



Description:

Ergonomic Horizontally designed furnaces are easy to install and operate. Just set your desired process temperature and the PID controller will control the furnace automatically. Our furnace models are designed for applications such as ashing most types of organic and inorganic samples, ceramics firing and decorating was burnt out, copper enameling, mold heating, crucible melting of non-ferrous metals, assaying and for determination of volatile and suspended solids.

STRUCTURE

1. **Furnace Shell** : Box type single zone tubular furnace with corrosion resistant casing to accommodate different sizes of Ceramic tube as per customer requirement i.e. from 40 mm to 100 mm to maintain the uniform temperature.
2. **Shell Construction** : Double walled rigid construction made from thick mild steel sheet with proper grader and stiffeners, duly powder coated filled with high quality UNIFEX ceramic fiber blanket insulation to minimize the heat loss.
3. **Gas Purging Facility** : Replaceable Alumina or Quartz tube. Stainless Steel/ Aluminum coupler, flanges and nitrile rubber O-ring for gas purging, nozzle for inlet and outlet of gas flow. Provision to attach vacuum pump.

SIZES AVAILABLE

- Model 142 (A)** 40 mm ID 150 mm to 250 mm hot zone and total length 450 mm
- Model 142 (B)** 60 mm ID 150 mm to 300 mm hot zone and total length 450 mm
- Model 142 (C)** 80 mm ID 200 mm to 300 mm hot zone and total length 550 mm
- Model 142 (D)** 100 mm ID 300 mm to 400 mm hot zone and total length 650 mm

HEATING SYSTEM

1. Heating system : 8 Nos. Kainthal Wire 'A-1' grade with Cr/Al/K type thermocouple fitted with suitable capacity SSR
2. Power : 2.5 KW (3 KVA) on single phase, 50 Hz supply
3. Maximum Temperature : 1200°C



- 4. Working Temperature : 1150°C (for continuous operation of more than 24 hrs.)
- 5. Temperature stability : $\pm 1^\circ\text{C}$

CONTROL SYSTEM

- 1. **Temp. Controller** PID, Microprocessor based (FUJI/ HONEYWELL MAKE) having digital fluorescent display with profile controller with 8 programmes and 4 step in each program with ramp and soak to display the set temperature with dwell auto cut off at set point.

- 2. **Power control & safety features -**
Siemens Thyristor Drive, Amp meter, Volt meter, Power conductor, Energy Regulator, Main Indicator, L&T Make MCB, Safety Fuse, Over shoot and short circuit protection, Audio Alarm or Indicator in case of temperature failure and fan to keep the temperature of outer casing from ambient to 30°C to 35°C higher.

Optional

Triple Walled Construction and Outer Body made of Stainless Sheet.
Iron mounted stand to keep the furnace