



Furnace Technologies Pty Ltd

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Muffle Furnace - Ashing

Ashing Furnace – 1000°C

Construction

The furnaces are strongly constructed of zinc coated steel powder coated Wedgewood blue with Hi Temp black front face and door. The muffle is strongly supported by a refractory mould at the front and insulating bricks at the back. It is insulated with ceramic fibre and firebricks. The steel cover around the muffle is surrounded by an air cavity and by gravity convection draws heat away from the bottom and out through the top reducing the wall temperature of the outer body. An air gap at the front and louvres on back panel allow adequate air flow to ensure a cool instrument panel. All cantilever door furnaces are fitted with a door switch for safety.

Kanthal Al Element is controlled by a microprocessor based PID Controller complete with Auto Tune function and sensor compensation for accurate temperature control. An over temperature cutout is also provided as a standard feature.

Air exhaust is through an adjustable 50mm vent on top of the furnace. Airflow is up to 20 exchanges per minute at 800°C. The air inlet is through two vent tubes at the back of the furnace, allowing air to pass over the external surface of the muffle through channels in the insulating bricks and into the working chamber via a gap at the top of the muffle. This gives a preheated airflow to maintain an even temperature. The heating section of muffle is set back from the door face approximately 70mm to give an even temperature from front to back of working area. The outer case is kept to minimum temperature by a surrounding air cavity.





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Specifications	100 Series
Power Rating	240V 2400W
Cat. No.	IO2CAF
Dimensions (mm)	External 460 D x 475 W 560 H
	Internal 320 x 160W 90 H
Temperature Range	Ambient to 1000°C +/- 20
Temperature Variation	+/- 10°C @ 815°C
Rate of Ventilation	2 to 20 Exchanges per minute @ 800
Weight (kg)	70

*Applies to uniform zone within 30 mm of back and 70 mm from front edge of muffle liner.