

“MAXPAK” Cartridge Heaters.....premium performance, affordable price.

In the years since it's introduction, the Duratherm high watt density, swaged cartridge heater has attained a standard of quality second to none.

Our total commitment to engineering excellence is reflected in our successful efforts to improve heater performance and production efficiency. The results obtained clearly establish “MAXPAK” as the most consistent, reliable and economical cartridge heater on the market.

Quality Design And Construction.....

1

Premium Quality Element Wire. Nickel-chromium resistance wire is precision wound on a high purity ceramic core to optimum computer generated gauge and pitch specifications. Element wires overlap the internal pins and are swaged into a metallurgical bond for optimum connection life.

2

Superior Element Positioning. Precision centering of the element assembly insures optimum heat uniformity around the circumference of the cartridge. The element winding is in close proximity to the cartridge sheath providing rapid and efficient transfer of heat to the application.

3

Densely Compacted Ceramic Insulation. The magnesium oxide ceramic insulation is compressed to near theoretical density in order to provide the best combination of heat transfer and dielectric strength. This dense mass of compacted ceramic also provides maximum resistance to shock and vibration.

4

High Temperature Alloy Sheath. Available sheath materials include various stainless steel and incoloy compositions. Additional metal sheath compositions can also be supplied as applications dictate.

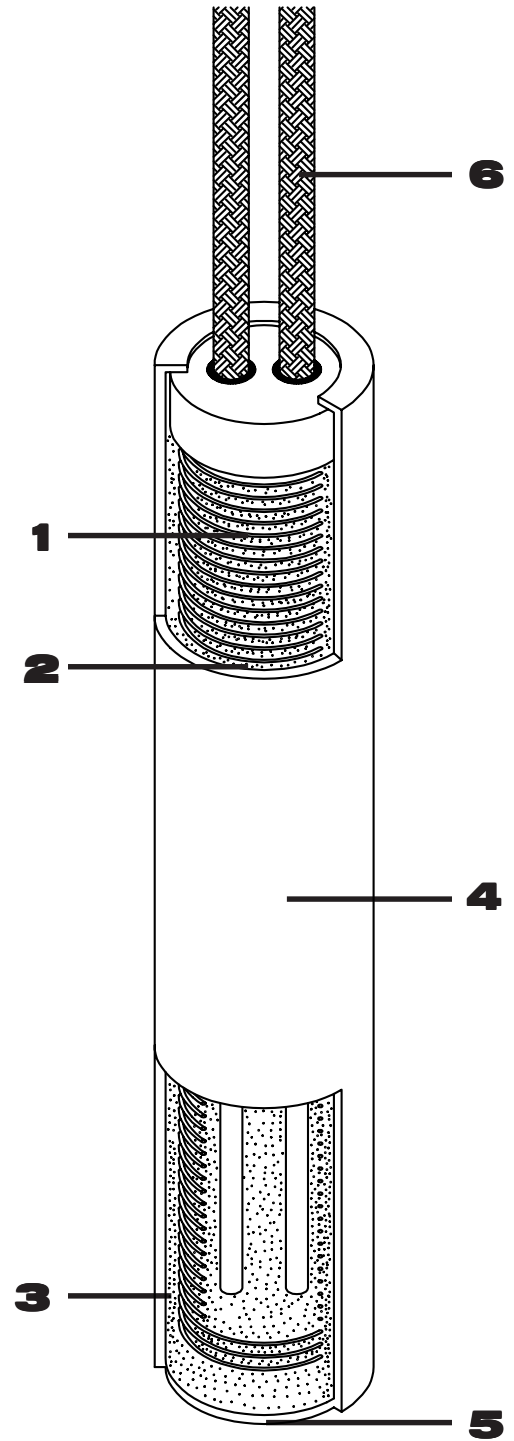
5

Welded End Seal. A metal end disc of the same alloy as the sheath is heli-arc welded into the end of the cartridge. This seal weld offers the total seal required for liquid heating applications as well as eliminating the possibility of contaminants entering the disc end of the cartridge.

6

Durable, Heat Resistant Lead Systems. The standard high temperature leads exit from the cartridge through a protective ceramic end cap. The lead insulation is recessed well into the cap to eliminate any possibility of exposing bare wire when bending the leads sharply at the lead end. Standard leads consist of ten inches of UL approved stranded wire. The lead wire insulation is UL rated for 492°F/250°C continuous operating temperature.

A wide variety of other standard and special purpose lead styles are also available.



"MAXPAK" Cartridge Heaters.....standard, special purpose and custom.

The Duratherm swaged cartridge design and manufacturing process is geared to provide quick delivery on both standard and application oriented versions of the "MAXPAK cartridge heater.

Standard "MAXPAK" Swaged Cartridge Heaters

Our extended range of imperial and metric cartridge diameters was established to provide our customers with a full service source for virtually any standard cartridge diameter required. A wide assortment of lead and seal options, construction variations and mounting options ensures compatibility with both new and existing heating applications.

- *** Extended Imperial And Metric Diameter Range
- *** All Combinations Of Sizes And Ratings Available
- *** Many Popular Lead And Seal Options
- *** Standard Integral Sensor Styles
- *** Wide Range Of Standard Mounting Options
- *** Many Standard Construction Options

Special Purpose "MAXPAK" Swaged Cartridge Heaters

Duratherm manufactures a variety of special purpose "MAXPAK" cartridge heaters for many common specialized heating applications. These special purpose cartridges are designed to provide the optimum physical, thermal and electrical characteristics for the precise application for which they were designed.

- *** Runnerless Injection Mold Heaters
- *** Thermoset Mold Platen Heaters
- *** High Performance Heaters
- *** Bolt Expansion Heaters
- *** High Wattage Immersion Heaters

Custom "MAXPAK" Swaged Cartridge Heaters

Custom cartridge heaters can be manufactured to customer specifications or can be engineered to satisfy the specific requirements of special applications. Custom cartridges often consist of standard units with relatively minor design modifications but may include a variety of the special features noted below.

- *** Unique Application Oriented Lead Configurations
- *** Special Non-Standard Diameters
- *** Extended Temperature And Wattage Performance
- *** Corrosion Resistant And Exotic Sheath Materials
- *** Low voltage Element Designs
- *** Special Multiple Sensor Options
- *** Unique Custom Engineered Construction Options
- *** Special Purpose Mounting Fittings

