

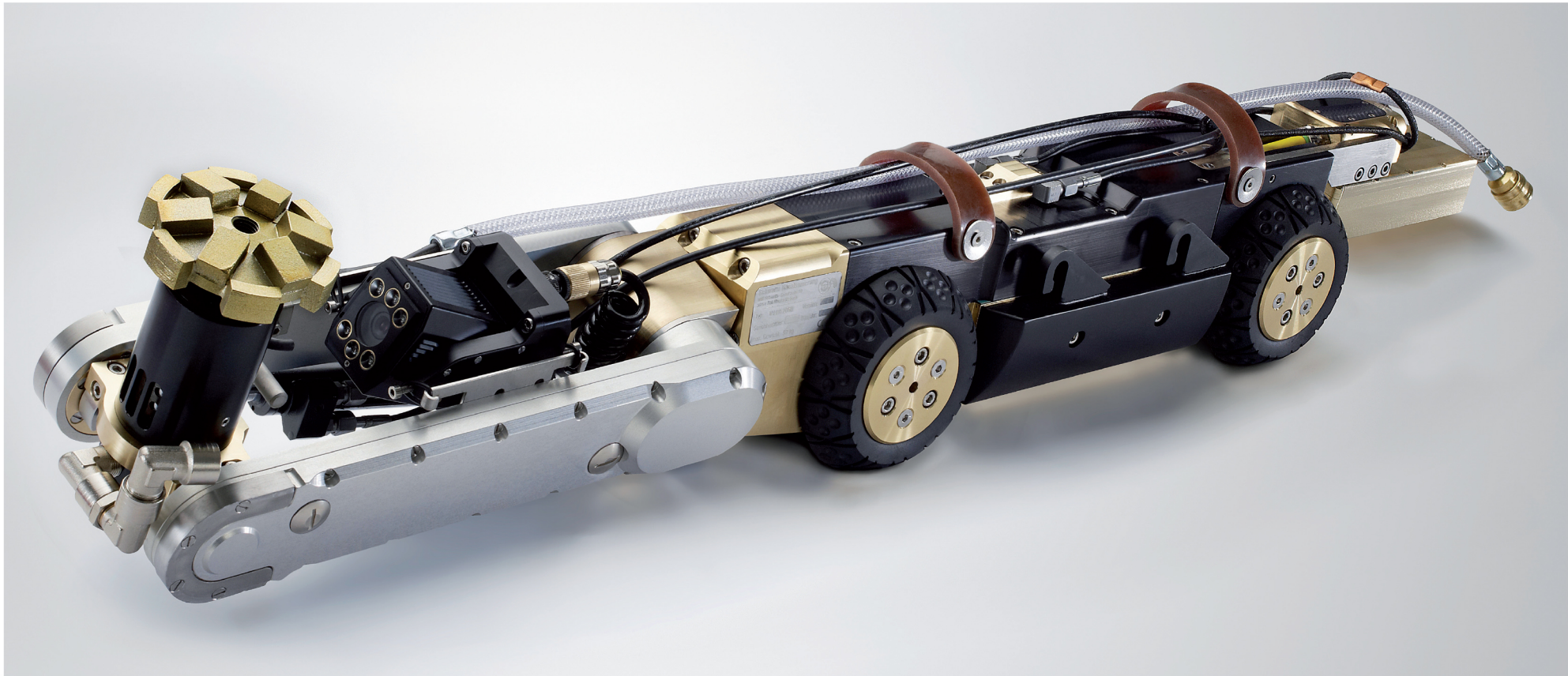


SCHWALM
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The Talpa FSR 2060 Sewer Rehab Robot

System Components and Accessories



Talpa FSR 2060 – Data and Facts

Application Sectors

- Trenchless partial rehab of sewer lines
- Primary line rehab with short liner segments*, accessible I.D. range: DN 200 – DN 600
- 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

*Using Schwalm lateral connection packers

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 2060

- 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°)

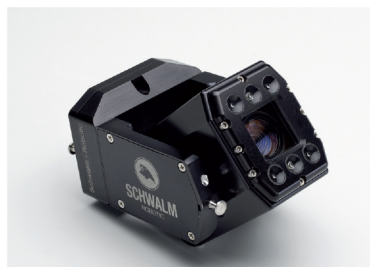
Available Cameras for Talpa FSR 2060

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 and ball-shaped, small/large each
- Mushroom head: small/large each
- Compressed air-powered chisel
- Compressed air-powered disc grinders
- High-pressure jet nozzles, cup and disc brushes
- Powered wrenches for DN 100/125/150/200 compression plugs

Wheels

- Solid-rubber surfaced wheels with high-grip treading
- Carbide-surfaced wheels, conical with solder-bonded carbide texturing

Axle Extenders

- Disc sets available in widths of 25 mm / 30 mm / 50 mm
- For line diameters DN 250, DN 300, DN 350 – DN 400, DN 500 – DN 600

Recommended Air Motors

- 1530-P: preferred for DN 200
- 2025-P: for DN 200 – DN 250:
- 2560-P: for DN 250 – DN 600, extendable
- 3 drive shaft extenders for 2560-P air motor available in lengths of 10, 15 and 20 cm

Schwalbe Digital Control Module

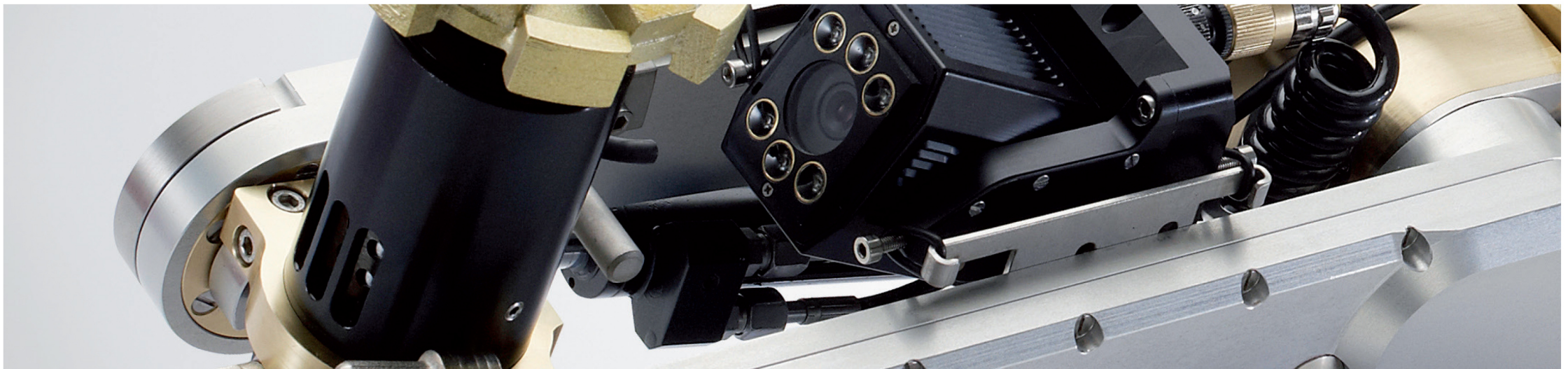
- Controls robot functions
- Power supply: 110 V or 230 V
- NTSC and PAL systems
- Control unit with serial interface: alphanumeric display of date, time and robot position (ft or m)
- Operating panel with two joysticks, options: keyboard, flat screen
- Available as 19-inch stationary rack module or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

Schwalm Robotic GmbH, Industriestraße 16, 36251 Bad Hersfeld / Germany
Telephone +49 6621 79578-0, Telefax +49 6621 79578-11
E-Mail info@schwalm-robotic.de

Schwalm Robotic GmbH, Bad Hersfeld / Germany: www.schwalm-robotic.de
Schwalm Kanalsanierung, Bad Hersfeld / Germany: www.schwalm-kanalsanierung.de
Combined website for Schwalm Robotic and Schwalm Kanalsanierung: 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

