

## Furnace Technical specifications

We designed the first office-friendly sintering furnace. Fully automated with closed loop thermal control and sized to fit through an office door, it delivers industrial-strength sintering in an office-safe package. The furnace combines traditional heating elements with high-powered microwaves to sinter printed parts. It uniformly heats parts to just below their melting point, removing binder and fusing metal particles to form fully dense parts without the residual stresses introduced in laser-based systems.

<b>Furnace Properties</b>	Heating	Hybrid - microwave and conventional heating elements
	Peak temperature	1400 °C (2552 °F)
	Furnace volume	12,585 cm <sup>3</sup> (30.5 x 20.5 x 20.5) / 768 in <sup>3</sup> (12 x 8 x 8)
	Retort	Carbon
	Gas connection	2 x 900L onboard gas canisters 2 connections for optional house gas
	Gas types (material dependent)	Forming gas Nitrogen, Argon
	Part trays	Adjustable-height ceramic part trays (optional add-on)
<b>Safety</b>	Vapor management	Replaceable effluent filters, disposable binder cold trap liner, connections for optional external exhaust
	Fail safes	RFID-enabled gas tracking, thermal interlocks, front-mounted E-stop
	Pinch point handling	Light curtain protection
<b>Physical Dimensions</b>	External Dimensions	75.4cm x 130cm x 158 cm (29.7 in x 51.2 in x 62.2 in)
	Height in open position	209cm (82.3 in)
	Weight	500 kg (1102 lbs)
<b>Connectivity</b>	Network	WiFi and Ethernet
	Power	208V 3-phase, 30A
<b>Software</b>	Supplied Software	DM Cloud with temperature profiles tuned to each material for fully automated sintering process
	Local Cloud Support	Optional
	UI	7" Touchscreen