MEGAFLEx—ceramic heaters are medium-to-high temperature heaters that have 1200°F as a maximum working temperature. These durable heaters have built-in ceramic fiber jackets that make them energy efficient. MEGAFLEX heaters are available with different terminal styles, are fully flexible, and can accommodate holes and cut-outs.

- Construction overview
- Clamping mechanisms
- Termination styles
- Special Instructions
MEGAFLEX CERAMIC INSULATED BAND HEATERS

- Injection molding machines
- Plastic extruders
- Blow-molding machines
- Container, pipe or tank heating
- Other processes applications

Construction and features
- Reduce Power Consumption
- Conserve Heat
- High degree of flexibility
- Uniform Heat distribution
- Various Termination Styles
- CSA and CE certified

In a MEGAFLEX heater, nickel-chrome wire is embedded in a flexible outer wall made of special, interlocking ceramic tiles, which are assembled like a brick wall. A ceramic fiber insulating mat and a stainless steel jacket cover this assembly. This construction prevents heat loss and reduces electrical consumption by 20%.

An energized MEGAFLEX heater will have a temperature of 350°F-450°F on its outside shell when the inside temperature is maintained at 1200°F. To improve the conservation of energy, different thicknesses of ceramic fiber insulation mats are available.

Heat is transferred from a ceramic heater to the surface of an application through conduction and radiation. This is why a tight grip on the cylinder is not as critical as in other types of heaters. Over-tightening should be avoided, since the pressure on the insulation mat reduces its insulating efficiency.

MEGAFLEX heaters are made by using different combinations of ceramic tiles, which are available only in specific lengths. Consequently, the width of a MEGAFLEX band falls within a certain incremental range.

MEGAFLEX ceramic band heaters can be manufactured with different clamping mechanisms, termination styles, holes, and cut-outs.

Specifications

| Min. Diameter | 2” |
| Min. Width | 1” |
| Thickness with 1/4” | 5/8” |
| Standard Gap | 3/8” |
| Max. Watt Density | 45 w/in² |
MEGAFLEX CERAMIC INSULATED BAND HEATERS

Electrical Terminations

- Post Terminals (B)
- Terminal Box (G)
- Stainless steel braided leads (E)
- Armor Leads (H)
- European Style straight plug (K00)
- European style 90° plug (K90)

G Style– Terminal Box
A practical way to protect screw terminals from damage and exposure.

B Style– Post Terminals
The most commonly used termination style. Recommended for high amperage applications.

H Style– Straight Armor cable
Provides protection against abrasion and contamination.

E Style– Stainless Steel Braided Leads
Highly flexible. Protects the lead wire from abrasion.

K90 Style– European connector
Used when there isn’t enough clearance above a heater to use K00 style European connector.

K00 Style– European Connector
Ideal for termination style when the power leads are frequently removed from the heater. An easy electrical connection when the heater fails.

Selection Tips

- The current amperage limitation for lead wire exiting directly from a heater is 10 amps.
- For higher than 10 amp applications, lead wires should be combined with a terminal box.
- European plugs are adequate for 16 amps. To have a balanced internal winding, it is recommended to locate the terminals at 180° with respect to the gap.
- Ceramic covers could be added to provide safety to exposed terminals.
MEGAFLEX CERAMIC INSULATED BAND HEATERS

Clamping Styles

Flange lock-up
The most economical clamping system, with #10-32 nuts and screws.

Latch & Trunion
Available on heaters that are 10” or bigger in dia.

Barrel nuts
Fasteners with 1/4-20 socket head screws are standard on all MEGAFLEX heaters. This style can accommodate springs which compensate for thermal expansion.

Special Construction

MEGAFLEX ceramic heaters can be combined with high velocity fans to form fast responding heat–cool units in accurate heating applications. These heaters are made with a perforated outside stainless steel sheath, and with no insulating jacket.