

# 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.

<b>PERFORMANCE</b>	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
<b>PHYSICAL</b>	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 style="list-style-type: none"> <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
	Fail safes	<ul style="list-style-type: none"> <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
<b>GAS</b>	Gas types	Forming gas, Argon (material dependent)
	Gas connection	<ul style="list-style-type: none"> <li>• External gas connection</li> </ul>
<b>PLATFORM</b>	Network connectivity	Wireless and Ethernet
	Automation	<ul style="list-style-type: none"> <li>• Auto-generated sintering profiles</li> <li>• Live job progress tracking</li> </ul>

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### DIMENSIONS

