

for drains & sewers

Ideas · Concepts · Solutions

for the construction and renovation of sewers, pipes, reservoirs, roads, industrial flooring and anchors.









for drains & sewers

Construction and renovation of wastewater installations

Many of the wastewater installations constructed since the end of the 19th century in Europe need renovation after some 50 to 100 years of use. Some of these waste systems or parts of systems pipes, manholes, water purification plants, catchment basins, oil and fat separators, digestion tanks, sludge settlement tanks and aeration tanks - can suffer 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 damage in this environment. High resistance to aggressive substances is the hallmark of all these **ERGELIT** products. On-site technical difficulties, such as pipes that are not man-accessible, confined working space or other special operating conditions, have always been a major consideration in the development of these **ERGELIT** mortars.

construction mortar that meets the toughest demands. It is sulphate resistant, waterproof and extremely strong.

ERGELIT-SBM is a

the increasing demands for robust and watertight drainage systems over the coming decades.

This mortar will cope with

Construction of manholes and wastewater installations



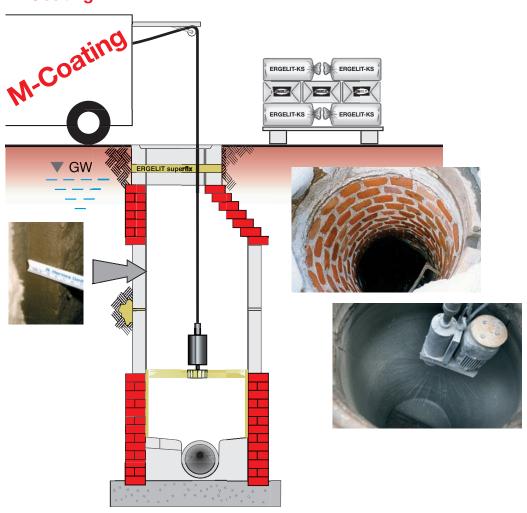








M-Coating



M-Coating is a renovation process designed for manhole shafts with a depth of up to 10 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** against corrosion by domestic wastewater **ERGELIT-KS 2** against corrosion by industrial effluent ERGELIT-KS 2b L against biogenic sulphuric acid corrosion



before



after

for drains & sewers

ERGELIT-KBi can be injected in order to produce a complete and durable seal in shafts and man-entry drainage pipes.

ERGELIT-KBi will not be washed away by heavy groundwater flow.

ERGELIT-10SD seals local leaks and can even be used underwater.

ERGELIT-10SD can be kneaded by hand and worked into the bored hole or damaged area, i.e. into the flow of water, and held in place until the mortar has hardened. ERGELIT-10SD forms a tough, watertight surface.

ERGELIT-10F rapid seals the smallest leaks in seconds.

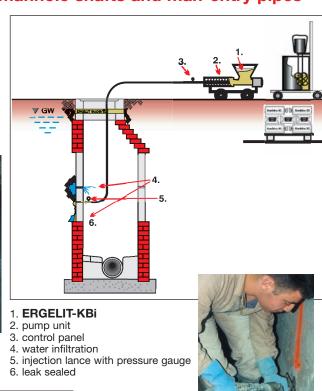
While **ERGELIT-10F rapid** can only be applied dry, you have an easy-to-spread grout in

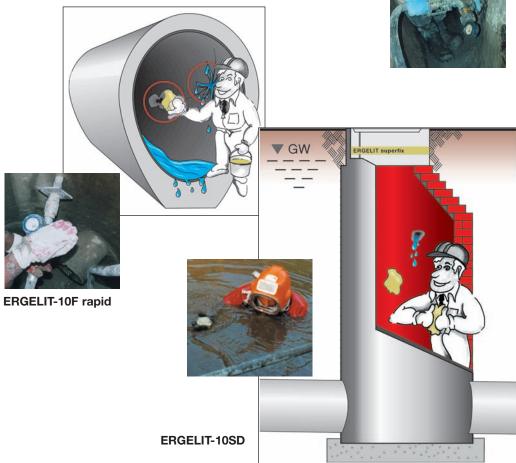
ERGELIT-10S special which also repairs leaks quickly and durably.

ERGELIT-10S special can also be used in small amounts as an additive to accelerate other ERGELIT dry mortars.

Repairing and sealing manhole shafts and man-entry pipes

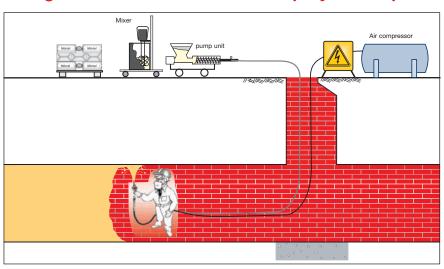








Lining with cement mortar - Wet spray technique

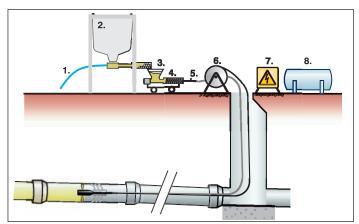


Using the wet spray technique, man-entry sewers and installations can be reprofiled or relined with a durable, minimum 5 mm coating of the appropriate anti-corrosion grade of ERGELIT-KS. In accessible sewers, this corrosion-resistant **ERGELIT** grout is the economical alternative to liner hose techniques. Thanks to the wet spray process, any size and cross-section of pipe can be stabilised and rehabilitated for decades.





Lining with cement mortar - Centrifugal spraylining process





coating, the answer is to apply **ERGELIT-KS** (selecting the appropriate level of corrosion protection) by centrifuge spray, in thicknesses from 5 mm to 40 mm.

When the entire conduit needs a new lining or

- 1. water hose
- 2. ERGELIT-KS
- 3. ERGELIT fresh mortar
- 4. pump unit
- 5. control panel
- 6. hose reel
- 7. generator
- 8. air





for drains & sewers

ERGELIT-KSP or
ERGELIT-KS 1 are the
right adhesive mortars for
fixing both large and small
ceramic or fused cast
basalt tiles, even in the
most difficult situations.
ERGELIT-KS 1 is
recommended for
subsequent repointing in
household wastewater
environments and
ERGELIT-KS 2 for
industrial wastewater.

Fixing ceramic tiles





By using the time-saving mortars ERGELIT-KS 1 (for domestic wastewater) or ERGELIT-KS 2 (for industrial effluent), you can make rapid, durable repairs to corroded inverts. After thorough cleaning with a high pressure lance, the invert is reprofiled using a squeegee and ERGELIT-KS.

Invert renovation









before after



Repointing masonry



The pressurised repointing of masonry joints with **ERGELIT-KBi** extends the life of old brick-built constructions. The joints are cleaned out and then filled via a pressure-fed lance with corrosion-resistant **ERGELIT-KBi** to give a watertight, durable repair.

Renovating 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 connections even where there is heavy water infiltration.



ERGELIT-KBF is

recommended for use on concrete surfaces that are physically stressed or corroded by effluent. The grain structure, together with the glass fibres added, make for much greater crack resistance. **ERGELIT-KBF** is waterproof and oil-resistant.

ERGELIT-OED is the right mortar to use for an oil-tight rendering in oil- or fat-separators or holding tanks. It can be applied by spray or by hand.

Coating wastewater installations in sewage treatment plants



Oil-tight coating



The range of mortars

ERGELIT-10S special – to repair water infiltration and to accelerate other ERGELIT mortars

ERGELIT-10F rapid – the 10 second mortar for stopping water infiltration

ERGELIT-10SD – the kneadable mortar for stopping water infiltration

ERGELIT-Kombina S – for quick repairs, consolidating climbing rungs, bricklaying, pointing and tiling

ERGELIT-KS – for bricklaying, pointing, tiling, coating, centrifuge spraying. It hardens quickly and gives high corrosion protection

ERGELIT-KBi – injection mortar for filling cavities, joints and holes

ERGELIT-DS – mainly for sealing large surfaces

ERGELIT-SBM – for constructing sewers, drains and manhole shafts

ERGELIT-KSP – drain and sewer adhesive mortar, especially recommended when fixing KeraLine or cast basalt tiles

ERGELIT-FM flex – for pointing

ERGELIT-V – for bedding invert channels

ERGELIT-iV - for relining of long flow ways

ERGELIT dry mortars for grouting: see separate leaflet



Engineering products and processes for the construction and renovation of drains, sewers, pipes, tanks, roads, industrial floors & anchors



