

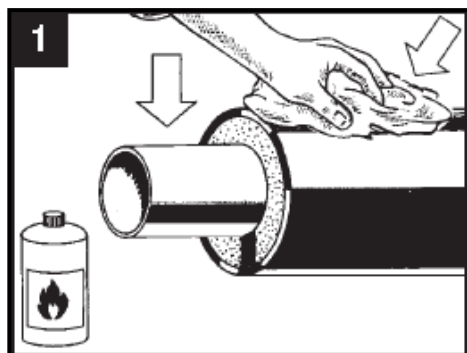
ECZ1

Installation instruction Heat shrinkable end-cap with zipper

Necessary materials and equipment:

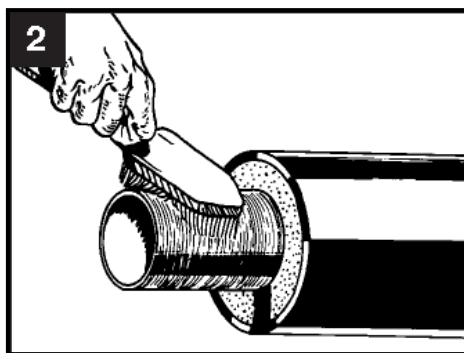
- an end-cap ECZ1 with size appropriate to jacket pipe and steel pipe diameter,
- a hose with a torch BN40 (or equivalent), propane gas bottle, regulator and gauge,
- an abrasive tape (grain 60-80) and the steel brush,
- PE cleaner and dry cleaning rags,
- a safety goggles and the gloves,
- a pyrometer or temperature sticks,
- a tent or an umbrella in case of rain or heavy sunshine,

Remark: If the welding of the steel pipe is performed prior to installation of the end-cap, move an end-cap aside from the welding area. If necessary protect the end-cap from direct contact with the flame of the welding gas burner.

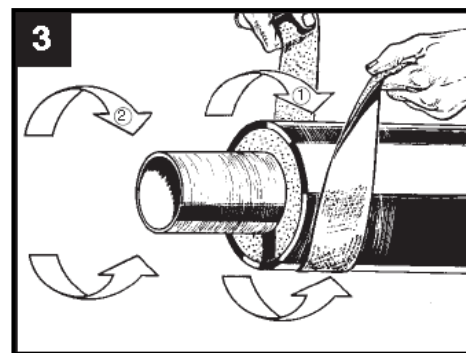


Preparation

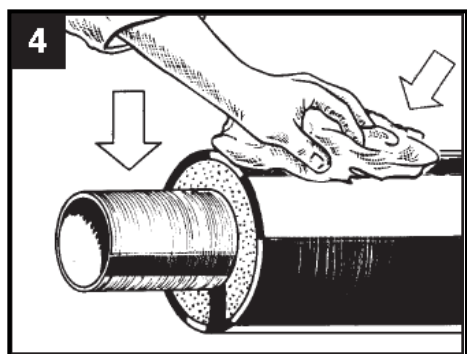
The jacket pipe and the steel service pipe must be dry and free of foreign materials such as oils, greases, foams etc. Use a PE cleaner.



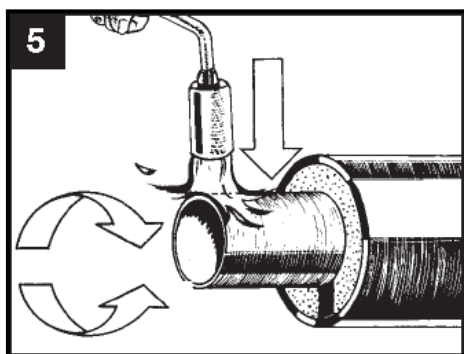
Remove all loose particles from the jacket pipe and service pipe by the steel brush. A deep scars on the jacket pipe shall be removed or scraped flat.



At first abrade the jacket pipe using an abrasive tape, than abrade the service pipe to remove a contamination.

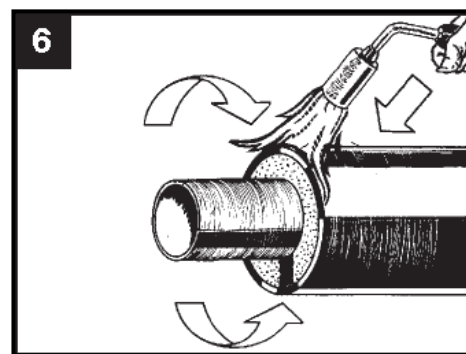


Remove all loose particles from abrading on the jacket pipe and the service pipe by a dry and clean rag.

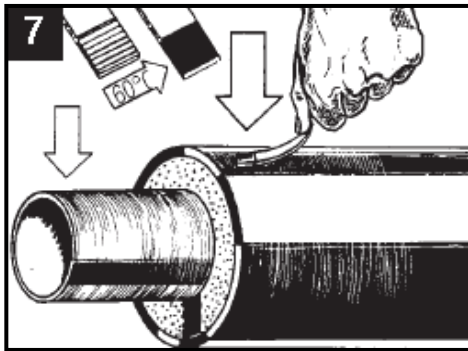


Pre-heating

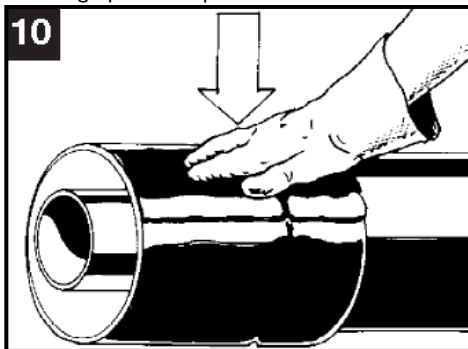
Pre-heat the service pipe first 60°C, avoid direct contact between flame and the foam.



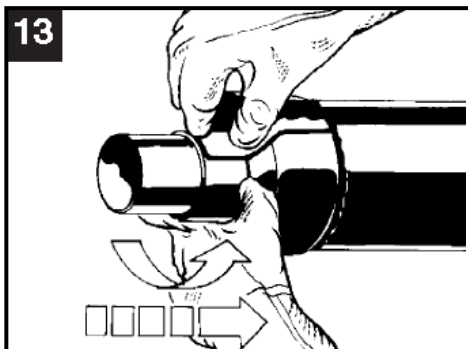
Pre-heat the jacket pipe to 60°C.



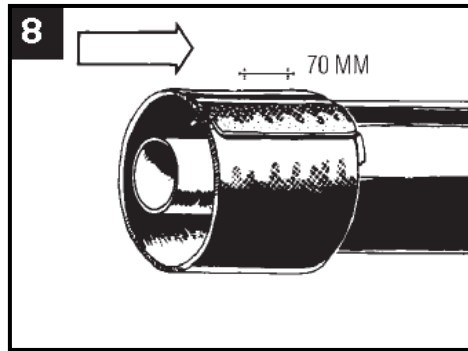
Check the temperature of the jacket pipe and the service pipe with the temperature indicator. An immediate change of its color means the correct temperature has been reached. The pyrometer can also be used for checking up the temperature.



Push down the closure patch with a gloved hand.

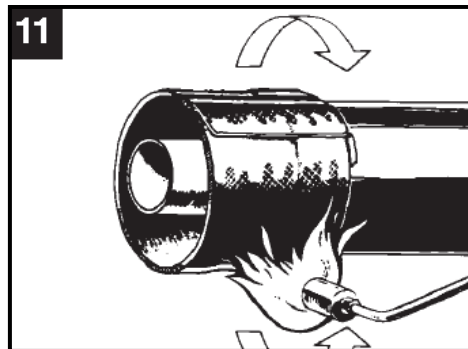


By using the gloved hands form the end-cap and push the closure area to the step-down and the service pipe.



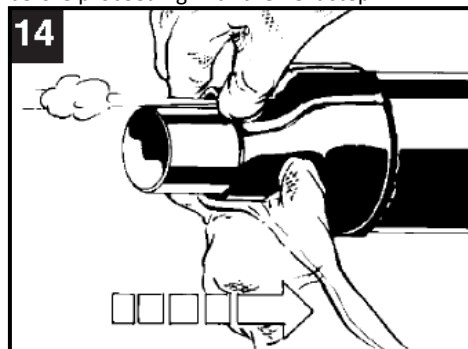
Positioning

Make a mark on the jacket pipe 70mm from the edge. Position the end-cap over the end of the pipe to this mark. Close up the zipper.

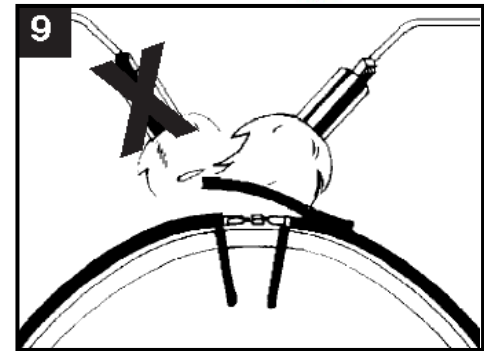


Start installation by heating the end-cap over the jacket pipe first. Move the flame in a circularly around the pipe until the end-cap has fully recovered onto the jacket pipe. Let it cool down a little before shrinking the end-cap over the step-down and service pipe.

Remark: If the second end-cap is to be installed on the other side of the pipe of the welded joint, shrink it down first only on the jacket pipe before proceeding with the next step.

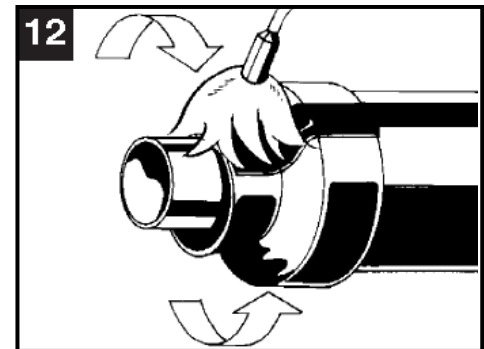


If necessary squeeze the end-cap together on the service pipe to relieve the air bulbs. Check if the adhesive has melted properly by carefully pushing the hot end-cap a short distance along the service pipe. The small wrinkles shall pull themselves out and end-cap surface shall get flat again immediately.

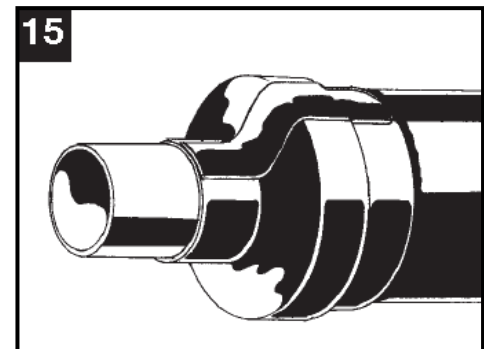


Installation

Start heating the top of the closure patch. Avoid contact between the flame and the zipper.



Shrink the end-cap over the step-down and onto the service pipe, keeping the flame moving around the pipe. Stop the heating when the end-cap has fully recovered and its surface has become totally smooth.



Inspection

The end-cap shall be fully recovered onto the jacket pipe and the service pipe without air bulbs. There shall be no burn-holes nor upstanding edges. When the end-cap has cooled down completely, cut off the protruding parts of the zipper at both ends. When doing this be careful not to damage the pipe nor the end-cap.