

# Damage and material analysis

## Water analysis and consulting

In industrialised countries, water has become indispensable as a medium for cooling or heating systems, in air conditioning and ventilation systems, or even in building heating systems. Its good heat capacity, environmental friendliness and easy availability make water the ideal medium for a variety of uses. However, if the water quality is not taken into account, damage can be caused by corrosion, deposits or even bacteria (e.g. legionella). Every year, water-related corrosion alone causes billions of euros worth of damage throughout Switzerland.



Photometer for the determination of various dissolved water components



Example of a cooling tower used in industry

### Specialities

- Analysis of water samples for corrosion-favouring components
- Determination of the total bacterial count (TBC) of water samples and the detection of legionella
- Training and method development for specific customer requirements
- Advice on necessary measures

### Delivery time

Depending on the type and scope of the tests performed or the required test duration. Usually, 2-3 working days. For more demanding tests, a delivery date will be agreed in consultation.

### Test methods

- Determination of conductivity, pH value, p-value and m-value
- Determination of water hardness
- Photometric detection of various dissolved ions
- Checking the microbiological load and detection of legionella
- Analysis of solid residues and corrosion products
- Further test methods on request

### Our services

- Carrying out independent water analyses
- Advice on water quality issues and recommendation of suitable measures against fouling, biofouling and corrosion
- Delivery of suitable sample containers
- Sampling and measurements on site in special cases on request

### Damage analysis

- Analysing solid residues and corrosion products, e.g. in the event of corrosion damage in water-bearing systems
- Preparation of independent expert reports (e.g. for warranty claims)



Determination of water hardness by titration

