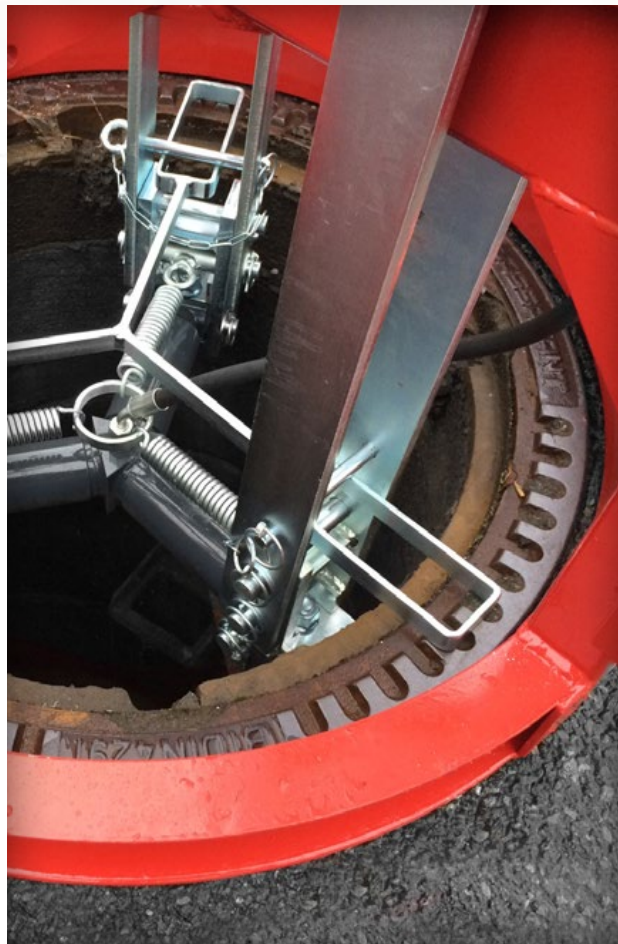




# MANHOLE FRAME ADJUSTMENT

COMPLETE RANGE FROM A TO Z

ISS. 04/2019








# MANHOLE FRAME RENOVATION


RENOVATION OF SUNKEN OR RAISED MANHOLES

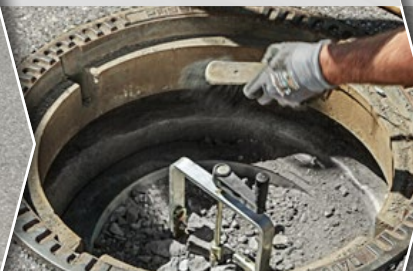
MANHOLE FRAME RENOVATION


1
00:00

SCHACHTMEISTER man-hydr.  
in position


2
00:05

Lower lifting cross


3
00:09

Raise manhole


4
00:12

DIRT COLLECTING TRAY  
Insert

5
00:16

Remove old mortar grout

6
00:18

AIR CLADDING MOULD  
in position

7
00:26

Pour shaft

8
00:28

Un-mould

9
00:30

Completed renovation


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# MANHOLE FRAME NEW PROJECT


RAISING THE MANHOLE FRAME THROUGH THE ASPHALT TOP LAYER

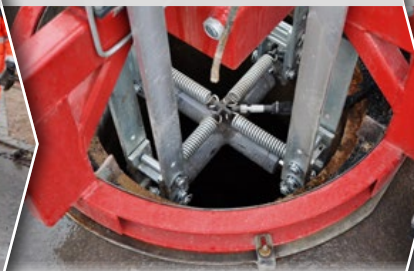
MANHOLE FRAME NEW PROJECT


1
00:00

Clear the manhole


2
00:07

Remove the dirt tray


3
00:13

SCHACHTMEISTER motor-hydr.  
in position


4
00:19

Lower lifting cross

5
00:20

Extend spreader grips

6
00:22

Bring manhole frame  
to level

7
00:25

SCHACHTMEISTER motor-hydr.  
remove

8
00:34

Pour shaft

9
00:38

Finished manhole

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# SCHACHTMEISTER 3.1

## MANUAL-HYDRAULICS



DEEPIMPACT

### DESCRIPTION

amtec's manually operated 3-arm-lifter the **Schachtmeister 3.1** is the ideal piece of equipment for adjustment work when renovating sunken or raised manhole frames.

### APPLICATION AREAS

Manhole frame adjustment for class D and B manholes.

### ADVANTAGES

- ✓ Robust, high-quality construction  
Made in Germany
- ✓ Optimally adjusted components
- ✓ Precise, labour-saving work
- ✓ Simple, ergonomic operation
- ✓ High-quality results
- ✓ Many add-on options

### TECHNICAL DETAILS



Model	manual hydraulics
Actuator	high performance double piston pump
Hydraulic cylinder	3
Lifting height	290 mm
Lifting capacity	32 t
Chassis lift	200 mm - manual
Dimensions (L x W x H)	1000 x 1200 x 1340 mm
Weight	approx. 190 kg

# SCHACHTMEISTER 4.3

## MOTOR-HYDRAULICS



LIFTS MANHOLES  
THROUGH THE  
SURFACE

### DESCRIPTION

amtec's motorised 4-arm-lifter **Schachtmeister 4.3** is the ideal piece of equipment for professional use in manhole frame adjustment.

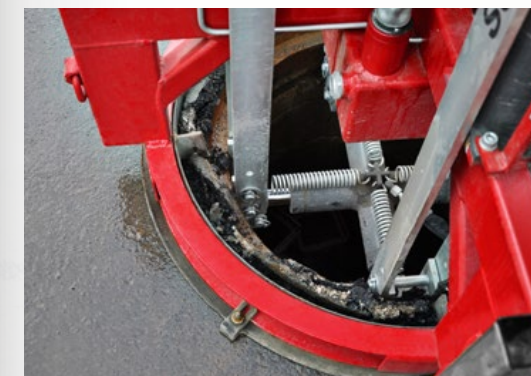
### APPLICATION AREAS

- Manhole frame adjustment for class D and B manholes and rain water inlets
- Raising manhole frames through the asphalt top layer in new road construction

### ADVANTAGES

- ✓ Robust, high-quality construction  
Made in Germany
- ✓ Optimally adjusted components
- ✓ Powerful lifting capacity even for the most demanding tasks
- ✓ Precise, labour-saving work
- ✓ Full hydraulic operation
- ✓ High-quality results
- ✓ Numerous accessories

### TECHNICAL DETAILS



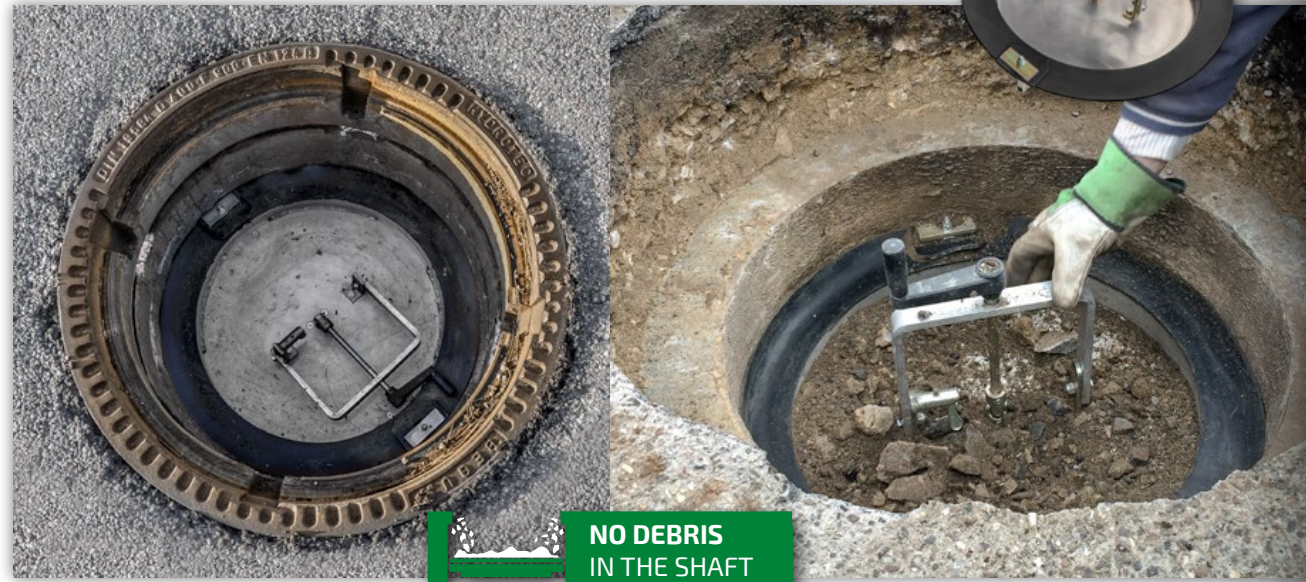
Model	motor-hydraulic
Actuator	Honda GX 100 2.1 kW (2.8 PS)
Hydraulic cylinder	4
Lifting height	290 mm
Lifting capacity	42 t
Chassis lift	200 mm - hydraulic
Dimensions (L x W x H)	1150 x 1340 x 1450 mm
Weight	approx. 290 kg



# DIRT COLLECTING TRAY

KEEPS THE SHAFT FREE FROM DEBRIS

DIRT COLLECTING TRAY



NO DEBRIS  
IN THE SHAFT

## DESCRIPTION

The dirt collecting tray is a practical aid for all manhole frame work and prevents dirt, mortar residue or tools from falling into the shaft.

The stable lightweight construction made of high-quality aluminium features practical details such as a peripheral rubber seal and a fold-down handle, making for comfortable and labour-saving work.

Solid all-metal clamping brackets ensure a secure fit in the shaft structure even under heavy loads.

## ADVANTAGES

- ✓ **Safe and convenient work**
- ✓ **Simple, ergonomic operation**
- ✓ **High-quality metal construction**
- ✓ **Secure fit even under high loads**

## APPLICATION AREAS

Seals the shaft structure stopping dirt, mortar residue and falling tools when working on the manhole frame.

## TECHNICAL DETAILS

Model	Dirt collecting tray, aluminium with rubber seal	
Clamping range	approx. 560 - 640 mm	
	-	round manhole frames class D400 / DN610
	-	manhole components with DN625
Weight	approx. 7.5 kg	

# GROUTING MOULDS

FOR GROUTING MORTAR

GROUTING MOULDS



GROUTING HEIGHT  
UP TO 305 MM

## DESCRIPTION

Nadler's range of **grouting moulds** ensure high-quality and clean joint grouting during adjustment work on manhole frames. Depending on the application, different models are available.

## APPLICATION AREAS

Grouting work during manhole frame adjustment:

- **Manhole structures, class D 400**
- **Street drains and sink boxes**

## CONSTRUCTION

### ■ TUBE MOULD

For inflation with integrated sealing strip, quick venting valve and 2 carrying straps for easy removal from the shaft.

**Height:** approx. 200 mm

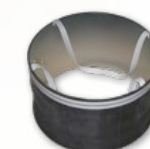


Incl. 1 filling nozzle

### ■ AIR CLADDING MOULD

Inner part made of stable, hot-dip galvanised sheet steel, the outer part of robust rubber for inflation, quick venting valve and 2 carrying loops for easy removal from the shaft.

**Height:** approx. 305 mm

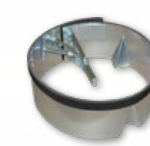


Incl. 2 filling nozzle  
Particularly suitable for large ring diameters

### ■ METAL MOULD

Metal shaft mould with foam rubber sealing and integrated filling funnels. The robust special screw fitting ensures uniform contact with the inside of the shaft structure.

**Height:** approx. 200 mm



No inflation required.

### ■ TUBE MOULD FOR RAIN WATER INLETS

Consisting of a heavy-duty air hose with vulcanized rectangular-rubber, preventing the overflow of grout into the drain shaft

**Height:** approx. 200 mm



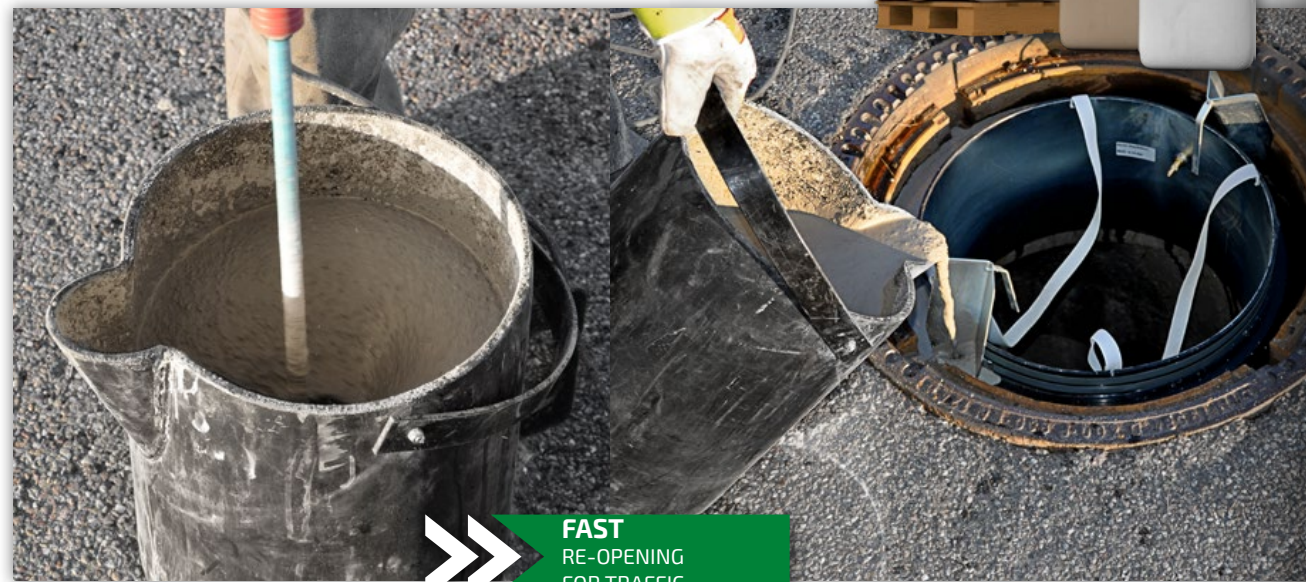
Suitable for street drains  
54 x 54cm, 50 x 50cm,  
Var. lengths



# GROUTINGMORTAR

SUPERFIX 10 + SUPERFIX 35 F

GROUTING MORTAR



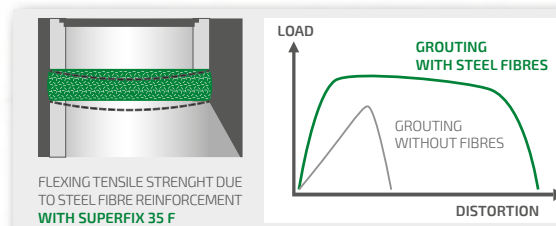
## DESCRIPTION

ERELIT®-grouting mortars are ready-to-use special mortars of the highest quality. Different granular grades and compositions as well as many years of experience guarantee a cost-effective, strong and durable solution to the problem.

The high flowability and low dependence on temperature of ERELIT®-grouting mortars mean trouble free grouting in virtually any weather conditions, summer or winter.

## APPLICATION AREAS

- Grouting ring gaps under raised manhole frames.
- Grouting of machine anchors, railings, posts and house entries.
- Grouting of slit gutters at airports.



## ADVANTAGES

- Particularly good flowability
- Shrink-free, self-levelling
- Extraordinarily high initial strengths
- Very good compressive, tensile and adhesive strengths
- Oil-resistant
- Impact and vibration resistant
- Good corrosion protection and high resistance to frost and road salt

## TECHNICAL DETAILS

	SUPERFIX 10	SUPERFIX 35 F
Composition	Additive hardened, cement bound grouting mortar	Additive hardened, cement bound grouting mortar with steel fibres
Granule size max	1 mm	4 mm
Grout level	up to 4 cm	4 to 12 cm
Water required	4.25 l to max. 4.9 l	3 l to max. 3.5 l
Processing temperature	to -5 °C	to -5 °C
Shelf life	6-9 months	6-9 months

# ADJUSTMENTRING

RENOVATION RINGS FOR MANHOLE RENOVATION

ADJUSTMENT RING & RUBBER BUFFER



## DESCRIPTION

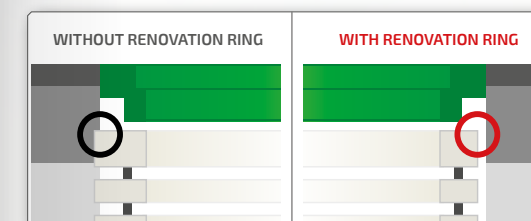
Nadler renovation rings are specifically made for manhole renovations and are available in the following heights: 4, 6, 8 and 10 cm.

All Nadler renovation rings have a diameter of 76 cm and are therefore smaller than the manhole frame.

The renovation adjustment rings are aligned in the manhole using rubber buffers. These rubber buffers are used to create a ring gap between an adjustment ring and the manhole or another adjustment ring, which is then grouted.

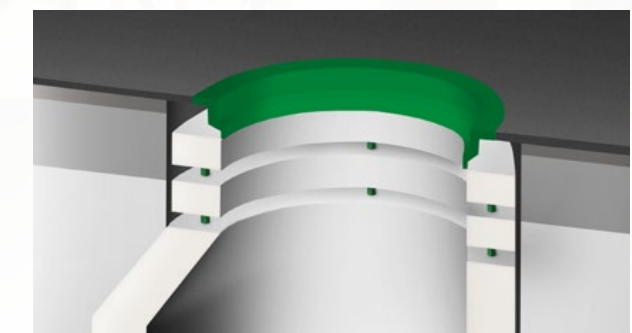
## ADVANTAGES

- 76 cm diameter of renovation rings - smaller than the manhole frame
- Self positioning of rubber buffers using cords



## APPLICATION AREAS

- Installing and exchanging adjustment rings
- Complete manhole renovation



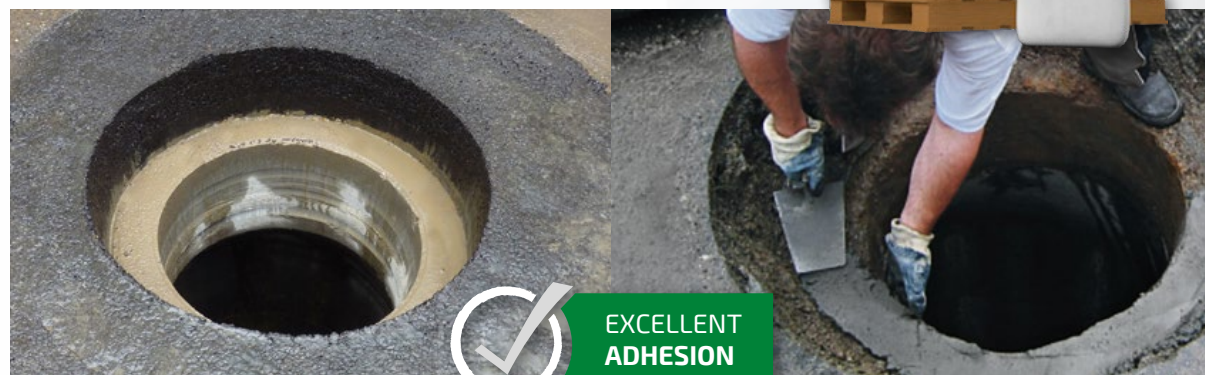
## TECHNICAL DETAILS

Composition	Concrete renovation ring
Heights	4 cm, 6 cm, 8 cm, 10 cm
Shelf life	unlimited



# MANHOLE CONSTRUCTION MORTAR

## RENOVATION MORTAR



**EXCELLENT ADHESION**

### DESCRIPTION

Masonry mortar for the highest demands. It is sulfate-resistant, waterproof and high-strength. ERGELIT®-SBM adheres well to the substrate when carefully applied.

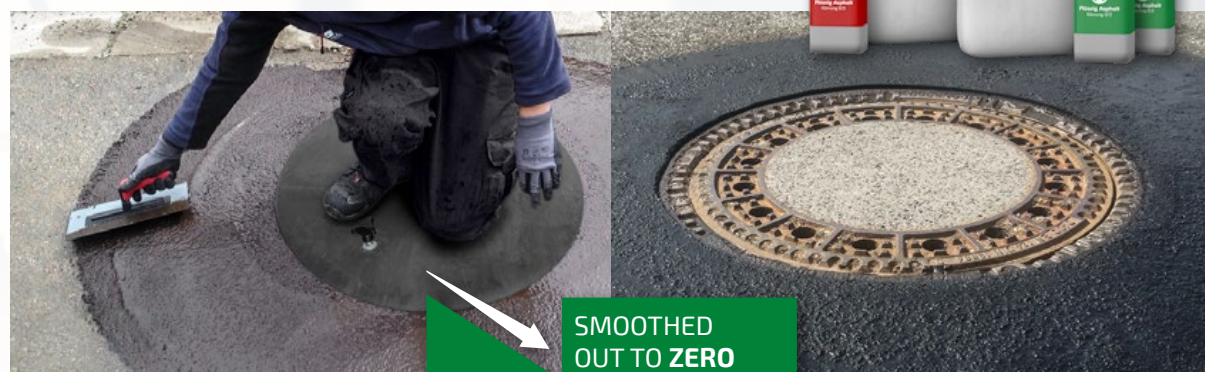
High initial strength allows early load-bearing capacity of the masonry.

### ADVANTAGES

- ✓ Early strength and shrink-free
- ✓ High resistance to abrasion
- ✓ High resistance to dynamic stress

# LIQUID ASPHALT

## ADJUST MANHOLES



**SMOOTHED OUT TO ZERO**

### DESCRIPTION

Liquid asphalt is a cold-processable 2-component bitumen-based mix. The two components are precisely combined and give liquid asphalt unique processing and material properties.

**Our tip for even more perfect results:** the Nadler cover mould FA.

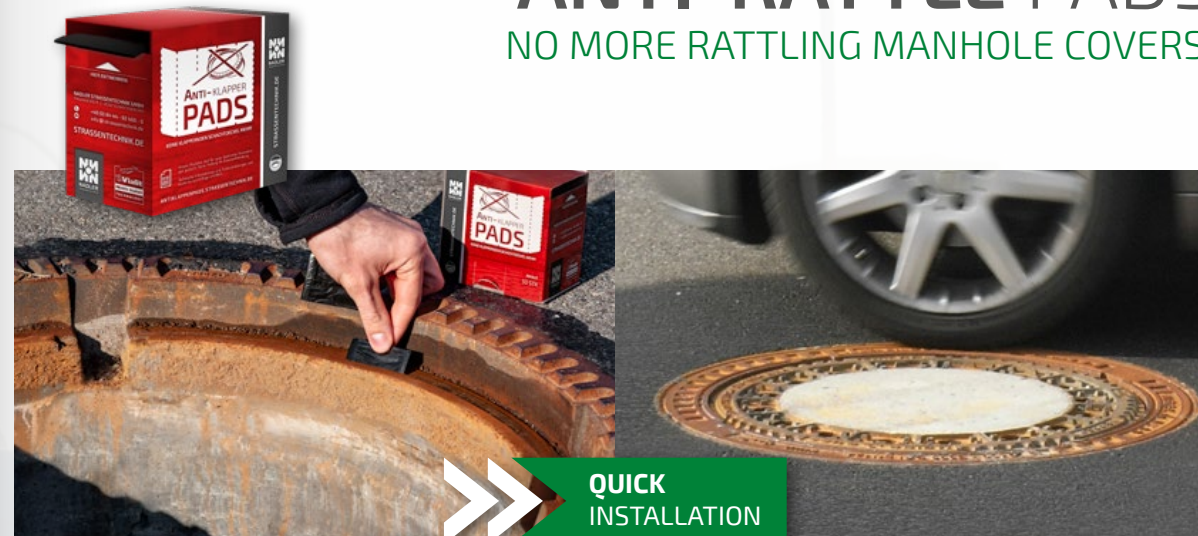
### ADVANTAGES

- ✓ Fast re-opening for traffic
- ✓ Smoothed out to "0" at edges
- ✓ Environmentally friendly (solvent free)



# ANTI-RATTLE PADS

## NO MORE RATTLING MANHOLE COVERS!



**QUICK INSTALLATION**

### DESCRIPTION

By using the new anti-rattle pads, vibrations and shocks are permanently and effectively reduced and annoying rattling eliminated.

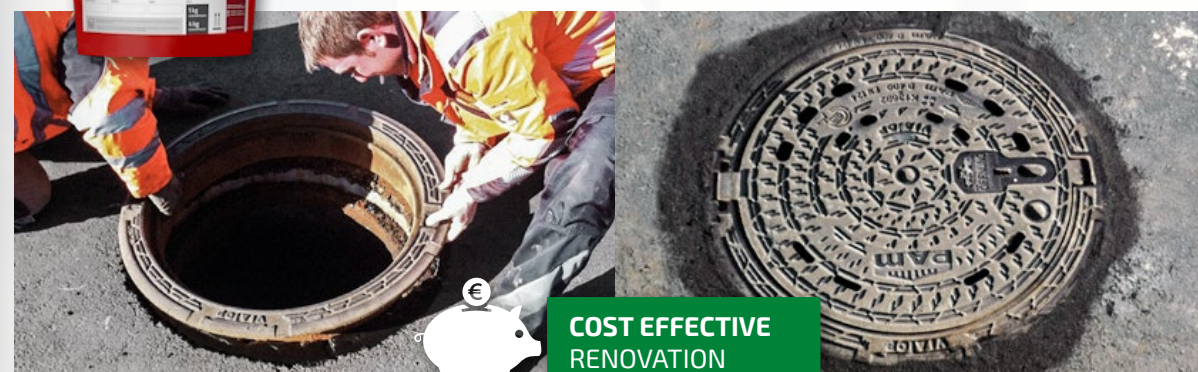
**They fit ALL manhole and hatch covers.**

### ADVANTAGES

- ✓ Permanently prevent rattling
- ✓ Quick installation
- ✓ Organic recipe

# SELF-LEVELLING RENOVATION

## RENOVATION OF SELF LEVELLING MANHOLES WITH BÜCOFIX



**COST EFFECTIVE RENOVATION**

### DESCRIPTION

Instead of complex and cost-intensive replacement, renovation of self-level covers with BÜCO-FIX is a worthwhile and high-quality option. BÜCOFIX cures within a very short time, adheres excellently to asphalt, concrete and cast iron and the site can be re-opened for traffic again after only 30 minutes, even on roads with a load class of 100.

### ADVANTAGES

- ✓ Fast re-opening for traffic
- ✓ Cost effective renovation
- ✓ Durable solution
- ✓ Highly abrasion-resistant



# PRACTICAL HELP

## TOOLS FOR MANHOLE FRAME ADJUSTMENT

### ADJUSTING DEVICE

For levelling manhole frames without wedges or similar underlays



LEVELLERS & TRANSPORT WONDERS

### PE GROUTING BUCKET

Special grouting bucket with pouring lip takes a whole bag of grouting or shaft construction mortar.



EASY CLEANING

### BIOLAST 2K

Ideal for cold grouting shafts. 2K component-grout, reactive bitumen-based in a practical cartridge.



IDEAL FOR SMALL RENOVATIONS

### MIXING HELP

With Nadler measuring cups & agitators, mix in no time.



QUALITY-ASSURANCE

### COVERLIFTER

We offer various cover lifts for manholes, hatches, hydrants and rainwater inlets.



PARTICULARLY BACK FRIENDLY

### COVERBOARD FA

Indispensable help for a clean result when adjusting protruding manholes with liquid asphalt.



CLEAN MANHOLE COVER

The information printed in this brochure is based on experience and the most recent research and practice, however it is non-binding and does not establish a contractual relationship.

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