

i1

Injected junction kit

Composition of the i1 kit:



- 1 drilled rigid HDPE muff
- 2 heat-shrinkable sleeves



- 1 box of Polyol
- 1 box of Isocyanate
- 1 mixing spatula

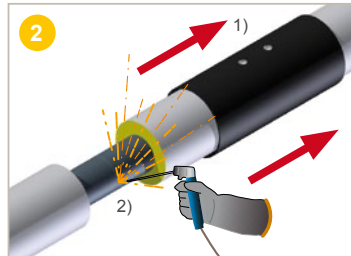


- 2 vent plugs
- 2 female closure plugs
- 2 male closure plugs
- 2 closure patches (FOPS)





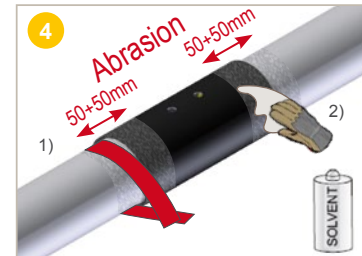
- 1) **Scrape** the PUR foam off the front (all signs of damp PUR foam must be removed from the ends).
- 2) **Clean** the ends of the pipes or parts with a cloth to remove any water, mud or sand.



- 1) **Slide** the HDPE muff onto one of the pipes, pushing it along a sufficient distance.
- 2) **Align** the pipes and weld the two steel pipes together according to professional standards.



- Slide** the HDPE muff at the stripped area so that it covers the pipe casing by **10 cm on each end**.
- ⚠ **Make sure** that the steel weld has cooled down before sliding the muff.



- 1) **Roughen** the surfaces (muff + casing 50 mm on each side) with abrasive paper (grain 40-60) or a wire brush.
- 2) **Clean and degrease** the roughened surfaces with a cloth dipped in ethanol (min. 94 %).



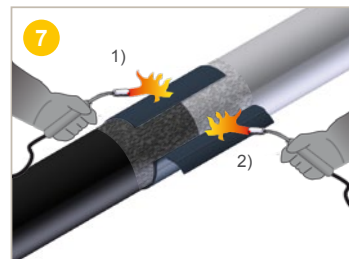
Use a blowtorch to **warm** the surfaces to be covered (muff + casing 50 mm on each end) up to at least 65 °C. Check the temperature on all surfaces with a thermometer.



Fit the heat-shrinkable sleeve on the joint so that the overlap lies between the 10 o'clock and 2 o'clock positions

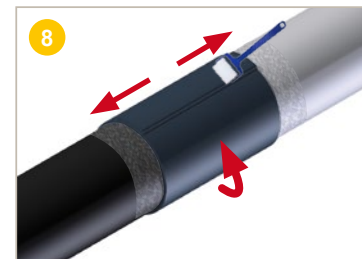
⚠ **Remember to remove its protective film.**

⚠ **Respect the implementation direction using the indicator:** large diameter muff side, small diameter pipe side.



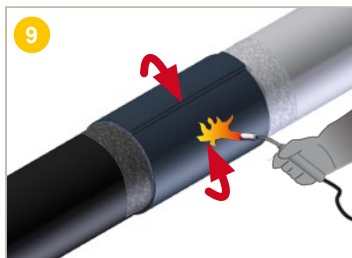
Leave 1 to 2 cm clearance to ensure correct shrinkage.

- 1) **Warm** the overlapping part of the heat-shrinkable sleeve slightly.
- 2) Then **warm** the adhesive of the other part of the sleeve called the "adhesive patch".



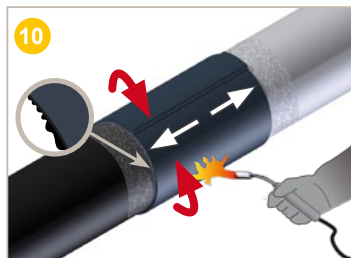
Press both ends of the heat-shrinkable sleeve firmly.

Remove the air bubbles with an application roller on the closure.



Shrink the heat-shrinkable sleeve around its circumference using large movements, starting at the centre.

Use a single blowtorch for diameters ≤ 450 mm and 2 blowtorches for diameters > 450 mm. If 2 blowtorches are used, use them on opposite sides of the pipe.



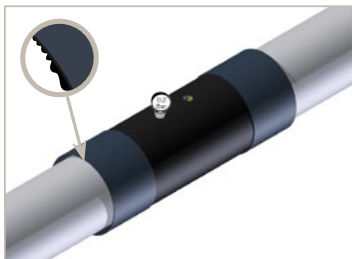
Continue heating starting from the centre and going towards the ends until shrinking is complete. Finish with horizontal movements over the whole surface of the sleeve. Shrinking is complete when the adhesive projects out of each end of the sleeve.



While the sleeve surface is still hot and malleable, use the application roller to **smooth and evacuate** the air bubbles. Use the same procedure on the closure.



Repeat operations 5 to 11 with the 2nd heat-shrinkable sleeve.

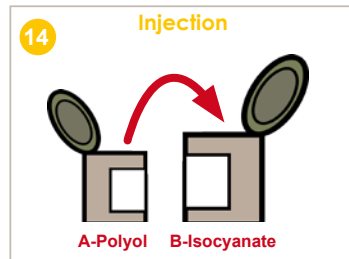


The system is correctly installed when:

- The sleeves are in contact with the surfaces to be protected and have no openings.
- The adhesive is visible on both ends of the sleeves.
- No holes or cracks are visible

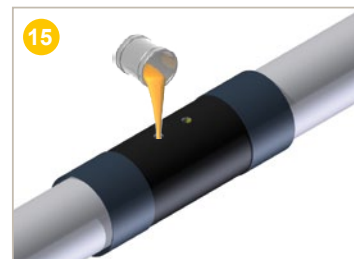
13 Recommendations :

It is recommended to perform an airtightness test at 0.2 bar with a hand pump and pressure gauge. If this is impossible, make a visual check. It is essential to allow the materials to cool down to ambient temperature before injecting polyurethane foam. In case of doubt or if a fault is observed, remake the junction completely.

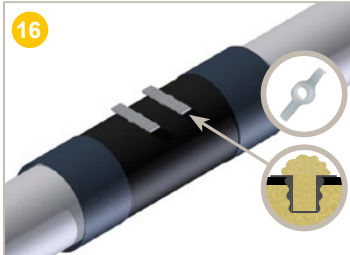


Take components **A** and **B** out of the kit boxes and check the diameters.

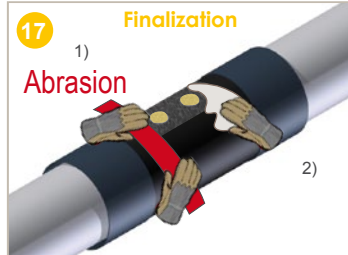
⚠ Check the kit use-by date. Pour component **A** into component **B**, **mix** together using the spatula supplied. The mixture is ready when it is homogeneous, with no signs of different colours.



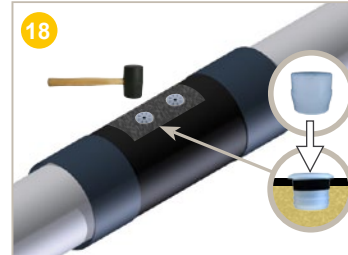
Pour the mixture into one of the 26 mm diameter HDPE muff injection holes. Make sure to pour in all of the mixture, using the spatula supplied.



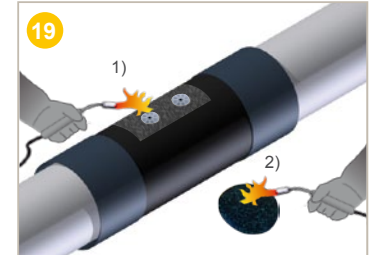
- 1) **Push** the 2 vent plugs fully into the 2 injection holes.
- 2) As soon as the expanded mixture has hardened, **remove** the plugs using the 2 tabs provided. **Clean off** any excess PUR foam.



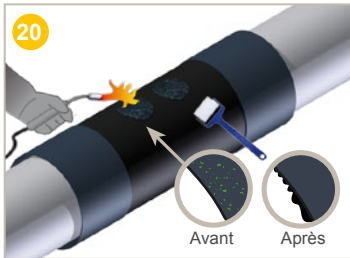
- 1) **Roughen** the surfaces to be covered (hole \varnothing + 50 mm on each side) with abrasive paper or a wire brush.
- 2) **Clean** the roughened surface to remove any polyethylene or sand particles with a dry cloth (or blow off with the flame).



- 1) **Press the female** closure plugs by hand fully into the HDPE muff injection holes.
- 2) Then **knock the male** closure plugs into the female closure plugs with a mallet.



- 1) Use a blowtorch to **warm** the surfaces to be covered (hole \varnothing + 50 mm on each side) up to at least 65 °C. **Check** the temperature on all surfaces with a thermometer.
- 2) **Heat** slightly (2 to 3 seconds) the 1st closure patch (FOPS) on the side opposite the coloured dots and then glue it onto the plug.



- 1) Finalise the bonding by **warming** until the coloured dots of the FOPS disappear.
- 2) While the closure patch (FOPS) is still hot and malleable, use the application roller to **smooth** and **evacuate** the air bubbles. **Repeat the operation with the 2nd closure patch.**

The system is correctly installed when:

- The closure patches (FOPS) are in contact with the surfaces to be protected.
- The adhesive is visible all around the closure patches.