PRODUCT DATA SHEET

Denso S43 HT Tape

High Temperature Butyl Tape System

Description

Denso S43 HT Tape is a multi-layer, asymmetric coextruded plastic tape. It consists of a stabalised polyethylene backing coated on both sides with permanently plastic butyl rubber compound.

Uses

The Denso Butyl Tape System is designed for the protection of buried or immersed line pipe, joints, welds, bends, fittings and for repairs to damaged areas in factory coated pipes.

Features

- Suitable for continuous operating temperature up to 80°C
- Self amalgamating butyl rubber compound
- Non-hardening and non-cracking
- Excellent resistance to mineral acids, alkalis and salts
- Compatible with factory applied pipeline coatings such as polyethylene (PE) and polypropylene (PP), polyurethane (PU)

Application

Prepare surface to ISO 8501-1 Sa 2½. Edges should be chamfered to remove step down. Abrade approximately 100 mm band of the pre-existing factory coatings and solvent (naphtha, toluene) degrease either side of the joint.

Priming: Denso Butyl Primer HT should be applied to the prepared substrate at a rate of 4 m^2/L and allowed to tack-dry (5 to 10 minutes) before applying tape.

Tape Wrapping: Apply the Denso S43 HT Tape with slight tension. Carry out the wrapping with the grey coloured inner layer in contact with the substrate. The start and the end of the coating to be wrapped a 50 mm width cylindrically on the factory coating. Progress to spirally wrap tape using a 55% overlap, tapering approx. 1% and without folds. Remove release liner as wrapping progresses. When commencing a new roll, the first wrap to be applied cylindrically, incorporating the endpiece of the preceding roll with one width overlap.

Apply second layer of tape over the initial wrap, also with slight tension and with the grey coloured layer in contact with the black layer of the previous wrap. The outer wrap must cover the inner wrap at the edges with minimum 25 mm, so that minimum 75 mm of the factory coating, painted initially in a width of approx. 100 mm, are incorporated into the site applied coating.

The end of the wrapping to be completed at a 3-o'clock position. Apply the last 100-150 mm of the Denso S43 HT Tape on to itself and without any tension. Press firmly by hand. The coating to be holiday tested to detect any discontinuities.

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Property Specifications

Properties	Value
Thickness (ASTM D1000)	
Adhesive - inside coating	*0.45 mm (Grey)*
Adhesive - outside coating	*0.04 mm (Black)*
Backing	*0.31 mm (Black)*
Total thickness	*0.80 mm*
Tape strength (ASTM D 1000)	*11 N/mm*
Elongation @ break (ASTM D1000)	*740%*
Hardness of the polyethylene foil (DIN 53505, ISO 868)	*40 Shore D*
Peel strength - tape to tape @ 100 mm/min (ISO 21809-3)	*4.5 N/mm (@ 23°C), 0.3 N/mm (@ 80°C)*
Water absorption (DIN EN ISO 62)	*0.05%*
Available size	*100 mm x 20 m*
Maximum Continuous Service Temperature	*80°C*
Peak Intermittent temperature	*90°C*
Coating System (4-layer system)	
Total thickness	*3.2 mm*
Impact resistance	*4.5 J/mm*
Indentation resistance - pressure (ISO 21809-3)	*1.0 N/mm² (23°C), 1.0 N/mm² (80°C)*
Indentation resistance - residual thickness (ISO 21809-3)	*1.0 mm (23°C), 0.70 mm (80°C)*
Specific electrical insulation resistance (ISO 21809-3)	*10^{12} ohm.m²*
Peel strength - on pipe surface @ 10 mm/min (ISO 21809-3)	*3.0 N/mm (23°C), 0.2 N/mm (80°C)*
Peel strength - on factory coating @ 10 mm/min (ISO 21809-3)	*2.3 N/mm (23°C), 0.1 N/mm (80°C)*
Lap shear strength - to steel @ 10 mm/min (ISO 21809-3)	*0.3 N/mm² (23°C), 0.05 N/mm² (80°C)*
Lap shear strength - on factory coating @ 10 mm/min (ISO 21809-3)	*0.3 N/mm² (23°C), 0.05 N/mm² (80°C)*

STORAGE: In dry, ambient temperature and away from heat and direct sunlight.

PACKAGING: 8 rolls per carton (19 kg)

DENSO (AUSTRALIA) PTY LTD
77 - 95 National Boulevard
Campbellfield, VIC 3061
Tel: +61 3 9356 7600
Fax: +61 3 9356 7699

www.densoaustralia.com.au

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