



Shaft coating with

M-Coating®



For shaft renovation

The process

Since 1999, M-Coating used in conjunction with ERGELIT dry mortars has been a proven method of rehabilitating corroded and/or leaking shafts. Both circular and rectangular shafts, from DN500 to DN3000, can be cleaned and coated fully automatically and without any problem, to standards set out in DWA M 143-17.

The M-COATING trailer is equipped with a specially designed cleaning nozzle (the TSSR) and a high pressure water pump delivering 385 bar working pressure for the shaft wall cleaning which is vital before any coating operation.

An electric winch lowers the TSSR through the shaft by means of a swivelling crane

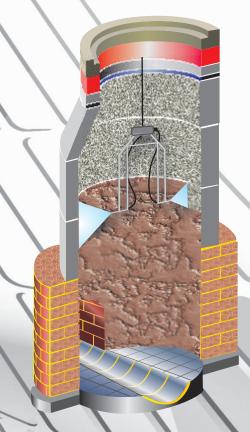
The process is based on more than 25 years of Hermes Technologie experience. The centrifugal spray technique means that shaft walls up to 15 metres deep can be coated to any realistic thickness. The necessary technical equipment is housed in a specially built trailer, ideal for the worksite, or in a van (e.g. the Fiat Ducato). Existing renovation vehicles can

be individually adapted as required.

The M-COATING trailer is equipped with a specially designed cleaning nozzle (the TSSR) and a high pressure water pump delivering 385 bar working pressure, for the shaft wall cleaning which is vital before any coating operation. the shaft by means of a swivelling crane built on to the rear of the trailer. The TSSR jet-nozzles are adjustable between 500 and 3000mm, so that a small and regular distance can be maintained from the surface to be cleaned. The arm on which the jets are mounted is turned by a motor. The result is regular, thorough and effective cleaning. The walls do not normally require any

further cleaning by hand.

The cleaning





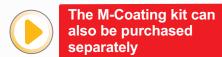
TSSR fully automatic, turns through 360°, working pressure up to 350 bar, sprays up to 12 MPa solid material!

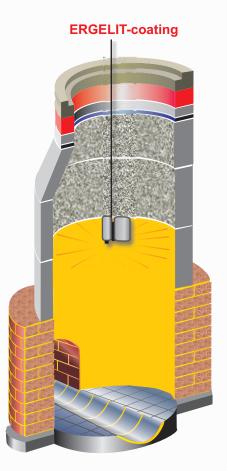


The walls of the shaft are inspected after cleaning. Any possible leaks are sealed off or damaged areas are repaired, using techniques such as pressurised grouting, injection or super-fast **ERGELIT grouts**. All equipment required for this is included as standard in the **M-COATING** system.









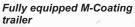






The coating process is based on an integrated system consisting of a mixer, a pump and a centrifugal spray. All three components are fully automated. For loading the grout or controlling the mixer and pump, only one operator is needed.

The centrifugal spray attached to the gantrymounted winch is guided up and down the shaft at constant speed by a second operator.

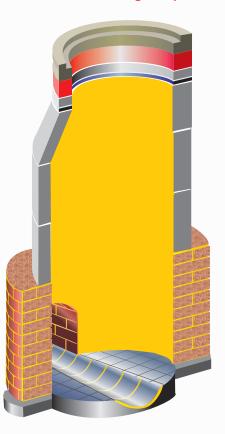


Four wheeled; dimensions approx L 3m50, W 1m75, H 2m max permitted laden weight 2.5 tons



Tripod with HDS-jet for water & sand blasting

ERGELIT-coating completed



Quality assurance

The M-COATING automated system removes many of the sources of error in substrate preparation and the subsequent coating process. It also offers user-friendly operation and an improved level of safety.

A quality assurance handbook provides the operator with a guide to the very best renovation practice, and the client with additional reassurance thanks to a quality assurance certificate issued for every shaft renovated by the M-COATING process.

M-Coating has achieved DIBt certificate n°Z-53.5-461 "Coating mortar ERGELIT-KS1 and injection mortar ERGELIT-KBi for the rehabilitation of wastewater collection systems and inspection shafts, using the M-Coating process."

M-COATING is tested by



M-COATING TSSR is tested by



ERGELIT-KS is independently inspected by the MPA NRW.

Request references, certificates, site reports or videos. We currently have a large amount of information about renovation available for your use, at www.hermes-technolgie.de

ERGELIT mortars for preparation

ERGELIT-KBi

- injection grout for filling cavities, gaps and holes

ERGELIT-10F rapid

the 10 second grout for plugging water infiltration

ERGELIT-10SD

the kneadable mortar for plugging water infiltration

ERGELIT coating mortars

ERGELIT-KS1

- Corrosion protection against domestic effluent from pH 4.5 to pH 10

ERGELIT-KS 2

 as above, but gives corrosion protection against industrial effluent between pH 3 and pH 12 and spikes of pH 1. Resistant to heavy attack from sulphates, magnesium, ammonia, oils, fats, benzole, petrol.

ERGELIT-KS 2b L

 resistant to heavy biogenic sulphuric acid attack from pH 1



These **ERGELIT-mortars** meet the specifications set out in GSTT Information Sheet no 18 and DWA M 143-17.

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

