

# S-MAX Pro™

Excellent choice for both prototyping and industrial serial production that can process all ExOne binders.



The S-MAX Pro<sup>™</sup> impresses with its speed, reliability and precision. It is available as a stand-alone solution but is also scalable and can be connected by a network, that creates a fully automated production line, to realize the industrial serial production in 3D sand printing.

## **TECHNICAL SPECIFICATIONS**

| External           | 10400 x 3520 x 2860 mm      |  |  |
|--------------------|-----------------------------|--|--|
| Dimensions         | (409.5 x 138.6 x 112.6 in.) |  |  |
| Build              | 1800 x 1000 x 700 mm        |  |  |
| Dimensions         | (70.9 x 39.4 x 27.6 in.)    |  |  |
| Layer              | 0.26 - 0.38 mm              |  |  |
| Thickness          | (0.01 - 0.015 in.)          |  |  |
| Min.<br>Grain Size | 140 µm                      |  |  |
| Weight             | 8600 kg<br>(18960 lbs)      |  |  |
| Electrical         | 400 V AC (±10%)             |  |  |
| Requirements       | 3ph/PE/N                    |  |  |

| Binder Systems                   | Furan              | CHP                   | HHP                   | Inorganic             |
|----------------------------------|--------------------|-----------------------|-----------------------|-----------------------|
| Build Speed                      | 18<br>(sec./layer) | 22<br>(sec./layer)    | 30<br>(sec./layer)    | 30<br>(sec./layer)    |
| Printing Time<br>(FS001 / FS003) | 13 h / 9 h         | 15 h / 11 h           | 14 h* **              | 12 h / 9 h**          |
| Exhaust Air                      | 300 m³/h           | 600 m <sup>3</sup> /h | 600 m <sup>3</sup> /h | 600 m <sup>3</sup> /h |

<sup>\*</sup> with Cerabead Sand with 0.26 mm layer thickness \*\* with Box-in-Box system (H: 400 mm)

### **SYSTEM BENEFITS**

- Fully automated printhead can process all ExOne binder systems (Furan, CHP, HHP, Inorganic)
- Automated adjustment of recoater to different molding materials
- Optional Box-in-Box system enables easy and fast removal of the job immediately after printing
- Industry 4.0 integration and cloud connectivity
- Real time process control and increased fault detection capability via camera and app
- Recipe Manager

#### **SYSTEM OPTIONS**

- With second jobbox and roller conveyor available
- With desanding station available (for standard jobbox)
- With Box-in-Box system available

#### **BOX-IN-BOX SYSTEM**

- Build Volume: 1800 x 1000 x 400 mm (70.9 x 39.4 x 15.7 in.)
- Weight: 1200 kg (2645 lbs) without sand; 2500 kg (5511 lbs)
  with sand
- With transport shuttle to move the box into the machine
- With transfer station for easily picking up the box
- Box with different designs available:
- With desanding and ceramic plates for optimized post processing (especially for Inorganic/Hot Hardening Phenol)
- With heating plates for optimized process (especially for Furan/Cold Hardening Phenol)