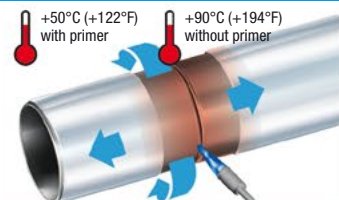


DEKOTEC®-HTS

1. Preparation

- During all application steps, you must wear appropriate personal protection equipment, such as safety shoes, helmet, protective goggles and welding gloves, as prescribed by local health and safety regulations.
- We strongly recommend that new staff becoming involved in using shrink sleeves receive training prior to working on them.
- Roughen adjacent work surfaces (e.g. with an emery cloth #40) and chamfer to an angle of $\leq 30^\circ$.
- For pipe diameters of sizes $> 400\text{mm}$ (16"), we recommend the use of 2 applicators.
- The surface must be dry and free from grease, oil, dust and other impurities prior to blast cleaning with a cleanliness level of at least Sa2½ (ISO 85011). Surface roughness (ISO85031) 50100µm.
- The blasted surface must be protected from the effects of dust and moisture.
- Never touch the cleaned surface with bare hands.
- When using master rolls, the sleeves must be cut to the required length (see table) and must have 45° chamfers.

2. Pre-warming the surface to be coated



- The surface to be coated must be evenly pre-warmed (steel and the adjacent factory coating) to $+50^\circ\text{C}$ ($+122^\circ\text{F}$) prior to the application of the DEKOTEC® Primer. If no DEKOTEC® Primer is used, the surface must be pre-warmed directly to $+90^\circ\text{C}$ up to 100°C ($+194^\circ\text{F}$ up to $+212^\circ\text{F}$) Pre-warming is carried out at a high flame intensity.
- Always use the correct primer for the shrink sleeve system.

3. Mixing DEKOTEC® Primer



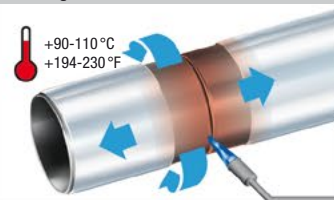
- Mix together DEKOTEC® Primer components A and B and stir for 2 min.
- Always measure out component B first. Before using DENSO hand pumps, a waiting time of approx. 5 sec between the individual pump strokes is highly recommended.
- When using the primer bag, place this on a firm sub-surface, remove the plastic clip and carefully mix the components in the bag using a roller or a clip for 2 min.
- Always adhere to a pre-mixing material temperature of $+20^\circ\text{C}$ to $+40^\circ\text{C}$ ($+68^\circ\text{F}$ to $+104^\circ\text{F}$) for all variants.

4. DEKOTEC® Primer application



- Apply an even layer (DEKOTEC®-EP Primer HT $>200\mu\text{m}$) to the whole area to be coated (steel surface and adjacent factory coating) with a solvent-resistant nylon roller. Alternatively, DEKOTEC®-EP Primer can be applied with a sponge.

5. Curing the DEKOTEC® Primer



- Curing the DEKOTEC® Primer with strong flame intensity up to a surface temperature of $+90^\circ\text{C}$ to $+110^\circ\text{C}$ ($+194^\circ\text{F}$ to $+230^\circ\text{F}$).
- Curing is complete when the DEKOTEC® Primer is dry to the touch.
- Maintain temperature of $+90^\circ\text{C}$ ($+194^\circ\text{F}$) until the sleeve is applied.

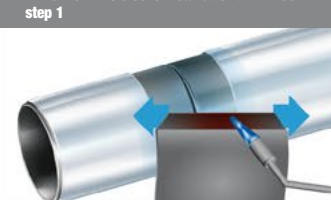
6. DEKOTEC®-HTS sleeve installation $\leq \text{DN } 100$



- Warm the entire sleeve on the adhesive side.
- Press on the sleeve in the steel area by hand so that it is free of air, overlap and push out any air pockets from the centre of the seam to the right and left.

Caution: Risk of burns.

7. DEKOTEC®-HTS sleeve installation $> \text{DN } 100$ step 1



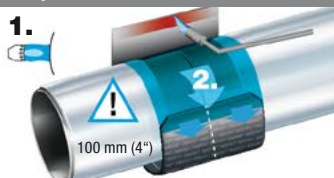
- Warm the adhesive side of the sleeve on the side with the 45° chamfer to a length of approx. 200mm (8").

8. DEKOTEC®-HTS sleeve installation $> \text{DN } 100$ step 2



- Press the DEKOTEC®-HTS onto the pre-warmed surface in a 2 o'clock position so that the centre marking is positioned on the sleeve above the weld seam.
- Remove any air pockets using the roller, as shown in the image.

9. DEKOTEC®-HTS sleeve installation $> \text{DN } 100$ step 3



- Warm the adhesive side of the DEKOTEC®-HTS at the loose end at a length of approx. 100mm (4").
- Press the loose end firmly onto the surface of the already installed end so that the centre marking of the sleeve at both ends is superimposed. Overlapping of the sleeve ends at approx. 100 mm (4").
- If the sealing flap of the DEKOTEC®-CLP has been pre-installed, warm it until the silvery surface is shiny.

10. DEKOTEC®-CLP Applying the sealing flaps



- Warm up the adhesive side (silver) of the DEKOTEC®-CLP sealing flap until it is shiny.
- Apply the DEKOTEC®-CLP in the overlap area of the sleeve by firmly pressing down on the surface with the superimposed centre markings.
- Avoid bending the sealing flap.

11. DEKOTEC®-CLP (pre-installed) Applying the sealing flaps.



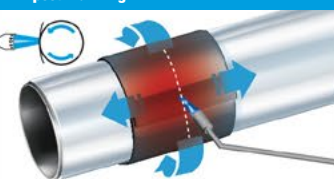
- Reduce the burner to a lower intensity (yellow flame).
- Warm the sealing flap progressively and pummel it by hand until it is smooth and tight all over.

12. DEKOTEC®-HTS Sleeve Installation Shrinking



- Use a medium intensity burner to shrink the DEKOTEC®-HTS sleeve.
- Heat the sleeve from the centre to the edges around the circumference with even movements.
- For pipe diameters of $> 400\text{mm}$ (16") 2 burners should be used in the respective opposite position.

13. DEKOTEC®-HTS Sleeve installation post-warming



- Even warming of the entire DEKOTEC®-HTS sleeve with strong flame intensity.
- The "DEKOTEC" embossing will disappear when sufficient heat is applied.
- The adhesive must be visible on both sides of the sleeve around the entire circumference.

14. DEKOTEC®-HTS Sleeve installation Smoothing



- Use a roller to remove air pockets. First, roll around the circumference to overlap the sleeve.
- Starting in the overlap area, from the centre to the edges, the roller is moved back and forth in a zig zag motion to push the air pockets forwards.
- Before filling, allow the sleeve to cool to the ambient temperature.

Pipe size diameter			Sleeve length	Length DEKOTEC®-CLP
DN (nominal diameter) (mm)	DA (outer diameter) (mm)	DN (inch)	mm	mm
80	88.9	3"	370	75
100	114.3	4"	455	75
150	168.3	6"	680	100
200	219.1	8"	850	100
300	323.9	12"	1195	150
400	406.4	16"	1465	150
500	508.0	20"	1800	150
600	609.6	24"	2135	200
700	711.2	28"	2470	200
800	812.8	32"	2800	200
900	914.4	36"	3135	200
1000	1016.0	40"	3470	200
1200	1219.2	48"	4135	200
1400	1422.4	56"	4800	200

The above values are theoretically determined on the basis of the specified tube outer diameter and a max. 4mm thick factory coating. These must be checked before cutting. Other cutting lengths on request.