

Petrolatum Tape System

USE:

For the protection of pipes, welded joints, bends, fittings and similar structures from corrosion, above ground, buried or immersed. To protect the substrate from the environment the tape must cover and make intimate contact with the entire surface.

EQUIPMENT LIST

Power wire brush / scraper / blast cleaning equipment (optional)

Brush, brush cleaning solvent

Utility knife

Overalls, gloves, cleaning cloth, hand cleaner, barrier cream

SURFACE PREPARATION:

Surfaces must be dry and free from dirt. Solvent wipe with a clean cloth to remove any grease deposits.

Power wire brush to remove all scale, loose rust and old flaking coatings to achieve a minimum finish of St2 according to ISO 8501-1 or Swedish Standard SIS 0055900.

APPLICATION:**1. PRIMING**

Brush or hand apply (with use of gloves) an even coat of DENSO MP Primer over the entire area to be wrapped.

Coverage: 2-5m²/kg

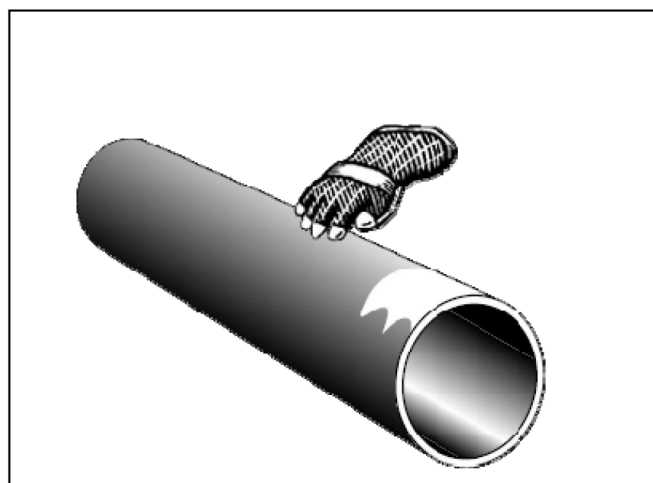


Fig 1. Priming pipes, rods and cables. Apply DENSO MP PRIMER to entire area to be wrapped with tape.

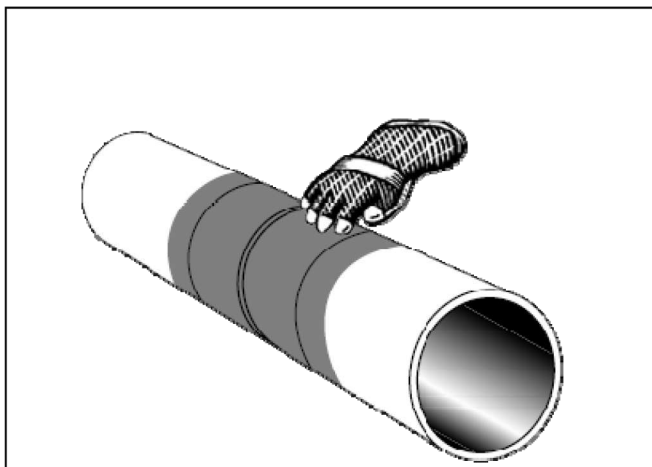


Fig 2. Priming butt welded joints. Apply DENSO MP PRIMER to entire area to be wrapped with tape.

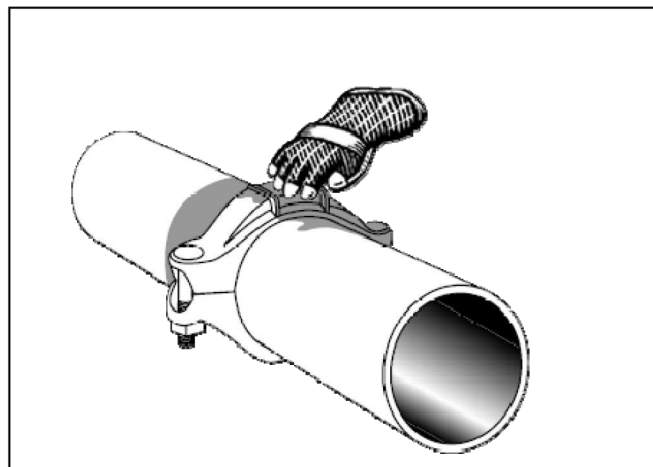


Fig 3. Priming flanges and couplings. Apply DENSO MP PRIMER to entire area to be wrapped with tape.

2. APPLICATION

a) Pipes, Rods and Cables:

Select as wide a width of tape as practical, e.g. 100mm wide for 100mm diameter pipe. When first applying, ensure that the outer side of the tape is applied to the substrate. Maintain sufficient tension, without stretching the tape, to ensure that the tape conforms to the surface without gaps. Repeat this step, overlapping each turn by at least 55% to give double thickness. Start new roll by overlapping the ends by one tape width.

Note: Where longitudinal welds are included in the area to be wrapped, apply a 100mm wide strip of the tape longitudinally over the weld and press into the contours before wrapping.

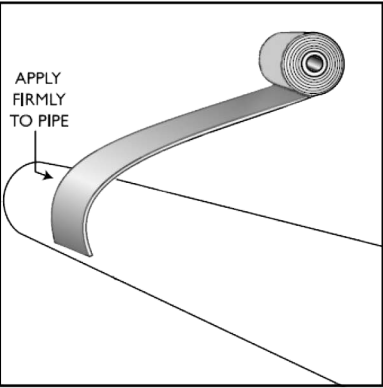


Fig 4. Start at the 9 o clock position.

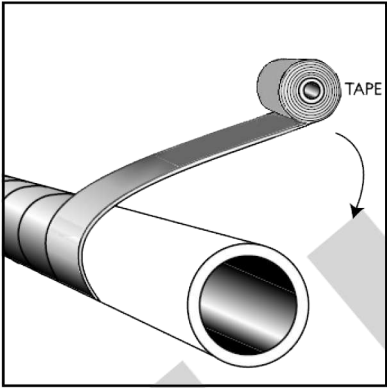


Fig 5. Diagram showing the correct application procedure for wrapping tape. Ensure that the compound side of tape is to the substrate.

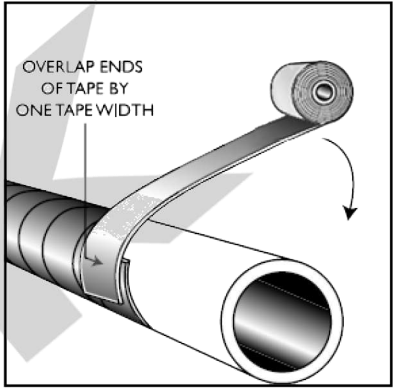


Fig 6. Starting a new roll of tape.

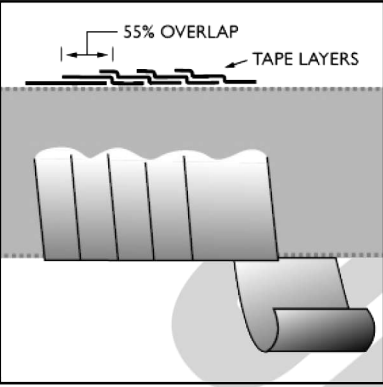


Fig 7. Overlapping each turn by 55% gives a double thickness.

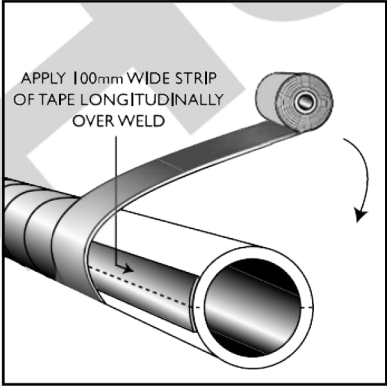


Fig 8. Wrapping a longitudinal weld.

For buried application, one should include Denso PVC Self Adhesive Tape, to be applied as per Fig 4. to Fig 7.

For above ground application apply Denso Sirex tape (optional) to protect against UV as per Fig 4. to Fig 7

b) Butt Welded Joints:

Proceed as (a) but start and finish wrapping with a minimum of 75mm overlap on to the existing pipe coating either side of the joint area.

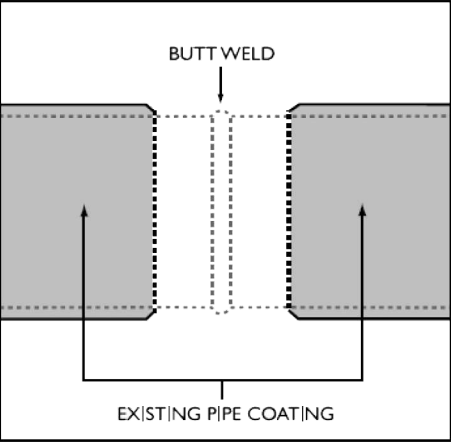
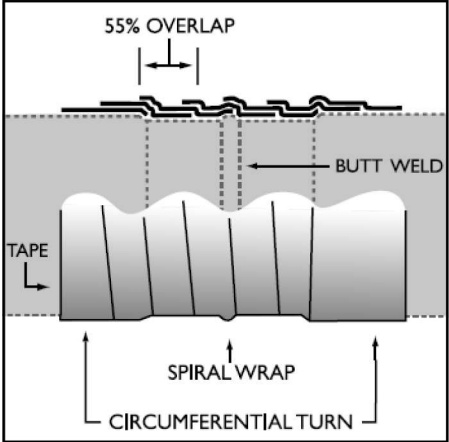


Fig 9. Butt weld and existing coating ready for over wrapping with tape. Note cutback of coating can be 75mm - 150mm either side of the weld except on FBE coated pipe.

- Fig 10. Note method of wrapping.
- 1. Start with one circumferential turn Onto factory coating.
 - 2. Then change to spiral wrap with 55% overlap over weld area.
 - 3. Finish with one circumferential turn over factory coating the opposite side of the weld. Overlap tape at least 75mm onto existing coating.
 - 4. Buried application will require the application of Denso PVC Self Adhesive Tape. (Formerly known as MP/HD Outerwrap Tape)



c). Flanges, couplings:

Apply one coat of DENSO MP PRIMER over entire surface to be wrapped. Profile the pipe joint with mastic of choice* so that there will be no air gaps under the subsequent tape wrapping. Push the mastic firmly into all cavities and around all bolt heads building it up to form a profile suitable for wrapping without forming bridges or voids. The tape is applied by dividing the joint into two halves. Start the tape, with the outside facing the pipe surface, on the centre of the crown of the joint and wrap away from the centre, towards the adjoining pipe, overlapping each turn by at least 25mm or preferably 55% to give a double wrap. Finish with at least one circumferential wrap onto the pipe to conclude the first half of the application. Start again on the crown of the joint overlapping initial wrap. Wrap towards the pipe on the opposite side of the joint overlapping tape as per first wrapping. Smooth finished wrap down well, particularly at the tape edges.

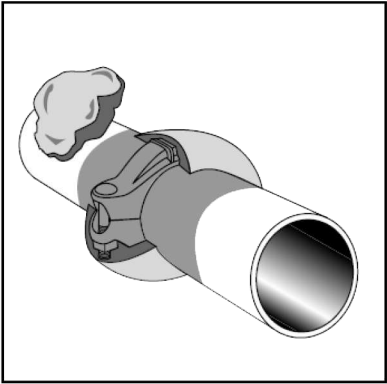


Fig 11. Profiling the joint with mastic of choice.

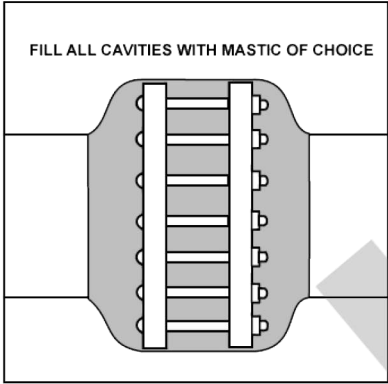


Fig 12. Make sure the mastic is pushed into all crevices and that it forms a smooth profile for wrapping.

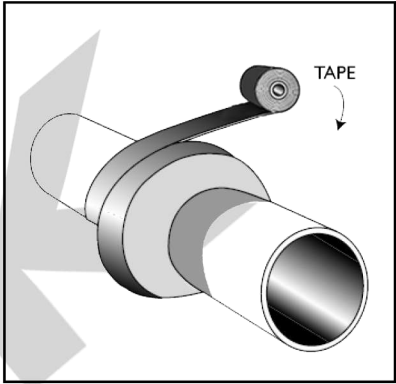


Fig 13. Wrap joint in two halves. Start on crown and work towards pipe then repeat from crown working towards pipe on opposite side of joint.

For buried application, one should include Denso PVC Self Adhesive Tape applied as per Fig 4. to Fig 7.

d) Damaged Coatings:

Cut away and remove loose coating from damaged area and smooth or chamfer edges. Clean area thoroughly then prime the exposed substrate or surface extending 50mm either side of the damage. Repair the damaged area with a patch of tape or mastic of choice*. Wrap the section of pipe as (b).

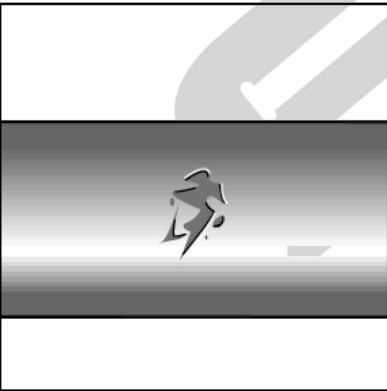


Fig 14. Damaged pipe coating.

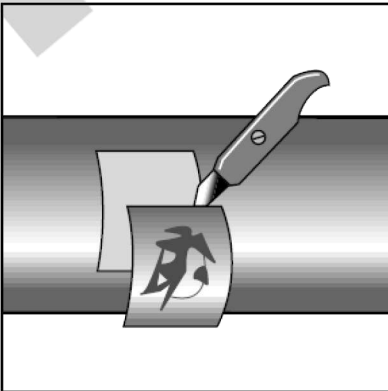


Fig 15. Remove loose or damaged area then clean thoroughly.

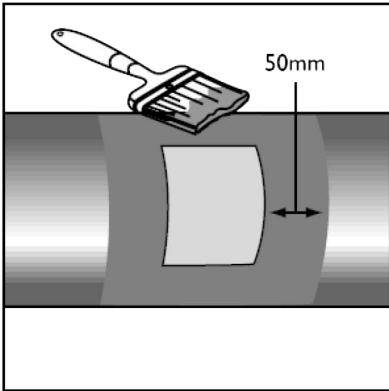


Fig 16. Smooth edges and prime area at least 50mm onto sound coating.

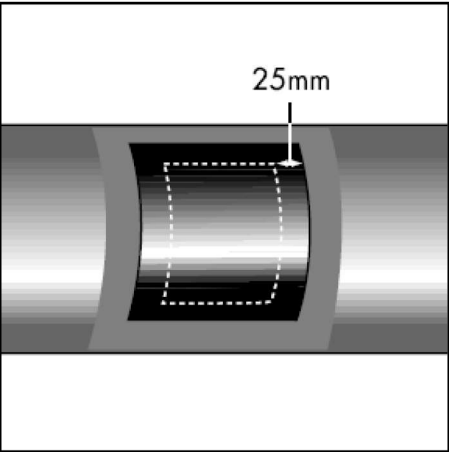


Fig 17. Repair damaged area with a patch of tape overlapping at least 25mm onto primed sound coating area before wrapping with tape as (b)

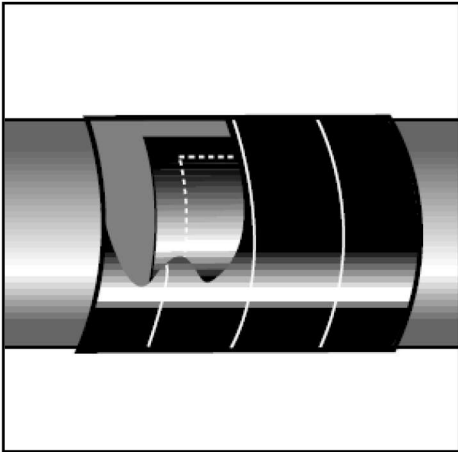


Fig 18. Overwrap repair as (b).

***Choice of mastic:**

Denso Mastic, Densyl Supersoft Mastic, Denso Superlight Profiling Mastic.

3. INSPECTION

Ensure that the entire surface is covered with no gaps or air pockets.
Holiday test at 5kV for single layer and 10kV for double layer.
Note: Holiday testing of petrolatum tapes is not recommended as the tapes are too soft, testing should only be conducted once the PVC Self Adhesive Tape has been applied.

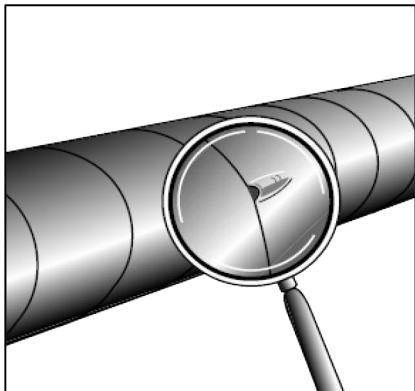


Fig 19. Examine for gaps or air pockets (see repair procedure figs. 14 to 18).

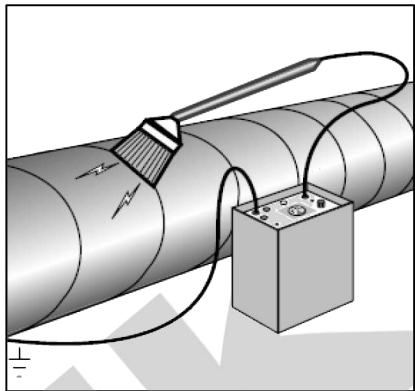


Fig 20. Perform holiday test using a ring or brass brush (5kV for single layer and 10kV for double).

SAFETY DATA:

Storage:	Store correct way up in original packaging. Store away from heat, direct sunlight and open flames.
Transport:	Avoid prolonged exposure to high temperatures during transit, preferably in an enclosed vehicle.
Handling:	Grease resistant gloves may be worn to reduce skin contact. Avoid contact with eyes.
Action in case of fire:	Extinguish with water fog, dry powder, carbon dioxide or chemical foam. Self-contained breathing apparatus may be needed for large fires.
Skin Contact:	Wash with warm water and mild soap. Pumiced heavy duty hand cleaner for stubborn stains.
Swallowing:	If feeling unwell, seek medical advice
Inhalation:	Not considered likely, except in fires avoid inhaling fumes.
Spillage:	Tapes and Denso MP Primer not hazardous. Pick up and collect material by hand.
Disposal:	Incineration or landfill in accordance with local regulations.
Other:	For more information please refer to Denso safety data and technical data sheets. Available for all system components.