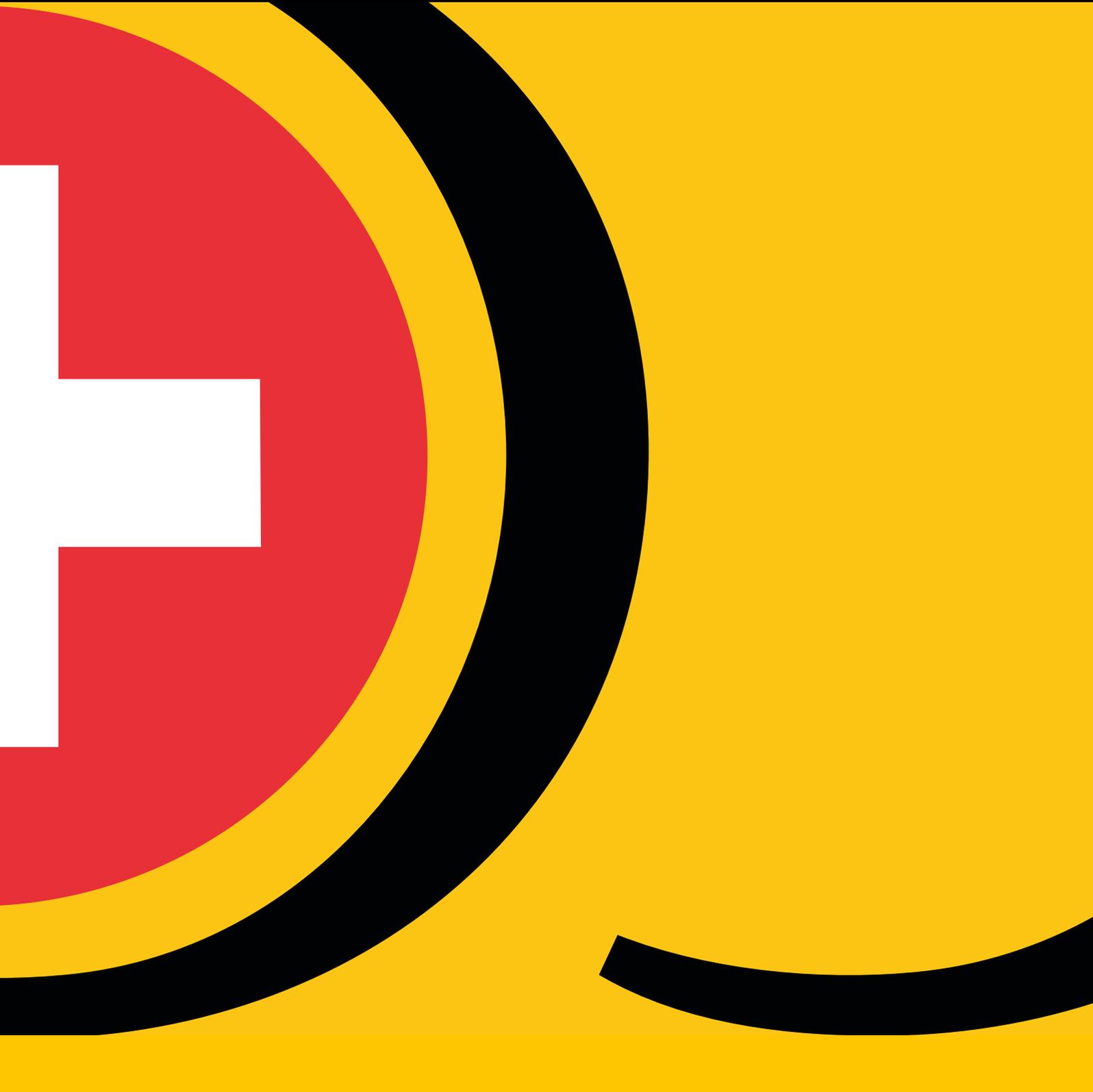


RS MaxLiner[®] System

DN 70 - DN 400

- Including In-House approval
- DIBt Approvals: Z-42.3-389, Z-42.3-487



RS Technik

With a system to success

RS Technik AG is one of the leading suppliers of systems for trenchless rehabilitation in the area of wastewater pipes and is able to look back on many years of experience in the development and marketing of repair and rehabilitation systems.

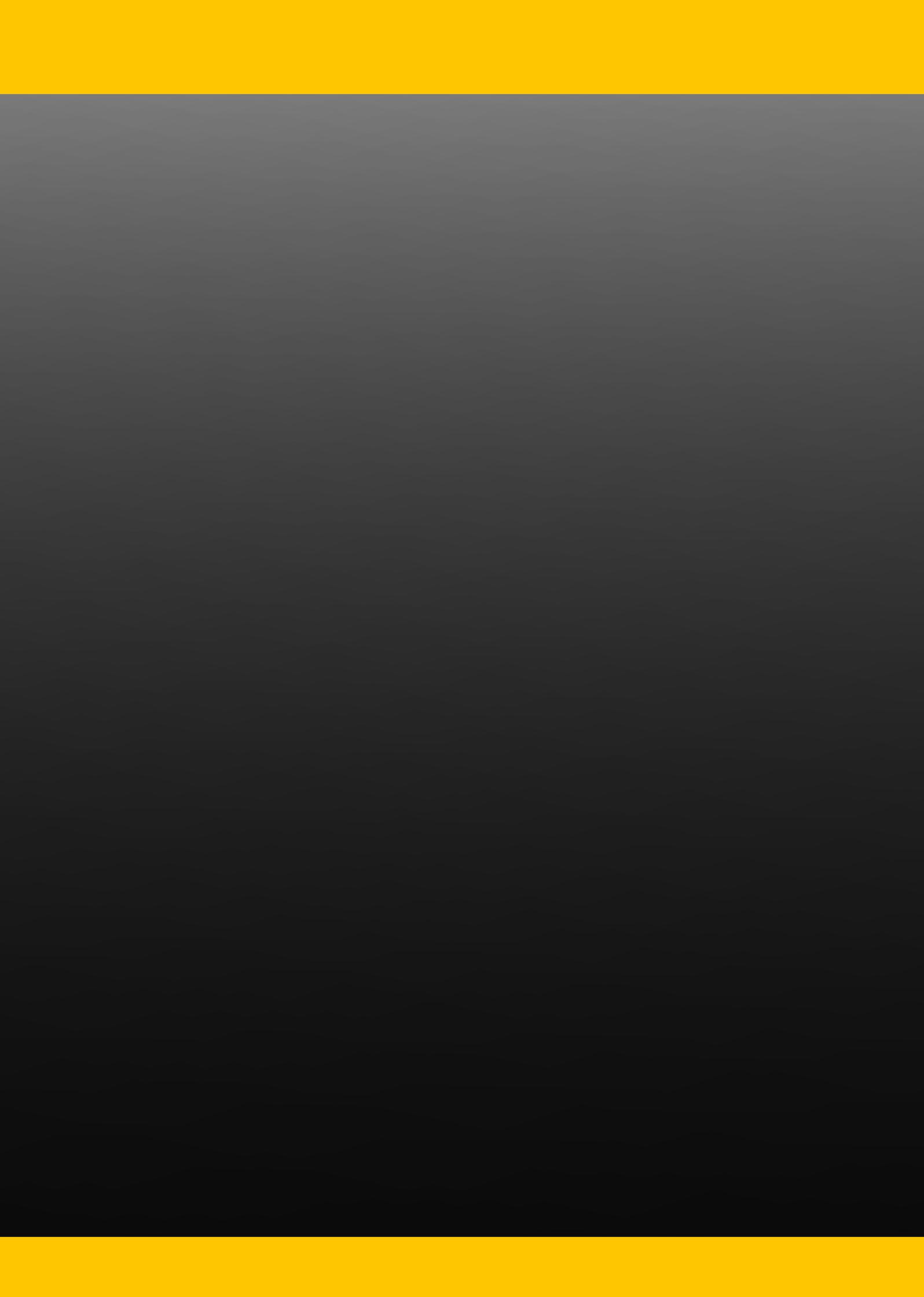
For over 25 years RS Technik has been offering comprehensive solutions for the rehabilitation of pipes and sewers: with the most modern equipment, first-class materials, on-site training and ongoing technical application support. The development and application of RS Technik solutions is founded in the main on the use of proven, effective and reliable alternatives for the rehabilitation of underground infrastructures around the world. Adapted to findings and experience gained from a large variety of markets.

In addition to high-value systems, techniques, products and materials we offer comprehensive advice to our customers and are at their side in all phases of their projects.

In order to be able to apply our systems successfully and without problems, you as one of our customers will be trained not only in the theory of these but also in their practical application on site. We speak your language and lead you step by step to success with solutions customised to your particular requirements.

RS Technik AG

Your expert partner for trenchless sewer and pipe rehabilitation systems.



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RS LinerGun® Inversion device

The RS LinerGun® is a light inversion device, which can be used flexibly for the renovation of pipes.

Properties

Small and compact

Flexible application

No liner length limitation, max. length only dependent on material and processing time

Liner inversion by means of compressed air

Heating with water or steam possible

Time saving: Inversion during impregnation/ calibration possible

Robust and reliable: simple operation, completely maintenance-free



control unit



adapter rings



mounting frame



Technical data

Application range: DN 50 - DN 300

Accessory: RS Control unit, adapter rings
DN 150 & DN 200, air tubes, mounting frame
foldable (also suitable for manual use with the RS
calibration roller)

Dimensions (l x w x h):

With mounting frame: 900 x 500 x 750 mm

Without frame: 500 x 400 x 450 mm

Weight: 35 kg

RS LinerCannon® Inversion device

The RS LinerCannon® is used for the inversion of the impregnated liner into the damaged pipe with compressed air.

Properties

Pressure drum in very light design

Material: stainless steel, Pressure drum in weight-optimized design

Liner inversion by means of compressed air

Heating with steam or water possible

Available in different sizes: 600, 800, 1000

Mobile assembly by means of transport wheels and carrying grids

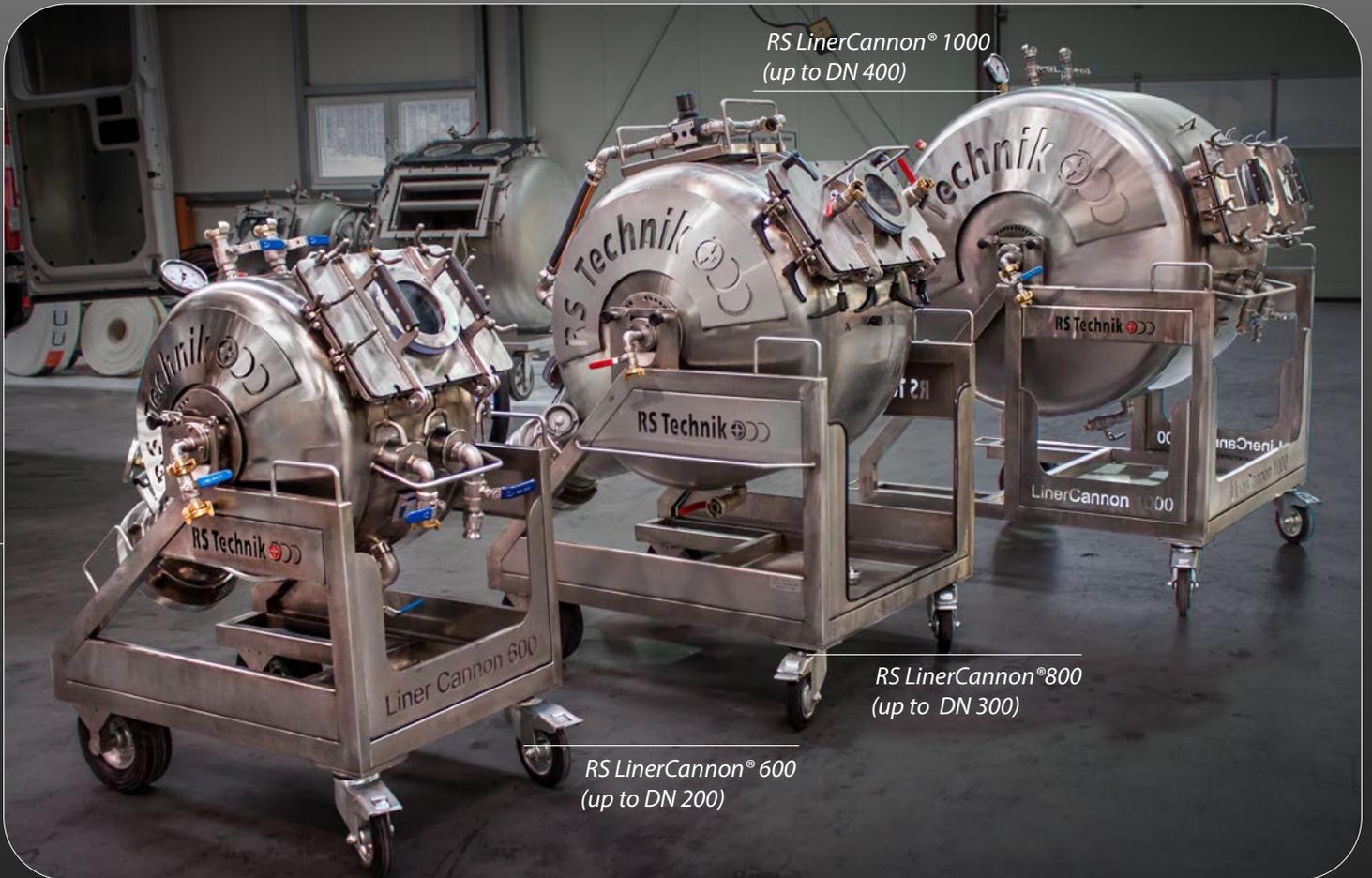
Viewing window above the steering wheel and temperature display on the hopper

Handwheel with parking brake/locking bolt

Shaft with eyelet for retaining strap

Safety valve 1.5 bar





*RS LinerCannon® 1000
(up to DN 400)*

*RS LinerCannon® 800
(up to DN 300)*

*RS LinerCannon® 600
(up to DN 200)*



Technical data

1" water outlet

2 x compressed air connection on drum,

3/4" sleeve, pressure gauge 1/2"

Storz coupling connection for adapter ring

Maximum pressure: 1.5 bar,
higher possible on request

RS Calibration roller mobil DN 300 / DN 400

With the RS calibration roller, we offer you a compact system for impregnation of pipe liners up to DN 300 and DN 400.

Properties

Manual adjustment of the roll gap

Calibration speed from 0 - 5.0 m/min infinitely adjustable by potentiometer

Operation via panel or foot-switch

Stainless steel frame and support frame safety flap

Digital roller gap display and laser distance sensor, additional distance scale

Folding roller conveyor with a length of approx. 600 mm, ball-bearing stainless steel rollers





Technical data DN 300

Usable roll width: 450 mm Roller diameter: 113 mm

Motor power: 2x 0.18 kW

Power consumption: max. 0.5 kW

Dimension (L x W x H): approx. 750 x 600 x 1,590 mm



Technical data DN 400

Usable roller width: 600 mm

Roller diameter: 138 mm

Motor power: 2x 0.25 kW

Power consumption: max. 0.75 kW

Dimension (L x W x H): approx. 900 x 600 x 1,590 mm

Weights: 370 kg

RS CMU Mixing unit

The RS CMU (Controlled Mixing Unit) is a simple mixing unit that ensures air-free mixing in the static mixer and an exact mixing ratio.

Properties

Material: Stainless steel (tank, mechanics), Aluminium (cover)
Aluminium hard anodized (pumps, valves),
Partly galvanized steel

Control: Pneumatic, volume control via pneumatic stroke

Preselection counter, operating lever with 3 positions, hardener selection lever for tank 1 or 2

Equipment: Tank level indicator and shutdown when the tank is empty, pressure relief device, operating mode control, optional refueling device

Mixing system: Air-free mixing of MaxPox (epoxy) or MaxPatch (silicate resin) system in replaceable static mixer



control elements

RS CMU



Technical data

Weight: approx. 95 kg empty

Tank capacity: tank 1: 60 litres, tank 2: 30 litres, tank 3: 15 litres

Flow rate: approx. 7.5 kg/min or 250 g mixture per double stroke

Pumps: 3 piston dosing pumps patented, designed as submersible pumps in tanks, double acting, with pneumatic control, seals/O-rings material resistant

Drive: pneumatic cylinder, operating pressure 5 bar

Dimensions (l x w x h): 750 x 480 x 1250 mm

RS CCM[®] Mixing unit **10 kg | 18 kg**

The RS CCM[®] (Computer Controlled Mixing Unit) is a fully automatic metering and mixing system that enables the air-free mixing of resin components while optimizing the processing time.

Properties

Siemens touch panel

Delivery rate 10 kg/min | 18 kg/min

Configurable for 2 or 3 tanks

Extensive sensor technology

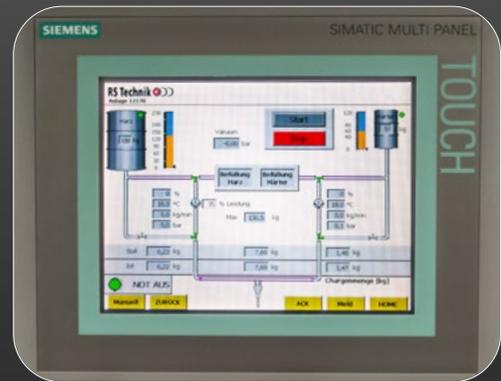
Climate system for resin and hardener

(heating coil system optionally available)

External filling device with return line for circulation directly in the IBCs

Seamless documentation of the mixing parameters,

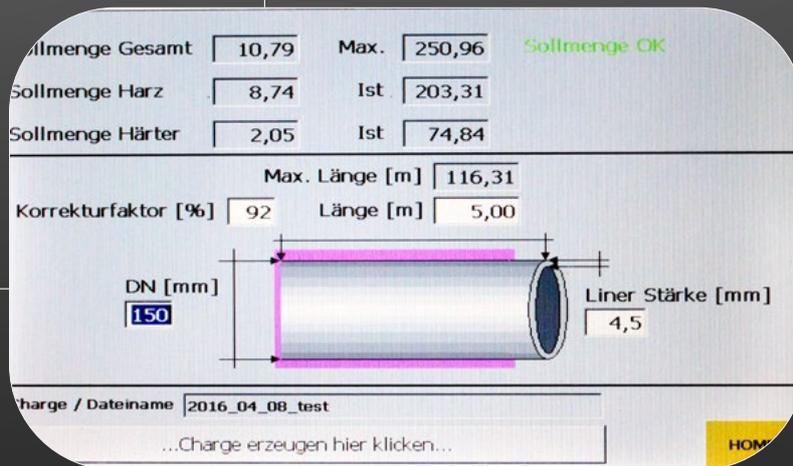
Transfer via USB



Siemens touch panel

control panel





SPS control system

Equipment

- Eccentric screw pump for resin/hardener
- Filling lances for refuelling the system from IBC or barrel
- Mixing head, filling hoses & spare parts set (stators etc.) included
- Optional remote maintenance possible



heating coils
optionally available

RS HotBox® 60 | 105 Mobile heating system

A big advantage of epoxy resin systems is the safe curing through heat. The RS HotBox® is a mobile heating system, which is controlled digitally.

Properties

Heating system complete with digital control

Operation with diesel, supply 230V

Small, mobile and light

Drivable

Continuous or circulation operation possible

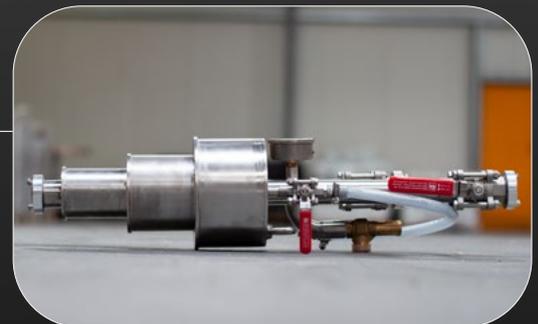


control element



water circulation pump

universal water end plug



Technical data

Heating capacity: 60 kW | 105 kW, 18 l tank

1 water circulation pump: 8000 l/h, 6 bar

1 universal water end plug: DN 100 - DN 300, stainless steel

Pressure relief valve 0,9 bar

3 m + 10 m hot water hose 1"

10 m pressure suction hose 1"

Achievable water temperature: 95°C

Dimension (l x w x h):

HB 60: 800 x 450 x 747 mm

HB 105: 800 x 660 x 975 mm

RS Miller MINI/ SUPER MIDI/ MAXI

Properties

Areas of application: Sewer cleaning and ideal for renovation preparation

Multifunctional: Motor, control, drive shaft with shaft cage and transport wheels

Cleaning, milling, cutting, polishing and brushing with one machine

Control by foot pedal

Possible extension: 10 m

Add-ons



RS Miller SUPER MIDI with
12 mm shaft / 20 m

RS Miller MINI with 8 mm
shaft / 17 m

RS Miller MAXI with 12 mm
shaft / 30 m



Chain scraper CLASSIC



Chain scraper CYCLONE



4-panel SANDING PANEL



Twister EXPRESS

Technical data

| Type | Shaft thickness (mm) | Shaft length (m) | Pipe diameter (DN) | Rotation speed | Weight (kg) | Recommended pipe size: | |
|------------|----------------------|------------------|--------------------|----------------|-------------|------------------------|--------------|
| | | | | | | Cleaning (DN) | Milling (DN) |
| MINI | 8 | 17 | 50 - 150 | 500 - 2900 | 27 | 50 - 150 | 50 - 70 |
| SUPER MIDI | 12 | 20 | 70 - 150 | 500 - 1500 | 69 | 70 - 150 | 70 - 150 |
| MAXI | 12 | 30 | 70 - 250 | 500 - 1500 | 89 | 70 - 250 | 70 - 200 |

RS Miller MINI, SUPER MIDI, and MAXI are operated with a 230V motor

Infinitely variable speed regulation

RS MicroCutter® Incl. accessories

The MicroCutter® ensures quick and flexible milling as well as effortless opening of inlets.

Properties

For internal pipe diameter 80 mm to 200 mm

Curved up to 90°

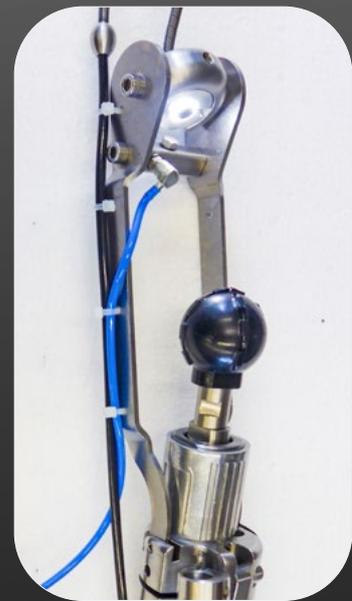
Can be clamped into the pipe (exact milling)

For precise work with integrated swivel gear

Purely pneumatic operation

Scope of delivery: Plastic-box incl. MicroCutter with pneumatic motor and 20 m supply hose, control panel, camera holder, accessories for the inner diameter of the pipes

80 mm - 200 mm and the necessary tool



Colour camera mC30Duo
incl. RS MicroCutter®

Bp drehgriff handle



Technical data

Clamping travel radial: 27 mm

Radial deflection of the milling head: maximum 92°

Radial stroke: 110 mm

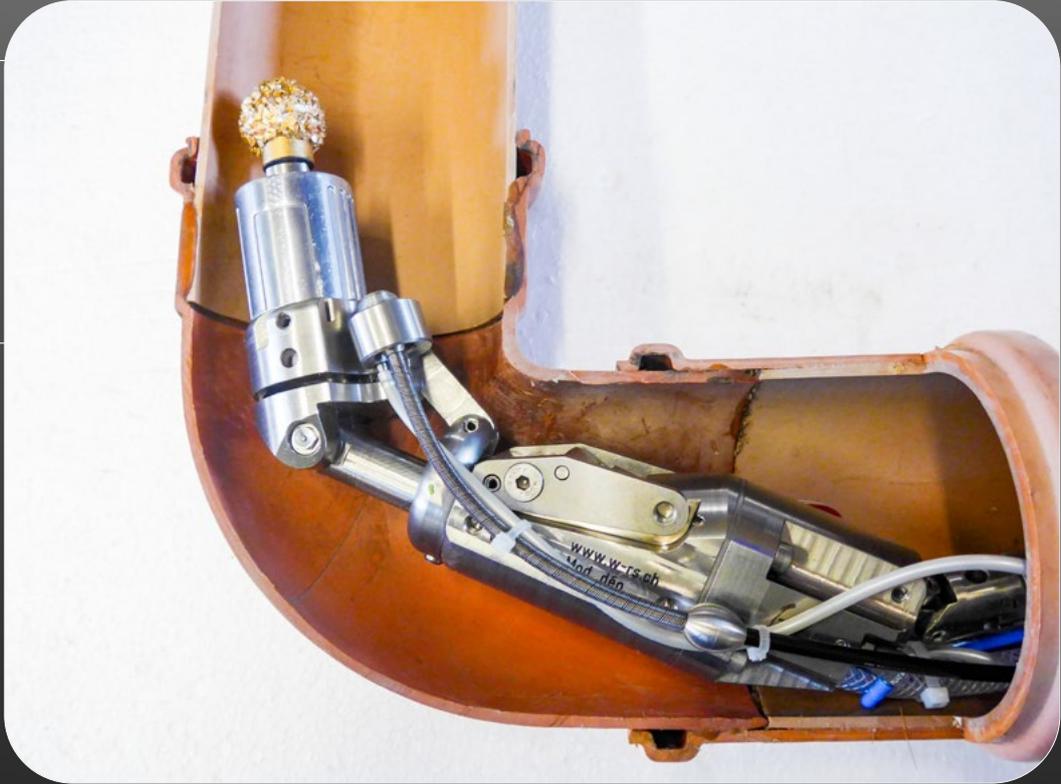
Weight MicroCutter: 2,8 kg
(without pneumatic motor and accessories)

Weight equipment: 19,5 kg

Air requirement: min. 700 l / min. at 8 - 10 bar

Motor power: approx. 0.37 kW at 22,000 rpm

Dimensions: l x Ø = 290 mm x 63 mm



Colour camera mC30Duo Set

for pipes of 15-200 mm

Camera head diameters: 29 mm and 13 mm

Monitor: 5.6" TFT-LCD with a recorder in carbon casing

Reel made of VA including a locking break,

15 m/ 30 m fibreglass sliding rod

Control unit with continuous light adjustment

Meters counter with electronic video insertion

Rechargeable batteries for over 2h of operating time

Data storage on SD card

RS Steam Unit

Steam generator

The field of application of the Steam Unit is steam generation for curing of hose liners.

Properties

Built-in diesel tank incl. diesel burner

Mobile or installation in vehicle/trailer possible

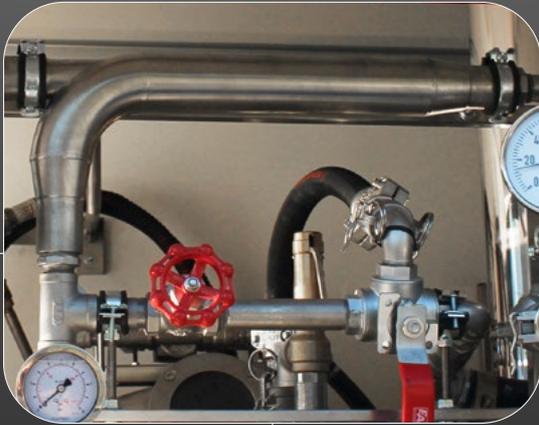
Polyethylene feed water tank

Electronic level control

High quality feed water pump

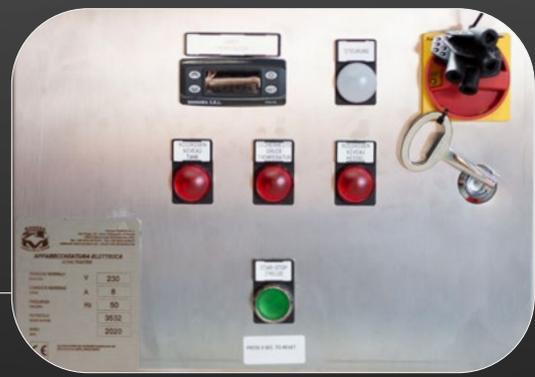
incl. control panel





digital temperature gauge

control panels



Technical data

Output from 100 kg/ h - 150 kg/ h

220 V / 50 Hz

5 m + 10 m + 20 m steam hoses

1 lance 1/2", 1 lance 3/4"

2 end nozzles for renovation
with open end up to DN 200

1 end nozzle for renovation
with open end from DN 200

Dimensions (l x w x h): 1100 x 600 x 1400 mm

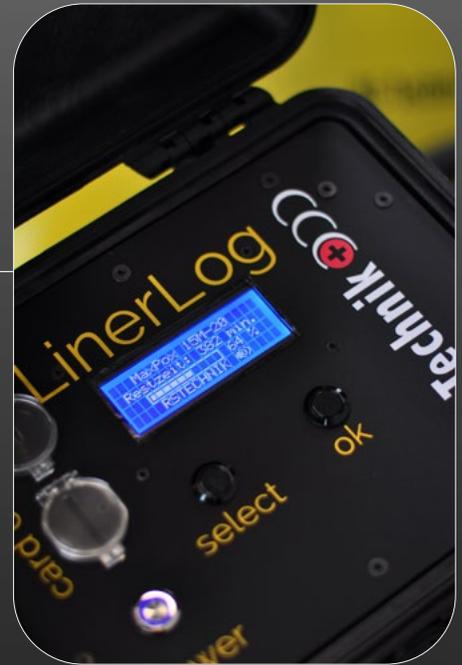
RS LinerLog Measuring and Logging Device

Small, handy, powerful - the new RS LinerLog for reliable curing control on site.

Properties

- Tailored to the needs of liner installation System-specific heating curves stored Packaging
- suitable for construction sites One-click evaluation of all data
- Issue of the protocol for submission to the client
- Reliable proof of curing
- Safety and time protection through accurate display of the remaining heating time





Digital readouts

Specifications

Dimensions: Height: 125 mm; Width: 270 mm; Depth: 235 mm (closed)

Weight: 2.50 kg without accessories

Battery life: approx. 100 hours

Charging time approx. 8 hours

Power supply: 5 V micro-USB, incl. USB power supply for 230 V

Dust and splash water protection

4 x temperature input for type K thermocouple/compensating cable, micro plug

1 x connection pressure sensor 5V, 0-2 bar

RS Steam trailer

A great advantage of epoxy resin systems is the safe curing through heat.
Various devices are available for this purpose.
With our steam trailer the curing of liners is done directly on site.

Properties

- Closed floor made of anti-slip screen
- Printing plates, sealed
- Walls and roof in plywood, waterproof glued with special synthetic coating
- Wing doors incl. door stop, 270° turnable, lockable via espagnolette lock
- Powder-coated steel corner reinforcements for added stability



control panel operable from outside



- Profile edgings on the door opening and rain guard above the door
- Torsion-resistant rear door
- Bolted and galvanised German brand chassis
- Original Humbaur axle (!)
- Maintenance-free rubber spring axles with independent wheel suspension
- Brakes with auto reverse



*RS LinerCannon® 600-1000
optionally available*



Technical data

Loading height approx. 530 mm

Permissible total weight: 2500 kg

Payload: approx. 1550 kg

Internal box dimensions (l x w x h):

4010 x 1810 x 2000 mm

RS MaxLiner[®] Rehabilitation vehicles

Rehabilitation vehicle equipment

< 7,5 t

RS CCM[®] mixing plant incl. Siemens Touch Panel (conveying capacity 18 kg/min)
incl. air conditioning system, SPS system & standard mixing head

External vacuum pump V-VTN 16 (suction capacity: 16m³/h)

Incl. RS calibration roller table DN 300, electrically operated with drum motors &
built-in base frame

External filling device

One progressive cavity pump each, for resin & hardener

Machine directive compliant tanks (resin 260 l | hardener 122 l)

Power generator: 5 kW



Rehabilitation vehicle equipment

12 t

RS CCM® mixing plant incl. Siemens Touch Panel with remote maintenance
incl. air conditioning system & standard mixing head
Temperature control unit for resin/hardener optional
(capacity resin mixing plant 18 kg/min)

External vacuum pump V-VTN16 (suction capacity: 16 m³/h)

RS calibration roller table DN 300 / DN 400,
electr. operated with drum motors & base frame

External filling device with return line

One progressive cavity pump each, for resin & hardener

Machine directive compliant tanks (resin 480 l | hardener 160 l)

Design with one or two hardener tanks possible



RS MaxLiner® Rehabilitation vehicles

Rehabilitation vehicle equipment

18 t

RS CCM® mixing plant incl. Siemens Touch Panel with remote maintenance

incl. air conditioning system, SPS system & standard mixing head (capacity 18 kg/min)

Temperature control unit for resin/hardener optional

External vacuum pump V-VTN16 (pumping speed 16 m³/h)

RS calibration roller table DN 300 / DN 400, electr. with drum motors & base frame

External filling device with return line

One progressive cavity pump each, for resin & hardener

Machine directive compliant tanks (resin 480 l | hardener 160 l)

Design with one or two hardener tanks possible

Social room incl. kitchenette, sink/washbasin,

Storage cupboards & lounge





RS CCM® incl. calibration roller



RS MaxLiner[®] Hose liners

Flex

- Flexible needle felt liner with PU coating
- Bendable up to a maximum of 45°
- Wall thickness stable needle felt material (ensures 3 mm minimum wall thickness)
- Cold curing and warm curing with water or steam
- Available from DN 70 to DN 400

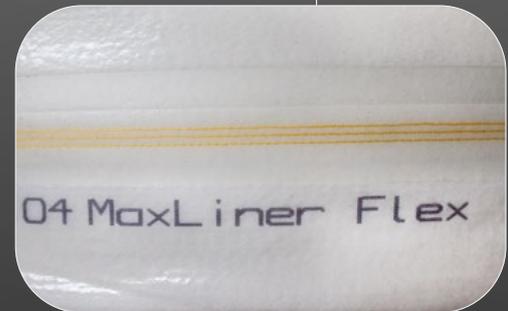
Flex S

- Highly flexible needle felt liner with PU coating
- Bendable up to a maximum of 90°, one dimension change possible
- Installations with closed end can also be implemented when changing dimensions
- Wall thickness stable needle felt material (ensures 3 mm minimum wall thickness)
- Cold curing and warm curing with water or steam
- Available from DN 70 to DN 400

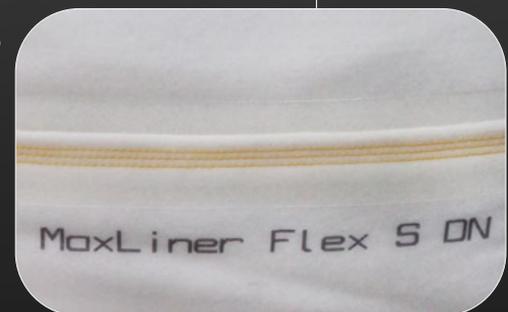
Flex 4D

- Extremely flexible needle felt liner with PU coating
- Bendable up to a maximum of 90°, up to 4 dimension changes possible (DN 150 - DN 250)
- Installations with closed end can also be implemented when changing dimensions
- Wall thickness stable needle felt material (ensures 3 mm minimum wall thickness)
- Warm curing with water or steam
- Available from DN 75 to DN 400

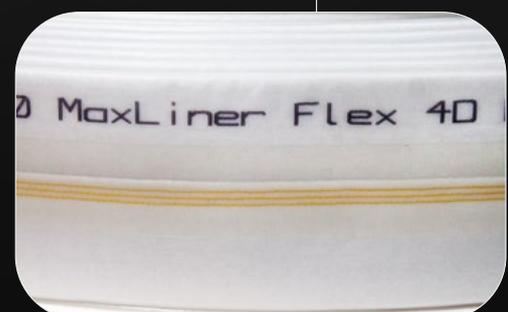
Flex



Flex S



Flex 4D





SuperFlex

SuperFlex

- Seamless, flexible polyester fibre hose with PU coating
- Bendable to a max. of 90°, one dimension change possible
- For dimension changes and bends, a calibration hose is to be used
- Cold curing and warm curing with water
- Available from DN 70 to DN 200

Wovoliner

- Super-flexible, seamless circular knit polyester fiber hose with laminated seamless PU film hose
- Bendable up to 90°, dimensional change possible
- Installation with air or water
- Cold curing or hot curing with water or steam up to max. 70°C
- Available from DN 70 to DN 200



Wovoliner

RS Calibration hoses

Lite

PVC-coated woven hose with overlapped welded seam

Heatable up to 40°C

Bendable to a max. of 90°

Available from DN 80 to DN 200

LiteTube

PVC-coated woven hose with sewn and welded seam

Heatable up to a max. of 80°C

Bendable to a max. of 90°

Available from DN 100 to DN 300

LitePlus

PVC-coated woven hose with welded flat seam

Heatable up to 80°C

Bendable to a max. of 90°

Available from DN 100 to DN 300

LiteBlue

PVC-coated woven hose with sewn and welded seam

Heatable up to 80°C

Extra flexible with light-weight woven

Available from DN 100 to DN 300

HotPlus

PVC-coated woven hose with welded flat seam

Heatable up to 80°C

Not bendable

Available from DN 200 to DN 400, further dimensions on request

Calibration hoses
LiteTube



Calibration hoses
LiteBlue



Calibration hoses
HotPlus



Preliner

Film hose made of PE with a welded seam
Serves as an outer film for protecting the liner against underground water and infiltration water



PU-outer tube

Thin polyester felt with PU coating
Serves as a preliner and is DIBt-approved for outer coating
Reduces excess resin in the feeds



RS MaxPox[®] Two-component epoxy resin systems

MaxPox[®] 15M

Resin component for processing with hardeners 20, 40, 70 and 120
Solvent and filler free



MaxPox[®] 20

Hardener component for processing with the resin MaxPox[®] 15M
Processing time at 20 °C approx. 25 min
Suitable for cold curing, warm curing with water or steam



MaxPox[®] 40

Hardener component for processing with the resin MaxPox[®] 15M
Processing time at 20 °C approx. 40 min
Suitable for cold curing, warm curing with water or steam



MaxPox[®] 70

Hardener component for processing with the resin MaxPox[®] 15M
Processing time at 20 °C approx. 70 min
Suitable for cold curing, warm curing with water or steam





MaxPox[®] 120

Hardener component for processing with the resin MaxPox[®] 15M

Processing time at 20 °C approx. 120 min

Warm curing with water or steam

MaxPox[®] Eco

SVHC-freies Zwei-Komponenten-Epoxidharz

Modular aufgebaut in Topfzeiten von 20 min bis 120 min

Reduziertes Ablaufverhalten

Weniger Überschussharz

Sichere Endwanddicke

MaxPox[®] Fill

Filled and yellow colored two-component epoxy resin system

High viscosity for good hold in the substrate

Processing time at 20 °C approx. 30/60/90 min (depending on hardener components)

Warm and cold curing possible

MaxPox[®] Thermo

Red colored two-component epoxy resin system

High temperature resistance up to 90 °C

High processing time at 20 °C approx. 16 h

Not suitable for cold curing, warm curing with water or steam



RS MaxPatch® Short liner resin system



*RS MaxPatch®
comp. A 2K Fast*



*RS MaxPatch®
comp. A 2K Summer*



*RS MaxPatch®
comp. A 2K Winter*



*RS MaxPatch®
comp. B*

Properties

Silicate-isocyanate resin with very good adhesion properties and chemical and thermal resistance

Available as three or two-component system

Adjustment of the processing time through targeted dosing of the C component.

Optimum adaptation to the ambient conditions



RS MaxPatch®
comp. A

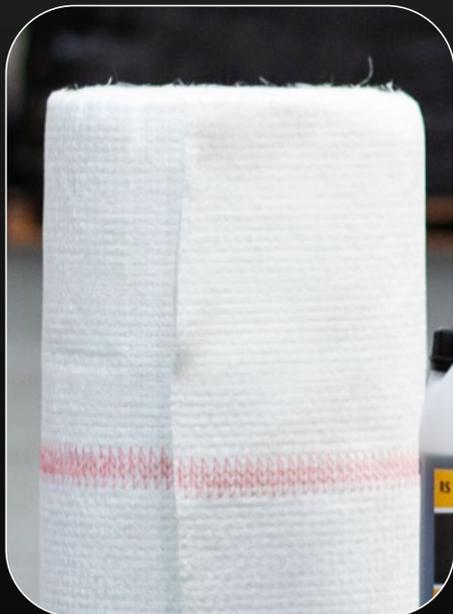


RS MaxPatch®
comp. B



RS MaxPatch®
comp. C

RS MaxPatch®
glass mat



RS MaxPatch® Glass mats

RS MaxPatch® Advantex-ECR-Glass

Glass mat rolls in 330 mm/415 mm/ 510 mm and
1300 mm width

Weights: 1086 g/m² or 1387 g/m²



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