

Shrink Tite Tape

- Shrink-tite tape is a post modified polyester, which when heated undergoes shrinkage in the length wise direction only
- This characteristic is used to consolidate mandrel wound composite preforms and uncured rubbers, to form high quality low voidage components
- The shrink-tite tape is fastened off with suitably rated adhesive flashtape, and spiral wound along the component
- A single layer exerts a maximum loading of up to cm^2/Kg on a small diameter mandrel. (Reducing as the diameter increases). The pressure exerted increases proportionally to the number of layers used
- Shrinkage starts at 80°C and gives highest pressure at 148°C . Over 148°C the pressure reduces. If multilayer wrapping is used, shrinking each layer with a heat gun will prevent wrinkling in the underlying layers
- The tapes natural release properties are limited and to ensure clean release after cure, a suitable release film or peel ply should be applied to the mandrel before the shrink-tite tape
- Also available, self releasing on upper surface

SPECIFICATION

• Optimum use temperature	148°C
• Initial shrinkage occurs	80°C
• Maximum Use Temperature	200°C
• Melt temperature	245°C
• Nominal shrinkage length	20%
• Width shrinkage	zero
• Maximum length shrink force	175 cm^2/Kg
• Time to reach maximum shrinkage	10 minutes
• Chemical resistance	to oils, moisture, resins, varnishes and most solvents
• Flammability	auto ignition over 480°C
• Tensile strength	over 1757 cm^2/Kg

AVAILABILITY & PACKAGING

• Thickness	0.05mm (standard)
• Widths	32mm & 64mm
• Length of roll	91.44m

STORAGE & HANDLING

- Store away from heat

Cont.

Aerovac Systems Ltd.

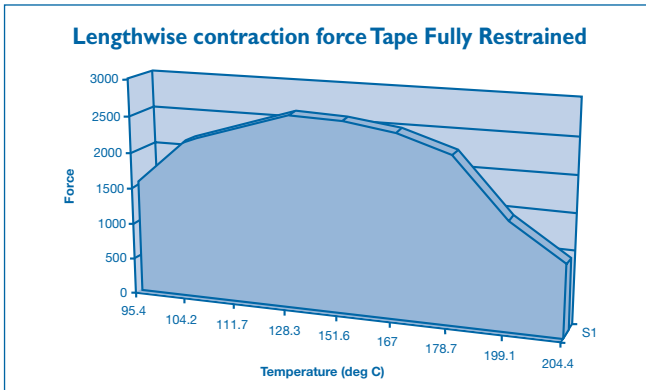
Tel: 01274 550500 Fax: 01274 550501 e-mail: sales@aerovac.com website: www.aerovac.com

All statements, technical information and recommendations contained in this publication are based on tests believed to be reliable, but their accuracy and/or completeness are not guaranteed. The user shall determine the suitability for this particular purpose and shall assume all risk and liability in connection herewith.

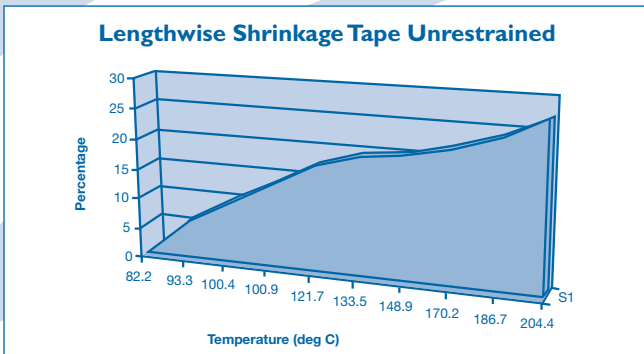
Calculation to determine the approx. psi compression force exerted by Shrink Tite Tape over a cylindrical object

Compression force (psi)	=	2 x 2500 x Thickness x laps
		Diameter
Where:	2500	= psi Shrink force of the tape @ 148.9°C (longitudinal force)
	Thickness	= Thickness of the Shrink Tite Tape (0.002" or 0.005")
	Laps	= Number of layers of the Shrink Tite Tape
	Diameter	= Outside diameter of the cylinder (inches)

- Graph 1) This graph represents the lengthwise contraction force tape fully restrained



- Graph 2) This graph represents lengthwise shrinkage tape unrestrained



Aerovac Systems Ltd.

Tel: 01274 550500 Fax: 01274 550501 e-mail: sales@aerovac.com website: www.aerovac.com

All statements, technical information and recommendations contained in this publication are based on tests believed to be reliable, but their accuracy and/or completeness are not guaranteed. The user shall determine the suitability for this particular purpose and shall assume all risk and liability in connection herewith.