



SUSTAINABLE COOLING WATER TREATMENT

Without the addition of chemicals



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Efficient prevention of calcium, corrosion and microbiological growth.

In the industry, cooling systems are used to dissipate excess heat. Chemicals are often added to the recirculating cooling water to prevent:

- ⇒ Calcium scaling
- ⇒ Corrosion
- ⇒ Microbiological growth and legionella

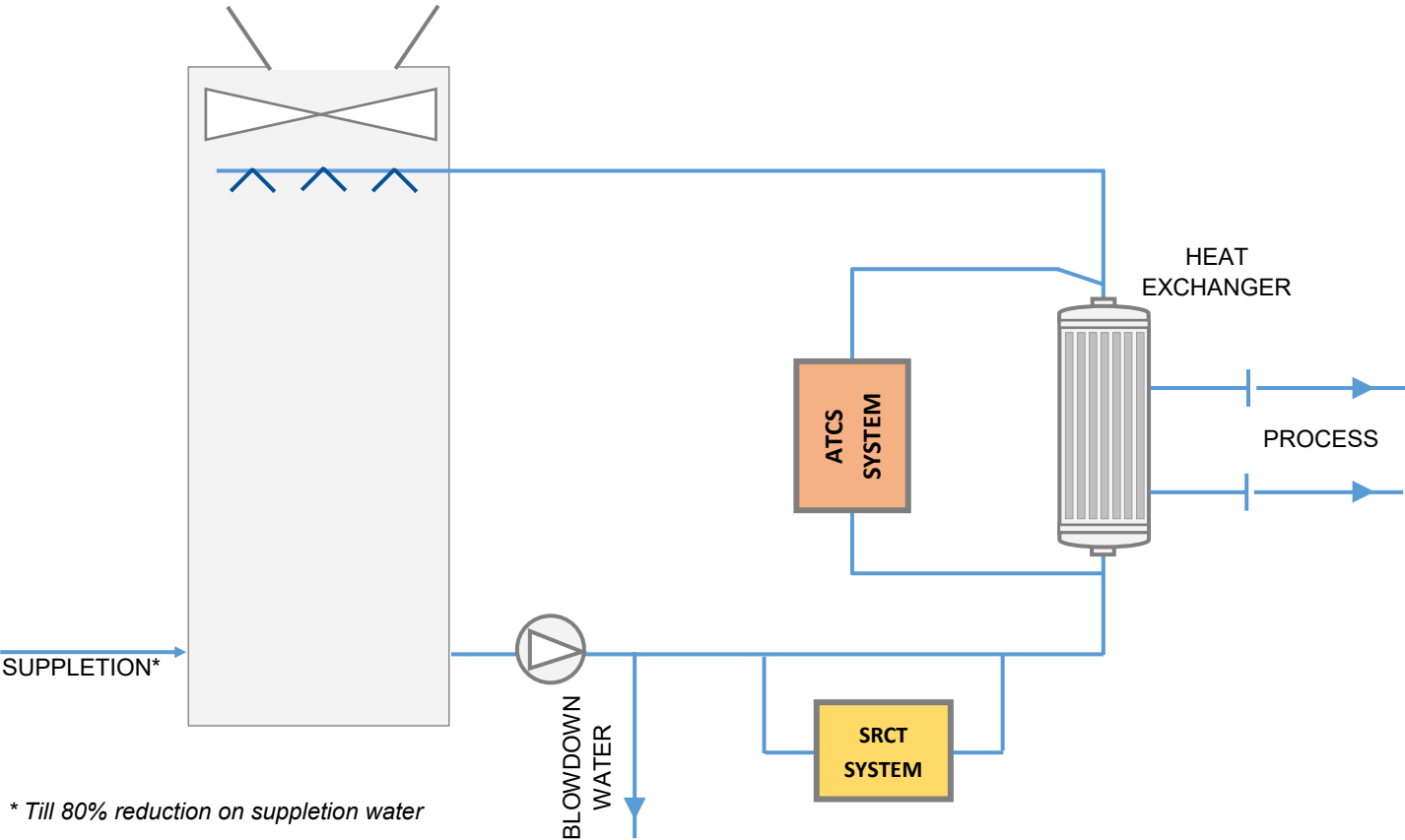
The use of chemicals such as hardness stabilizers, corrosion inhibitors and biocides are not only costly, but also harmful to humans and our environment.

RWB offers two unique and patented systems to avoid these problems without the use of chemicals:

- ⇒ The SRCT system for cooling water treatment
- ⇒ The ATCS system for continuous cleaning of heat-exchangers (see other brochure)



Simple installation of the SRCT and the ATCS system in existing processes



Without the addition of chemicals

The SRCT system for cooling water treatment

Calcium

The SRCT cooling water treatment system pumps only a part of the cooling water flow through the reactor chamber. The reactor chamber contains a series of disc-shaped cathodes and anodes. By applying voltage to these poles the electrolysis process starts. Under the influence of this natural process, only the scaling calcium and magnesium (temporary hardness) precipitates on the cathode. The other elements, including the non-scaling calcium and magnesium elements, remain in the water in dissolved form.

Corrossion and microbiological growth

On the anode side OH- ions are formed which increases the pH value. This in combination with the dissolved calcium and magnesium is an excellent inhibitor against corrosion. In addition, the chlorides naturally present in the water are converted into free chlorine under the influence of the electrolysis process. Active chlorine prevent algae growth and has a disinfecting effect to prevent legionella contamination.

Automatic cleaning

By using disk-shaped cathodes and anodes it is possible to build compactly (minimized footprint to treat large quantities of cooling water). The patented self-cleaning mechanism automatically removes the deposited lime scale from the discs. This results in; a low maintenance system, no down-time for cleaning and avoiding unnecessary cleaning costs.

Standard installations

The SRCT system is available in different configurations. Installations are standard equipped with PLC control. For the removal of contamination from the cooling tower system can optionally be provided with a sand filter.



Capacity standard unit from 1 MW up to 80 MW



ADVANTAGES

- Chemical-free cooling water treatment
- Energy and water savings up to 80%
- Fully automatic self-cleaning system
- Plug and Play - no down time
- Integrate into existing process
- Very compact configuration
- Easy to use and low-maintenance
- No pre- or post-treatment required
- Minimal operating costs
- Very short payback time
- Falls under the VAMIL and MIA scheme
- 2000+ systems operational

Professionals in water!

Standard systems and customer specific installations within the drinking water, waste water and proces water market.

from 100 liter tot 10.000 m³ per hour

RWB has all the necessary disciplines in-house. From process technology, mechanical engineering, automation, project management, realization to commissioning.

In addition, RWB has a national 24/7 service department. With this, RWB offers a complete and multidisciplinary package in water treatment. That is our added value!



PROCES TECHNOLOGY



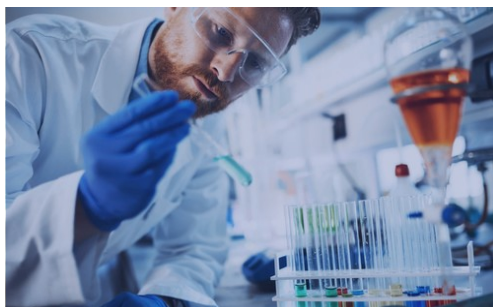
ENGINEERING



SYSTEM REALIZATION



24/7 SERVICE



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