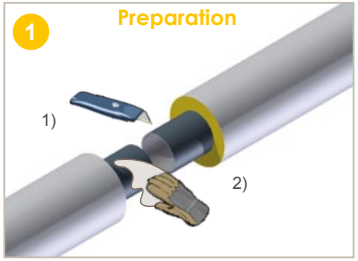
i10 injected electrowelding-junction kit

Composition of the i10 kit:

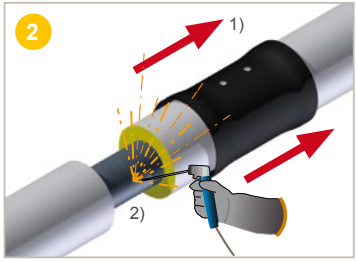
- 1 drilled heat-shrinkable muff
- fusion grids

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

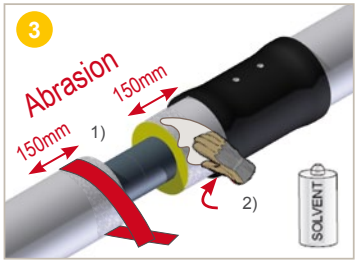
- 2 vent plugs
- 2 female closure plugs
- 2 male closure plugs
- 2 closure patches (FOPS)



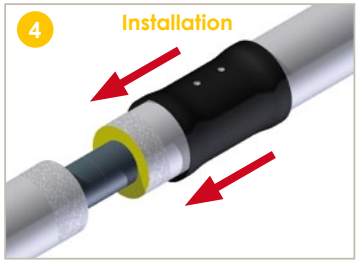
1) **Scrape** the PUR foam off the front (all signs of damp PUR foam must be removed from the ends).
2) **Clean** the ends of the pipes or parts with a cloth to remove any water, mud or sand.



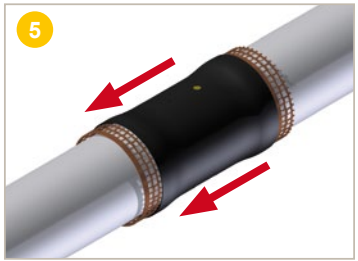
1) **Slide** the heat-shrinkable muff onto one of the pipes, pushing it along a sufficient distance.
2) **Align** the pipes and weld the two steel pipes together according to professional standards.



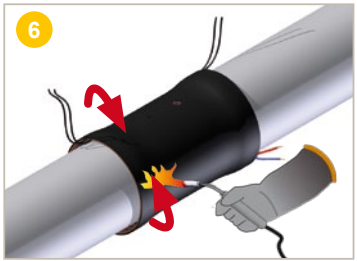
1) **Roughen** the surface of the casing (150 mm on each side) and the inside of the muff with abrasive paper or a wire brush.
2) **Clean** and **degrease** the roughened surfaces with a cloth dipped in ethanol (min. 94 %).



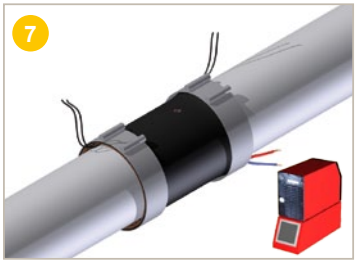
Slide the heat-shrinkable muff at the stripped area so that it covers the pipe casing by 5 to 10 cm on each end.
⚠ Remember to remove the protective film from the muff.



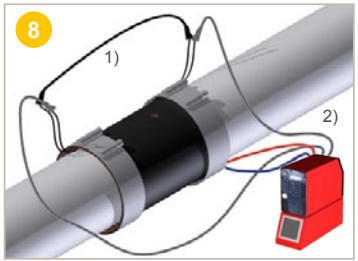
Install the fusion grids and staple them into position.



Shrink the two ends of the heat-shrinkable muff with a blowtorch. 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.



⚠ Allow the muff to cool before electrowelding.
After shrinking and cooling to ambient temperature, **fit** the tightening straps on the heat-shrinkable muff.

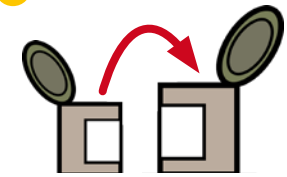


1) **Connect** the branch wire to one of the welding wires at each end.
2) **Connect** the sensor and the two remaining welding wires to the welding machine.
⚠ Fasten the wires with adhesive tape to stop them coming off.
3) **Perform** the electrowelding of the muff.

9

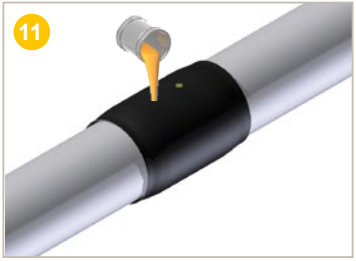
After shrinking and return to ambient temperature, check that the muff and the casing are firmly bonded together.
⚠ It is recommended to perform an airtightness test at 0.2 bar using a hand pump and pressure gauge.

10 Injection



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.

11



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.

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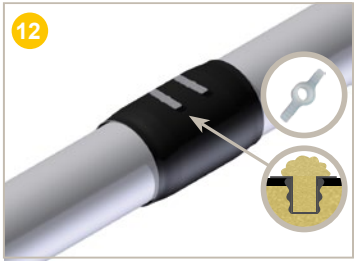
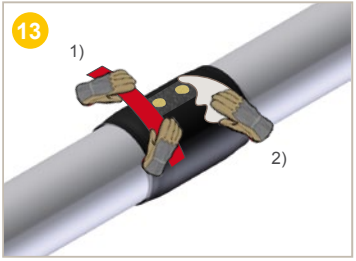


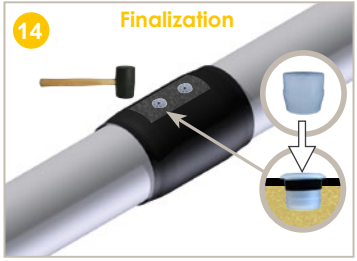
1) **Push** the 2 vent plugs fully into the 2 injection holes.
2) As soon as the expanded mixture has hardened, **remove** the plugs using the 2 tabs provided. **Clean off** any excess PUR foam.

13



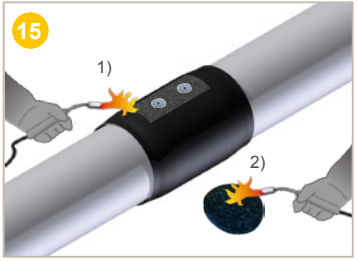
1) **Roughen** the surfaces to be covered (hole Ø + 50 mm on each side) with abrasive paper or a wire brush.
2) **Clean** the roughened surface to remove any polyethylene or sand particles with a dry cloth (or blow off with the flame).

14 Finalization



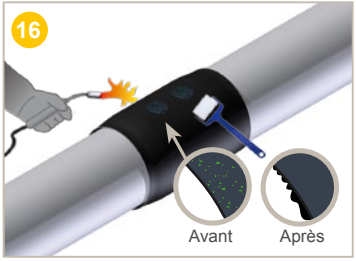
1) **Press the female** closure plugs by hand fully into the HDPE muff injection holes.
2) Then **knock the male** closure plugs into the female closure plugs with a mallet.

15



1) Use a blowtorch to **warm** the surfaces to be covered (hole Ø + 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.

16



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.