

Y-reduction shrink joint

Application:

Y-reduction shrink joint is used to change from DUO-Pipe to UNO-pipe.

All 3 ends of the joint are shrinkable and have an additional Mastic Sealing.

For usage with:

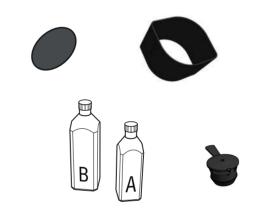
DUO-Pipes from outer diameter of ${\bf 126mm}$ to ${\bf 202mm}$ and

UNO-Pipes from outer diameter of 91mm to 142mm.



Additional material:

- 1. Sleeve with additional sealing compound
- 2. Foam packages for insulation
- 3. 3x Venting plugs
- 4. 3x Bitumen Mastic Sticker
- 5. 3x Shrink Collars



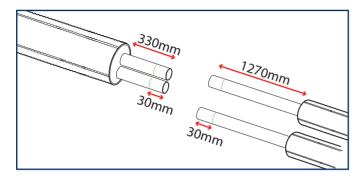
Tools required:

- 1. Emery cloth, grain size 60
- 2. Alcohol, min 93%
- 3. Gas burner Ø 50 mm
- 4. Drilling machine
- 5. Hammer
- 6. Gloves
- 7. Pressing tool and T-piece connectors
- 8. Cutter





Preparations

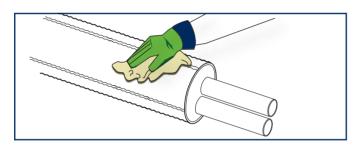


1. All surfaces in the joint area must be CLEAN and DRY.

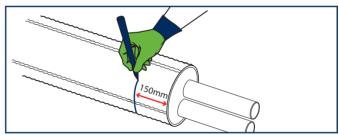
Remove insulation from the DUO Flex Pipe: 330mm Remove insulation from the single Flex Pipes: 1270mm

Cut off 30mm of the flexible service pipes to provide clean pipe endings for the press fitting istallation later on.

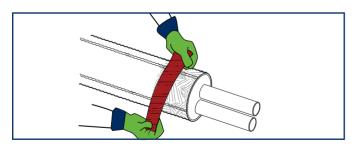
The length between the finished free pipe connected with the coupler must be 1540mm.



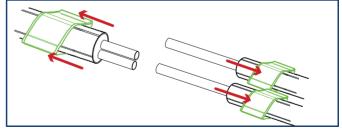
2. Clean approximately 500mm of the DUO Pipe casing end with alcohol.



3. Mark from the edge of the DUO Pipe casing 150mm.

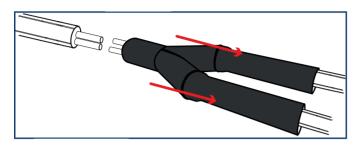


4. Grind minimum 250mm of the contact surfaces of the casing with emery cloth, so grind marks become visible outside the collar rim (This enables visual control of the grinding by the inspection). Clean the surface with alcohol to remove grind dust and activate the contact surfaces with a gas burner.

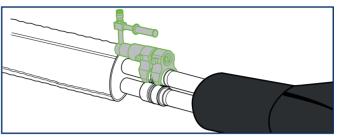


5. Pull over the shrink collars on all three pipes

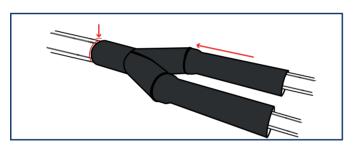




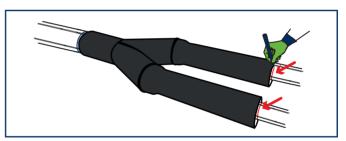
6. Check that the sleeve is clean and dry inside and out. Place the sleeve with collars on to the UNO-pipes that the service pipes look out of the big part of the Y-piece, so couplings can be installed.



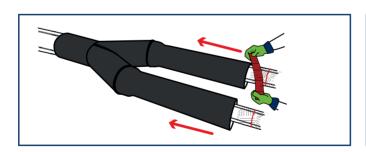
7. Install couplings according to the valid instructions.



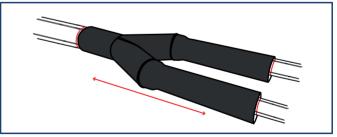
8. Center the sleeve over the joint according to the mark on the DUO-pipe casing.



8. Mark the UNO-pipes on the edge of the sleeve.

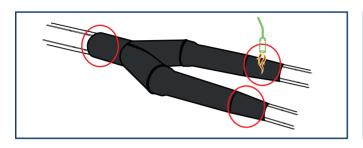


9. Grind minimum 250mm of the contact surfaces of casing with emery cloth, so grind marks become visible outside the collar rim (This enables visual control of the grinding by the inspeciton.)



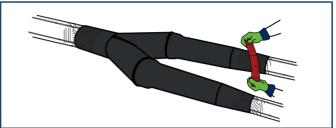
10. Remove remaining grind dust and center the sleeve over the joint according to the marks on the casing.



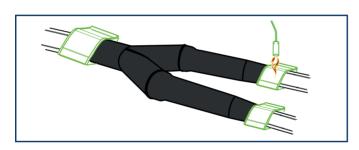


11. Remove the mastic cover from all sleeve ends. Check that all covers has been fully removed.

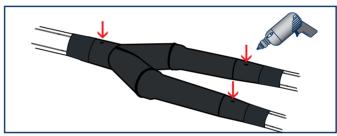
Shrink the 3 sleeve ends, until the mastic comes out. Avoid to heat the casing directly.



12. Grind the contact surfaces of the collars on the sleeve with emery cloth. Remove grind dust if any. Avoid touching the ground contact surfaces.

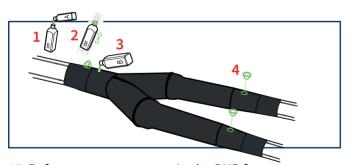


13. Remove the collars from the packaging. Check that all packaging has been removed. Center the collar over the sleeve end. Remove the mastic cover and start to shrink the collars with the gas burner.



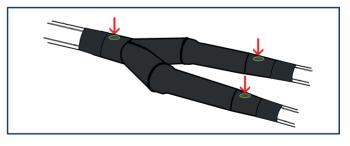
14. Drill three Ø24mm holes - one on each end of the sleeve, at the highest point.

For leakage testing it is an advantage to drill first 2 holes and then the third one in connection with the foaming. When the shrink sleeve has cooled to handwarm, leakage test with 0.2 bar. Test the sleeve ends visually with soapy water.



15. Before you start to pour in the PUR foam, put paper tape around the holes to protect the casing during the foaming process.

Fill in the foam in the hole of the DUO-pipe side and install all venting plugs in the holes. Wait at least 30 minutes for degassing to complete.



16. Cut of the plastic ends of the vent plugs and sand the top with emery cloth.

Then clean the surface with alcohol and use a slightly flame to activate the surface. When finished put the Bitumen Sticker over the vent plug and press it on.



