

Process Phoenix®

This system is used for all types of pipes (drinking water, waste water, gas, oil, industrie, etc.) with dimensions of 80 - 1000 mm and lengths of up to 650 m. Also pipes with elbows and bends can be renovated with this system.

A fabric hose coated - depending on medium - with PE, PU or Hytrel is filled with epoxy resin and forced under pressure into the pipeline to be renewed by means of a special reversion machine.

In the sewage sector, insertion is possible via existing manholes. In the case of pressure lines, a construction trench with a diameter of approx. 1 m is necessary.

The resin is cured by filling the pipe with hot steam, producing a shrinkage-free bond with the original pipe. In addition, excess resin strengthens joints and cracks.

After relining, connections are reopened using a remote control robot system. As a consequence of the shrinkage-free bond of the liner to the old pipe, an impermeable seal is formed with connecting openings.

Process Phoenix only causes a minor reduction of the cross-section of the pipes, and full transport capacity is retained. It improves the internal surface state of the pipe and thus its hydraulic capacity.

Furthermore, it prevents the subsequent occurrence of sedimentation or of bacterial formations, and obviates the need for regular cleaning operations.

This method is rapid, and reduces downtime to a minimum. The cost of a Process Phoenix repair is far less than that of conventional replacement.

In addition there is a particularly high saving on the social costs, although these cannot always be precisely quantified.

Connection Lines

However, when connection lines also shows signs of leakage, such lines can be also renovated without having to excavate. If an access chamber exists on the connection side, the entire connecting element can be reconditioned using the Phoenix process.

As a result of the total bond made by the hose inliner with the old pipe, a 100% seal is also guaranteed. The pipe ends extending into the main pipe are subsequently milled off with a robot.

