



INSULTECH® “HEAT SHIELD” SPECIFICATION

Design: LT500HS-TC

For use on Low Temperature Thermal Service

SERVICE: A cost effect thermal insulation solution, used on equipment, machinery and surfaces not exceeding 500°F. Thermal “Heat Shield” exposure can be indoors and outdoors. INSULTECH® Heat Shield is weather / water resistant, ideal for commercial / industrial settings. INSULTECH® Heat Shield is a cost effective insulation design with many of the features typical of a self contained INSULTECH® Blanket Insulation design.

EQUIPMENT APPLICATIONS:

- Steam Traps
- Threaded Steam Fittings
- Condensate Systems
- Condensate Pumps
- Steam Tracing
- Pumping Traps

BLANKET COMPONENTS:

- Outer Jacket: • 18.0 oz/sy - PTFE Teflon Impregnated Fiberglass Cloth
- Insulation: • 1/4” Thick – ManniGlass® 1900 Non-Woven Glass Fiber

Physical Data:

Physical Properties	Performance Measures	Test Methods
Thermal Conductivity	0.205 @ 75° F 0.27 @ 250° F 0.40 @ 500° F	ASTM-C177 / C518
Insulation Density	7 PCF	
Upper Use Temperature Limit	1200° F (Insulation Rating)	UL 94V-0 Non-Flammability

DESIGN REQUIREMENTS:

The INSULTECH® Heat Shield will be custom fit to match the treated surface. Using CAD / CNC technology, INSULTECH® Heat Shield will match complex surface geometry with close tolerances. All pieces will include a Velcro™ flap closure along seams to assure maximum thermal performance.

FABRICATION REQUIREMENTS:

- A. INSULTECH® Heat Shield outer jacketing will match the treated surface and will account for thickness changes resulting from the composite addition of Non-Woven Glass Fiber insulation. This material is stitch quilted to the jacketing, producing a self contained heat shield system, easy to install within minutes. Sewing thread will be a PTFE fiberglass.



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- B.** The outer jacket surface will be designed and manufactured via CAD/CNC for exact fit and finish. CAD design will allow a precision CNC production approach with maximum tolerances. A CAD electronic filing and storage will be necessary for future reference, establishing a part number library which will match an existing Steam Trap Management Program.
- C.** For ease of identification and location, an aluminum or stainless steel name plate tag will be riveted to each blanket piece. 1/8” Embossed lettering will include equipment model, description, size, rating and tag number sequence. The tag will appear in a visible location on the exterior surface of the heat shield blanket.
- D.** INSULTECH® Heat Shield Insulation will accommodate inspection / survey access by providing a 3/8” diameter brass or stainless steel grommet, placed strategically.
- E.** INSULTECH® Heat Shield Insulation projects will include an instruction package shipped with the material. This package will include Assembly Drawings, identifying piece location, a material list of all pieces and instructions for installation on how the INSULTECH® Heat Shield will be installed. This feature will be presented for Steam Trap Manifolds & Steam Trap Assemblies.
- F.** INSULTECH® Heat Shield Insulation will be guaranteed to fit. Warranty timeline is 18 months, from date of installation and it applies to material replacement only.
- G.** INSULTECH® Heat Shield Insulation will include a Velcro® hook & loop fastener sewn to an outer jacketing flap. A 1” wide hook will be stitched to the outer jacketing surface of heat shield and a 1” wide loop fastener will be stitched to an extended outer jacketing flap. The Velcro® will be polypropylene, sewn with a multiple filament black polypropylene thread.
- H.** To access the true limitations of this recommended design, refer to the technical data sheets on each product component. This recommended design is intended to follow those guidelines and produce the highest achievable service life possible. Blanket design quality can be reduced or enhanced by changing any one component. If a question arises regarding deviations from those stated guidelines, please contact your regional representative or call Shannon direct.