

1.MUFFLE FURNACE (LABORATORY TYPE)

Specifications:

Electrical Muffle Furnace should be of Horizontal, Rectangular in shape, maximum required temperature is 1000 deg C and working temperature 950 Degree Celsius the furnace is heated by Kanthal Al wire and the temperature is controlled by digital temperature controller.

Outer Chamber:

The furnace is constructed out of thick gauge mild steel outer shell reinforced with heavy angle and channel Iron frame work to make the equipment mechanically rigid.

Inner Chamber:

The inner Chamber is formed by Refractory Muffle of size

Door:

Single double walled door outer made of mild steel sheet and lined with ceramic fibre blanket is provided in the front opening. The door is mounted on heavy duty hinges and provided with simple but effective locking arrangement.

Heating element:

The furnace is heated by Kanthal Al heating coils wound in spiral form on the muffle embedded in high grade refractory cement and backed by high temperature insulating 128 grade ceramic fiber blankets.

Temperature indication and control:

The temperature inside the chamber is indicated and controlled by Smart Range Digital Solid State Temperature Controller Working in conjunction with Cr / Al type thermocouple. Compensating cable lead wire and supply with fuse units for protection is provided.

Control Panel:

A compact model control panel accommodating the following components is attached to the right side of the chamber for operational Convenience:

- Main isolating Switch(L&T)
- Pilot Indicating Lamp
- Air Break Magnetic Contactor(L&T Make)
- Digital Temperature Controller

Inner chamber muffle furnace	Power rating
100 X 100X 225mm(4`` X 4`` X 9``)	1.5Kw
125 X 125 X 250 mm(5`` X 5`` X 10``)	2.5Kw
150 X 150 X 300 mm (6`` X 6`` X 12``)	3.5Kw
200 X 200 X 300(8`` X 8`` X12``)	5.0Kw
300X300X300(12*12*12 Inch)	6.0 kw

2.Electrical Grooved furnace- 1100 Degree Celsius.

We manufacture a wide array of Muffle Furnaces, which is offered in different sizes as per the current industry standard. These furnaces are designed with complete perfection to assure low maintenance and high performance. Our product array are highly demanded in various application in the emerging field of agricultural, medical,

research laboratories, industrial, ash determination, metal treatment and wool industries.

Grooved FURNACE (open type coil 1050 °C) with Digital Temp.

- Construction: Outer Body made of Mild Steel Body. Inner Body made of ceramic insulation.
 - Insulation: Special type ceramic Insulation between bodies for Insulation.
 - Coil: Kanthal APM make coil for long lasting.
 - Temp Range: from above ambient temp to max 1100°C.
 - Accuracy: +/- 3 deg.
 - Temp Controlled by: Programmer controller & L&T contactor.
 - Sensor: 'K' type calibrated sensor.
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- Power supply. 440V, 50 Hz Single phase

CONTROL PANEL: Control panel provided with side of the furnace with the following temp. Control and electrical accessories:-

- Microprocessor based PID controlled Digital Temperature Indicating cum controller 1 no.
- K type Thermocouple 1 No.
- L&T CONTACTOR – 1NO
- Mains indicating lamp 3 Nos.
- Mains ON/OFF switches (MCB) 1 no.
- Heater indicating lamp 1 No.
- Heater ON/OFF switches 1no.
- The outer chamber using perforated sheet to avoid skin temperature

Inner chamber muffle furnace	Power rating
100 X 100X 225mm(4`` X 4`` X 9``)	1.5Kw
125 X 125 X 250 mm(5`` X 5`` X 10``)	2.5Kw
150 X 150 X 300 mm (6`` X 6`` X 12``)	3.5Kw
200 X 200 X 300(8`` X 8`` X12``)	5.0Kw
300X300X300(12*12*12 Inch)	6.0 kw



