

INWATROL *expert*

The recommendations on measurement and control technology acc. to VDI 2047 part 2 have been implemented

The reporting and documentation obligation required in the new VDI guideline is decisively and largely supported through the use of an **INWATROL *expert*** system.

VDI 2047 part 2 recommends monitoring important operating parameters such as (excerpt):

- The conductivity of circulation water
- The concentration of biocides
- Metering pump monitoring
- Level metering of the chemical products
- pH value

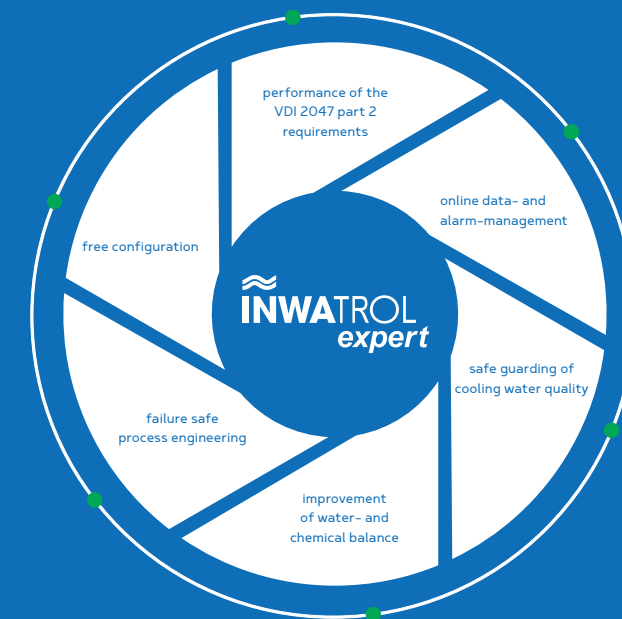


References

Our partners in large-scale industry, as well as midsize production plants, trust in **INWATROL *expert*** systems.

Our Guarantee

With our **INWATROL *expert*** systems in conjunction with innovative conditioning agents and modern communication technology, we guarantee:



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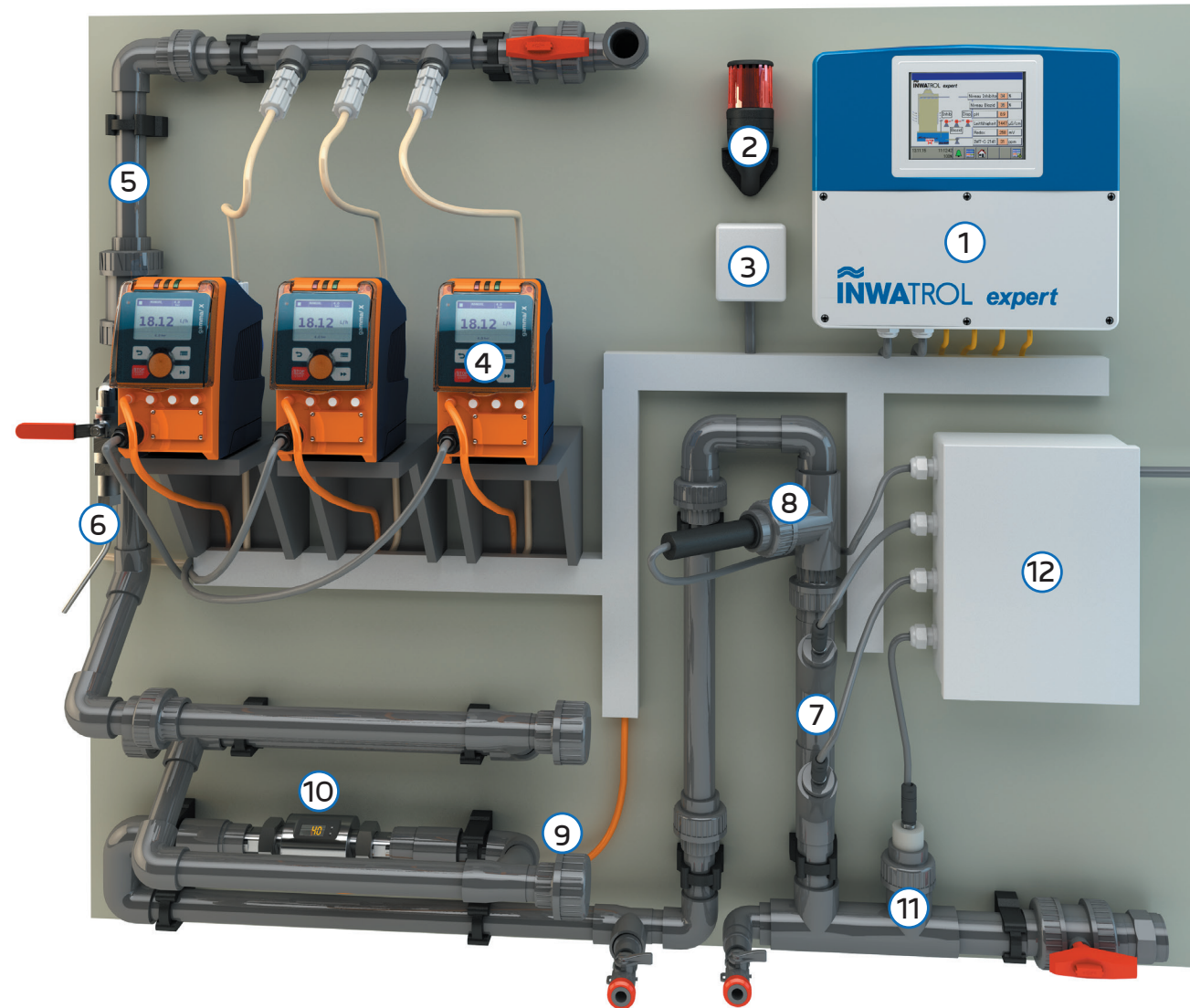
Real-time Monitoring and
Controlling of Cooling Water



The INWATROL *expert*

Fully automated online monitoring and control of (cooling) water systems

The **INWATROL *expert*** systems allow a fully automated, online monitoring of the product metering(s) for water treatment as well as a detailed description of the cooling water quality. Thanks to their modular design, the **INWATROL *expert*** systems guarantee a reliable conditioning of the cooling water taking into account the complex interactions between microbiology, corrosion and deposition processes.



- ① INWATROL expert Controller with touch-screen
- ② Alarm lamp
- ③ 230-V socket
- ④ Metering pumps
- ⑤ Check valve
- ⑥ Sampling point (Can be disinfected)
- ⑦ pH, ORP measurement, or free choice of measured variables (free chlorine, peroxide etc.)
- ⑧ Inhibitor measurement
- ⑨ Corrosion measurement acc. to ASTM standard
- ⑩ Flow meter
- ⑪ inductive conductivity
- ⑫ Modem and power supply

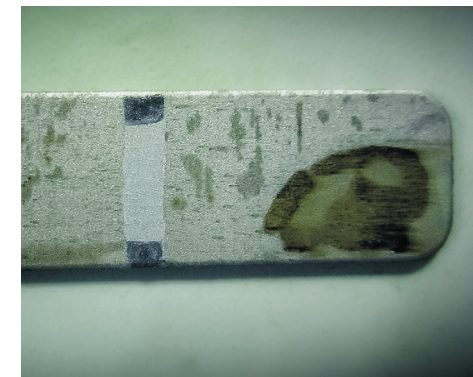
Examples of Functions

Continuous measurement of system-relevant operating parameters to assess the cooling water quality and to allow a demand responsive use of the cooling water treatment agents (inhibitor, dispersant, biocide).

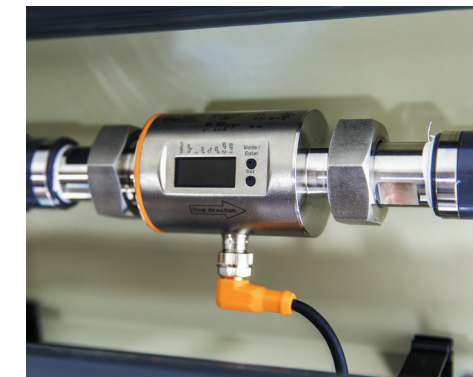
- Inhibitor concentration
- pH/ORP
- Free chlorine
- Hydrogen peroxide
- Chlorine dioxide
- Turbidity
- Biofilm
- Corrosion (LPR)
- Oil



Inhibitor concentration

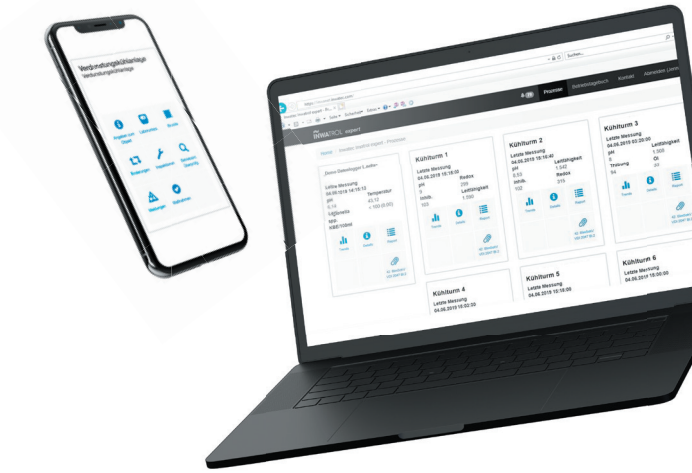


Corrosion



Flow monitoring

The **INWATROL *expert*** systems enable a high level of operational reliability through remote monitoring and a limit detection system with central evaluation. Control deviations and disturbances can be identified immediately and eliminated by appropriate countermeasures.



Operation Diary

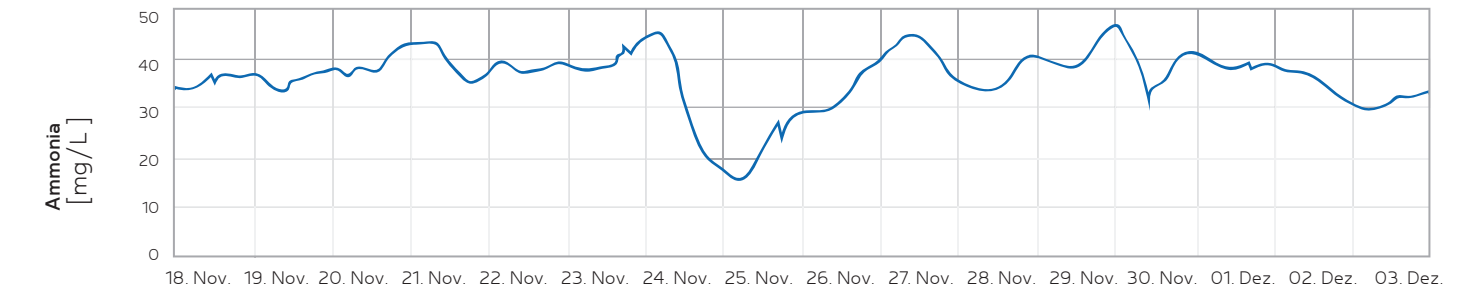
Digital operating diary to fulfill the documentation requirements according to the 42nd BimSchV

For operators of evaporative cooling systems and wet scrubbers, the digital operating diary represents a customized and user-friendly solution for implementing the requirements of the regulation on evaporative cooling systems, cooling towers and wet separators (42nd BimSchV) and the VDI guideline VDI 2047 Part 2.

Online Monitoring

All of the operating data generated by the **INWATROL *expert*** systems can be viewed and documented for the operator via web browser. Archived and online data can be easily retrieved and evaluated at any time.

Recording of analysis values such as Ammonia:



Recording of the redox potential to control the biocide dosage:

