

## Furnace Specifications

Fully-automated and sized to fit through a doorway, the furnace delivers industrial-strength sintering in a form factor suitable for shop environments. With high thermal uniformity and low gas usage, the furnace heats parts in a vacuum-enabled chamber to just below their melting point, fusing the metal particles together to create sintered parts with densities up to 98%. Featuring an external gas hookup and adjustable

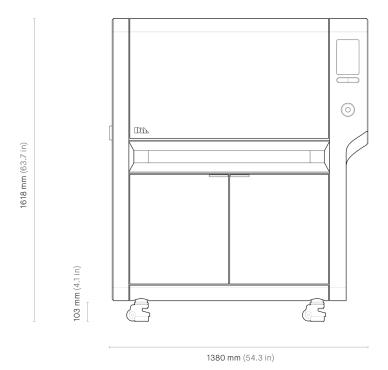
shelving totaling 3,000 cm<sup>2</sup> of surface area for sintering parts, the furnace scales to support mid-volume production of high-quality, dense metal parts ready for end-use applications.

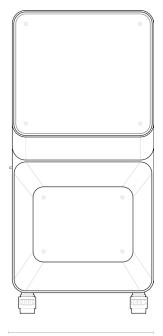
| PERFORMANCE | Atmosphere              | Partial-pressure sintering (vacuum-enabled)   |
|-------------|-------------------------|---|
|             | Heating                 | SiC heating elements (4 sides)  |
|             | Max temperature         | 1400 °C (2552 °F)   |
|             | Average heat load       | 8,100 BTU/hr  |
|             | Max heat load           | 15,600 BTU/hr for 2 hours   |
|             | Thermal uniformity      | ±5 °C at sintering temperatures   |
| PHYSICAL    | External dimensions     | 1618 x 1380 x 754 mm (63.7 x 54.3 x 29.7 in)  |
|             | Height in open position | 2160 mm (85.0 in)   |
|             | Weight                  | 798 kg (1,760 lbs)  |
|             | Workload envelope       | 300 x 200 x 200 mm (11.8 x 7.9 x 7.9 in)  |
|             | Workload surface area   | 3,000 cm <sup>2</sup> (465 in <sup>2</sup> )  |
|             | Workholding             | Adjustable multi-level trays with ceramic setters (6-position   |
|             | Retort                  | Stacking graphite rings   |
|             | Ventilation             | <ul><li>Effluent air exhaust line (0.5 in, push-to-connect)</li><li>Liquid drain line (0.5 in, push-to-connect)</li></ul> |
|             | Binder management       | Removable binder cold trap liner  |
|             | Pinch-point handling    | Finger-safe light curtain protection  |
|             | Fail safes              | <ul><li>Thermal interlocks</li><li>Front-mounted E-stop</li><li>Over-temperature protection</li></ul>                     |
|             | Power requirements      | 208 VAC, 60 Hz, 30 A, 3-phase dedicated circuit   |
|             | Onboard controls        | 7-inch touchscreen display  |
| GAS         | Gas types               | Forming gas, Argon (material dependent)   |
|             | Gas connection          | External gas connection   |
| PLATFORM    | Network connectivity    | Wireless and Ethernet   |
|             | Automation              | <ul><li>Auto-generated sintering profiles</li><li>Live job progress tracking</li></ul>                                    |



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## DIMENSIONS





754 mm (29.7 in)