



Furnace Technologies Pty Ltd

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Volatile Matter Furnace

Volatile Matter Furnace to AS 1038.4 – 1995

Construction

Strongly constructed of zinc coated steel powder coated Wedgewood blue with Hi Temp black front face and door. The muffle is supported by a refractory mould at the front and insulating bricks at the back. It is insulated with top grade Kaowool ceramic fibre blanket. 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 airflow 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.

Features

The furnace has three thermocouples. A permanently fixed stainless steel sheathed thermocouple, which controls the temperature of the muffle. A ceramic sheathed thermocouple permanently located so as to position the four place crucible stand in the uniform temperature zone, and an unsheathed thermocouple which can be positioned under any of the four crucibles. The temperature of the unsheathed thermocouple is related to the sheathed thermocouple and must be 900 +/- 5C. Both of these thermocouples are terminated on the front panel of the furnace for easy monitoring.

The furnace has adequate heating to regain 885°C after four minutes and 900 +/- 5°C within seven minutes of the insertion of a cold stand and its crucibles, as required by the standard.

A four place crucible stand, flue cap and floor tile are provided with the furnace. Probe insertion ports in the door are optional.

	100 Series
Power Ratings	2400W
Cat No.	102VM
Dimensions External (mm)	456D x 468W x 560H
Dimensions Internal (mm)	250D x 160W x 90 H
Weight (kg)	50

