



CABLE-LESS
MULTI-SENSOR
IN-PIPE INSPECTION
Video & Leak Detection





Innovation and Research Award

United States Patent No. 9,804,102 B2





# MTA PIPE INSPECTOR®

CABLE-LESS MULTI-SENSOR IN-PIPE INSPECTION video - leak detection - pressure - temperature - turbidity - conductivity - distance ...

### **FEATURES**

- All pipe materials
- DN 100 (4") DN 3000 (120")
- CCTV 30fps HD-quality video
- Hot tapping
- Overcoming 90° bends
- Pinpoint leak accuracy
   5l/h (1.3gph) at 5bar (75psi) pressure
- Up to 50km (30miles) in one pass
- Distance recording
- Trackable (location signal)



## IN-PIPE INSPECTION

MTA Pipe-Inspector is an autonomous inspection device. Floating battery powered in the pipeline fluid it collects continuous measurement data from inside for determining the pipeline condition without excavations or pipe cuttings.

#### **FROM DN 100**

Overcoming 90° bends
MTA Pipe-Inspector is applicable
in pipelines from DN 100 to DN 3000
regardless of the pipe material, even in
hard-to-reach pipelines like at airports, highways,
industrial or other access-sensitive areas.

Delivering the data for system condition assessment the system offers a reliable basis for further economic decisions, risk management and evaluation.

#### **APPLICATIONS**

- Drinking water
- Raw water
- Wastewater
- Industrial water
- Hydropower
- Gravity channels and force mains
- Distribution and transmission lines

## AIR POCKETS AND PEAKS

Air pockets and peaks, affecting the efficiency of pipeline operation are reliably detected by a specific combination of optical and acoustic inspection procedures.

#### LAUNCH AND RETRIEVAL

In pressure applications the MTA Pipe-Inspector can be deployed into live mains by means of hot tapping with valve and flange fittings.

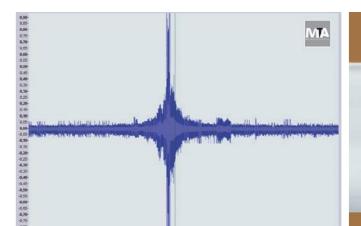
In case the end location does not allow direct extraction access a retrieval sluice is attached at a valve to insert a retrieval net. The net covers the complete main pipe inside diameter to catch the MTA Pipe-Inspector.

AIR POCKETS AND PEAKS



## **ACOUSTIC LEAK DETECTION**

MTA Pipe-Inspector pinpoints leakages in metallic and non-metallic pipes by recording leak sounds directly at their point of origin, regardless of the pipe material and diameter.





# BENEFITS MTA PIPE INSPECTOR®

- No service interruptions
- No access excavation or pipe cuttings
- No pre-cleaning
- Complies with drinking water quality standards
- · Access in restricted or high risk areas
- Environmentally friendly

#### **GAS**

The aim of gas pipeline inspections by MTA Pipe-Inspector within the context of commissioning is to assure quality and the compliance with existing standards.

#### **HYDROPOWER**

MTA Pipe-Inspector acoustic leak detection pinpoints smallest leaks down to 5 liter per hour (1.3gph) at 5bar (75psi) operating pressure.

The inspection of newly installed hydropower pipelines ensures that no deposits or sediments affect the operational conditions of the entire system.



MTA Pipe-Inspector in "taxi pig"



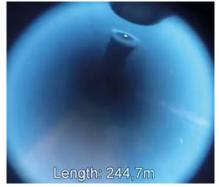
Hydropower pipeline inlet



Foreign object "hammer"



Insertion into gas pipeline



Potable water pipeline inspection



MTA Pipe-Inspector retrieval at Francis turbine



MTA Messtechnik GmbH Handelsstraße 14-16 A-9300 St. Veit an der Glan T +43 4212 71491 F +43 4212 72298 office@mta-messtechnik.at www.mta-messtechnik.at