

## Consulting:



The selection of plastic pipe materials and systems for underground installation has extremely long-term implications. Designed for a service-life of several generations, pipelines are scarcely accessible for retrospective modification once they have been installed:

- High-value surface occur
- Building construction follows underground activities
- Repair costs in case of damage can be a multiple of the original investment amount
- Diversion of traffic and blocking of roads is scarcely possible with today's high traffic densities

For these reasons, planners, project clients and operators of piping systems are confronted with the challenge of gathering the best possible knowledge of the potentials and limitations of pipe materials before a decision is made. In addition, the costs for underground engineering must also be taken into account. Actual pipe-system costs rarely make up more than 15 % of total costs, whereas the underground work and restoration of the surface account for 85 % or more. The use of trenchless installation methods thus presents significant cost-reduction potentials.

The egeplast team of consultants will be happy to help you in every decision-making phase.

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## Project Dettingen:

From supplier to product developer: egeMDR with axially force locked socket according to an idea by the Dettingen local authority



# Project report: egeMDR with axially force locked socket according to an idea by the Dettingen local authority

Project data	
Project description:	Rehabilitation of a drinking water pipeline in open trench installation
Challenges:	Installation in very small partial sections
Solution:	Implementation of the client's product idea for a quickly assembled spigot and socket system with a connection with tensile strength and pressure resistance
Installation:	Open method
Pipe material used:	egeMDR with protection layer and axially force locked spigot and socket joint 500 m 110 x 10.0 mm SDR 11 and 160 x 14.6 mm; Pipe and moulded components have tensile strength and are pressure resistant up to 16 bar
Parties involved in the project:	Principal: Dettingen/Erms local authority Contact: Rolf Riesch



**The local authority in Dettingen wanted to combine the conventional socket connection with the numerous advantages of PE pipes. The new SLM® RCplus pipe with axially force locked spigot and socket, was therefore developed without further ado. As desired the pipe was directly delivered to the construction site with spigot and socket, pre-assembled in pallets, with pipe ends dismantled by the factory to the insertion length.**

The Dettingen local authority on the River Erms supplies its 2,670 customers with approximately 510,000 m<sup>3</sup> of drinking water. To do so the local utility companies maintain a pipe network which is over 121 km long. New pipelines or rehabilitation measures are generally managed by their own construction teams. During the rehabilitation of 500 m of drinking water pipeline in open trench installation, the municipal utility companies were faced with the challenge of having to deal with extremely small part sections and coordinate welding work according to the weather conditions.



Delivery ready for use directly to the construction site: without welding equipment the construction team is able to get started with installation work immediately.

This led to the idea that a spigot and socket system would offer several advantages in such cases: firstly the welding and cooling times would not be needed, and secondly there is no dependence on the weather. What is more, no qualified welders are needed on site for this type of connection. The idea of directly supplying pipes with a socket which are also dismantled to the insertion length found immediate agreement at egeplast, especially as this system represents a practical alternative to welding. What is more, it retains the familiar flexibility, the permanent leak-tightness and pressure resistance. ■



The spigot and socket system consisting of the egeplast SLM® RCplus and the ReinoGrip® sleeve retains tensile strength and is pressure resistant up to 16 bar.