

PIPE - INSPECTOR®

Cable-less TV Inspection of Pipelines
with Integrated Leak Detection

Potable Water
Waste Water
Oil
Gas
District Heating



SCHMIDT WASSERTECHNIK B.V.
TOOLS • MATERIALS • SERVICES

PIPE-INSPECTOR®

Cable-less TV-Inspection of Pipelines with Integrated Leak Detection



For Potable Water, Waste Water, Oil, Gas and District Heating Pipeline Systems

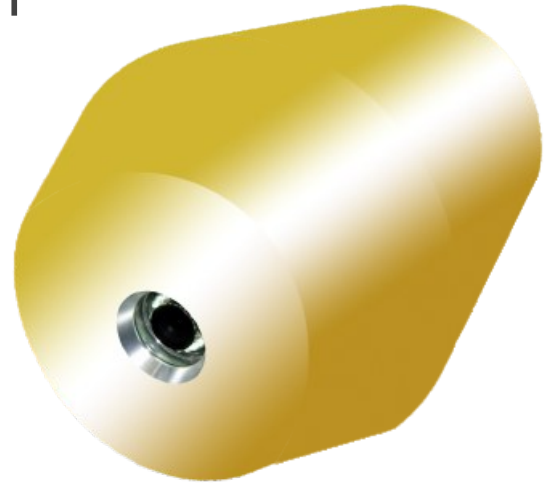
What is the purpose of Pipe-Inspector® ?

Pipe-Inspector® now allows the cable-less and complete optical and acoustic inspection of transport pipelines without interrupting operation.

In contrast to wired TV-inspection systems, this procedure operates wirelessly, so that the continuous inspection of long sections up to 50km length is possible.

Pipe-Inspector® overcomes 90° bends and is used in pipelines from DN 100 to DN 3000 regardless of the material.

Pipe-Inspector® is applicable in hard-to-reach pipelines such as airports, highways, industrial or other access sensitive areas. Thanks to a pressure resistance of up to 100bar Pipe-Inspector® can be even used the inspection of hydropower pipelines e.g. for commissioning inspections.



Pipe-Inspector® Waste Water

How does Pipe-Inspector® work?

Pipe-Inspector® floats battery powered and cable-less in the pipeline fluid providing continuously data from inside for determining inspected pipeline's condition without excavation or pipe cutting.

The device is introduced by a kind of pig trap at existing T-pieces, at tanks or vents and can be retrieved for the inspection data analysis at a defined endpoint.

Suitable for all materials and fluids

- High daily output
- Environment-friendly
- Low staff expenses
- No pre-cleaning
- Suitable for potable water

- Optical TV examination
- Sound recording for detection of smallest leakages with pinpoint accuracy down to 10l/h at 5bar operating pressure
- Pressure recording along the entire pipe length
- Turbidity measurement (optional)
- Conductivity measurement (optional)
- Temperature measurement
- Length measurement including meter display
- Video in HD-quality



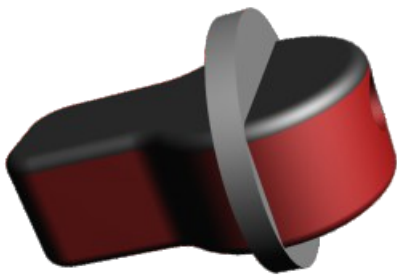
Potable Water

Inventory data of pressure pipelines are often patchy available. Data of installation fittings, connectors, peaks and low points, pressure recordings under operating conditions and condition assessment of the pipeline are often entirely missing.

The optical inspection with integrated leak detection over long distances during operation is a world innovation.

Pipe Inspector® delivers the data for a condition assessment of the potable water system and a reliable basis for further decisions.

- DN 50 - DN 3000, bend-capable, up to 50km
- Pressure pipelines up to 100bar



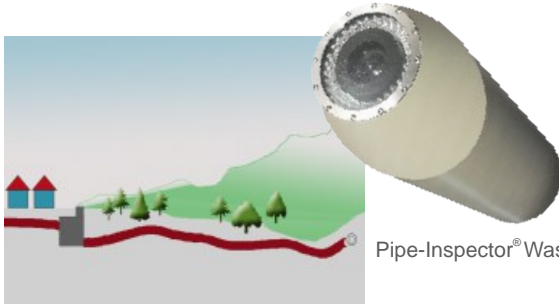
Pipe-Inspector® Potable Water



- Cable-less TV inspection
- Acoustic leak detection
- Pressure recording over total pipeline length
- Length measurement including meter display
- Temperature measurement
- Damage protocol including pictures
- Video in HD-quality
- Battery charge for 5 - 50km inspection
- Protocol section by section

Waste Water Pressure Pipelines

Waste water pressure pipelines with only a few manholes at large distances, with bends, peaks and low points are a real challenge when it comes to their inspection and condition assessment. Pipe Inspector® offers a whole new spectrum of opportunities for the pipeline examination and maintenance.



Pipe-Inspector® Waste Water

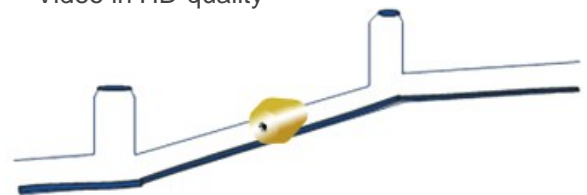
- DN 50 - DN 3000
- Pressure pipes up to 100bar
- Cable-less TV inspection
- Acoustic leak detection
- Detection of deformations and peaks
- Length measurement including meter display
- Damage protocol including pictures
- Video in HD-quality

Waste Water Open Channels

Sewer Pre-Inspection



Pipe-Inspector® reduces significantly the personnel costs with daily capacities from 10 to 20km inspection length due to its autonomous concept.



- DN 150 - DN 3000
- Min. 5cm water level in the sewer
- Damage detection
- Length measurement including meter display
- Damage protocol including pictures
- Video in HD-quality
- Evaluation acc. to EN Standards
- Protocol section by section

TECHNICAL DATA

Video	Full HD, wide angle, max.1920x1080p@30fps
Recording length	2-10h, depending on type and battery capacity
Supply	Li-Ion battery
Light	LED ring
Acoustic leak detection	Microphon 70-4.000Hz
Temperature measuring range	0-70°C
Pressure measuring range	0-100bar
Path measurement	Accelerometers
Detection signal	512Hz or 33kHz
Explosion protection	ATEX
Conductivity measurement	Optional
Turbidity measurement	Optional
Casing material	PE, stainless steel, depending on type
Data transfer	USB 2.0



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