Flexible Heater Construction Characteristics

The texture of the fiberglass/silicone material can be “smooth” or “rough”. Smooth silicone tends to be more flexible and stain resistant. Rough silicone has a more durable texture. Standard construction of a plain wire-wound flexible heater is made with rough silicone. Smooth silicone is standard for heaters with PSA, vulcanized to a metal plate or other options or constructions that are deemed necessary by engineering. If smooth silicone is desired, please specify when ordering.

Flexible silicone rubber heaters can be produced using different material thicknesses and texture. Multiple layers can be applied for a thicker heater application. Overlapping the perimeter by 1/2” with the outer layers of a four-layer construction are more “moisture resistant” than standard two-layer construction giving that additional seal around the internal heater. Example: a 10”×10” heater sandwiched between 11”×11” outer layers.

The internal heat distribution pattern(s) allows for the heater element wire to be placed as close as 5/32” from the edge of the flexible heater. The heat pattern can be distributed to accommodate holes or cutouts, or to concentrate the heat in specific sections of the flexible heater as the application dictates. Flexible heaters are produced in two heating element choices: wire-wound elements and etched foil elements (see page 9-4).

Heaters can be supplied up to Standard Max 3’×12’ or Optional Max 4’×12’.

Small heater used to remove condensation in a gas filter is designed with two holes, two slits & Velcro® for easy installation while filter is in use.

Round heater with a center hole used in air horns for motorized vehicles such as Trains, Semi Trucks, or RVs where the leads need to go through the center.

An insulating heater used on a compressor pump to prevent freezing in Siberia.

Cone heater used on a soup dispenser kettle.

Formed heater with six thermocouples for six-zone control used to refurbish airplane propellers by applying heat to cure an epoxy compound that attaches a new nickel lead edge to the propeller blade.

Flexible Heaters

Typical Applications

- Aerospace
- Air Horns
- Aircraft Comfort Heaters
- Airplane Propeller Repair
- Animal Feeders
- ATM Machines
- Autoclaves
- Automotive
- Battery Heaters
- Computer Memory Planes
- Copy Machines
- Credit Card Scanners
- De-Icing
- Drum Heaters
- Food Service Equipment
- Graphic Arts Equipment
- Guidance Systems
- Gyroscopes
- Heated Presses
- Incubators
- Laboratory Equipment
- Laminators
- Liquid Reservoirs
- Medical Equipment
- Mirror Heaters
- Optical Equipment
- Outdoor Antennas
- Packaging Machinery
- Photo Processing
- Recovery Systems
- Refrigeration Equipment
- Security Equipment
- Semiconductor Equipment
- Shoe Machinery
- Turbine Propeller Repair
- Vacuum Chamber
- Vending Machines
- X-Ray Processing

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