

# Local Patch repair

The finest quality for Pipe Rehabilitation

**QUICK**  **LOCK**



**QUICK-LOCK**

The only internal pipe repair system made of V4A high-grade Stainless Steel with EDPM compressed rubber seal achieving the WRC (Nr. UC7982) and German DIBT (Nr. Z-42.3-374) approval.

**NEW - QUICK**  **LOCK** **Liner end sleeve**

**UHRIG**



Pipe and Sewer Culvert Technology

**Patented**

# QUICK LOCK

For the repair and rehabilitation of

The patented QUICK-LOCK is more than just a Local patch repair system. It has been developed and manufactured to be both durable and sustainable. The feedback and experience from

clients and installation partners has been used in the design and development of QUICK-LOCK to ensure that we can guarantee the function and quality for Local patch repairs.



## How it Works

The QUICK-LOCK System works completely with mechanical means requiring no chemicals, resins or glues and is suitable for all forms of pipe and surfaces.

The QUICK-LOCK sleeve is inserted into the damaged pipe section and expanded with the QUICK-LOCK packer, physically pressing the rubber seals against the inner wall of the pipe instantly sealing out all infiltration. Once the QUICK-LOCK sleeve has been expanded to the correct pressure it is mechanically locked in position with the patented locking system which ensures that the sleeve stays permanently in position.

Due to the design and construction method of the QUICK-LOCK sleeve it has its own static capability and is able to absorb the natural tectonic movements of the pipe.

For repairs in longer damaged pipe sections the QUICK-LOCK sleeve can be interconnected forming one continuous sealed pipe.

## The Quick-Lock system philosophy:

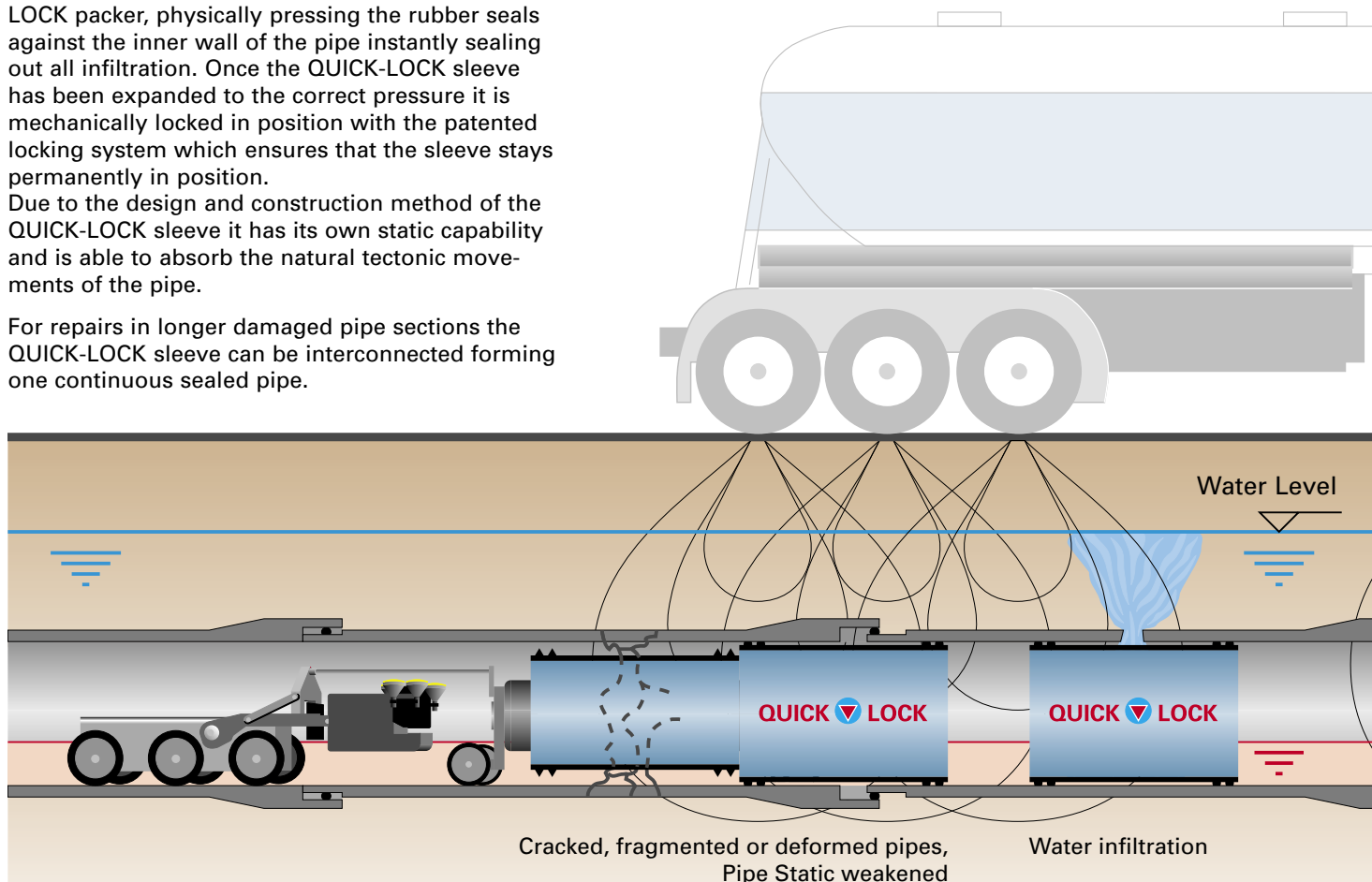
The development of the QUICK-LOCK system progressed on several basic principals; that it would be easy to install, that there would be little or no preparation work required to be carried out on the damaged pipe section, and that mistakes during installation should be out of the question making the system fool proof.

## Requirements:

The only tools required for installation of the QUICK-LOCK system are a CCTV crawler camera, a compressor and the QUICK-LOCK packer.

## Service:

The QUICK-LOCK system is employed by specialist companies only. Our many service providers are trained and further educated in regular intervals.



The various Applications for QUICK-LOCK with

existing pipe systems



**Static:**

By installing the QUICK-LOCK sleeve it is possible to restore the damaged pipe section to its original static condition.

QUICK-LOCK is the only local patch system with its own static capabilities. Static has been tested and passed for use in pipes with damage condition type II (III) existing in old sewer pipes.

**Resistance to high pressure Jetting:**

Extensive tests have been carried out to ensure that the QUICK-LOCK sleeve is suited to withstand all the daily occurrences taking place in a Sewer pipe. One of the test sequence carried out involved a jetting nozzle with 110 bar being passed over the installed QUICK-LOCK sleeve 60 times as according to DIN 19523.

The QUICK-LOCK sleeve passed the test successfully reaching all the standards set out for newly installed pipe systems.

**Material:**

We use only the highest quality materials for the manufacturing of the QUICK-LOCK sleeve.

V4A Stainless Steel and the EDPM rubber gasket are both materials that have been widely used in the industry for decades and have been tried and tested many times.

The quality of the Stainless Steel used is 1.4404 (316L) when used in the sewer network under normal conditions it is practically indestructible.

The EDPM rubber sealing gasket is the same material that has been successfully used for seals in the pipe industry for many years. It has a very high life expectancy and durability.

The EDPM rubber used has also the approval for use in potable water pipes and drinking water.

**Product range availability:**

The QUICK-LOCK sleeve is available for the pipe sizes from DN 150 mm to DN 800 mm and in lengths from;

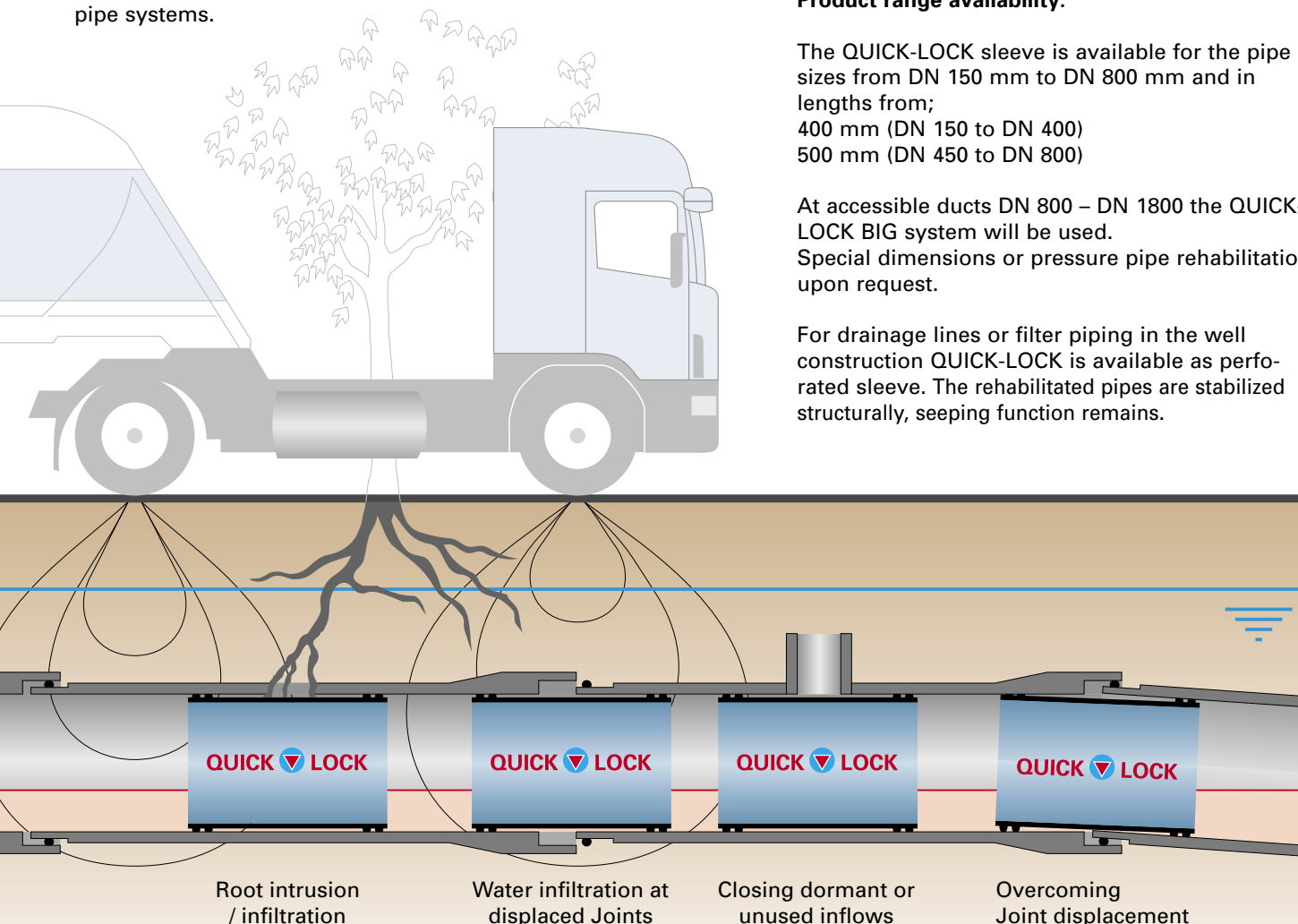
400 mm (DN 150 to DN 400)

500 mm (DN 450 to DN 800)

At accessible ducts DN 800 – DN 1800 the QUICK-LOCK BIG system will be used.

Special dimensions or pressure pipe rehabilitation upon request.

For drainage lines or filter piping in the well construction QUICK-LOCK is available as perforated sleeve. The rehabilitated pipes are stabilized structurally, seeping function remains.



Root intrusion / infiltration

Water infiltration at displaced Joints

Closing dormant or unused inflows

Overcoming Joint displacement

Common forms of damage found in Sewer networks



# .... for connecting liner systems to

Hose liner systems are subject nowadays to high demands for quality. Protection and connection of liner systems has been neglected so far. The newly developed QUICK-LOCK liner

end sleeve does not only seal the ring space between liner and old pipe, but also protects the liner end against mechanical influences of high pressure cleaning.



### Requirements for liner connections:

- seal against residual intrusion between liner / old pipe
- mechanical protection against high pressure cleaning
- mechanical protection against pulleys etc.
- seal of pipe integration depending on the respective shaft connection

### System advantages:

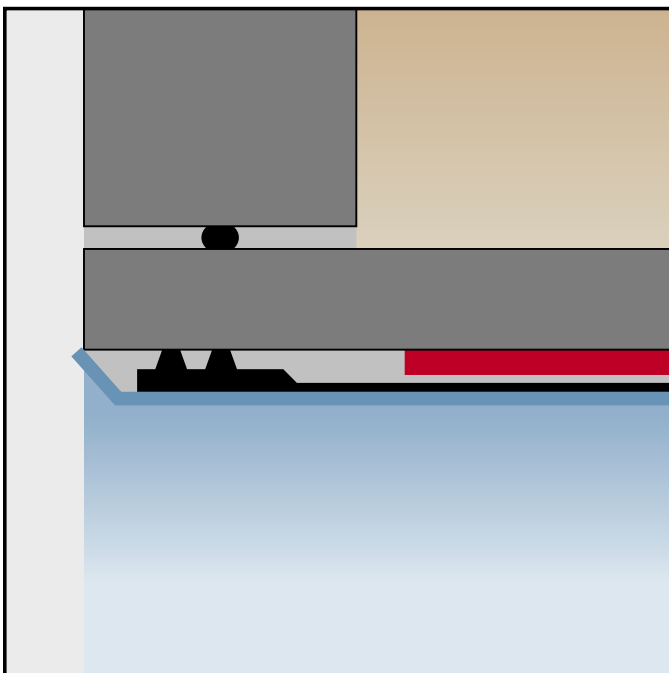
- simple installation
- long-life materials V4A stainless steel and EPDM
- tight and high pressure rinsing resistant - IKT tested
- compensation of shrinkage behavior of GFK liners

### Preconditions:

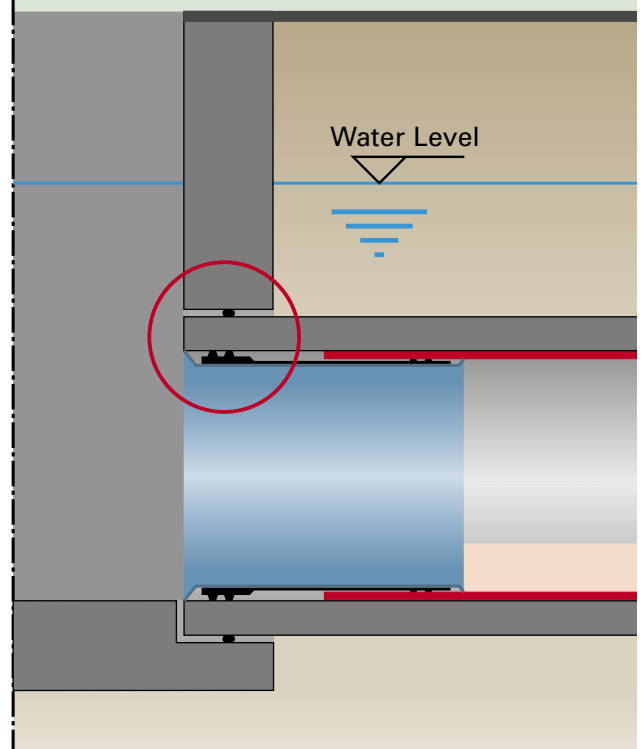
For the installation of the QUICK-LOCK liner end sleeves only a set of air powered cutting tools and an installation balloon suitable for the system are required

### Operating principle:

The operating principle of the liner end sleeve resembles the well proven QUICK-LOCK system. The EPDM rubber gasket has been designed in a way that all common liner wall thicknesses (GFK) can be compensated in the respective nominal width.



### Integration variant liner/pipe



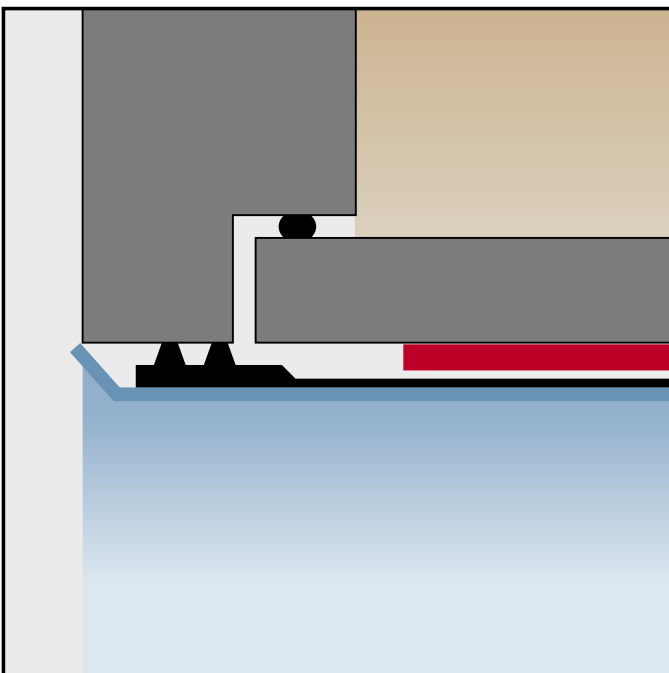
# pipes and buildings



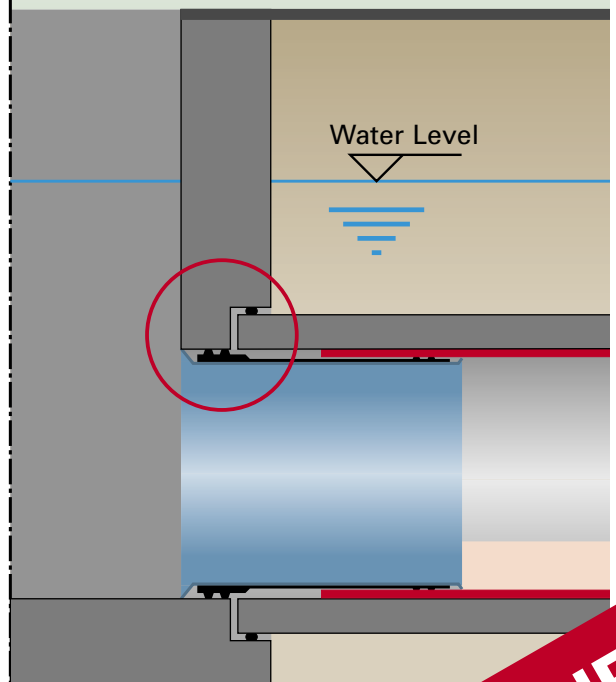
## Product range:

The QUICK-LOCK liner end sleeve is available in nominal widths of DN 150 - DN 1200 and in the overall lengths

- 250 mm (DN 150 - DN 400), one piece, based on the QUICK-LOCK System
- 300 mm (DN 450 - DN 600), one piece, based on the QUICK-LOCK System
- 300 mm (DN 700 - DN 1200), two pieces, based on the QUICK-LOCK BIG System



## Integration variant liner/shaft



**NEW**

# QUICK-LOCK BIG

A multi part Joint repair system made of high grade V4A Steel with an EDPM rubber compression ring for internal repairs of man entry pipes and Culvert systems.

The tested and proved QUICK-LOCK system has been further designed and developed for the use in circular man entry pipes and Culverts.

QUICK-LOCK BIG consists of V4A Stainless Steel (base material 1.4404) in several parts with an EDPM gasket covering the full surface area.

The separable part ring can be inserted into the pipe or culvert system through existing normal, small entry manholes.

There is no need to remove the existing road surface or reduction rings on the manhole for access.

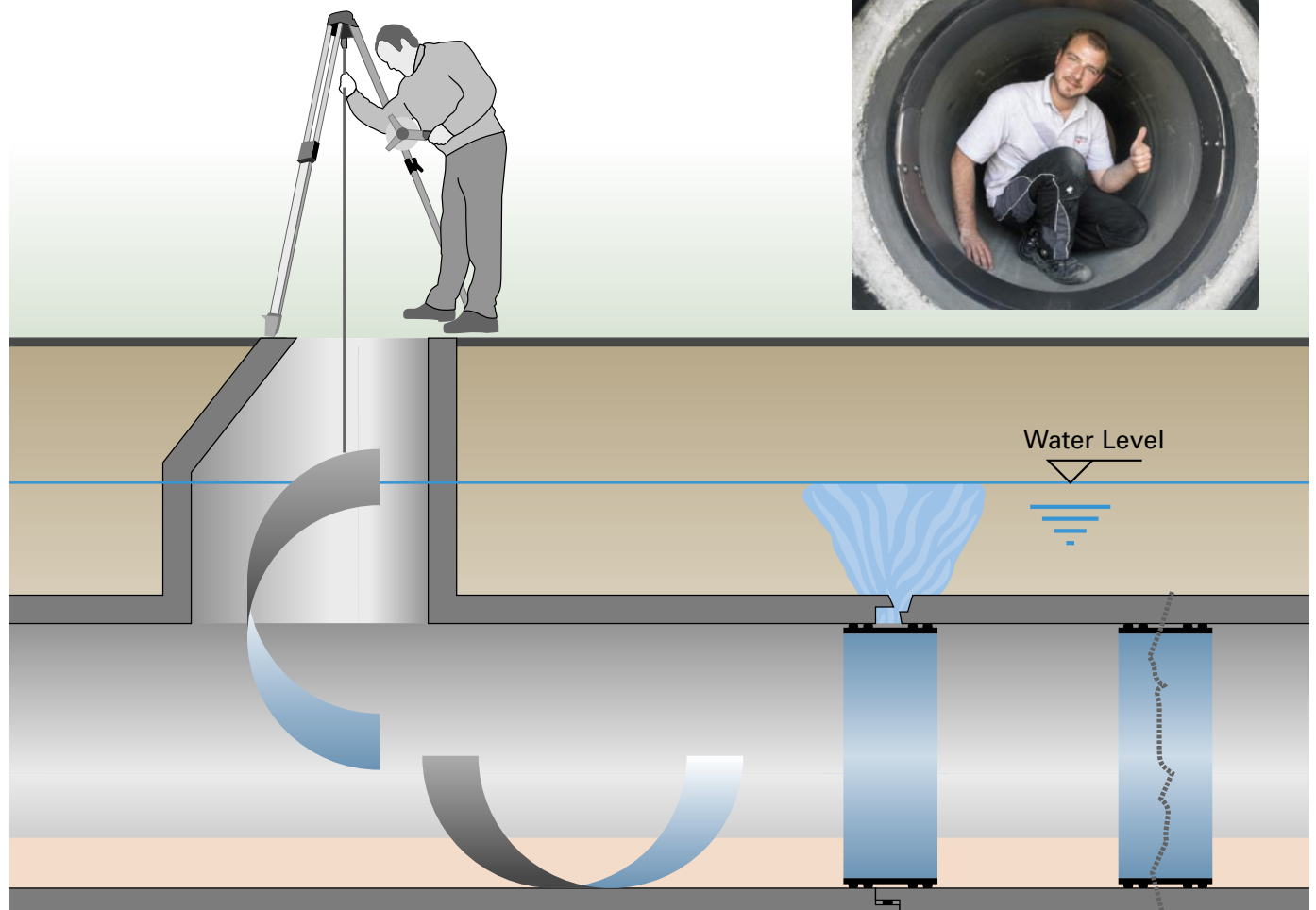
This avoids using expensive machines saving time and labour costs.

At the damaged section QUICK-LOCK BIG can be positioned in just a matter of minutes, expanded and fixed using an assembly tool developed for QUICK-LOCK BIG.

The QUICK-LOCK BIG system has been specially designed for the sealing of joints and radial cracks in round pipes and culverts.

The sealing of the pipe defect is based on a compression of the EDPM rubber gasket.

The QUICK-LOCK BIG system is available for pipe diameters from DN 800 to DN 2000 and is supplied in installation lengths of 200 mm.



# QUICK LOCK for usage in supply lines

The QUICK-LOCK system is very well established for the rehabilitation of supply lines, especially in the field of drinking water. It doesn't matter whether it concerns vertical well piping or horizontal pressure piping, many partial damages can be repaired sustainably by QUICK-LOCK.

## Drinking water approval:

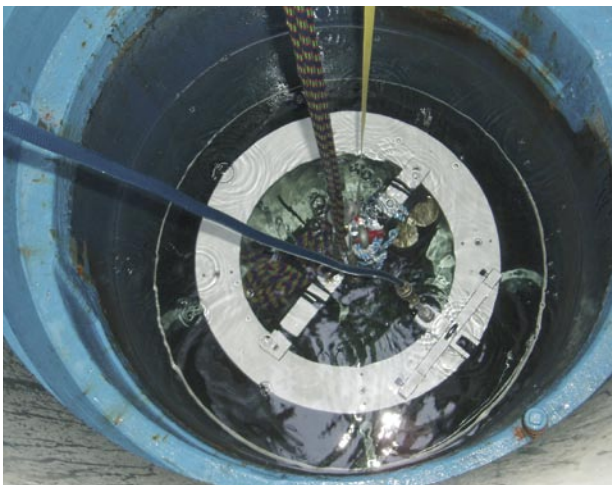
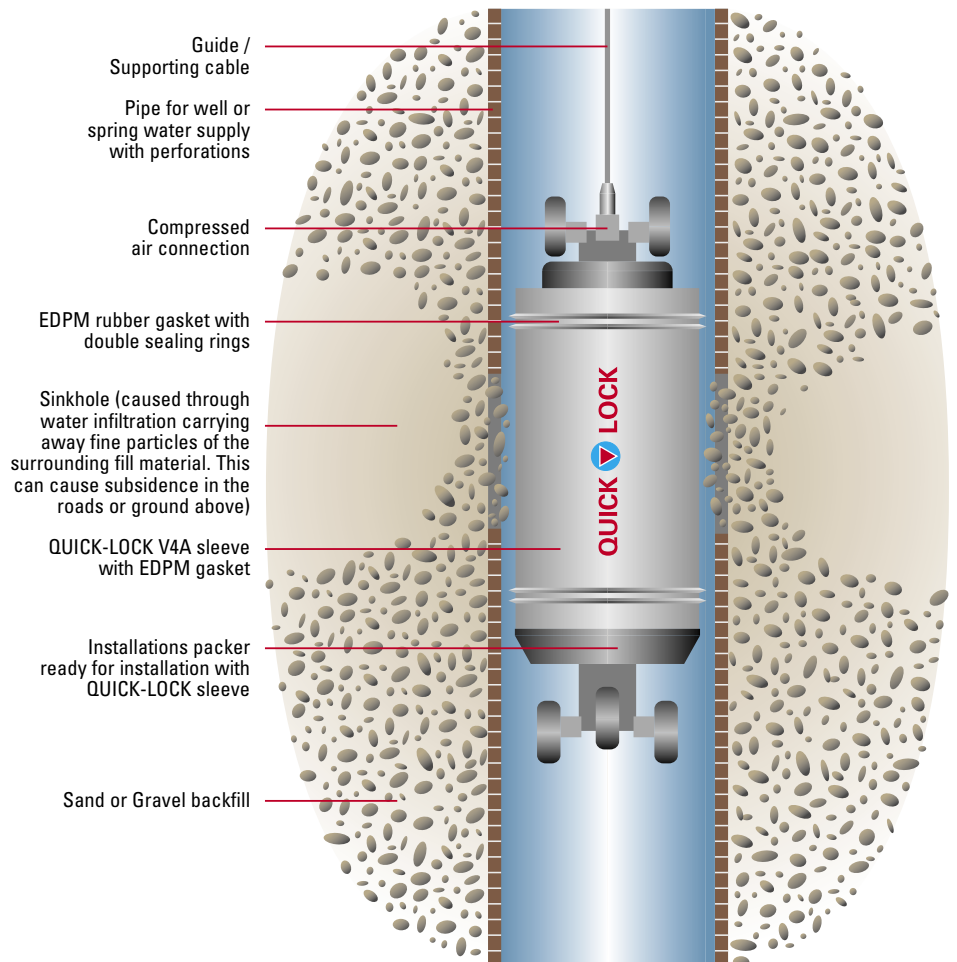
The used materials stainless steel and EPDM correspond with the KTW recommendations of the Federal Ministry of Health and belong to the standard materials in the field of drinking water supplies.

## Well piping:

Leaking pipe connections in well piping? Leakages in the area of filter zones? The QUICK-LOCK system allows repairing these defects quickly and economically even under water.

## Pressure pipes:

For the pressure pipe rehabilitation, the possibility for rehabilitation with the QUICK-LOCK system depends primarily of the pipe surface. At a diffusion tight inner pipe surface the QUICK-LOCK system allows rehabilitation of pressure pipe systems up to an operational pressure of 10 bars.



Competence for all aspects concerning Waste Water

**QUICK LOCK**

**THERM-LINER**

**UAM**  
*proline*

Uhrig - your reliable partner from the start to the project end...



**Sewer Pipe technology**

- **QUICK-LOCK**  
Local patch repair system (non accessible pipe)
- **QUICK-LOCK BIG**  
Local patch repair system (accessible pipe)
- **QUICK-LOCK LEM**  
Local patch repair system (accessible pipe)

**Energy from Waste Water**

- **THERM-LINER**
- Heating and cooling with waste water

**Plant Engineering**

- Sewer Network Management
- Sluice gate and flush systems
- Weir System
- Electronic guidance control system

**Civil Engineering**

- Patented method for installing large diameter pipes and culverts
- Engineer design and build
- Earth moving, floatation and foundations

**Machine technology**

- **UAM**  
excavator attached compactor

**UHRIG**



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