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.

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	1628 x 1380 x 931 mm (64.1 x 54.3 x 36.7 in)
	Height in open position	2195 mm (86.4 in)
	Weight	733 kg (1615 lbs)
	Workload envelope	300 x 200 x 170 mm (11.8 x 7.9 x 6.9 in)
	Workload surface area	3,000 cm² (465 in²)
	Workholding	Adjustable multi-level trays with ceramic setters (5-position)
	Retort	High purity retort with stacking graphite rings
	Ventilation	• Effluent air exhaust line (0.75 in, barbed fitting)
	Binder management	Binder trap with removable binder collection jar
	Fail safes	• Thermal interlocks • Front-mounted E-stop • Over-temperature protection
	Power requirements	• 200-220 VAC phase to phase, 50/60Hz, 24 A/phase, three phase, no neutral • 380-415 VAC phase to phase, 50/60Hz, 16 A/phase, three phase and neutral
	Onboard controls	7-inch touchscreen display
GAS	Gas types	Forming gas, Argon, Nitrogen (material dependent)
	Gas connection	External gas connection. Fitting type: CPC PN MC4004.
PLATFORM	Network connectivity	Wireless and Ethernet
	Automation	• Auto-generated sintering profiles • Live job progress tracking

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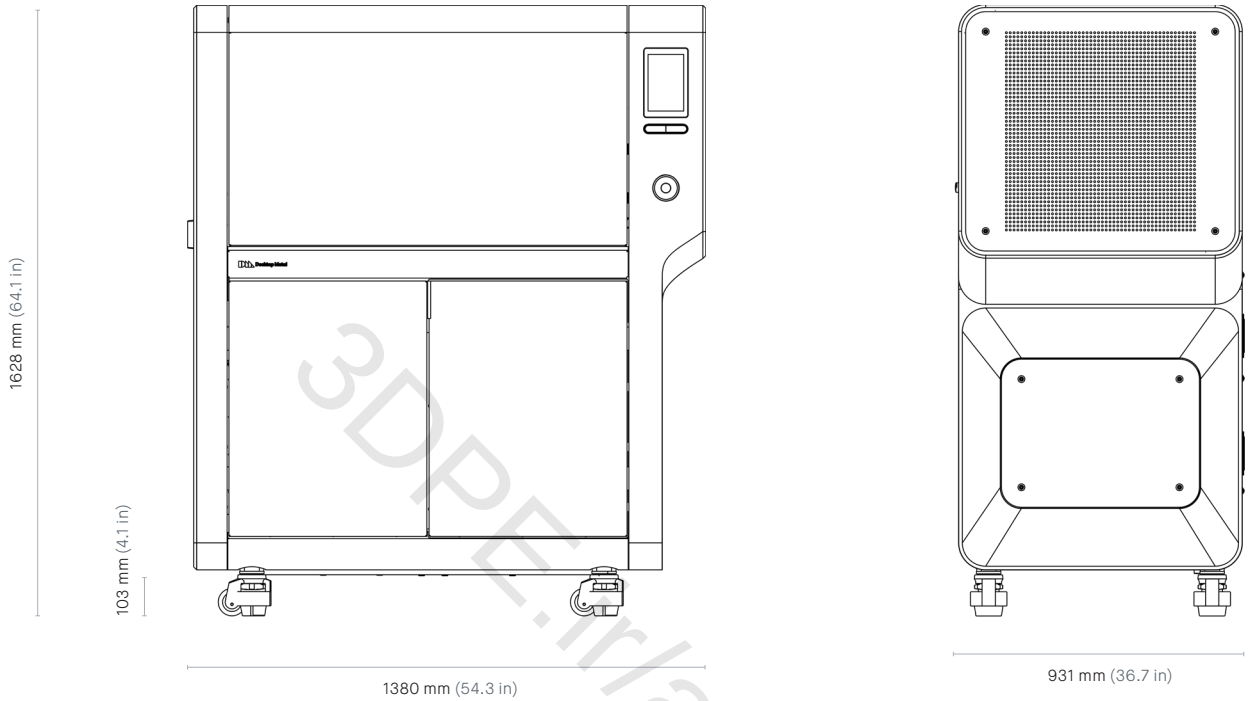
DIMENSIONS



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