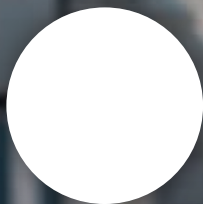


A central graphic featuring a large grey circle with the text "INDUsniff PIPE SYSTEM MONITORING" inside. Surrounding this central circle are several smaller circles of different colors (teal, olive green, and grey). One teal circle on the left contains a white water drop icon. Another teal circle on the right contains a black and white image of a pipe inspection camera. The entire graphic is set against a background of fine, light grey diagonal lines.

# INDUsniff PIPE SYSTEM MONITORING

INDUsniff MEASUREMENT PIG  
PIPE SYSTEM MONITORING





Pharma



Food



Cosmetics



Biotech



Chemistry



Water management

# INDUsniff – Perfect for industrial fluid environment

Medium-conducting pipe systems are used in various industrial fields of application. Acquiring spatially resolved measurement data within pipe systems is essential for a reliable and efficient operation. The INDUsniff MEASUREMENT PIG measures parameter of the fluid medium directly within the plant and provides information about deviations.

The industrial environment is no longer conceivable without pipe systems as medium-conducting component. The INDUsniff MEASUREMENT PIG provides information on where no one else get there – a flowing sensor for various parameters, depending on the requirements and can easily be retrofitted.

The quality assurance of industrial pipe systems is an important component in order to react as quickly as possible on deviations in continuous operations. To achieve these objectives, the INDUsniff MEASUREMENT PIG can collect and evaluate measurement data wirelessly such

as pressure, temperature, pH, conductivity, pipe run.

The INDUsniff MEASUREMENT PIG combines the strenghts of a wireless sensor of diverse designs for the fluid medium inside pipe systems with the property adapting them individually to the requirements. The MEASUREMENT PIG can be inserted into the pipe system and removed with a configurable BYPASS unit, continuously and automated. The measurement data are transmitted wirelessly to an online interface. Innovative, miniaturized, wirelessly – perfect for industrial fluid environment.

## POTENTIAL AREAS OF USE

- ⊕ Precise pressure and temperature profile for process parameter monitoring
- ⊕ Leak detection via long-term monitoring
- ⊕ Measurement for subsequent analysis of the pipe run
- ⊕ Monitoring of process parameters within heat exchanger systems, cooling circuits etc.
- ⊕ Acquisition of long-term data in pipe systems (pH, p, t etc.)

# Convincing functions



Pressure



Temperature



Position



Data storage



Auto Bypass  
(optional)



Electrical  
conductivity



RFID



Energy  
Harvesting



Low Power



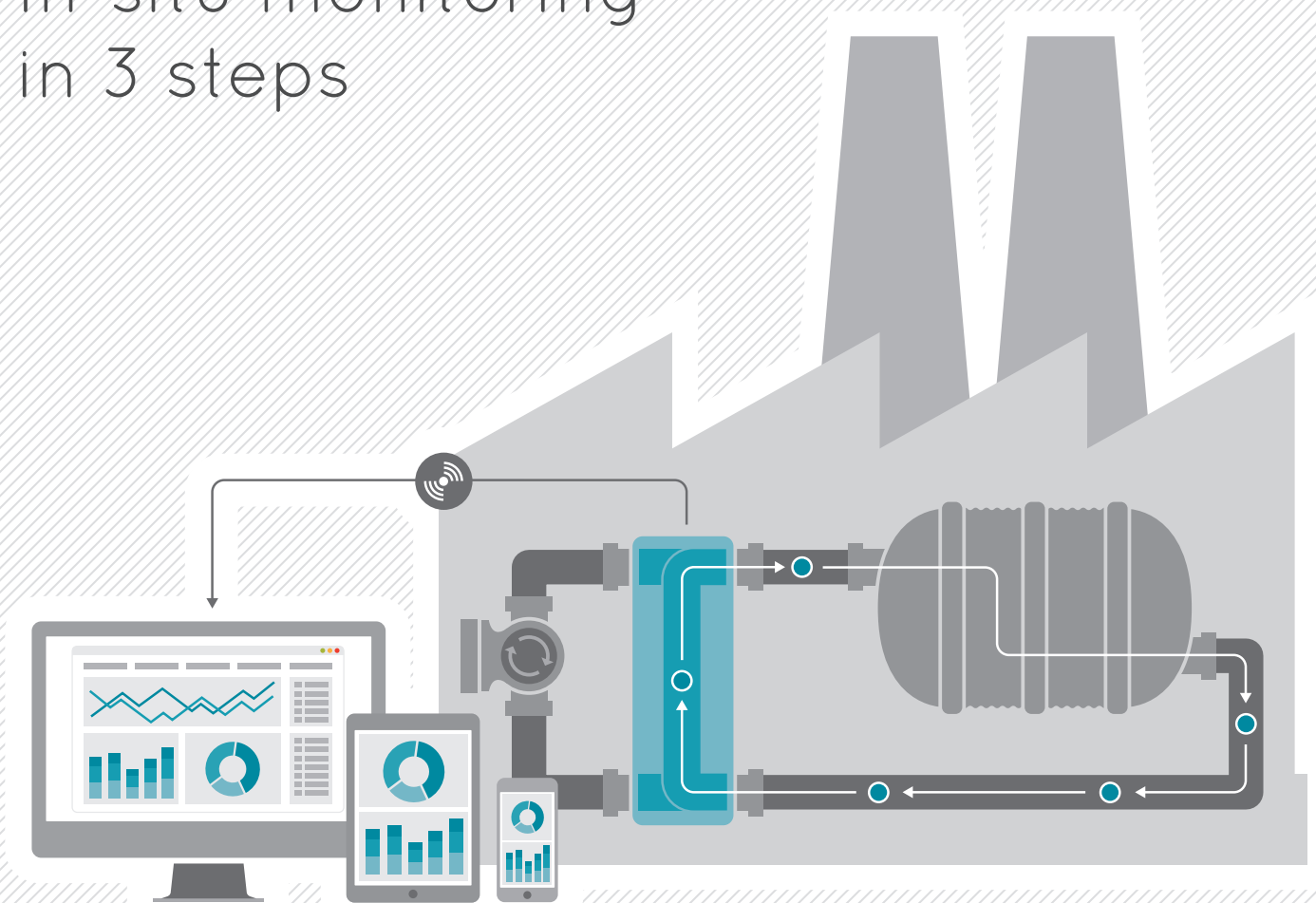
Camera



Drive system



# In-situ monitoring in 3 steps



1

Insertion of the INDUsniff MEASUREMENT PIG via manual Bypass system for initial measurement or the fully automatic for continuous in-situ monitoring.

2

INDUsniff MEASUREMENT PIG is flushed through the entire pipe system by the pump current records measurement data continuously.

3

The Bypass reads out measurement data of INDUsniff MEASUREMENT PIG automatically or manually and transmits them to the building management system or the online portal.

# Different applications – various configurations



- ⊕ Spherical, miniaturized Measurement Pig, metal/plastic
- ⊕ High-precision measurement of pressure and temperature
- ⊕ Diameter 15–30 mm (further optional)
- ⊕ Wireless, automatic reading and charging



- ⊕ Cylindrical, miniaturized Measurement Pig
- ⊕ Metal housing
- ⊕ Integration of camera, sensor for pressure and temperature
- ⊕ Diameter from 20 mm (further optional)
- ⊕ Wireless function



- ⊕ Spherical, miniaturized Measurement Pig, plastic
- ⊕ Housing density 1.0 kg/m<sup>3</sup>
- ⊕ Integration of sensors for pressure, temperature, conductivity and pH (further optional)
- ⊕ Diameter from 15 mm
- ⊕ Wireless, automatic reading and charging



- ⊕ Pill shaped, miniaturized Measurement Pig
- ⊕ Plastic housing
- ⊕ Integration of precise 3d-orientation measurement for pipe run measurement
- ⊕ Diameter 15 mm
- ⊕ Wireless function