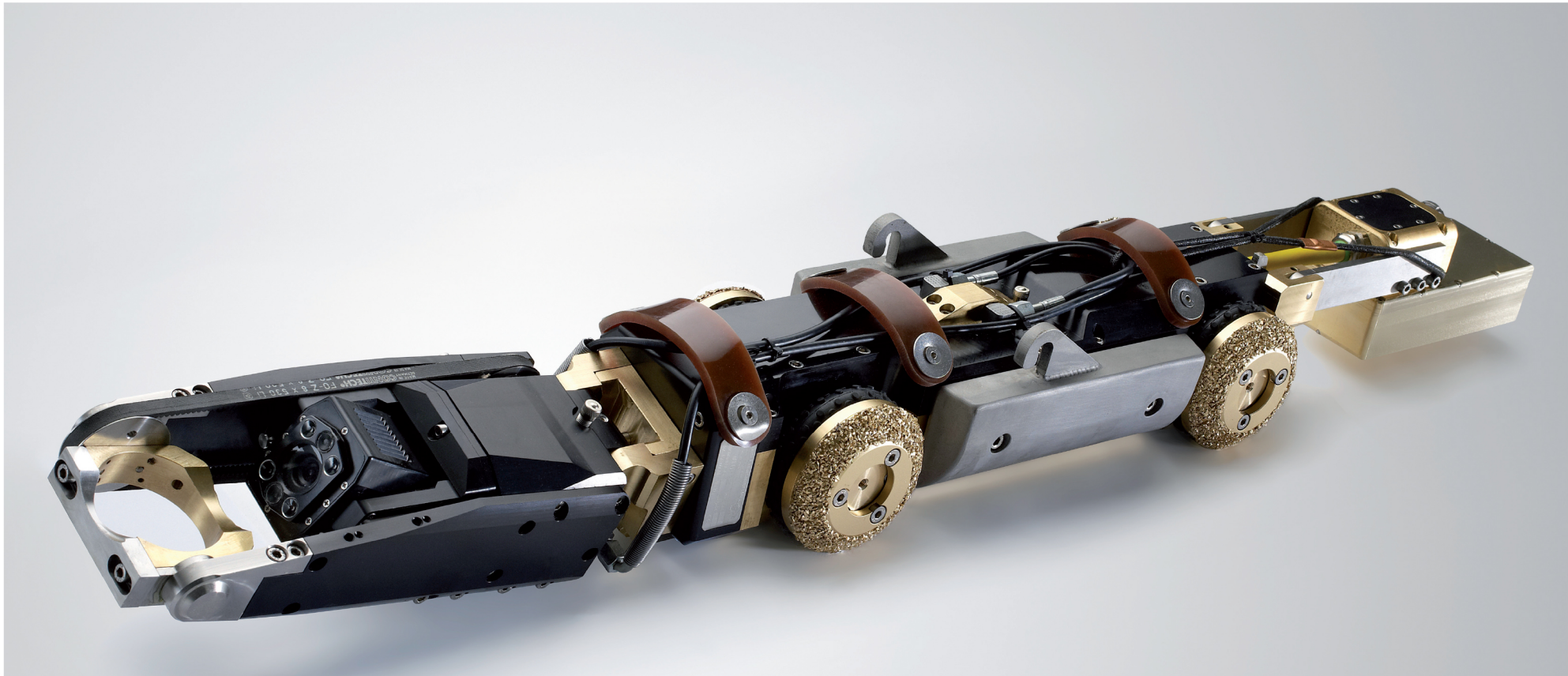




# The Talpa FSR 1330 Sewer Rehab Robot

System Components and Accessories



### Talpa FSR 1330 – Data and Facts

#### Application Sectors

- Trenchless partial rehab of sewer lines
- Primary line rehab with short liner segments\*, Accessible I.D. range: DN 130 – DN 300
- Rehab of lateral connections with hat seals\*, Accessible I.D. range: DN 90 – DN 250
- Localized TV inspection of main lines and laterals for internal QA

#### Robot Functions

- Milling of concrete, ceramics, organic substances, plastics
- Abrasive cutting: cut out protruding obstacles
- Cleaning with specialized brushes, high-pressure jetters
- Maneuvers and positions lateral connection packers
- Compression plugs for sealing of inoperative lateral lines

#### Degrees of Freedom of the Talpa FSR 1330

- Robot carriage: drives forwards/backwards
- Access arm: swivels up/down
- Access arm: swivels clockwise/counterclockwise
- Tooling mount: swivels about transverse axis up/down
- Camera: 270-degrees camera swiveling in lateral axis (+/- 135°)

#### Available Robotic Camera Systems by Schwalm – MiNa and MiMoZo

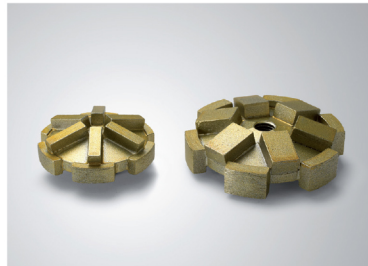
##### The MiMoZo Camera: Robust High-Performance Zoom Camera

- Image sensor: 1/4-inch CCD
- Resolution: 520 TV lines, PAL or NTSC available
- Minimum illumination: 2.5 Lux (daylight mode, real-time color mode)
- Zoom lens: 10x optical, Focus: automatic and manual
- Electronic shutter: automatic and manual (8 steps)
- Swivel feature: +/- 135-degrees (backward view), wear-resistant friction clutch
- Watertight: pressure monitoring to 0.2 bar (7 psi) with indicator light
- Quick mount: assembly to the robot with a few steps

##### The MiNa Camera: Sewer Camera, Compact Version

- Image sensor: 1/3-inch Sony Super HAD CCD II
- Resolution: 600 TV lines, PAL or NTSC
- Minimum illumination: 2.0 Lux (daylight mode, real-time color mode)
- Swivel feature: +/- 135-degrees (backward view), wear-resistant friction clutch
- Watertight: pressure monitoring to 0.2 bar (7 psi) with indicator light
- Quick mount: assembly to the robot with a few steps





## System Components and Accessories

### Tooling / Attachments

- Piranha heads: conical or ball-shaped, small/large each
- Mushroom heads: small/large each
- Compressed air-powered disc grinder
- High-pressure jet nozzles, specialized brushes
- Powered wrenches for DN 100/125/150/200 compression plugs

### Wheels

- Carbide-surfaced wheels, conical with solder-bonded carbide texturing
- Carbide wheels: 150 mm diameter, with increased ground clearance
- Solid-rubber surfaced wheels with stud treading

### Axle Extenders

- DN 200 extender – widens wheel base, for DN 200 and up
- DN 250 extender – widens wheel base, for DN 250 and up
- DN 300 extender – widens wheel base, for DN 300

### Recommended Air Motors

- 1320-P: for DN 130 – DN 200
- 1530-P: for DN 150 – DN 300
- 2025-P: for DN 200 – DN 250
- 2560-P: for DN 250 upwards (up to DN 600), extendable
- 3 drive shaft extenders for 2560-P air motor available in lengths of 10, 15 and 20 cm

### Schwalm Digital Control Module

- Controls robot functions
- Power supply: 110 V or 230 V
- NTSC and PAL systems
- Control unit with serial interface: alphanumeric display of date, time and robot position (ft or m)
- Operating panel with two joysticks, options: keyboard, flat screen
- Available as 19-inch stationary rack module or portable module in aluminium carrying case with integrated screen

### Automatic Cable Drum

- Electrically powered cable feed with self-levelling winding, cable length: 140 m, operates from 110 V or 230 V power
- Output and retrieval: automatic or manual, winding tension and speed: closed or open-loop control
- Cable length reading accurate to nearest 1 cm, with digital display reset function for positioning to defined zero points

### Hose-in-Hose Supply Lines

- Seamless hose-in-hose system for compressed air and water supply to robot
- 100 m in length, extension segments available for additional length, with hose reel for feed and retrieval





SCHWALM Robotic GmbH – Systems for Trenchless Partial Sewer Rehabilitation

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Combined website for Schwalm Robotic and Schwalm Kanalsanierung [www.schwalm-kanal.de](http://www.schwalm-kanal.de)

Design, technical data and features are subject to change. All photographic material shown must not necessarily comply in full detail to our current products shipped.

- Sewer Rehab Vehicles
- Sewer Rehab Robots, System Components and Accessories
- Lateral Connection Packers