

INSTALLATION MANUAL ver 1.1.

Belmafex casing joint, shrinkable with mastic

Content of the joint set:

Shrinkable casing with mastic
welding and venting plugs (optionally)



Set of tools necessary for the casing joint installation

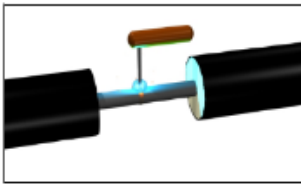
propane butane torch (gas cylinder, reducer, connection hose), drill, plugwelder tool, plug holder, hammer, sand paper (grain 80-100), cleaner (ethyl alcohol or acetone), protection gloves.

General requirements for BELMAFLEX joint installation

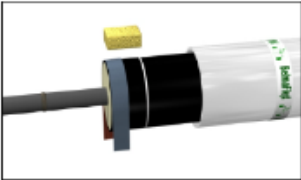
- Installation works should be performed by properly trained and prepared personnel.
- Installers should follow the instructions described in Belmafex installation manual dedicated for the specified product
- Staff should be equipped with all necessary tools needed to perform correctly product installation. The list of tools is described in products installation manual
- In case of difficult weather conditions such as rain or direct sun, installation place should be covered by tent, umbrella or any other protection which could effectively protect the joint area during installation works.
- Foaming should not be performed in case of temperatures below 0°C
- Temperatures of liquid foam components before foaming should not be higher than 25°C. Therefore during hot days it is advised to perform foaming operations within morning periods.

Prior to the product installation it is necessary to:

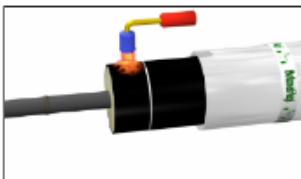
- Remove gently the wet and moist PUR layer from the preinsulated pipe ends (max up to 20mm)
- Connect (if necessary) and check the connection of the alarm wires according to the instruction of preinsulated pipe manufacturer.
- Precisely clean and un-dust the casing pipe in the joint area with the use of ethyl alcohol or acetone and sand paper with grain 60-80
- Activate gently the casing pipes in the area where the joint is going to be installed with the use of flame (heating up to temperature around 60°C)
- Unless the pipes are under cover above mentioned activities should not be performed during wet and rainy weather
- After the joint installation (before foaming) it is advised to perform the tightness test under pressure of 0,2 Bar



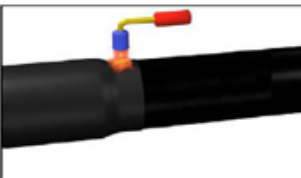
Weld together the ends of the steel pipes. Carry through a pressure test. Cut away expanded insulation foam around the pipe ends.



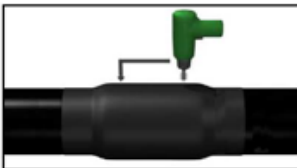
Clean the jacket pipe ends at least 150mm from both pipe ends. The surfaces must be CLEAN and DRY. Activate the surface with sand paper or a steel brush to obtain a rough surface, this ensures a better joint grip.



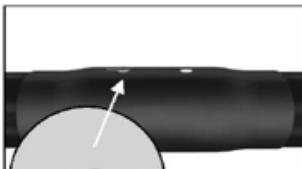
Activate the jacket pipe at least 150mm from both sides of the pipe ends until the surface has a matt, silky look. The surface temperature should be around 60°C.



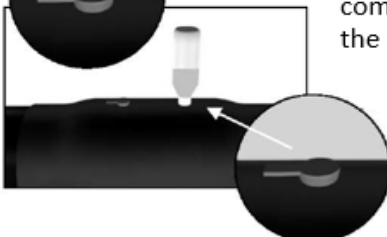
Remove the wrapping from the shrinkable casing. Centre the shrinkable casing on the joint area. When the casing has been positioned, remove the paper from the mastic bands. Check that the casing is correctly positioned. Shrink the casing joint at the both ends with the use of the soft and steady yellow flame



Drill holes in the shrinkable casing for the liquid foam application. When the shrinkable casing has cooled down after the shrinking - check the tightness of the casing joint at the pressure of 0.2 bar



Pour the foam into the earlier prepared holes. Immediately after this activity hammer in the ventilation plugs into the holes. When the foaming process is completed remove the ventilation plugs and drill the holes in the holes area with the use of milling cutter 24,5mm. After this clean the area around the holes.



Weld in the welding plugs accordingly to the instruction of the plugwelder tool supplier. It is recommended to heat up at the same time plug and the area around the hole for about 30 seconds at the heater temperature between 220°C – 230°C. Perform the visual check of the finished joint connection