

ADB e-Marketplace Hawle Service

WEBINAR

Efficient digitalization in
water supply infrastructure



*“We want to ensure the sustainability
of valuable drinking water supplies.”*

Hawle Service

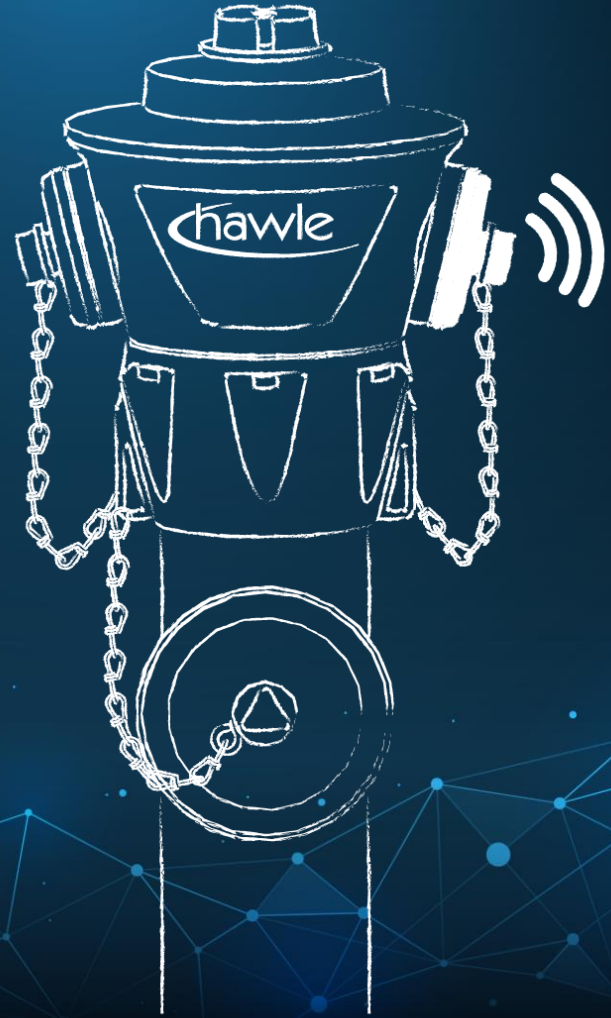
Hawle Service

Overview

- Founded in 2004
- First service “hydrant service”
- 34 employees
 - » Of which 17 service technicians
- Head quarter in Leobersdorf



Smart monitoring of hydrants



S.CAP International

Why should you make your hydrants smart?

Unauthorized water withdrawal for ...



Filling private pools



Filling tank vehicles



Daily work on construction sites

S.CAP Technology



Cap

Different caps in different countries

Each cap must be machined accordingly



Motherboard

Incl. communication module + sensor

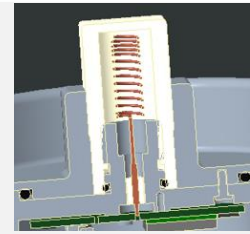
Startup goes via a magnet



Battery

Only spare part

5 years operating time or at least 200 alarms



Antenna

To ensure connectivity

Connectivity is a key requirement - status can be checked online.

How does the S.CAP work?



Rotation sensor



Water contact sensor

H4i Technology

Rotation counter

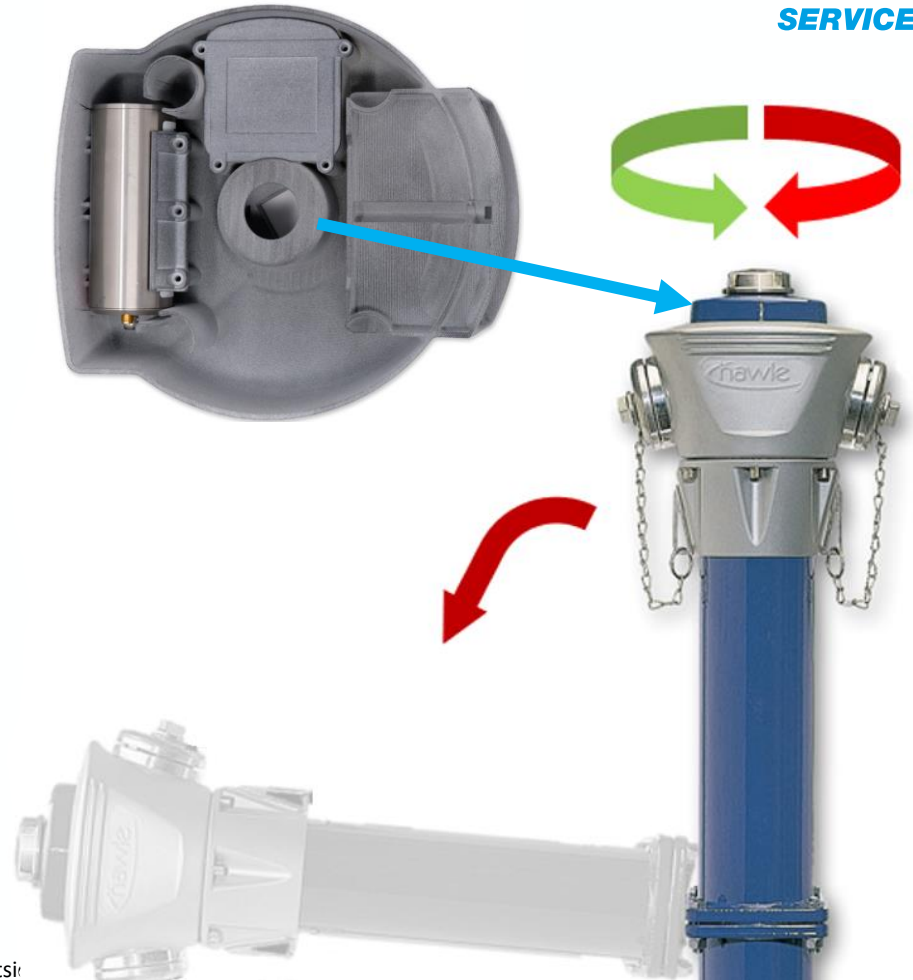
- 15 turns to open position – the counter shows the current position of the wedge
- Ensuring the drainage function – hydrant must be completely closed

Position / acceleration sensor

- Alarm in case of break away

Leak detection sensor (optional)

- Correlating leak noise logger for permanent monitoring of water distribution



Multifunctional online monitoring system



Hawle.Live

What is going on in your water supply system?



Pipe leakages up to pipes bursting

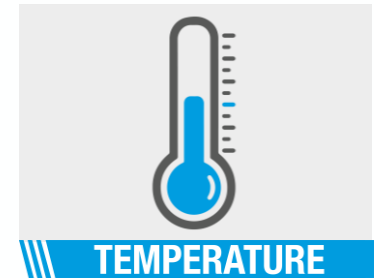
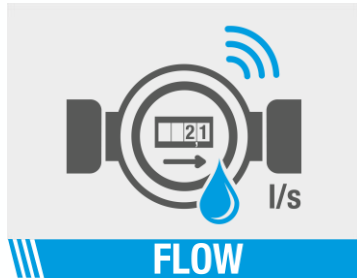
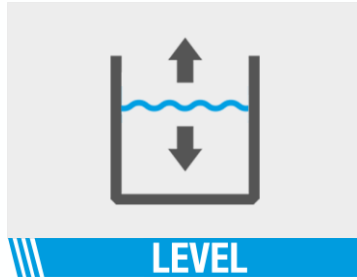


Contaminated water



Failure of important fittings in the pipe network

Hawle.LIVE Applications





Hawle.LIVE

Smart measurement of water quality



s::can | Quality from Austria

New light source measurement thanks to multi-parameter spectral sensor



Parameter

- Turbidity NTU / FTU
- Organic
- Color
- Conductance (optional)





HAWLE
SERVICE

Hawle.LIVE

Smart measurement of water quantity



Diehl water meter with reed contact

- min. flow rate → 25 L/min
- max. flow rate → 2,100 L/min



Hydrant withdrawals

- chamber installation
- battery driven – no external power supply
- further sensors can be combined

Digital air valve

Features



- Energy-independent – harvesting via
 - » Solar panel
 - » e-Power turbine
- Device monitoring – detection of malfunction
- Sensor's maintenance free
- Data documentation/ history for investment plans

Smart gate valve monitoring



Hawle.LIVE Key

Hawle.Live KEY Concept

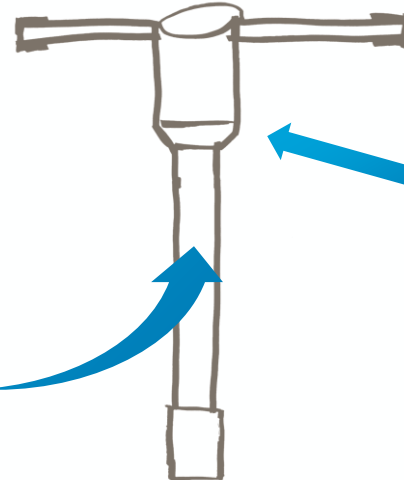
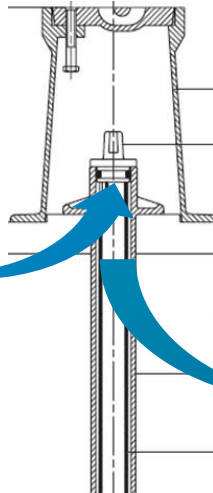
- Based on the knowledge of the S.CAP - IoT into gate/ service/ butterfly/ etc. valves
- „Let´s make our valves smart!“
- What does the customer expect?
 - » Position (open/closed)
 - » Location / identification
 - » Status data



Hawle.Live KEY Concept

2nd approach: moving the electronics from the surface box into the operation key

- Using the connectivity and processor power of existing smartphones



NFC Tag

Near Field Communication

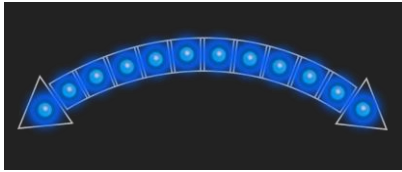
- Contactless information transmitter
- Energy-independent

What does the customer expect?

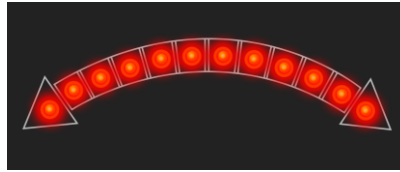
- 100% identification with serial number
- Data storage via http address



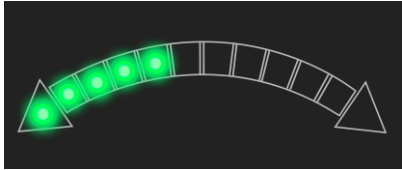
Hawle.Live Key Intelligent status bar



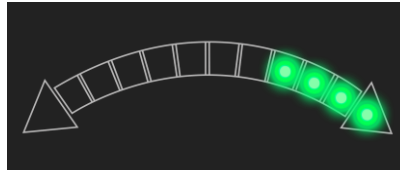
Searching Bluetooth connection



Failure gate valve / direction / torque



Open gate valve with state indicator



Close gate valve with state indicator



Feedback Round

