

### Arctic Cast® Extruder Heat/Cool System

Tempco's Arctic Cast Shroud System was our pioneer shroud design for the air-cooling of extruders. The cooling efficiency of the Arctic Cast shroud system meets or exceeds that of water-cooled systems when used with our field proven high-capacity blowers.

The Arctic Cast shroud features a vented 1/4" thick cast aluminum layer for durability. The cast-in heaters are designed with a large fin surface area to maximize cooling efficiency. The blower port directs inlet air to the hottest part of the heater, distributing it evenly over the entire cross section of the zone.

## 3 – Arctic Cast Construction

### Arctic Cast Extruder

**Single Layer Shroud – Vented Cast Aluminum layer bolted directly onto Tempco's Specially Designed Finned Cast-In Aluminum Band Heater**

#### Usage Requirements

*This rugged shroud design is recommended for installations where the shroud system could be exposed to physical damage, such as instances where the extruder barrel is low to the ground. It is suited to work with Tempco's Specially Designed Finned Cast-In Aluminum Heater and cannot be used on any existing finned cast-in heaters.*

### Arctic Cast Construction Details

#### Single Layer Shroud

- \* *Vented 1/4" thick Cast Aluminum layer – directs the cooling air flow over the heater*

#### Shroud Assembly Features

- \* *Two Individual Halves bolted together (Two-Piece) and clamped around finned cast heater*
- \* *Blower Options – See Pages 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 Location*
  - ✦ *Vertical Orientation – at the bottom of the shroud*
  - ✦ *Custom location achieved only by rotating entire shroud system*
- \* *Standard top Air Outlet*
  - ✦ *Custom location achieved only by rotating entire shroud system*
- \* *Shroud Air-Inlet Baffle with built-in air deflector that breaks up incoming airflow, distributing it across the cast-in heater(s)*



Arctic Cast shown with Vertical Mount Option

#### Heater Type and Components

- \* *Recommended Heater Types – Tempco Finned Cast-In Heaters with standard 1/4" gap between heater halves and bolt and nut clamping*
- \* *Heater Strap Clamping is available*
- \* *Power Input with Standard 10-32 stud termination with ceramic or mica insulator*
  - ✦ *Bus Wiring between halves is optional*

#### 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 3-40 for complete Ordering Information.