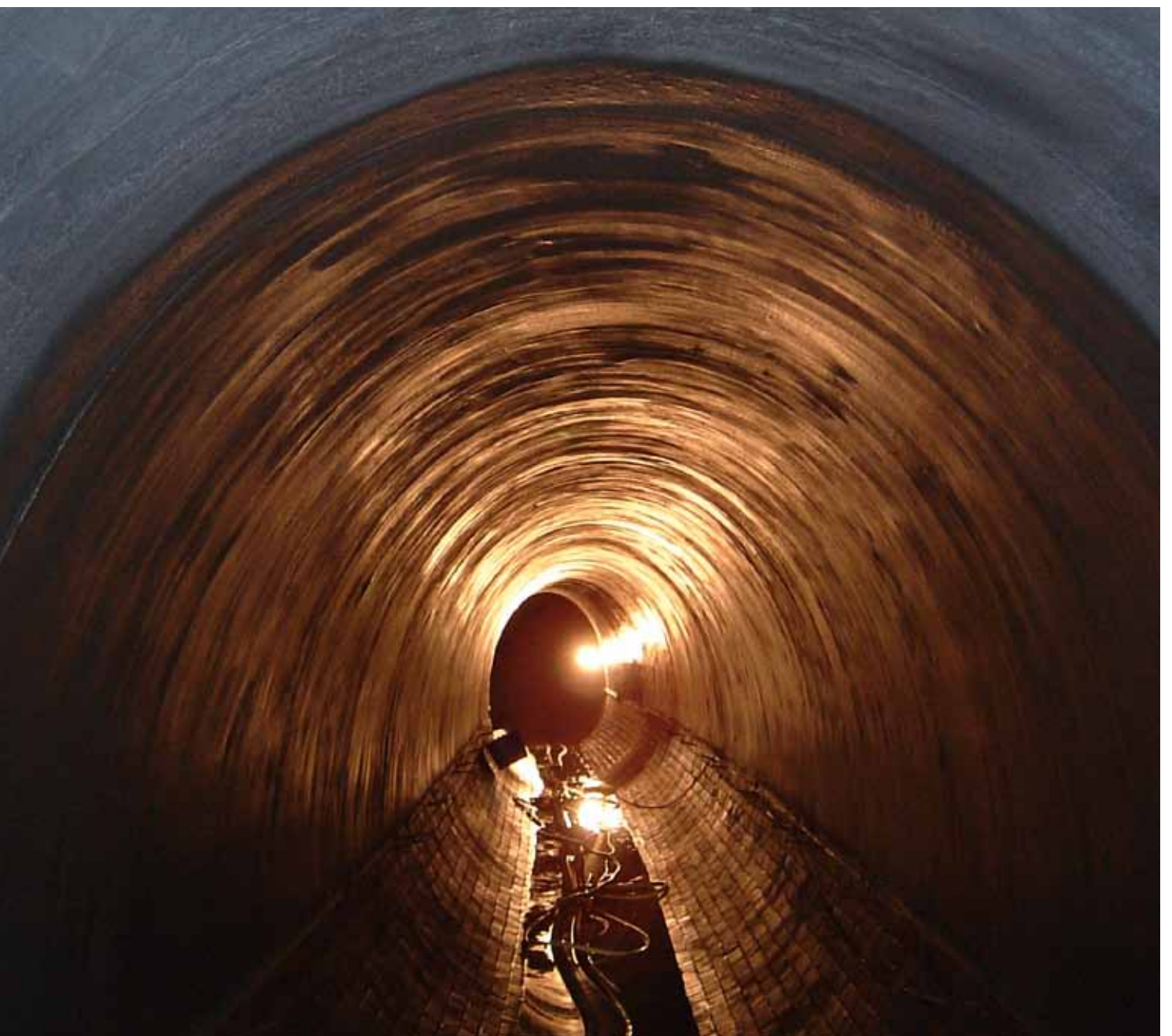


Rehabilitating drains and sewers



Time-saving mortars for drain & sewer rehabilitation

» Building and rehabilitating wastewater structures

Wastewater systems have been constructed in Germany since the middle of the 19th century. Many now need rehabilitating after some 50 to 100 years of use. Some of these wastewater systems or parts of systems - pipes, manhole shafts, water purification plants, catchment basins, aeration tanks, oil and fat separators, digestion tanks and sludge settlement tanks - had suffered serious damage after only a short period of time. Since 1982 the **ERGELIT dry mortars** described below have been developed specifically for the repair of such types of damage. High resistance to aggressive substances is the hallmark of all of these **ERGELIT products**. On-site technical difficulties, such as pipes that are not man-accessible, limited working space and special operating conditions, have always been a major consideration in the development of these **ERGELIT mortars**.

ERGELIT-SBM: The mortar to meet your most stringent requirements

- » sulphate resistance
- » high strength and impermeability to water
- » very high abrasion resistance
- » very high corrosion resistance
- » very high early and final compressive strengths

This material will ensure your brick-built wastewater system is sound and watertight and able to cope with the increasing demands of the coming decades.



Masonry work in shafts and wastewater structures



The M-COATING Process



M-COATING is a rehabilitation process designed for manhole shafts with a depth of up to 25 metres. Using a centrifuge spray, ERGELIT-KS (available in various degrees of corrosion resistance) can be applied in a coating of any desired thickness, from 5 mm minimum. This gives not only protection against corrosion, but greater static strength to the shaft as well.

The ERGELIT KS range:

- » ERGELIT-KS 1 for public wastewater systems
- » ERGELIT-KS 2 for industrial wastewater systems
- » ERGELIT-KS 2b L against biogenic sulphuric acid corrosion

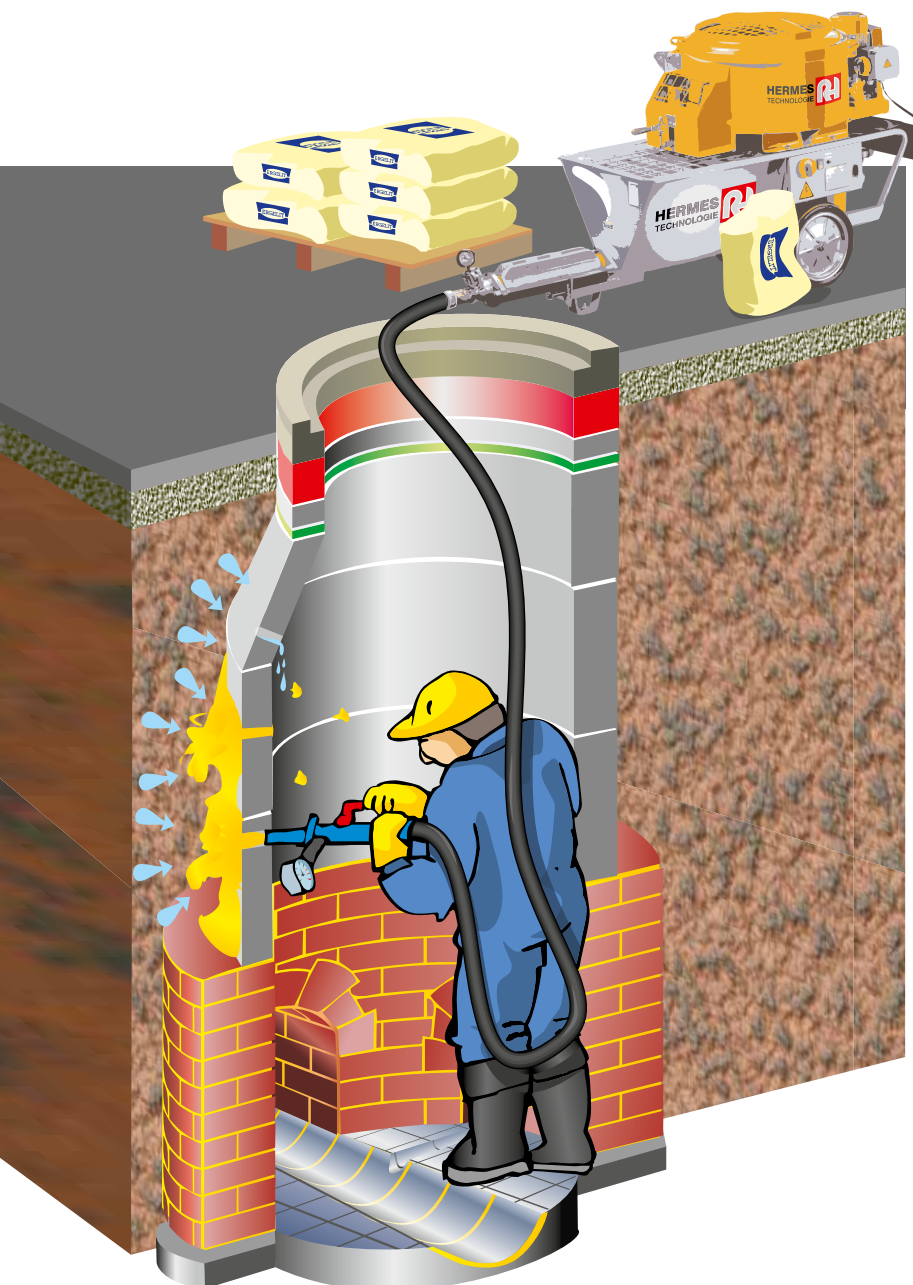




Coating shafts and man-entry pipes

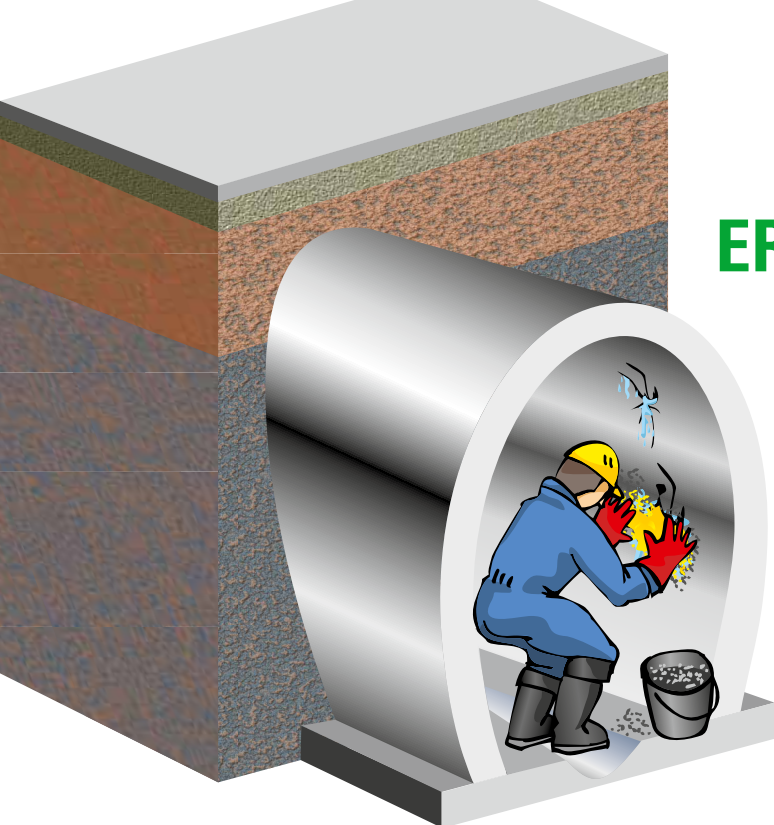
ERGELIT-KBi can be injected in order to produce a complete and durable seal in shafts and man-entry wastewater systems. **ERGELIT-KBi** will not be washed away even by heavy groundwater flow.

» May be used in all drinking water protection zones





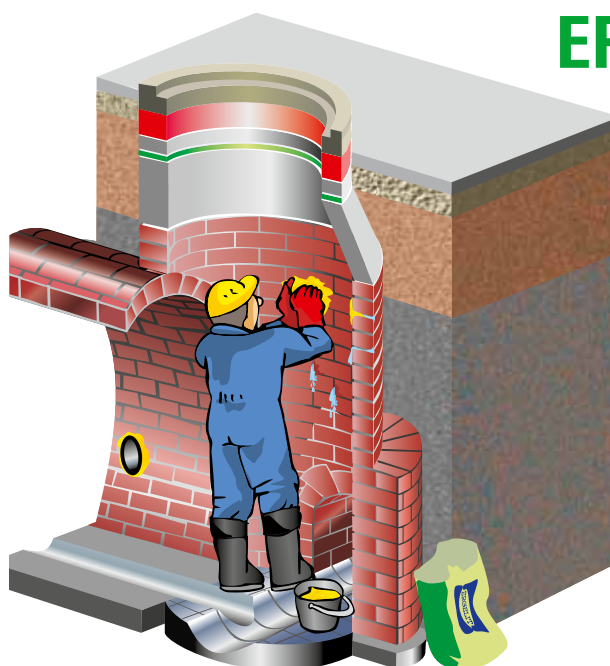
ERGELIT-10F rapid



- » ERGELIT-10F rapid seals off infiltration in seconds
- » ERGELIT-10F rapid is applied in its dry form
- » ERGELIT-10F rapid has impressively high early strength
- » ERGELIT-10 SD spot seals individual leaks where there is more serious water ingress and can even be applied under water
- » ERGELIT-10 SD is kneaded by hand and pressed into a bored hole or damaged area, i.e. directly into the flow of water, and held there until the mortar has hardened
- » ERGELIT-10 SD produces a tough, watertight surface

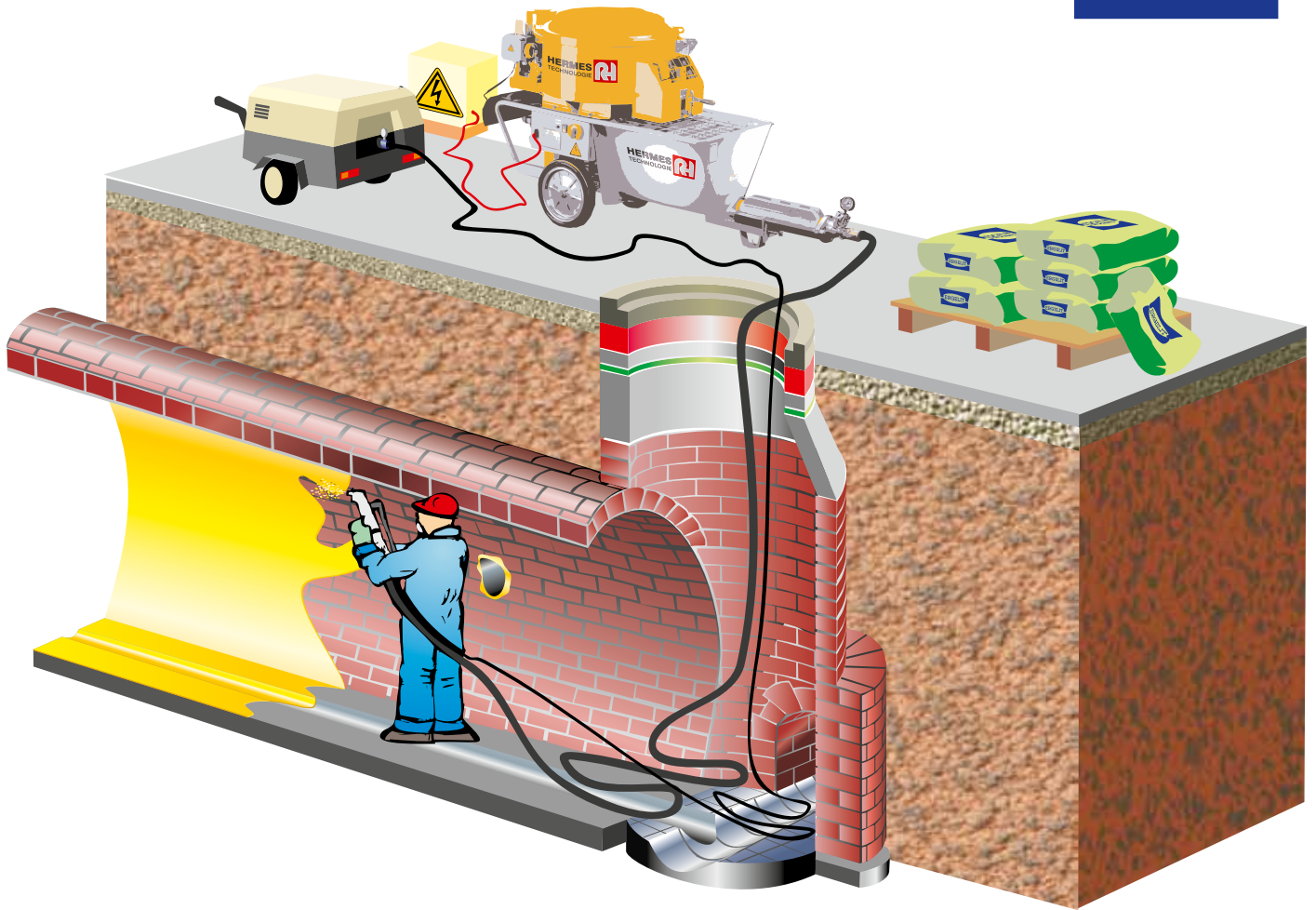


ERGELIT-10SD



- » ERGELIT-10S special is an easy-to-spread mortar that will also plug leaks quickly and permanently
- » even when exposed to running or pressurised water
- » ERGELIT-10 S special can be used in small quantities to accelerate other ERGELIT mortars

Spray-coating

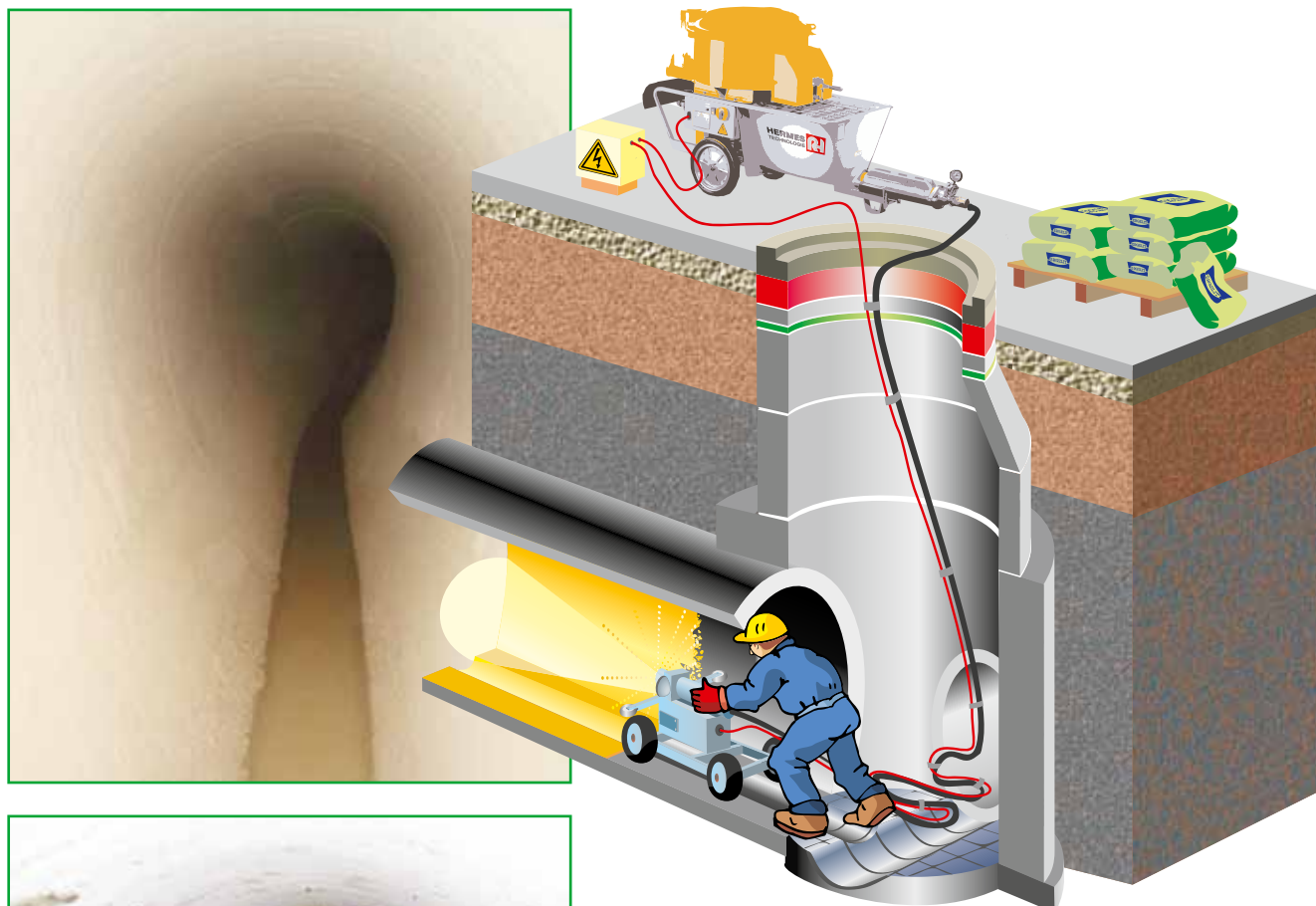


Using the wet spray technique, man-entry sewers and installations can be rehabilitated or relined with a durable, minimum 5 mm coating of the appropriate anti-corrosion grade of ERGELIT-KS. In man-entry sewers, this corrosion-resistant ERGELIT grout is the economical alternative to pipe relining. With the wet spray process, any profile and size of pipe can be statically stabilised and rehabilitated for decades. ERGELIT-KT 10 or ERGELIT-KT 40 are available for use when pumping long distances by hose or where longer processing time is required.





Centrifugal spray-coating



When the entire sewer needs a new lining or coating, the answer is to apply ERGELIT-KS using the centrifugal spray technique (with the appropriate level of corrosion protection) in thicknesses from 5 mm to 40 mm.

Laying ceramic tiles and mouldings

ERGELIT-KSP, ERGELIT-SBM or ERGELIT-KS 1 are the adhesive mortars for fixing large and small ceramic or fused basalt tiles even in difficult situations.



Invert rehabilitation



before



during



after

By using time-saving ERGELIT-KS 1 mortar (in public wastewater systems) or ERGELIT-KS 2 (in industrial wastewater systems), corroded inverts can be repaired quickly and permanently. After thorough cleaning with a high pressure lance, the invert is re-profiled using a squeegee and ERGELIT-KS.



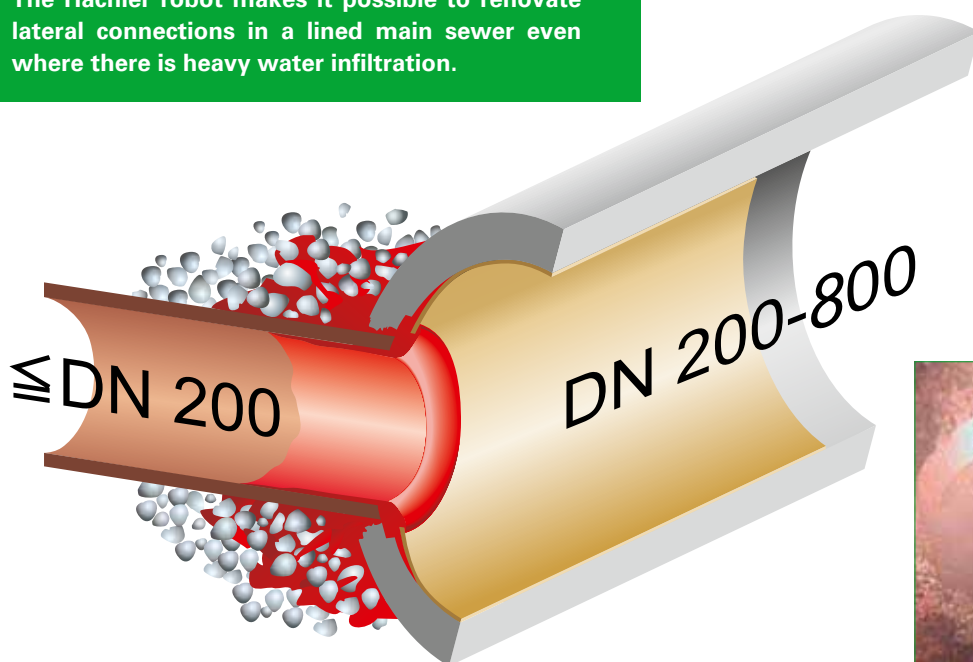
Pointing brickwork



Pressurised repointing of masonry joints with ERGELIT-KBi extends the life of old brick-built constructions. The joints are cleaned out and then a pressure-fed lance is used to grout them with corrosion-resistant ERGELIT-KBi to give a watertight, durable repair. Alternatively, ERGELIT-KS 1 can be used when grouting public wastewater systems and ERGELIT-KS 2 for industrial wastewater systems.

Rehabilitating lateral connections

By using ERGELIT-Kanaltec iS or ERGELIT-Kanaltec CF, watertight connections can be expertly made where laterals join the main sewer. The Hächler robot makes it possible to renovate lateral connections in a lined main sewer even where there is heavy water infiltration.



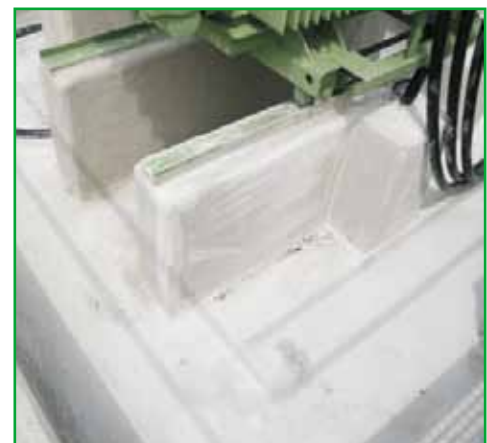
Coating wastewater installations in sewage treatment plants

ERGELIT-KBF is recommended for use on concrete surfaces that are subject to mechanical stress and affected by effluent. The grain structure and the added glass fibres make for much greater crack resistance. ERGELIT-KBF is oil-proof and impermeable to water.



Oil-tight coating

ERGELIT-OED is the right mortar to use for an oil-tight rendering in oil- or fat-separators or holding tanks. It can be sprayed by hose or centrifuge, or applied manually.





Our mortar range

- » **ERGELIT-10S special** - for plugging leaks, and accelerating other ERGELIT mortars
- » **ERGELIT-10F rapid** - the 10 second mortar for stopping water infiltration
- » **ERGELIT-10SD** - the kneadable mortar for plugging leaks
- » **ERGELIT-KS** - for bricklaying, pointing, tiling, coating, centrifuge spraying. It hardens quickly and gives high corrosion protection
- » **ERGELIT-KT 10 und KT 40** - gives a long processing time when bricklaying, coating and spraying. High corrosion protection
- » **ERGELIT-OED** - a cement mortar ideal for the fully comprehensive rehabilitation and repair of every type of concrete surface.
- » **ERGELIT-KBi** - Injection mortar for filling cavities, joints and holes
- » **ERGELIT-SBM** - for constructing sewers, drains and man-hole shafts: your generalpurpose mortar
- » **ERGELIT- Kanaltec CF** - for use with Kanaltec robotic equipment when rehabilitating poorly fitting inlet connections or, when re-lining, between the old and new pipes at the junction with the inlet pipe.
- » **ERGELIT-KSP** - drain and sewer adhesive mortar, especially recommended when fixing large format tiles

For ERGELIT dry mortars for grouting: see separate leaflet.

Our applications specialists will gladly advise you on your specific case. Naturally, we are ready to assist you on site with a particular problem.



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