

[Ai 1400C Controlled Atmosphere Muffle Furnace](#)

SKU | GCF1400



Specifications

Electrical requirements	208-240V, 50/60Hz, single phase
Heating element & thermocouple type	Silicon carbide

Min/max/constant temperatures	Ambient/1400°C/1300°C (depends on gas environment)
Temperature controller	Eurotherm 3204 Controller (UK) or Shimaden fp93 (Japan) with 4 patterns and 40 segments (ie. 4 x 10 segments or 2 x 20 segments) at +/- 1°C Maximum heating rate: 15°C per minute
Maximum heating rate	15°C / min
Furnace cavity	Mitsubishi (Japan) high quality 1600 grade polycrystalline alumina fiber
Thermocouple type	S
Gas inlet/outlet	1/4" hose barb with 1/4" BSPT (British Standard Pipe Thread)
Vacuum port	KF40
Positive pressure	Not to exceed 0.02 MPa / 150 torr / 3 psi
Temperature controller precision	+/- 1°C
Working environments	Air, N2, Ar, NO2, CO, CO2, He, Ne, etc. (Hydrogen, up to 5%)
Certification	ETL tested to UL and CSA standards (Standard), CE (Standard)
Warranty	1 year

Size Comparison

Nominal vs usable Chamber size (DxWxH)	6x6x6"/4x5x5.5"	12x8x8"/10x7x7.5"	16x12x12"/14x11x11.5"
Chamber capacity (cu ft)	0.13	0.44	1.33
Installed heating element	4	8	12
Maximum output	3 kW	7 kW	13 kW
Unit/shipping dimensions (WxDxH)	23x28x35"/28x33x45"	26x30x40"/33x34x50"	31x33x44"/43x35x55"
Unit/shipping weight (Lb)	290/400	450/580	590/720

GCF1400 Maximum Working Temperatures

Working Environment	Temperatures
Air	1400°C
Helium (He), Neon (Ne), Argon (Ar)	1400°C
Nitrogen (N₂)	1270°C
Hydrocarbon gas	1250°C
Hydrogen (H₂) up to 5%	1200°C
Rough vacuum	1200°C