

Furnace technical data

We designed the first office-friendly sintering furnace. Fully-automated with closed-loop thermal control and sized to fit through a doorway, it delivers industrial-strength sintering in an office-safe package. The furnace uniformly heats parts to just below their melting point, removing secondary binder and fusing metal particles to form parts with densities of 96-99.8% without the residual stresses introduced in laser-based systems.

Furnace properties	Heating	Conventional heating elements, 4 sides
	Peak temperature	1400 °C (2552 °F)
	Workload volume	12,585 cm ³ (30.5 x 20.5 x 20.5) / 768 in ³ (12 x 8 x 8)
	Retort	Carbon
	Gas connection	2x 900L onboard gas canisters
	Gas types	Forming gas, nitrogen, argon (material dependent)
	Part holder	Ceramic holder, optional multi-level adjustable trays
	Heat load	20 kW (5.7 tons cooling)
Safety	Vapor management	Replaceable effluent filters, disposable binder cold trap liner
	Fail safes	RFID-enabled gas tracking, thermal interlocks, front-mounted E-stop, over-temperature protection
	Pinch point handling	Finger-safe light curtain protection
Physical Dimensions	External dimensions	w 138.0 x d 75.4 x h 161.8 cm (54.3 x 29.7 x 63.7 in)
	Height in open position	217.8 cm (85.8 in)
	Weight	500 kg (1102 lbs)
Connectivity	Network	WiFi and Ethernet
	Power	208V 3-phase, 30A; 5-wire connection
Software	Supplied software	Studio System™ cloud software
	Browser requirements	Accessible via any web browser
	Onboard intelligence	<ul style="list-style-type: none"> Fully-automated, built-in temperature profiles tuned to each build and material System status and cycle monitoring
	Onboard control	7" touchscreen furnace console