

# Cool TO-THE Touch<sup>™</sup> Shroud System

## Cool TO-THE Touch Extruder Heat/Cool System

Tempco's Cool TO-THE Touch extruder heat/cool systems are custom engineered to provide optimal heating and cooling while providing personnel safety with a Cool Touch perforated outer layer. These systems are designed with finned cast-in heaters that optimize overall system efficiency. The reflective inner layer of the shroud decreases the heat-up cycle, reducing energy consumption. The "maxi-flow" unrestricted blower port directs inlet air to the hottest part of the casting and distributes it evenly over the entire cross section of the zone.

#### **Cool to the Touch**

Dual Layer Shroud with Inner Stainless Steel Solid Layer (thermally isolated from heater) and Outer, Cool to the Touch, Perforated Stainless Steel Layer for Maximum Venting and Heat Dissipation

#### **Usage Requirements**

The Cool TO-THE Touch Construction Style achieves best results when built for Tempco's High-Efficiency Finned Cast-In Heaters.

### **Cool to the Touch Construction Details**

### **Dual Layer Shroud**

- \* Inner Stainless Steel solid layer radiation shield that directs the cooling air flow over the heater
- \* Outer Stainless Steel perforated layer isolates hot surfaces from contact (cool touch)

#### **Shroud Assembly Features**

- \* Two Mounting Styles are available:
  - Hinge with Barrel Clamps designed for ease of installation
  - Two Individual Halves with Barrel Clamps (Two-Piece) used where installation space is tight or mounting is difficult
- \* Internal Support Straps or Support U-Bolt on blower mount half of shroud permits shroud to be opened for servicing without removing unit from barrel
- \* Anti-Rotate Tabs used only with Finned Cast-In Heaters to prevent shroud from radial and axial movement around the barrel
  - ✤ Tabs are cast as part of the heater (may require a Terminal Box)
- \* Blower Options See page 3-41 through 3-43 for Complete Details
  - Single or Dual Tempco Recommended Blowers available from 148 CFM up to 1210 CFM at 115V or 230V, or 480V 3-Phase
  - Customer Specified blower
  - ➡ Blower not required for Heat-Only Shrouds

#### \* Blower Location

- Horizontal or Vertical Orientation
- Extension Housings Available
- \* Standard Air Outlet combined with Terminal Box at top
- \* Optional Air Outlet Features Include:
  - Air Outlet Shield deflects air flow out of shroud and shields shroud from external solid contamination
  - Air Outlet separate from Terminal Box
  - •• Alternate Radial Air Outlet locations available
- \* Air-Inlet Baffle Optional
- \* Vent Hole(s) Optional

(800) 323-6859 • Email: sales@tempco.com

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Cool to the Touch shown with optional dual blowers mounted vertically with knockouts for heater termination(s) and top vertical air outlet

#### Heater Type and Components

- \* Recommended Heater Types Finned Cast-In Heaters with standard 1/4" gap between heater halves, Ceramic Band and Maxiband Heaters
- \* Power Input Terminal Box with 7/8" dia. K.O. for 1/2" conduit:
  - •• Standard 10-32 stud termination with ceramic or mica insulator
  - With Louvered Cover used when terminal box is separate from air-outlet
  - Stainless Steel Screen used when terminal box is combined with air outlet
- \* Power Input through Blower Mount input wiring through knockouts in blower mount eliminates terminal box and facilitates ease of heater service

### **Sensing and Controlling**

- \* Existing Zone Control Probe Shroud System can be designed per customer specifications
- \* Tempco supplied Zone Control Probe
- \* Tempco customized Power Control Panel designed to complete Your Thermal Loop System

# **Ordering Information**

See Page 3-36 for complete Ordering Information.