

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 cm² 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.

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| 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 ² (465 in ²) |
| | Workholding | Adjustable multi-level trays with ceramic setters (6-position) |
| | Retort | Stacking graphite rings |
| | Ventilation | <ul style="list-style-type: none"> Effluent air exhaust line (0.5 in, push-to-connect) Liquid drain line (0.5 in, push-to-connect) |
| | Binder management | Removable binder cold trap liner |
| | Pinch-point handling | Finger-safe light curtain protection |
| | Fail safes | <ul style="list-style-type: none"> Thermal interlocks Front-mounted E-stop Over-temperature protection |
| | 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 | <ul style="list-style-type: none"> External gas connection |
| PLATFORM | Network connectivity | Wireless and Ethernet |
| | Automation | <ul style="list-style-type: none"> Auto-generated sintering profiles Live job progress tracking |

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DIMENSIONS

