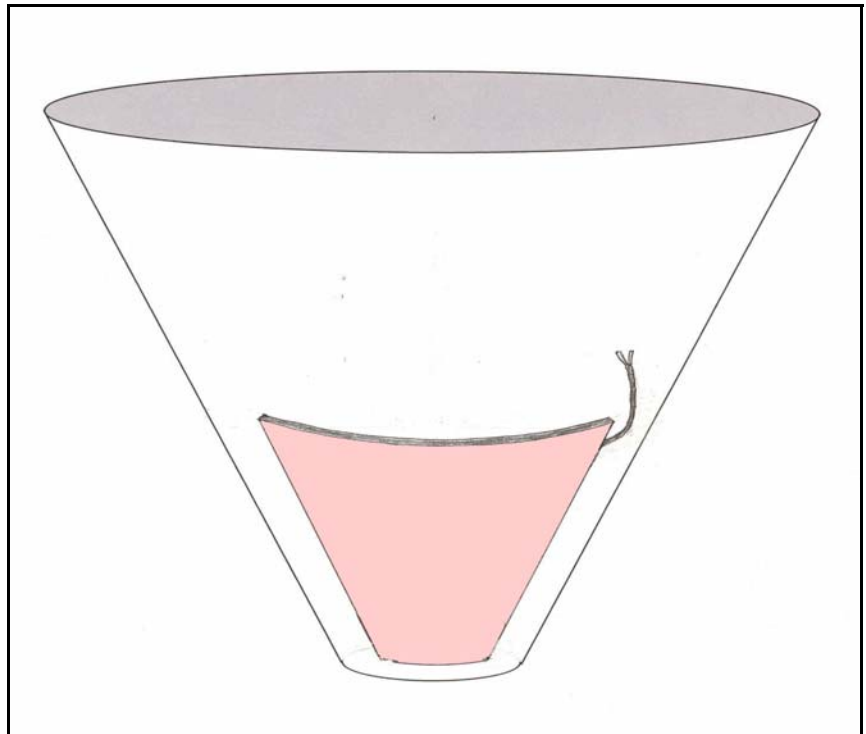




TYPE G HEATING BLANKETS



**FLEXIBLE HEATING
BLANKETS FOR
CONICAL HOPPERS**

INTRODUCTION

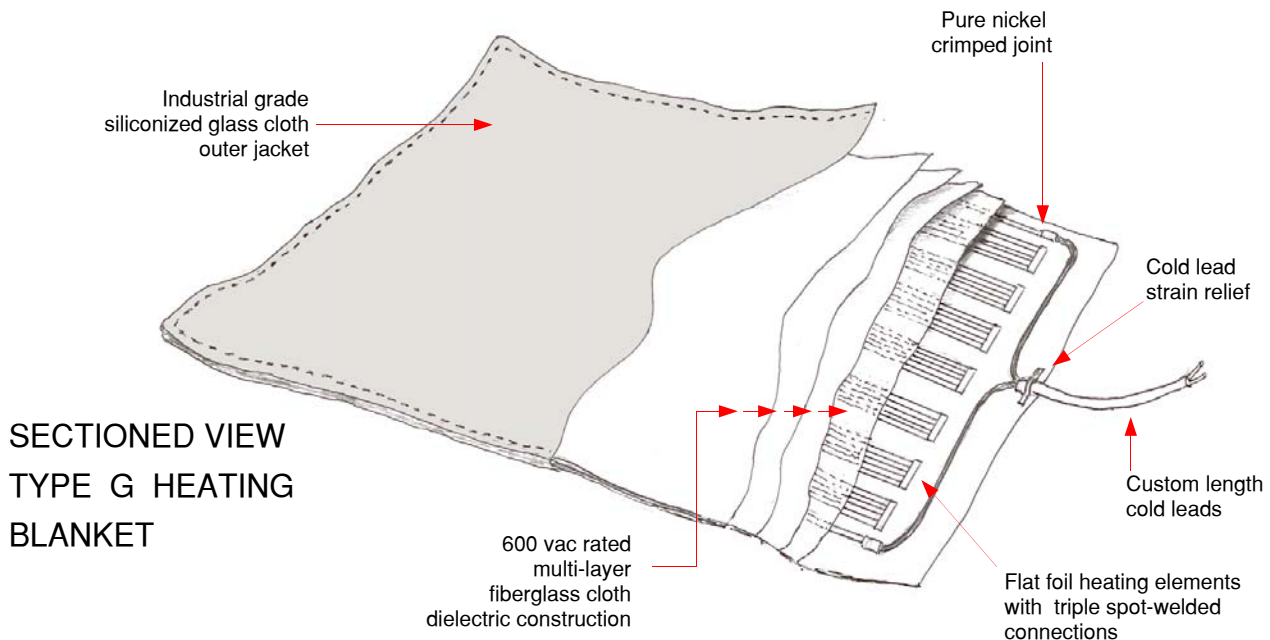
Some styles of Air Pollution Control Equipment are designed with conical shaped hoppers to collect the particulate. Unlike flat pyramidal hoppers, the curved surfaces of conical hoppers cannot be effectively heated with type HB Heating Modules.

Conical hoppers are most effectively heated with a flexible style of heater that can follow the varying curvatures of the cone while continuously maintaining the essential heater - hopper contact. To meet these unique design requirements, HTD Heat Trace, Inc offers the type G Heating Blanket.

The type G Heating Blanket is the exact same heat source that is used inside of the HB Heating Module. This low watt density heater has been successfully used in the manufacture of thousands of heating modules, heating blankets and heating jackets, and repeatedly proves to be the most reliable heat source for use on Flyash, dust and powder applications.

As shown in the following sketch, flat foil heating elements are sewn into a multi-layer, high temperature, fiberglass cloth dielectric construction. This 600 volt rated construction is further protected by an additional outer layer of siliconized glass cloth to provide moisture and water resistance.

Type G Heating Blankets are custom sized and shaped to suit each application and they can be manufactured with power ratings up to 300 watts/sq.ft on voltages from 120 to 600 vac.

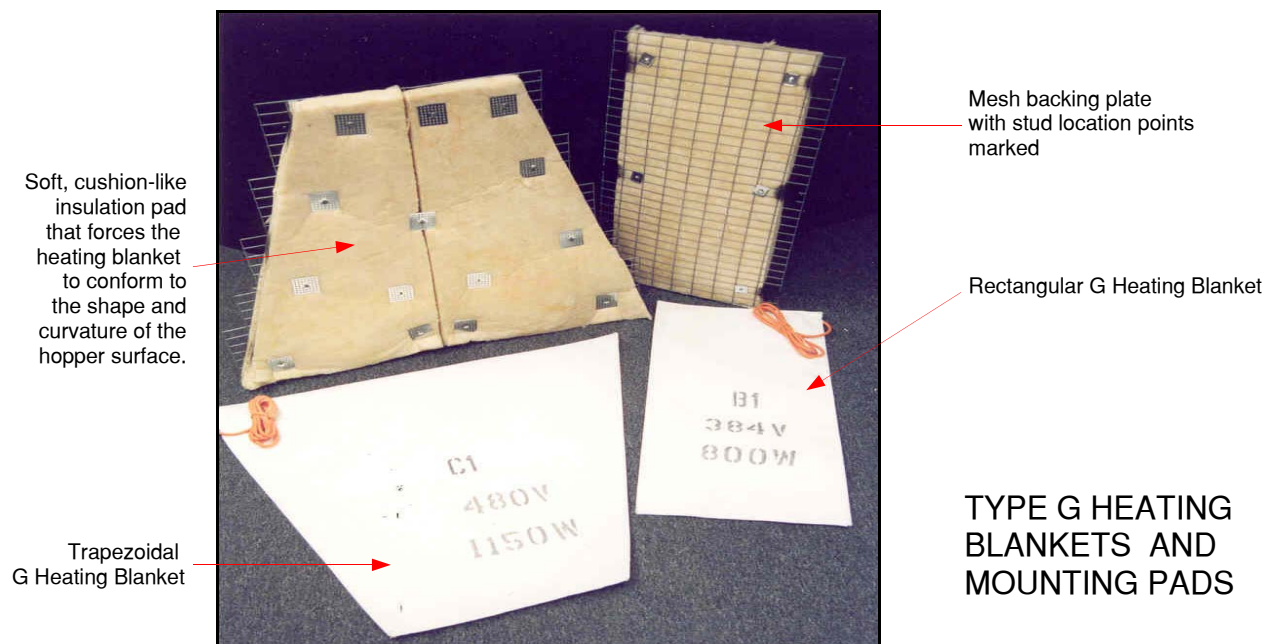


INSTALLATION

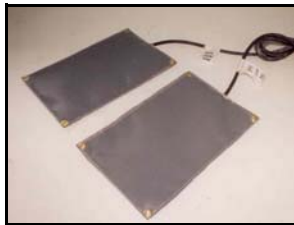
Type G Heating Blankets are supplied with a very simple, effective mounting kit that ensures that the flexible heater blanket follows the exact contours and curvatures of the cone while maintaining continuous and intimate contact with the surface of the hopper. Intimate heater - hopper contact ensures maximum conduction of heat into the hopper and optimizes the reliability and life expectancy of the heater.

The Mounting Kit for each size and shape of heating blanket consists of a soft, cushion-like insulation pad combined with a mesh backing plate (see photograph), mounting studs, nuts and washers. Installation is quick and simple:

- The installer spot welds studs to the hopper surface using the mesh backing plate as a template to locate the exact stud positions.
- The G Heating Blanket is positioned and initially held to the hopper surface with strips of glass tape that are laced in a criss-cross pattern from stud to stud.
- The insulation / mesh mounting pad is placed over the heating blanket and impaled onto the studs.
- Pressure is applied to the mesh backing plate, forcing the "soft" insulation to compress, which, in turn, forces the heating blanket to conform to the shape of the hopper.
- Large washers are applied over the mesh and double nuts are used to apply the final compressive pressure that permanently holds the heating blanket in contact with the hopper surface.



*CUSTOM SIZES &
SHAPES*



Type G Heating Blankets are custom sized and shaped to fit the lower areas of the hopper being heated.

System designs and heater layouts may included:

- Rectangular shaped heaters that spread in a "petal" formation from the hopper throat area up the sides of the hopper.
- Trapezoidal shaped blankets tailored to fit the hopper throat and lower third of the hopper.
- Poke tubes, transition pipes and the cylindrical throat outlets that connect to the evacuation valves below the hoppers are frequently heated with strips of G Heating Blanket.

*SYSTEM DESIGN AND
ENGINEERING*

HTD offers a complete design and engineering service for all hopper heating applications.

The hopper heating system will be designed exclusively for your hopper size and configuration. Thermal engineering and calculations will be based upon maintaining your specified temperature with worst case, winter operating conditions. Thermal insulation type and thickness can be specified or we can recommend optimum choices based upon your application needs.

System designs include heating blankets, power junction boxes and all mounting brackets and hardware. Layout drawings and wiring diagrams are standard with each system.

Control systems can be as simple as local mounted thermostats with integral contactors all the way up to PLC based, Control, Monitoring, Alarm and Energy Management Panels and Systems.

Please contact HTD for further information.



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