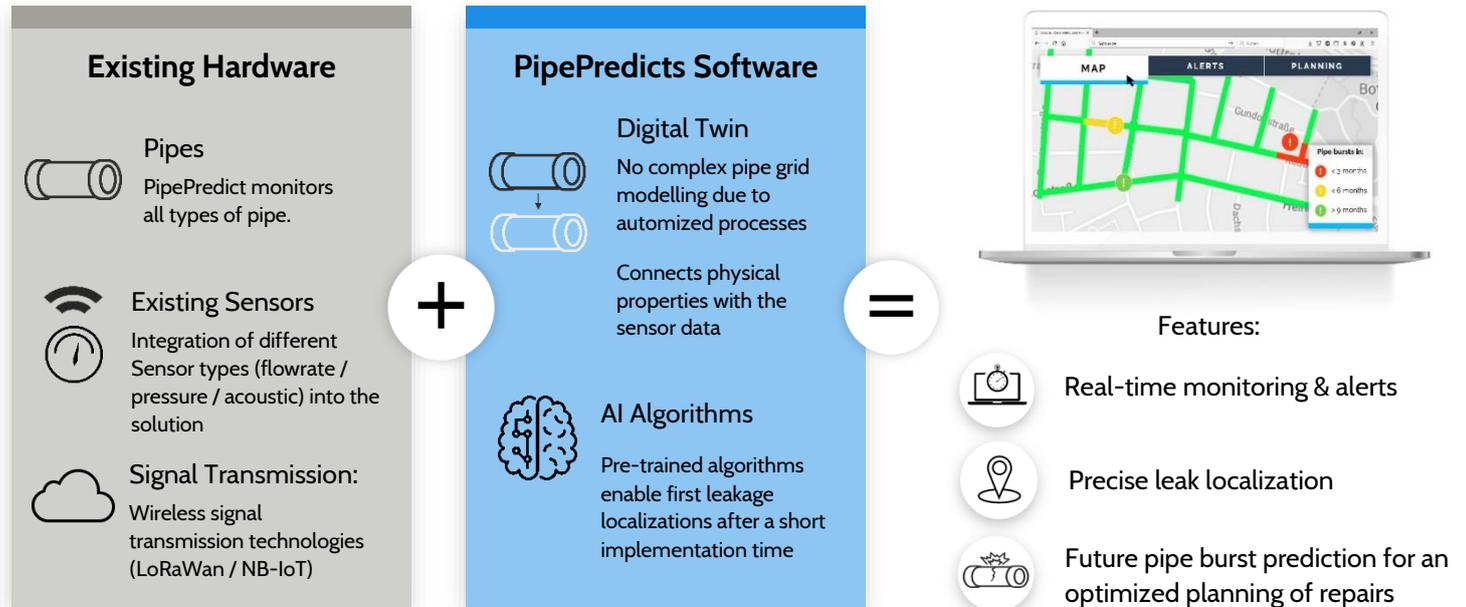# Pipe Predict

PipePredict – Live monitoring and pipe burst prediction for water grids

PipePredict is a special software solution optimizing pipe system operations.
Permanent monitoring of the pipe condition using sensor technology enables early and precise detection of leaks.
Even difficult to detect leakages can now be monitored and upon growth localized precisely without any manpower.

How does PipePredicts techonolgy work?

Live - Monitoring Tool

MAP | ALERTS | PLANNING

Pipe bursts in:
! < 3 months
! < 6 months
! > 9 months

Existing Hardware

Pipes
PipePredict monitors all types of pipe.

Existing Sensors
Integration of different Sensor types (flowrate / pressure / acoustic) into the solution

Signal Transmission:
Wireless signal transmission technologies (LoRaWan / NB-IoT)

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PipePredicts Software

Digital Twin
No complex pipe grid modelling due to automized processes

Connects physical properties with the sensor data

AI Algorithms
Pre-trained algorithms enable first leakage localizations after a short implementation time

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Features:

Real-time monitoring & alerts

Precise leak localization

Future pipe burst prediction for an optimized planning of repairs

Vorteile:

Cost reduction:
Minimize water losses and save repair costs of up to 8.500€ per repair measure.

All types of pipes:
Applicable for plastic as well as metal pipes. Use your current pipes as long as possible.

Economic repairs:
Time-consuming search for leaks is no longer required, as these can be located instantly.

Low installation effort:
Due to the integration of existing sensors the implementation stays simple and economically.

Use Cases:

Photograph: Ruhland / Shutterstock.com

Two application scenarios:

1. Precise real-time localization of leaks
Once a leak has occurred, our software solution reduces your leak detection costs by narrowing the search area down to the meter.

2. Pipe burst predictions for high efficiency
Forecasts allow repairs to become plannable and prevent emergencies. By comparing water losses with repair costs, we calculate the cost-effective maintenance times at which you can take action.

Pilot project with: Kreiswerke Main-Kinzig

1. Analysis: Possible localization precision with existing sensors

2. Sensors: Only if needed, additional hardware will be integrated without civil construction effords

3. Digital Twin: Automatically created using existing GIS-Data

4. Real-time monitoring: Monitoring of pipes in real-time, early detection and precise localization of leaks without necessity of your manpower

Which precision and savings are possible in your pipe system? Let us analyse your pipe network now!

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