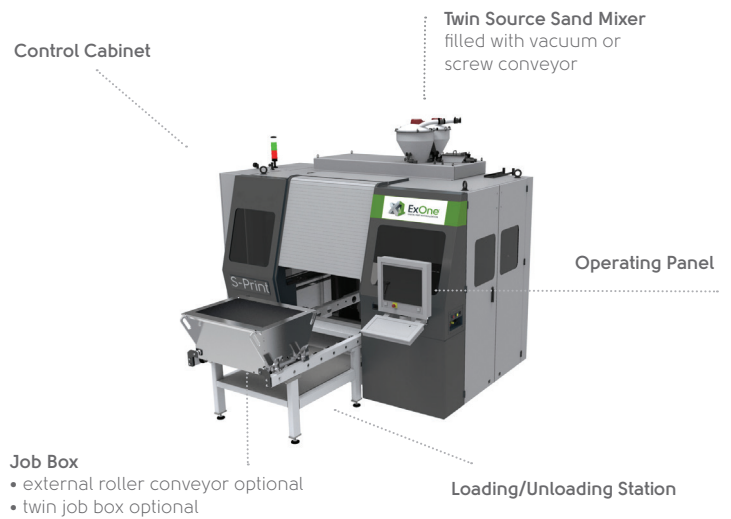


S-Print™ Phenol



Improved Productivity and Flexibility in a Compact Design

The S-Print Phenol, suited for sand casting foundries, creates complex sand cores and molds directly from CAD data, eliminating the need of a physical pattern to create a core or mold. The phenolic binder is the solution for high temperature pouring. Due to the high heat strength of the core, very thin walls or thin pipes can easily be printed.



Core features

- Bending strength up to 800N/cm²
- Thin walls and thin pipes can be realized

Curing

- Easy curing with microwave technology

Industry proven casting materials

- No foundry changes required
- On-demand sand supply management system

High productivity

- Flexible job box can print one prototype or short runs of multiple cores
- Changes can be made quickly
- High-speed printing
- Easy unloading
- Cores ready for immediate casting

High accuracy

Highly accurate printing process guarantees highly accurate cores

Suited for complex geometry

- Greater design freedom
- Suitable for intricate cores

Varied casting applications

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



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.)
Build speed	16 000 to 18 000 cm ³ /h (0.56 to 0.64 ft ³ /h)
Layer thickness	0.24 mm (0.009 in.)
Print resolution	X/Y 0.1 mm / 0.1 mm (0.004 in. / 0.004 in.)
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 S-Print	400V 3-Phase/N/PE/50-60 Hz, max. 6.2 kW
Electrical requirements heater	400V 3-Phase/PE/50-60 Hz, max. 6.3 kW
Data interface	STL

CONSUMABLE MATERIALS

- FS001:** ExOne casting media, silica sand
- FS052:** ExOne casting media, synthetic sand for lower thermal expansion
- FA101:** ExOne Activator, matched to the chemistry and specifications of FB101
- FB101:** ExOne Binder, phenol binder system optimized for low gas emissions for high part strength
- FC101:** ExOne Cleaner, required for all automated and in-process maintenance operations, dissolves FB101

All ExOne materials and delivery systems are designed and engineered for the ExOne process and equipment. The materials include ExOne binder and activator which are specially formulated to be used with ExOne casting media.

**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.*