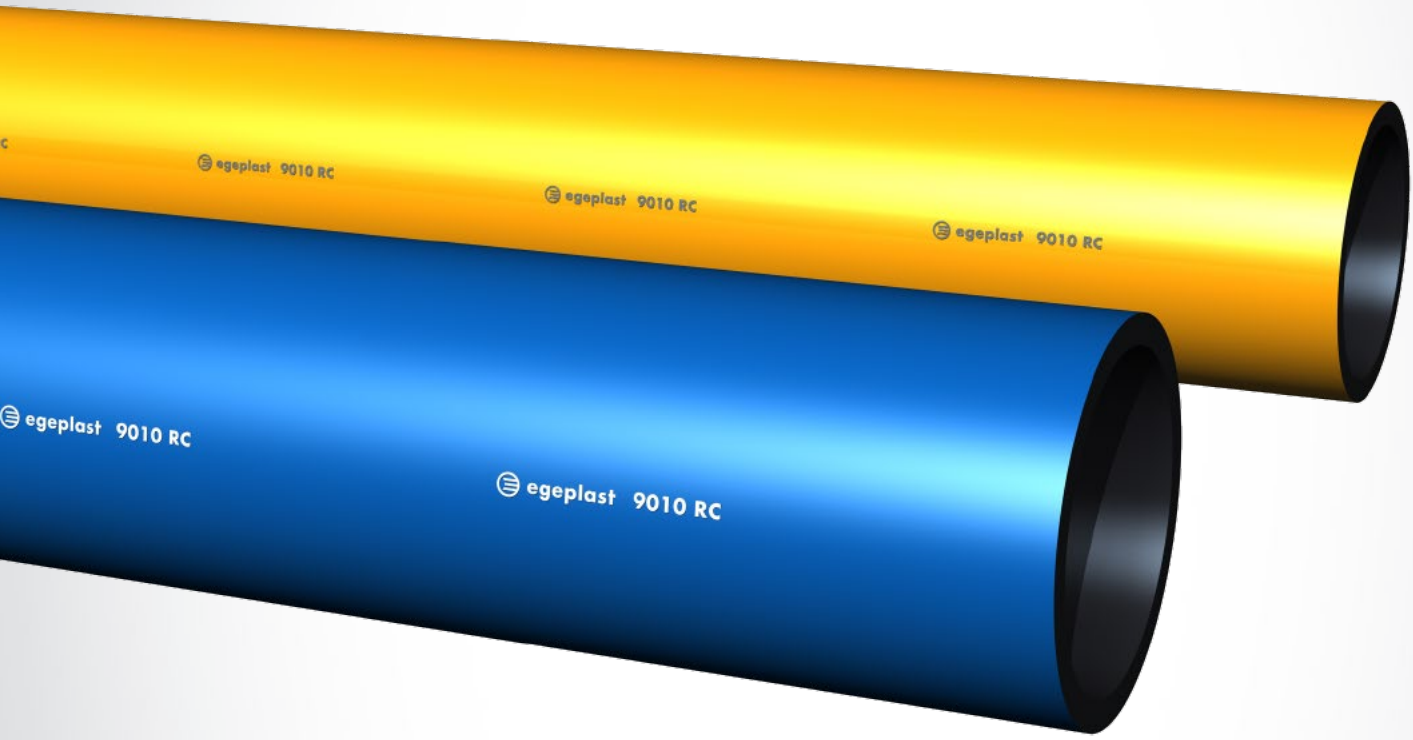
egeplast

90 10® RC

Processing Guidelines



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Processing Guidelines

Details given in this brochure reflect the state of the art. No claim is made with regard to their completeness, they are intended for instruction and guidance; no obligation may be derived from it. Mistake and subject to change reserved.

Our customer service will be pleased to answer any further questions regarding the installation or use of our products, or any other questions. In addition, our customer and applications engineering services are pleased to be at your disposal to provide any technical guidance that you may want.

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Please note that the guarantee does not apply if and insofar the instructions contained in this technical brochure for the correct installation, joining and use of our products are not followed precisely. Relevant safety regulations, current standards and codes of practice must be complied with.

The sale and delivery of our products are subject exclusively to our respectively applicable current general terms and conditions, which you can call up on our website (www.egeplast.de/www.egeplast.eu).

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1 Processing Guideline

egeplast 90 10® RC pipes

Supplement to the installation instructions for PE pressure pipes A 135 and A 435 from the Kunststoffrohrverband e.V. in Bonn

1.1 General information

egeplast 90 10® RC pipe is a pressure pipe made of PE 100-RC with a coextruded, dimensionally integrated, coloured outer layer, specifically for open trench installation without sandbed as well as for ploughing and milling techniques.

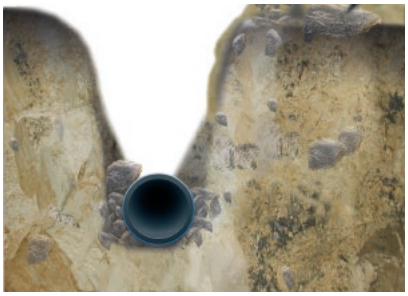
Scope of application

The installation instructions apply to soil covered egeplast 90 10® RC pipes made of PE 100-RC. The pipe joints and pipeline components must be rated for use with their respective operating pressures.

Installation, open-trench

egeplast 90 10® RC pipes are suited for installation without a sand bed because they are made of PE 100-RC which is particularly resistant to stress-induced cracking. The excavated soil is suitable for backfilling if it can be compacted.

In order to assess the filling soil, the DIN 18196, inter alia, is relevant.



The pipe trench is to be constructed, among others, according to DIN 4124 (Excavation Pits and Trenches). The minimum covering for gas pipelines are 0.6 to 1.0 m, by which covering can be reduced to 0.5 m for sections up to a length of approximately 2.0 m, that do not have to bear any particular load (front yards, walkways). Potable water pipes must be laid frost-resistant by covering them at depths of 1.0 to 1.8 m (according to climate and soil conditions). Apart from this, DVGW Worksheet W400-2 shall apply for the Construction of Water Mains.

Installation, ploughing and milling

The egeplast 90 10® RC pipe is quite flexible. This makes installation using the ploughing or milling procedures possible. The minimum allowable bending radius should be observed. In case of any process-related lower deviation of the permissible bending radii, damages caused by buckling when bending or overexpanding must be constructively ruled out.

Fig 1-1: Schematic diagram Ploughing procedure

Fig 1-2: Schematic diagram Milling procedure

1.2 Joining techniques

Welding connections

With regard to processing, in particular the jointing technique, there is no difference between pipes made of PE 100-RC and those made of PE 100. PE 100-RC pipes may also be welded without any limitation in compliance with DVS 2207, Part 1. All PE 100-RC materials used by egeplast have been proven suitable for welding according to DVS.

- Electrofusion welding

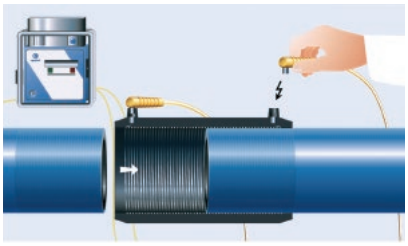


Fig 1-3: Electrofusion welding

egeplast 90 10® RC pipes may be welded to all the commonly used electrofusion fittings made from PE 100. The surface is to be prepared for welding by machining in accordance with DVS Guideline 2207, Part 1. egeplast recommends, as do the fittings manufacturers, the use of rotary scrapers to remove the oxide layer. The guidelines and specifications given by the fittings manufacturers must also be followed.

- Butt welding

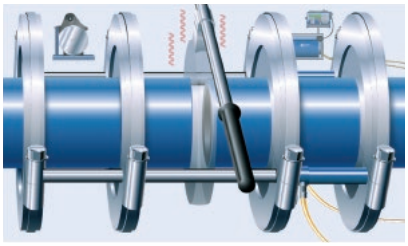


Fig 1-4: Butt welding

Processing of egeplast 90 10® RC pipes by means of applying the butt welding process will be carried out in line with PE 100 pipes. The joining process is based on the welding parameters given by DVS 2207.

Flanged joints

The following types of design are commonly used for making flanged joints:

- Stub end for electrofusion
- Stub end for butt fusion

Processing of RC pipes will be carried out in line with PE 100 pipes.

Push-fit connections / Compression fittings

egeplast 90 10® RC pipes may be processed in line with PE 100 pipes using commercially available push-fit connectors / compression fittings. Particular attention must be paid to processing recommendations of the respective manufacturers.

Mounting of tapping fittings

There are no requirements differing from normal engineering practice for mounting welded tapping fittings onto egeplast 90 10® RC pipes.

1.3 System Techniques

egeplast 90 10® RC pipes can be integrated into the pipeline network with all the moulded fittings and joining elements normally used in the trade. The manufacturers´ instructions should be followed in doing so.

egeplast offers numerous fittings made from PE 100-RC/PE 100. We would be pleased to provide you with the respective documentation separately.

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