

WATER TREATMENT – A CHALLENGE !

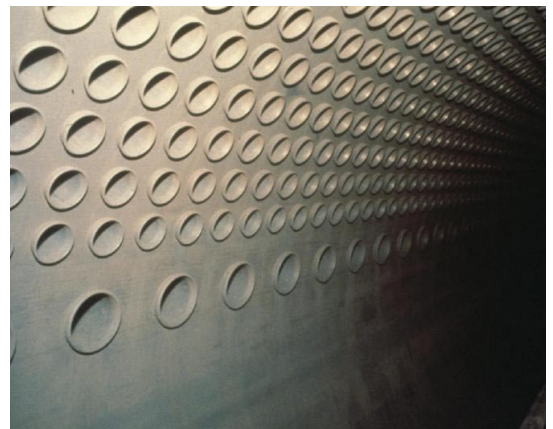
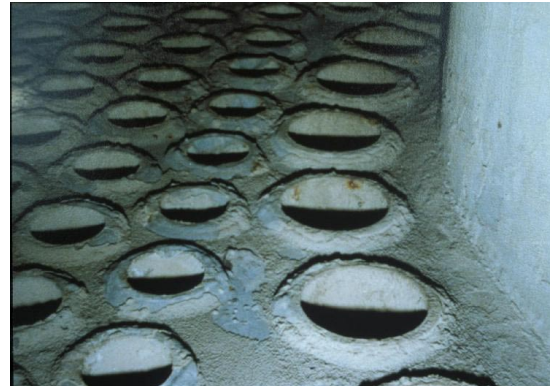
A number of problems are associated with the use of process water at high temperatures. These include lime deposits (furring), corrosion and microbiological contamination of the process system. Vecom has been supplying water treatment products that help to stop these undesirable deposits forming in cooling and process water systems for years.

The quality of the process water used is important. It can be mains water, perhaps softened, or spring water, possibly softened and with the iron contamination removed. The quality of mains water is very variable. In one area water is very soft, in another it contains high levels of chlorides, while in yet another area the water is very hard.

In addition to the quality of the process water, the quality of steam is also influential. If the steam is wet it can transport salts from the boiler water. Steam can be corrosive if it contains dissolved gases such as oxygen and carbon dioxide. These gases can raise the acidity of the water after condensation of the steam and this acidity can cause corrosion.

Good water treatment and an experienced water treatment specialist are absolutely essential in this situation.

The last 20 years has seen enormous development in water treatment chemicals. Particularly the introduction of organic compounds has brought about many changes. The choice of formulations for water treatment products is now so great and their range of properties so extensive, that it is sometimes difficult to maintain an overview.



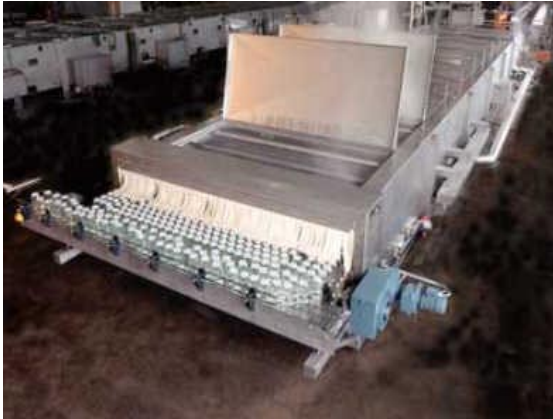
Without (above) and with (below) water treatment

When choosing a product it is best to be aware of the following facts:

- There is no such thing as a wonder product that can handle every potential situation.
- There are guidelines for the application of water treatment chemicals, but for example in the foodstuff industry there is no universal approach. Every situation requires individual assessment.
- Extensive expertise and reliable service are essential.
- The effectiveness of the products increases proportionately with the attention that the user is prepared to pay to water treatment.

The choice of water treatment to be used in a system depends on several factors. Before changing to a new water treatment concept it is advisable to make an inventory of the various factors that will influence the treatment:

- water and steam quality
- water circulation system and process temperature
- type and quality of equipment
- operating conditions
- laws and regulations relating to foodstuff technology, hygiene and the environment.



In the foodstuff industry good water treatment using for example sterilisation or pasteurisation processes is absolutely essential

The water treatment concept chosen should be a package of chemical products to prevent corrosion, contamination and to fight microbiological contamination. In addition, a sophisticated computer system for dosing the treatment products and a quality monitoring system for the water quality are also important. All this means coordinated action from all involved parties from an early stage. Timely recognition of potential problems can avoid the occurrence of unnecessary damage and costs.

Vecom is able to offer industry a total package via its cooperation with Aquality and due to its extensive experience in maintenance, water treatment and system & tank cleaning: identification of problems, provision of advice, supply of water treatment products and subsequent after-sales service.

"Prevention is better than cure" applies very much to water treatment.

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