



**DESIGN SPECIFICATION: LT550SG**

**For use on Plastic Extrusion Equipment – Below 550 F**

**SERVICE:** This design can be used on piping and equipment not exceeding 550°F (288°C). Outer jacket fabric is non-pervious and is suitable for exposure to molten plastic and oils. Inner jacket is pervious to liquids and should not be used in areas of potential wicking. Double sewn construction protects both jacketing materials.

**APPLICATIONS:** Extruder Barrels & Heads    Injection Molding    Blow Molders

**DESIGN COMPONENTS:**

- Outer Jacketing:                    32.0 oz./sq. yd. HD - Silicone Impregnated Fiberglass Cloth
- Insulation:                            Fiberglass Needled Mat - 11 lb./ft.3 density (1" & 1.5" Thick)
- Inner Jacketing:                    24 oz./ sq. yd. Heavy Duty - Plain Fiberglass Cloth

**Blanket Thickness to Surface Temperature Reference:**

<u>Operating Temp.</u>	<u>Thick.</u>	<u>Surface Temp.</u>	<u>Thick.</u>	<u>Surface Temp.</u>
450°F (232°C)	1"	135°F	1.5"	118°F
550°F (288°C)	1"	154°F	1.5"	132°F

- \* The above reference cold face surface temperatures should be used as guidelines for blanket thickness design.
- \* The cold face surface temperature of the blanket should achieve ambient temperature conditions.
- \* The economic thickness of the blanket should consider blanket cost to thermal performance.
- \* Heat loss calculations are based on a 70°F ambient using a flat surface condition.

**FABRICATION REQUIREMENTS:**

- a.) Blanket construction shall be a double sewn lock stitch with a minimum of 7 stitches per inch. All raw jacket edges will have a double folded aluminized fiberglass fabric overlapping the outer silicone fabric and inner plain fiberglass cloth. No raw cut jacket edge will be exposed. Stitching will be Teflon® coated fiberglass thread. Binding edge shall be fiberglass cloth side exposed & stapled using 3/8" wide monel staples, placed 1" on center along the binding edge.
- b.) For ease of identification and location, an aluminum name plate tag will be riveted to each blanket piece. 1/8" Embossed lettering will include location, description, size, and tag number sequence.
- c.) Blanket design will include a belting system for securement and installation. The belting system will include a 1.5" inch wide silicone fiberglass cloth belt and 1.5" inch wide Velcro® hook loop fasteners. This belt will have three layers of silicone fiberglass cloth double stitched. A 1.25" inch wide stainless steel "D" ring will be attached to the belt. Both sides of the belting system will be attached to the outer layer of silicone cloth fabric with a 2.5" x 1" cross pattern box stitch. Belts will be spaced at most, 8" inches on center along the blanket edge.
- d.) Outer jacketing surface will include a Mylar® composite "Warning Label" (3"x5") to alert the operator of extreme temperature. The label will be sewn onto the outer jacketing and it will be visible.
- e.) 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 can be reduced or enhanced by changing any one component. If a question arises regarding deviations from the stated guidelines, please consult your regional representative or call Shannon direct.