

Engineering took the Arctic Cast concept and modified it, creating the more efficient dual layer Polar Cast shroud system. The Polar Cast features the same 1/4" thick outer aluminum shroud as the Arctic Cast, but the similarities end there. The Polar Cast features finned cast-in heaters that allow for quick thermal response during heat-up and cool-down cycles. The Cool Touch outer layer is vented to improve cooling and provide personnel safety. A reflective inner layer has been added to this shroud design to decrease the heat-up cycle and reduce energy consumption. The unrestricted blower port directs inlet air to the hottest part of the heater and distributes it evenly over the entire cross section of the zone.



CONSTRUCTION DETAILS

DUAL LAYER SHROUD

- Inner Solid Aluminum Sheet Metal layer – radiation shield that directs the cooling air flow over the heater
- Outer 1/4" thick Vented Cast Aluminum layer – isolates hot surfaces from contact (cool touch) and provides structural integrity for the shroud

SHROUD ASSEMBLY FEATURES

- Two Individual Halves bolted together with integrally cast terminal box
- Stainless Steel End Plates – support outer layer and thermally isolate the shroud from the heater and extruder barrel
- Anti-Rotate Tabs – prevent shroud from radial and axial movement around the barrel
- Tabs are cast as part of the heater
- Blower Option
 - ✓ Single or Dual Blowers available from 148 CFM up to 1210 CFM at 115V or 230V
 - ✓ Customer Specified blower
- Blower Location
 - ✓ Vertical – at the bottom of the shroud
 - ✓ Custom location achieved only by rotating entire shroud system

HEATER TYPES AND COMPONENTS

- Recommended Heater Types – Finned Cast-In Heaters with standard 1/4" gap between heater halves
- Heater Strap Clamping is available
- Power Input through Cast Terminal Box with 7/8" dia. K.O. for 1/2" conduit
 - ✓ Standard 10-32 stud termination with ceramic or mica insulator
 - ✓ Bus Wiring between halves is optional

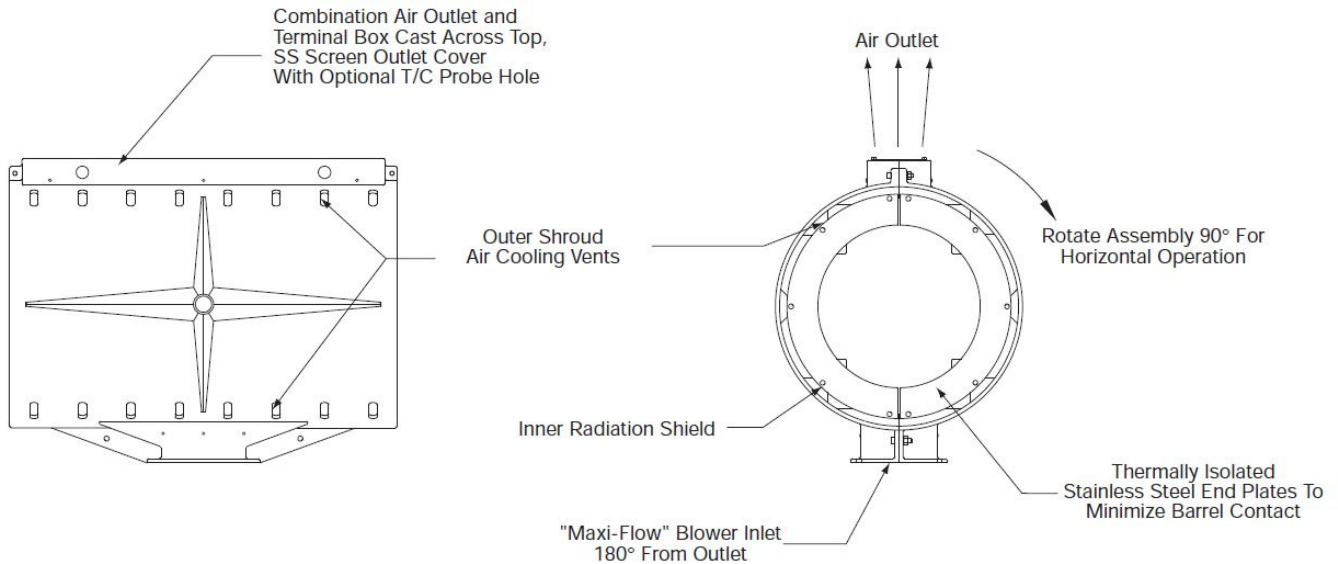
SENSING AND CONTROLLING

- Existing Zone Control Probe – Shroud System can be designed per customer specifications
- Thermal Solutions of Texas supplied Zone Control Probe
- Thermal Solutions' customized Power Control Panel designed to complete Your Thermal Loop System

ALUMINUM SHROUD SYSTEM SPECIFICATIONS FOR FINNED CAST ALUMINUM HEATERS

Dual layer cast aluminum vented outer shell shroud system with stainless steel outer layer supports and reflective aluminum internal layer. This shroud design is not suited for any other finned cast-in heater.

SHROUD PART NUMBER	BARREL OD (Shroud ID)	SHROUD OD	SHROUD WIDTH	BLOWER CFM	HEATER OD	HEATER PART NUMBER	WATTS PER SHROUD	HEATER VOLTAGE
	(inches)	(inches)	(inches)		(inches)			
ASF01179	7.38	13.38	22	550	10.38	CBH10017	8320	230 3Ø
ASF01124	7.50	13.44	23	550	10.50	CBH08128	8000	230 3Ø
ASF01169	8.25	14.25	23	550	11.25	CBH09707	18000	230 3Ø
ASF01105	9.31	15.31	24	550	12.31	CBH07492	15000	230 3Ø
ASF01104	9.31	15.31	29	550	12.31	CBH07491	15000	230 3Ø
ASF01150	13.00	19.00	29	550	16.00	CBH08813	30000	230 3Ø



MADE TO ORDER REQUEST FORM

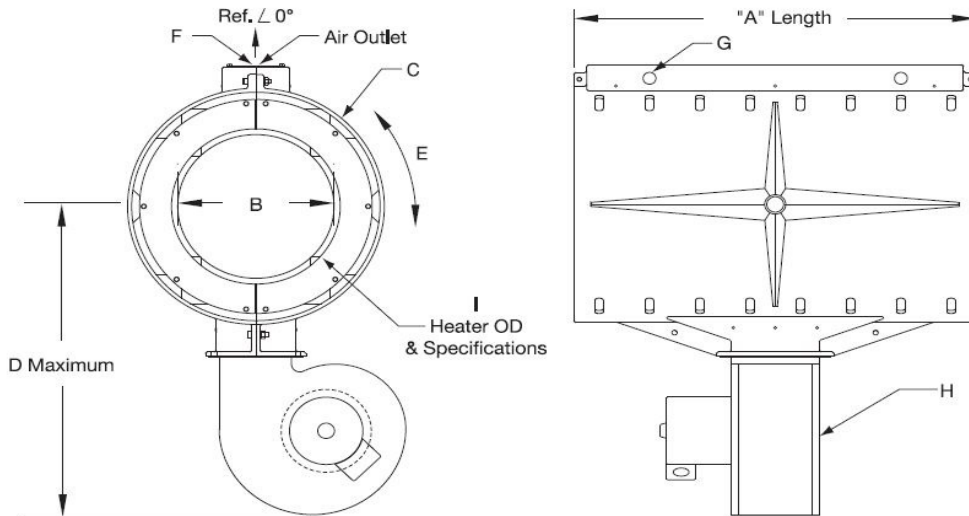
CUSTOMER INFORMATION

NAME: _____ PHONE: _____ FAX: _____
 COMPANY: _____ EMAIL: _____
 ADDRESS: _____
 CITY: _____ STATE: _____ ZIP: _____
EXTRUDER
 MODEL: _____ MFG: _____ PROCESS TEMP: _____ °F °C
 RESIN TYPE: _____

When submitting this form, please include an extruder barrel sketch or drawing that includes the following:

- Extruder Barrel Support(s)
- No. of Heating Zones
- Vent Locations
- Zone Probe Locations
- Input Feed Location
- Pressure Tap Location
- Zone Length(s)
- Additional Restrictions

PLEASE PROVIDE DIGITAL IMAGES (IN .JPG FORMAT) OF THE EXTRUDER BARREL



SHROUD SPECIFICATIONS

Width _____ Zone Length: _____ Barrel OD/Shroud ID: _____ Max Shroud OD: _____ in cm
 Max Blower Clearance: _____ Rotational Orientation of Air Outlet & Blower: _____
 Angle from Vertical 0° (reference if other than 90° or 180°) _____
 Zone T/C Probes: Quantity: _____ Clearance Hole Diameters: _____
 Location: Centered at Top (std) Custom (indicate clockwise from drawing angle): _____
 Wire Entrances: 7/8" (½ trade size conduit – std) 1-3/32" (¾ trade size conduit – optional)
 Customer specified:

BLOWER SPECIFICATIONS

Configuration: Single Dual Customer specified (see below)
 Blower: Part No.: _____ or CFM: _____ Volts: _____ Frequency (Hz): _____
 Optional Inlet Guard Optional Blower Extension: Horizontal Vertical Custom
 Mounting Dimensions: Length: _____ Width: _____
 Customer's blower MFR: _____ Part No.: _____
 (attach mounting info) or CFM: _____ Volts: _____ Frequency (Hz): _____

BLOWER SPECIFICATIONS

Inner Diameter: _____ Wattage per Half: _____ Voltage per Half: _____