

# Shop System™ Printer Specifications

The Shop System™ is the world's first metal binder jetting system designed specifically for machine shops—enabling shops to easily produce parts with exceptional surface finish and resolution at scale.

With production rates of up to hundreds of green parts per day, the Shop System™ produces parts up to 10x faster than laser powder bed fusion\*. Employing a ~1 pL droplet size, the Shop System™ achieves superior surface finish, bleed control and rich feature detail at high speed. The Shop System is now available in three packages, enabling reductions in operating costs and material flexibility for high throughput customers.

## Key benefits

- Turnkey system, from printing through sintering and powder recycling
- High resolution printing (1600 dpi)
- Maximum throughput of 800 cc/hr
- Configurable build envelope
- Print previously inaccessible complex geometry
- Flexible production from low-volume batches through mid-volume production

|                 |                                 |                                                    |
|-----------------|---------------------------------|----------------------------------------------------|
| TECHNOLOGY      | Print technology                | Binder Jetting                                     |
|                 | Print direction                 | Uni-directional                                    |
| PERFORMANCE**   | Maximum throughput              | 800 cc/hr                                          |
|                 | Layer thickness                 | 50 µm - 100 µm                                     |
|                 | Native printhead resolution     | 1,600 dpi (1 pL native drop size)                  |
|                 | Dimensional tolerance of parts  | ± 2.0%***                                          |
|                 | Binder jetting module           | 70,000 nozzles (5x redundancy)                     |
| PHYSICAL        | External dimensions (W x D x H) | 1,990 x 760 x 1,630 mm (78.3 x 29.9 x 64.2 in)     |
| BUILD ENVELOPES | 4L                              | 350 x 222 x 50 mm (13.8 x 8.7 x 2.0 in)            |
|                 | 8L                              | 350 x 222 x 100 mm (13.8 x 8.7 x 3.9 in)           |
|                 | 12L                             | 350 x 222 x 150 mm (13.8 x 8.7 x 5.9 in)           |
|                 | 16L                             | 350 x 222 x 200 mm (13.8 x 8.7 x 7.9 in)           |
| ELECTRICAL      | Power requirements              | 100-120V, 12.5A. 220-240V, 5.6A. 50/60 Hz, 1.03 kW |

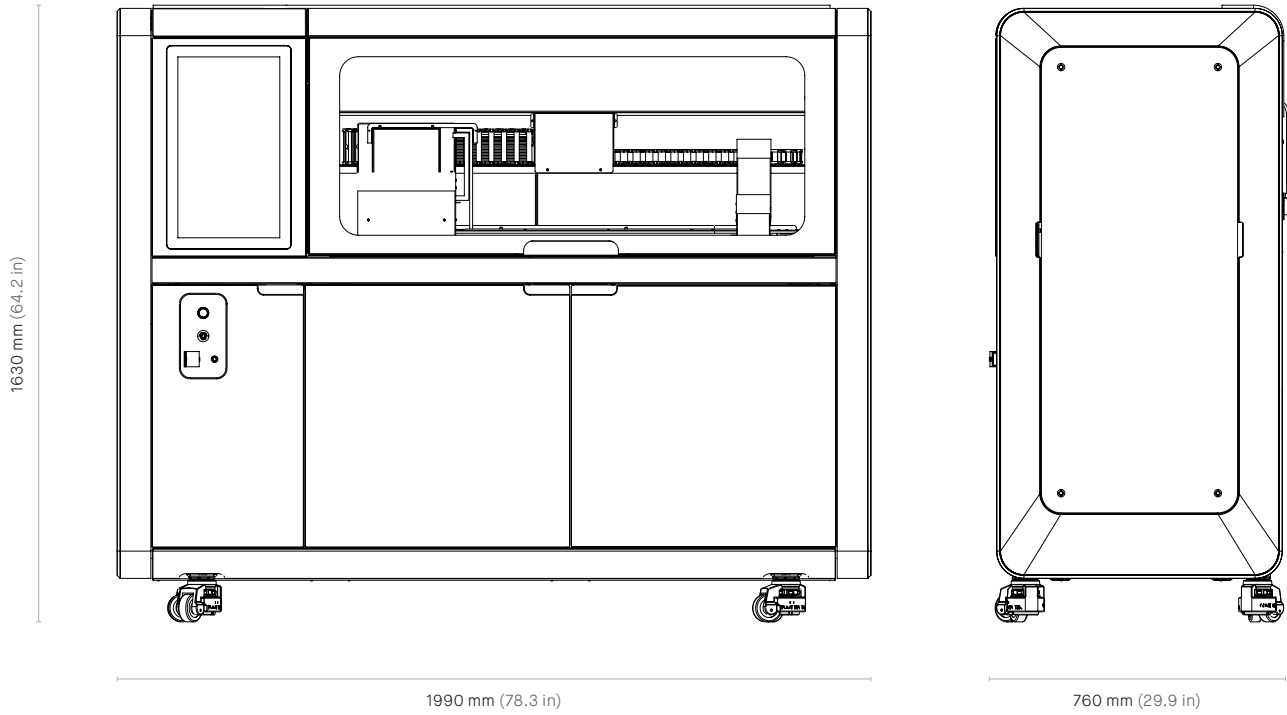
\* Based on published speeds of single laser, mid-range laser powder bed fusion systems available as of May 6, 2022 and using comparable materials and processing parameters as applicable

\*\* Performance specifications qualified using Desktop Metal powders

\*\*\* Tighter tolerances achievable through the use of Desktop Metal's proprietary Live Sinter™ sintering simulation and compensation software

## Shop System™ Printer Specifications

### DIMENSIONS



### PACKAGES

|                                          | Shop System™ | Shop System™ + | Shop System™ Pro |
|------------------------------------------|--------------|----------------|------------------|
| TURNKEY HARDWARE, SOFTWARE AND MATERIALS | X            | X              | X                |
| DM BINDER                                | Required     | Required       | Required         |
| USE OF DM-ENGINEERED POWDERS             | Required     | Required       | Recommended*     |
| DISCOUNTED DM BINDER AND POWDERS         |              | X              | X                |
| CUSTOM PRINTING AND SPREADING PARAMETERS |              |                | X                |
| DM FURNACE CUSTOM SINTERING PROFILES     |              |                | X*               |

\* Some restrictions apply — contact sales for further information