

### **HOPPER HEATERS**

Thermo Hopper heating systems play an important role in the removal of fly ash from precipitators and bag filter hoppers. The hopper heater is designed to preheat the hopper to prevent moisture condensate from collecting in it during startup conditions. In addition, they maintain the hopper and fly ash at temper atures above the flue gas acid dew point during normal operating conditions Construction Thermo Hopper Heater comprise of Flat heating elements and Wire type elements, uniformly distributed and sandwiched between multiple layers of fiber glass cloth. This complete assembly is housed in tamper proof rugged high temperature resistant Aluminum Body. The Heating element is connected to power supply through Fibre Glass insulated and Silicon Rubber sheathed Cable FEATURES: Series type Circuit Heating Element Exclusive one piece design is easy to install and handle Low Watt Density For uniform Heating and long Life Vibration and Shock Resistance No screws / Nut bolts. No Moving Parts. Heater is sealed with rivets Rugged Construction Rugged High Temperature Resistant Aluminum Body Long Life Good heater contact with surface resulting in lower element temperatures.

#### **TECHNICAL SPECIFICATIONS**

Operating Voltage 415 V AC 3 Phase Max. Watt Density 2.5 to 3 Watts/sq. inch

Max. Operating Temperature 180 C - Temperature Sensor "J" type/PT 100

Power/Control Connection 2.0 M of Lead cable

**Temperature Control** TIC/Capillary type Thermostat

### **HEATING TAPES**

Heating tapes are highly flexible in nature and can be wrapped on pipelines, valves, flanges, columns and on any uneven shaped equipment to raise and maintain the temperature of the contents. These tapes are available with 25mm width and from one meter to 10 meters length. The raw material used in this heating tapes are nichrome wire with fiberglass fabric for the temperature up to 350 deg. C and nichrome wire with quartz fabric for a temperature up to 800 deg. C. The maximum wattage of these heating tapes will be 250 watts per mtr at 230V/1Ph. AC supply.

# **HEATING JACKETS**

Heating jackets are highly flexible in nature and can be used to raise and maintain the temperature of contents in tanks, reaction kettles, uneven shaped vessels, dish ends, conical bottoms of vessels where the heat is required. heating jackets are made as per the size and shape of the equipment to be heated. The raw material used in these heating pads are nich rome wire and



**PICTURES OF** HOPPER HEATER





HOPPER HEATER











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fiber glass cloth for the temperature range up to 350 deg. C and nichrome wire and quartz cloth for the temperature up to 800 deg. C. Heating jackets produces uniform heating to the entire material of the equipment and these are best alternative to steam heating and thermic fluid oil heating system. As per the site conditions and application, water proof and non waterproof heating jackets will be offered.

#### **FEATURES**

Uniform Heating: Close and evenly distributed heating element ensures effective and uniform heating.
Highly Efficient: Heat is applied on the surface from where heat loss occurs resulting in minimal heat loss.
Easy maintenance: Being an external heating system, maintenance is possible without the need for costly, disturbing shutdowns.

Precise Temperature Control: Thermostatic controls associated with heaters enable very precise temperature control with minimal thermal lag.

Adaptability: The high flexibility of the carrier material enables the heaters to fit snug on complicated shapes and bends and hence suited to all shapes and sizes.

Long Life: The high flexibility also ensures good heating element contact resulting in lower element temperatures and hence long life.

**Custom-built**: Heating Jackets are designed to suit individual requirements incorporating cutouts to accommodate any shape and size.

## **DRUM HEATERS**

Tried and tested across many industries, our range of Flexible Heating Jackets simply wrap around the vessel / drum, clip together and the thermostat can be set to the desired temperature.

High-grade thermal insulation to reduce heat-loss and increase efficiency whilst providing protection for the operator.

Fitted with adjustable retaining straps and quick release buckle clips. Integrated fully adjustable thermostats.

240volt or 430volt versions available from stock.

Ideal for wide variety of plastic, fibre and metal containers – drums, tubs, buckets, kegs, carboys, totes and IBCs. Deliver an even heat over a large surface area, minimizing the possibilities of damaging the product. Fit and forget – no regular maintenance required. Safe to use 24 hours a day.

Available in various capacity like 1KW, 1.5KW, 3KW, 4.5 KW for standard 200 liter poly / Metal drum or custom size.

## **HEAT TRACER**

Heat tracers are constant output, parallel resistance type which is cut to length as per the site requirement. These are available with different outputs of 20 W/M, 30 W/M, 40 W/M and 50 W/M.

HEAT TRACERS are made with superior quality imported grade Teflon (PTFE) insulated and braided with S.S.fine gauge multi wires.It is moisture proof & chemical proof and can be widely used for temperature maintenance applications on edible oils, chemicals, furnaces Oils, L.S.H.S. LDO, Bitumen pipelines, storage tanks of Boilers, furnaces D.G.Sets, etc. suitable to maintain a maximum temperature of





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