

## Characteristics of water IQ

- Finely and homogeneously in the (cluster) molecular structure
- Increased regularity and level of structure of molecules
- Lower surface tension
- Higher inside surface
- Increased wettability
- Better stabilizing power of colloids
- Excellent penetration
- High crystalline molecular stability
- Increased solubility
- Aragonitic's lime more soluble
- Fineness & homogeneity for your products!

## Your chances

- Homogeneous liquids
- Uniform behavior of the aqueous products
- Reduced germ susceptibility / durability
- Higher product stability
- Efficiency increase of additives / additives
- Simplified emulsion / formation of colloidal system
- Better wettability
- General increase in quality

## It may be worthwhile for you!

- Water-based surface coatings (coatings, adhesives, ...)
- Chemicals for textile treatment, power equipment
- Aqueous, circulatory run cleaning and treatment processes
- Other water-based products

# Here the water structure is already in use:

## **COOLING CIRCUITS / COOLING TOWERS:**

• Preventing the growth of algae and of deposits in pipelines (fouling) and the silting (without chemicals such as biocides, corrosion and algae protection)

#### DRY CLEANING:

- Higher penetration and dirt holding assets
- Better cleaning and dissolving power

#### **HEATING CIRCUITS:**

- Reduction / prevention of fouling
- Protection of the pipeline network

#### DRINKING WATER NETWORKS:

• Preventing during standstill (chemical-free)

## FOOD INDUSTRY:

Extended shelf life

#### FACILITY OR MACHINE CLEANING:

• Significant reduction of resources

## Your benefit!

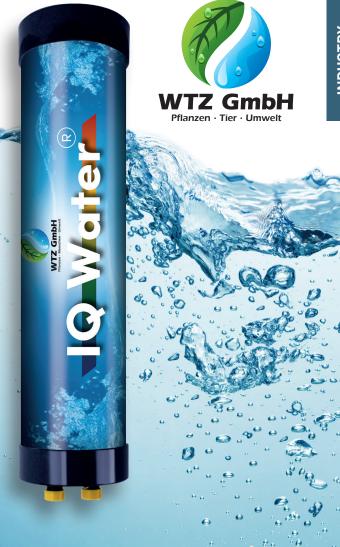
- Higher customer satisfaction
- Fewer complaints
- Higher product quality & stability
- Competitive advantage

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# The chance to make more of your product.

For the structuring and improving quality of ultrapure, osmosis and tap water.

## The essence of water

Water may be so commonplace be for us and so very puzzling, as well. Which molecular peculiarities its abnormal behavior in many ways underlie, has so far been scientifically analyzed and explained only in its infancy.

Water is the only inorganic substance which occurs in the liquid state. According to the laws of chemistry water should only be in gaseous state because it is composed of two gases, the very light hydrogen and relatively heavy oxygen. The fact that water is liquid, is founded on a particular interaction of the molecules.

## A water molecule exists rarely alone ...

Water molecules combine to create dynamic variable, spatially arranged groups, so-called **clusters** whose quality means also the **quality of water**. Refined water has such characteristics like high **solubility** and **flexibility**. Water clusters can be described as "functional units" of water molecules.

Due to the fact that water is by means of pressure pumped through or even still-standing in water pipes, the clusters are "welded together", enlarged and made unmoveable.

This applies to all water used in the industry (ultrapure, osmosis or tap water). Its structure is destroyed and thus it gets physically sluggish and passive.

## The way nature does it

In nature - among other things - the big sluggish and and energy-less cluster structure is broken, crashed, restructured by **intensive swirling processes** (rotation). This energizes water and promotes the opposite: the formation of **small, reactive and agile** cluster structures.

## The way we do it



The IQ-water system combines serval operating principles according to natural laws, like for example swirling, pressure/suction processes and levitations.

## **Cluster refinement**

If you microscope water by means of a dark-field microscope, you can ascertain the following facts:





tap water

refined water by IQ-water

## Facts that count!

- The smaller the cluster, the greater the inner surface, the greater the contact area with respect to solutes
- The size of the water cluster, also affects the surface tension and the ability of solution
- Structured water has more stable physical characteristics
- Structured water with small clusters can stabilize colloids better

