

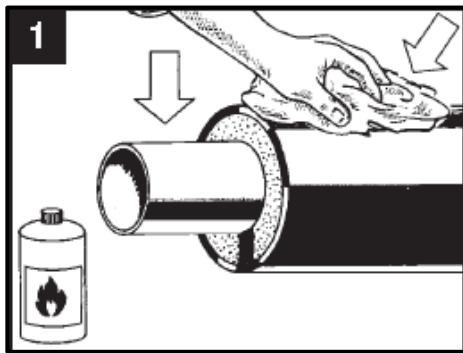
ECS1

Installation instruction Heat shrinkable end-cap with mastic

Necessary materials and equipment:

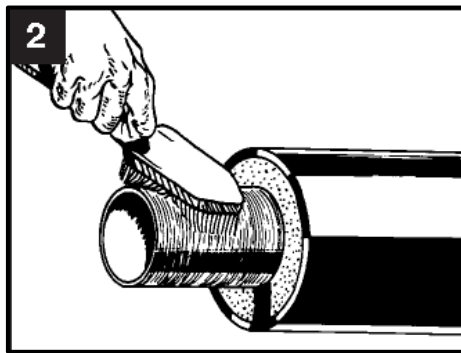
- an end-cap ECS1 with size appropriate to jacket pipe and steel pipe diameter,
- a hose with a torch BN40 (or equivalent), propane gas bottle, regulator and gauge,
- an abrasive tape (grain 60-80) and the steel brush,
- PE cleaner and dry cleaning rags,
- a safety goggles and the gloves,
- a pyrometer 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.

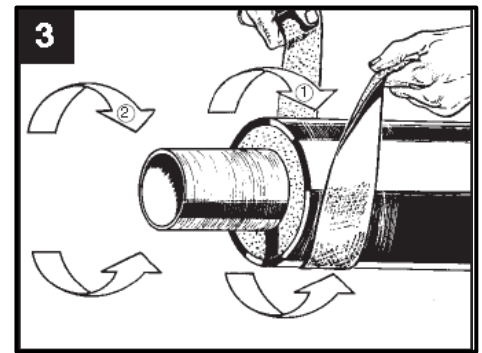


Preparation

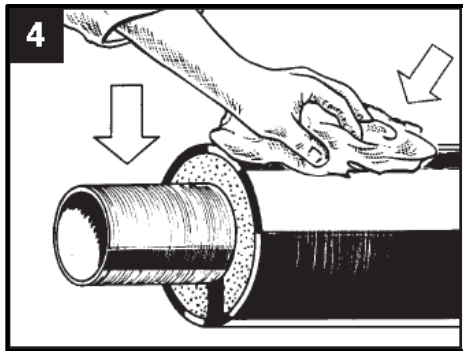
The jacket pipe and the steel service pipe must be dry and free of foreign materials such oils, greases, foams etc. Use a PE cleaner.



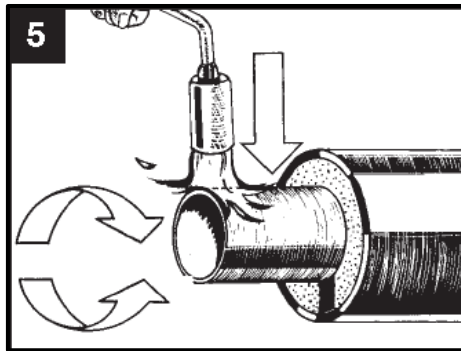
Remove all loose particles from the jacket pipe and service pipe by the steel brush. A deep scars on the jacket pipe shall be removed or scraped flat.



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

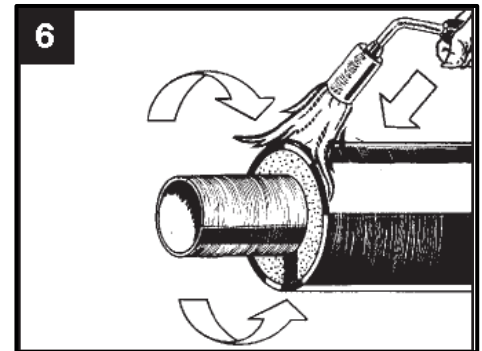


Remove all loose particles from abrading on the jacket pipe and the service pipe by a dry and clean rag. .

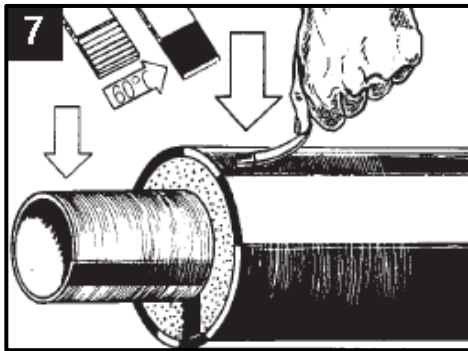


Pre-heating

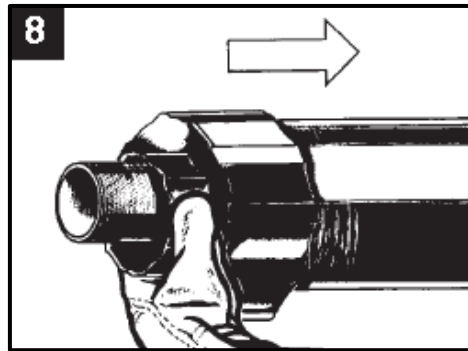
Pre-heat the service pipe first 60°C, avoid direct contact between flame and the foam.



Pre-heat the jacket pipe to 60°C.

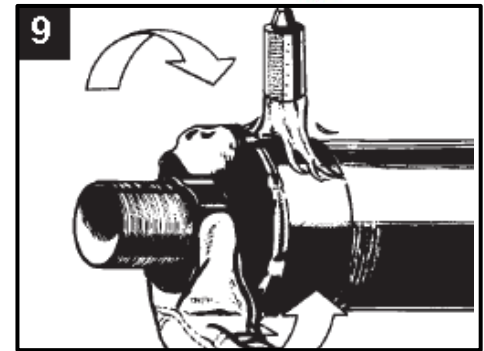


Check the temperature of the jacket pipe and the service pipe with the temperature indicator. An immediate change of its color means the correct temperature has been reached. The pyrometer can also be used for checking of the temperature.



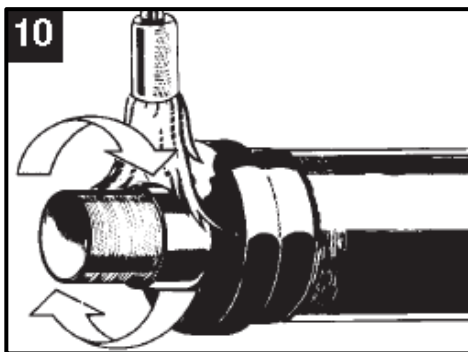
Positioning

Place the end-cap at the end of the pipe (push it up to the edge of the jacket pipe).

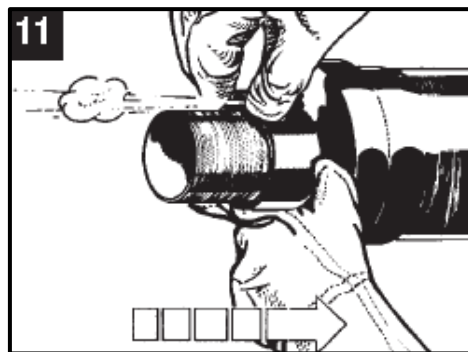


Start installation by heating the end-cap over the jacket pipe first. Move the flame in a circular motion around until the end-cap has fully recovered onto the jacket pipe. Let it cool down a little before shrinking the end-cap over the step-down and service pipe.

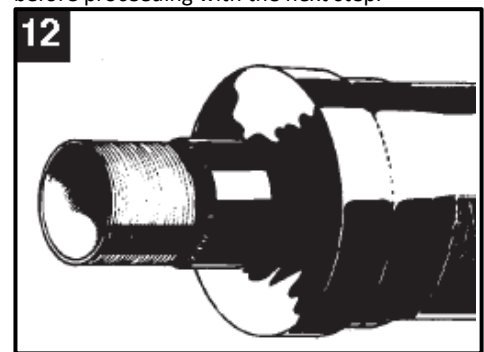
Remark: If the second end-cap is to be installed on the other side of the pipe of the welded joint, shrink it down first only on the jacket pipe before proceeding with the next step.



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.



If necessary squeeze the end-cap evenly on the service pipe to relieve the air bulbs. The small wrinkles shall pull themselves out and make the end-cap surface flat again immediately.



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.