

Better Fresh Technology LLC

Division of Omega Holdings USA

Micro-structured H₂O Keeping Food Safe Naturally

From Alpha (the beginning) to Omega (to infinity)

The Right Thing to Do!

bfttech 

Who we are...

Established in 2012, developed in the USA

Commercial equipment developed and tested in lab/field/process facilities - from farm-to-fork

Current industries and applications served

- Fruit and Vegetable processing
- Fish and Meat processing
- Medical facilities
- Fresh cut products

Future industries in the early adoption stage

- Nutritional and Health
- Baked goods
- Snack Foods
- Beverages

Currently working Fortune 100 companies that are deploying BFtech proprietary and patented technology



Alliances that provide validation...



Our Products

- AqauFew EO Water Treatment Systems (H_2O hydrogen separation of acidic and alkaline water)
- STT EO Water Systems (Neutral EO water)
- Pre-installation Consulting
- Engineering and Design Services
- Maintenance Service Contracts
- IoT Connection Subscription Services



Dual Electrolysis Surface Tension Chamber Tube Process

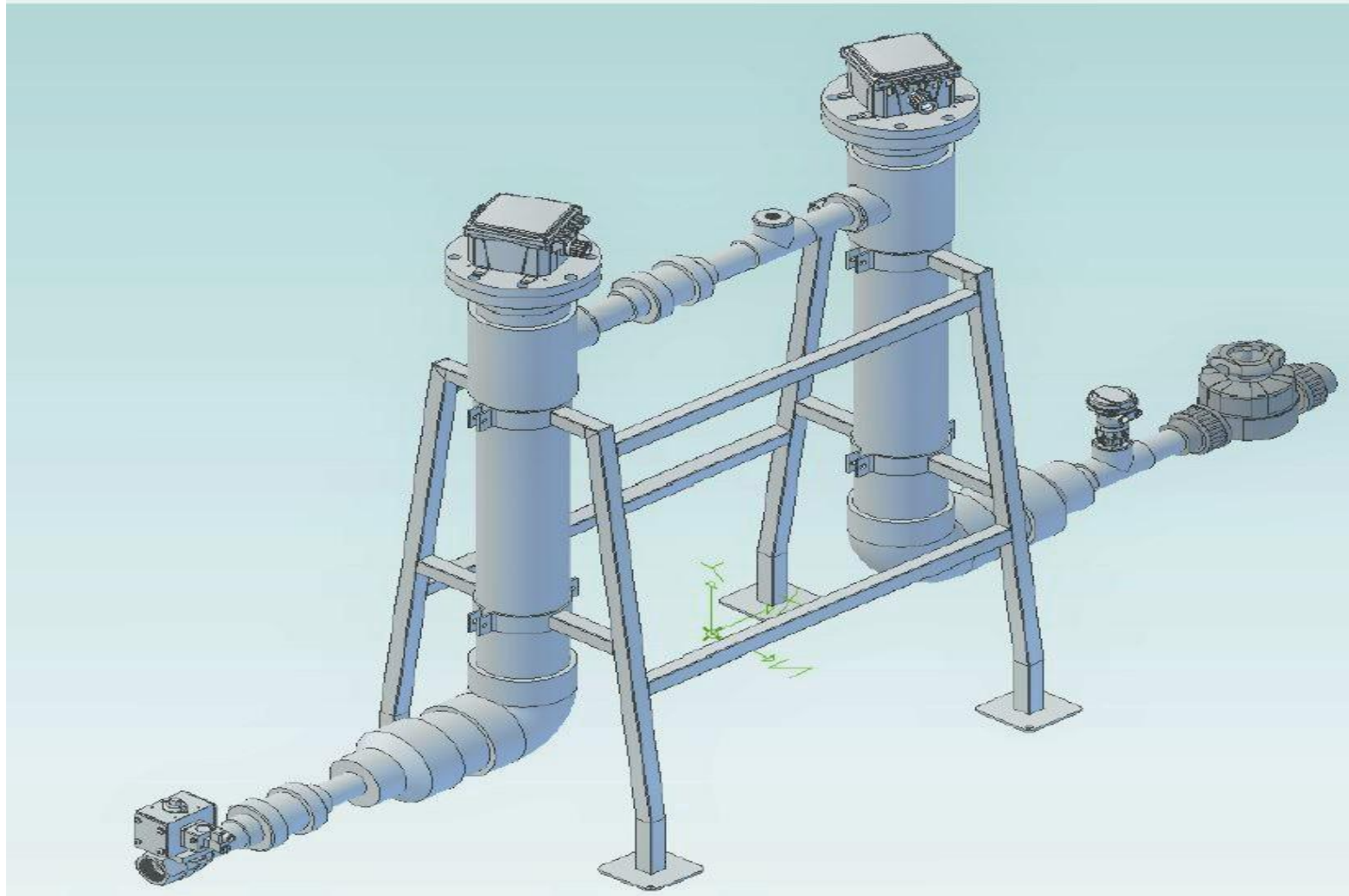
Surface tension is a microscopic effect of the weak [hydrogen bonds](#) which form between water molecules.

Surface tension prevents a coin from sinking: the coin is indisputably denser than water, so it must be displacing a volume greater than its own for [buoyancy](#) to balance mass.

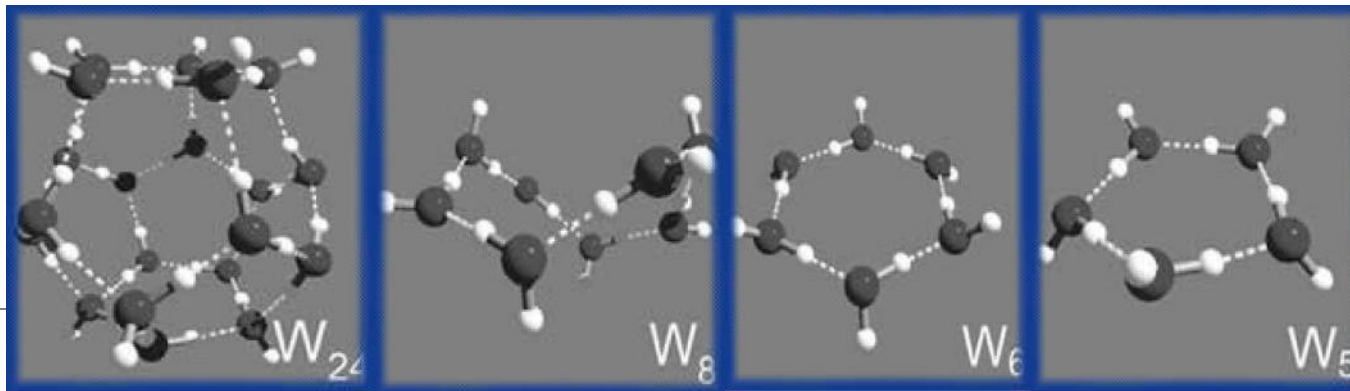


Source: https://en.wikipedia.org/wiki/Surface_tension#Gallery_of_effects

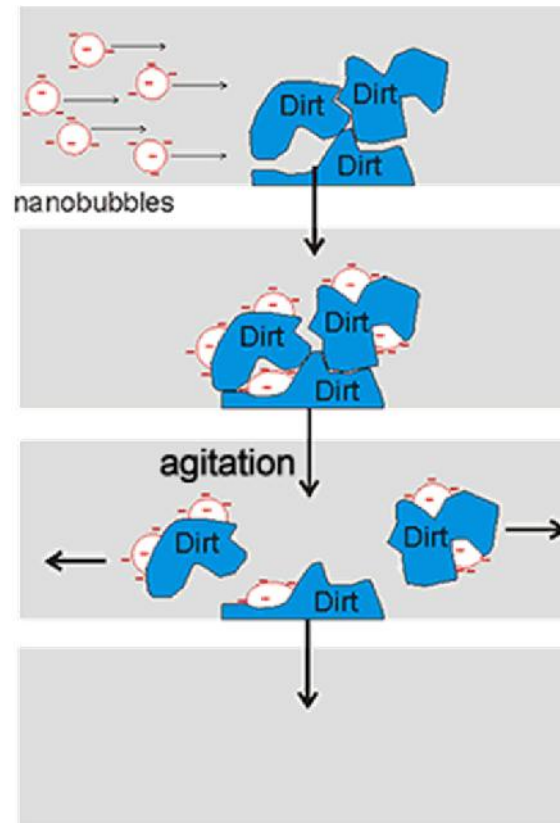
DUAL STT EO Water System

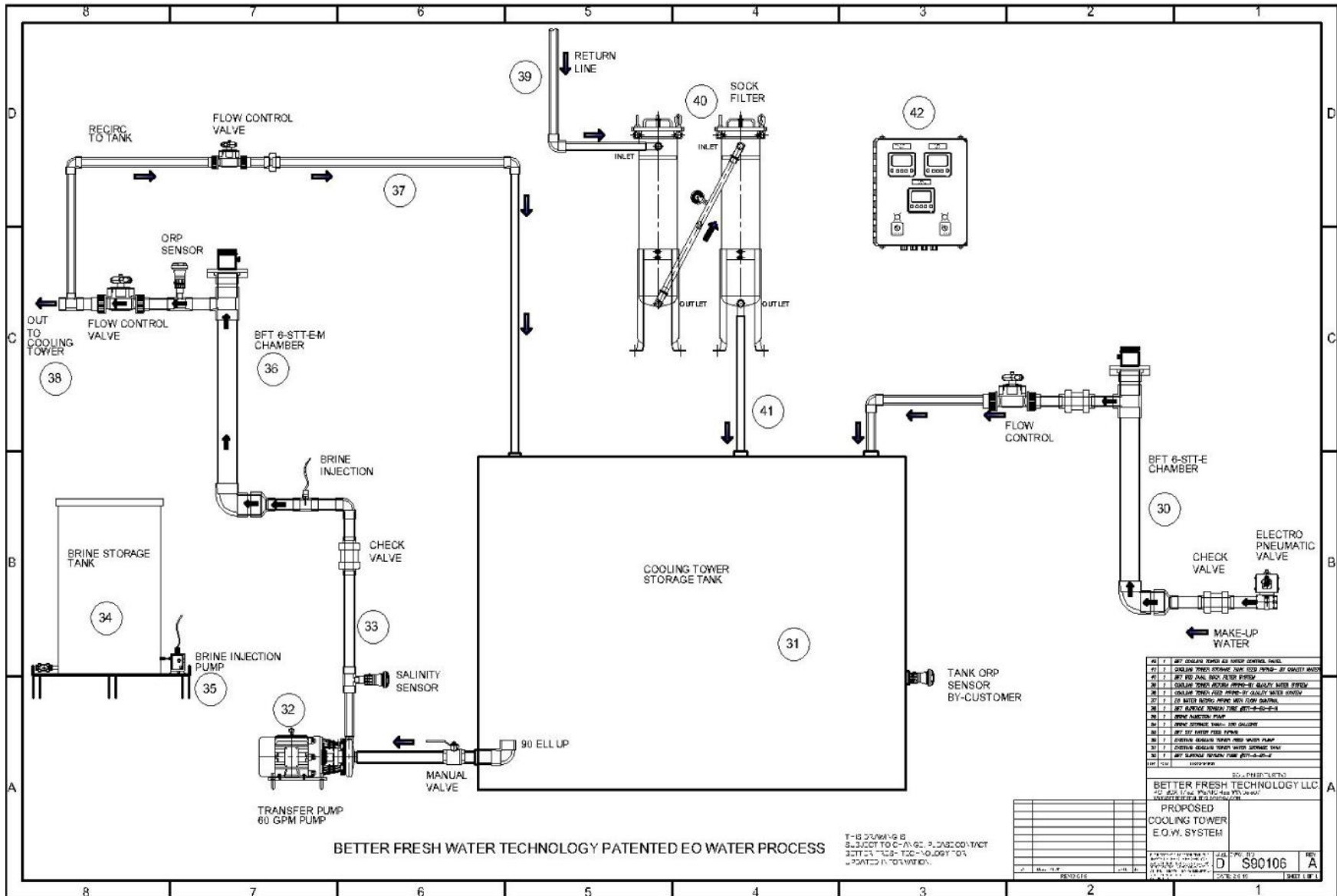


BFTech EO Surface Tension Tube (STT) Breakdown of Water Molecules



Example of nanobubble "reduced surface tension" in molecules breaking down organics





Dual EO Water surface Tension Tube ±

Dual STT EO water creates a two-stage electrolysis process.

FIRST STAGE

Source water enters STT EO water systems at set GPM that is required for cooling tower.

First STT type has an (anode + and negative -) electrodes.

Each electrode is connected with positive and negative current which starts the electrolysis as water flow through first EO water chamber tube.

The positive and negative current over electrodes (anode + and negative -) create and Ion Exchange of positive and negative minerals that results in decreased surface tension in water.

Through electrolysis and decrease surface tension, the minerals stay in suspension.

Reduces scaling and organic build up on all hard surfaces in cooling towers.

No outside particulates and sediments will not build up as well due to surface tension.

Dual EO Water surface Tension Chamber Tube ±

Second Stage

EO water will flow from first stage STT tube and go through specific design filter system designed for BFTech which will remove sediments or particulates which drop out of water due to decrease surface tension.

ST EO then transfer into the enhanced STT chamber which will have the same electrolysis process using anode and cathode electrodes and proprietary anode+ membrane and cathode – membrane which runs parallel to each electrode.

Natural active ingredients produced are hypochlorous acid “sanitizer” is produced from positive mineral ion exchange current and natural sodium hydroxide “degreaser detergent” from negative ion exchange current.

Due to the enhanced process in second stage decrease surface tension goes from nanobubble to micro-bubbles. Very slick surface on all hard surfaces.

If chemicals usage is desired up to 40 to 60% reduction of chemical is suggested.

Reduce chemical concentrates result from the enhance properties in electrolyzed water.

Neutral pH stable water.

Dual Surface Tension Chamber Tube Oxygen Reduction Potential Acidic Low pH, Hypochlorous Acid and High pH, Alkaline water. ±

Electrolysis creates and increase ORP "oxygen reduction potential".

ORP measures the antimicrobial activity in water.

ORP in water is measured in millivolts. Normal water ORP level range between 180 to 240+mV. No antimicrobial activity.

Through STT system we increase the ORP level up to 900+mV, very antimicrobial activity for neutralizing pathogens and fungi's.

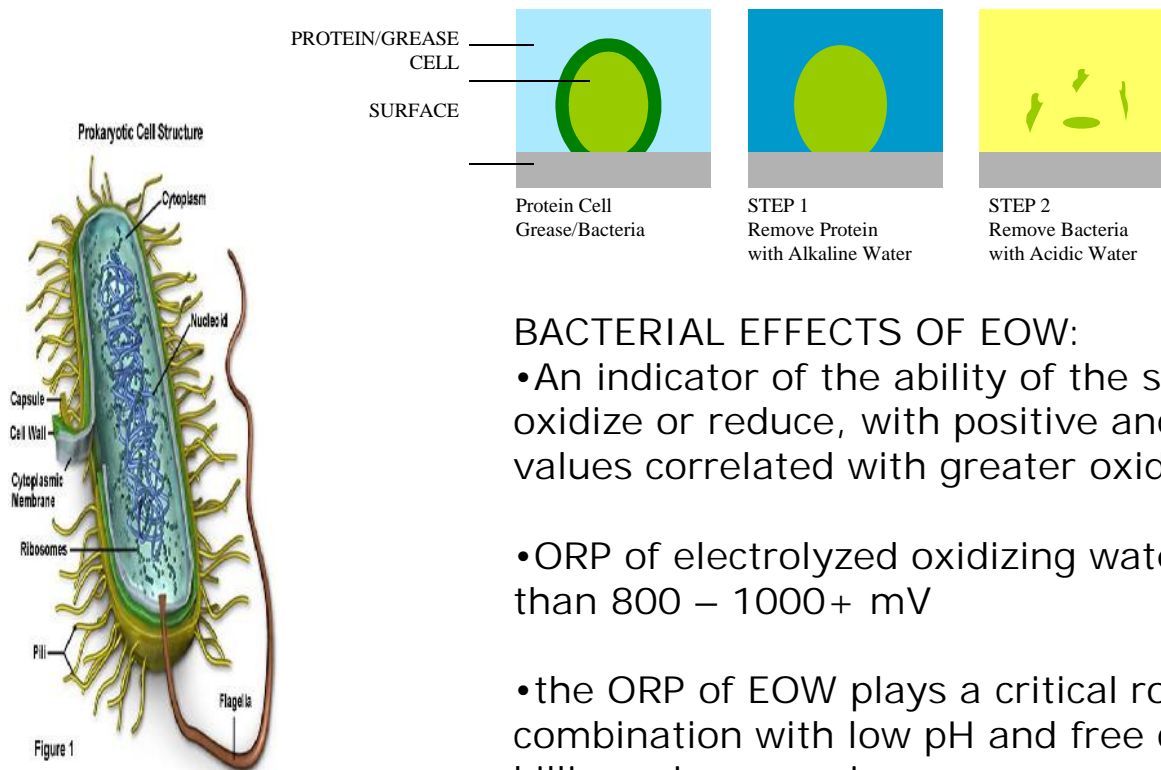
Acidic Water Neutral pH

Active Ingredient – Hypochlorous Acid, "free chlorine" Non corrosive

Alkaline Water Neutral pH

Active Ingredient – Sodium Hydroxide (degreaser/degreaser)

EO Water surface Tension Chamber Tube \pm Hypochlorous acid (HOCL) and Sodium Hydroxide and ORP



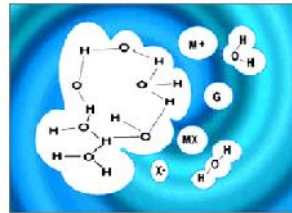
BACTERIAL EFFECTS OF EOW:

- An indicator of the ability of the solution to oxidize or reduce, with positive and higher ORP values correlated with greater oxidizing strength
- ORP of electrolyzed oxidizing water is greater than 800 – 1000+ mV
- the ORP of EOW plays a critical role in combination with low pH and free chlorine in killing microorganisms

How Functional Water is Produced

The Process of Structuring Functional Electrolytic Water

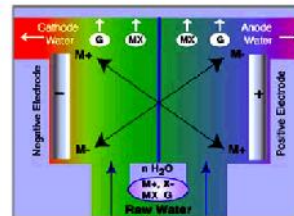
Cluster of Water Molecules



Molecular Structure Of Water

Positive and Negative Ions

Electrolysis Chamber



The Electrolysis Process

Positive and Negative Electrical Charge

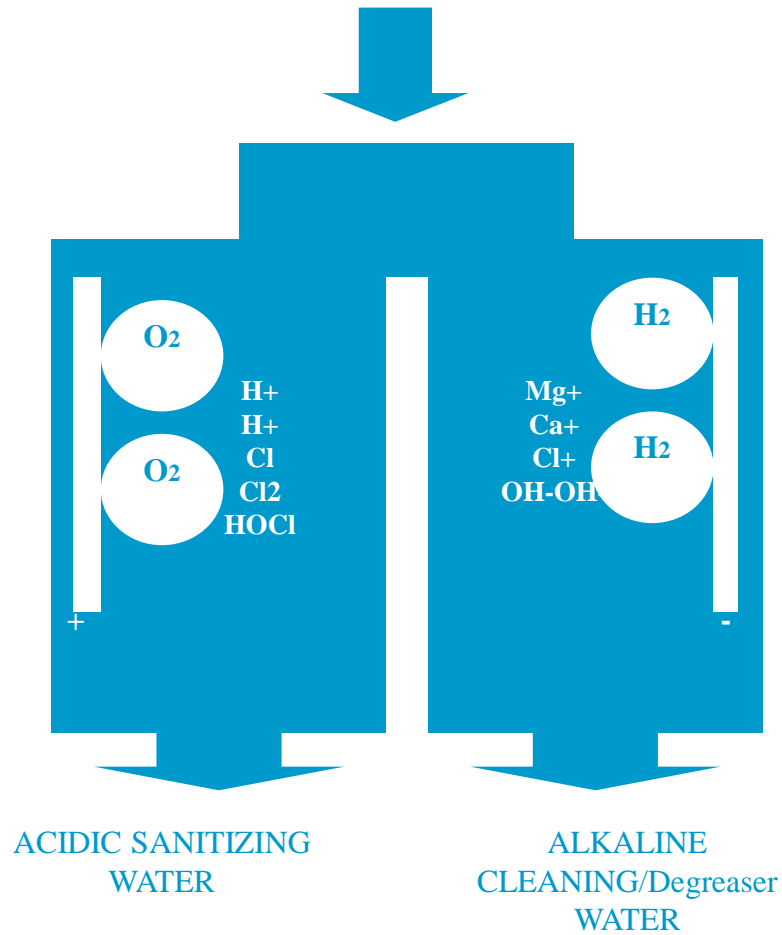
Electrolytes Found In Water Molecules

Positive Ions (M ⁺)	Negative Ions (M ⁻)
Ca ²⁺ — Calcium	CO ₃ ²⁻ — Carbonate
Mg ²⁺ — Magnesium	Cl ⁻ — Chlorine
Na ⁺ — Sodium	SO ₄ ²⁻ — Sulfate
K ⁺ — Potassium	NO ₃ ⁻ — Nitrate
Fe ²⁺ — Iron	
Mn ²⁺ — Manganese	

Separation Of Ions After Electrolysis

Resultant Ion Separation

Source WATER
Mild Brine Solution



BFTech STT EO water system benefits

- Maintain antimicrobial pathogen and fungi control on all hard surfaces.
- Reduce scaling on hard surfaces.
- Maintain antimicrobial pathogen from air born sediments.
- Minerals in water remain in suspension.
- Less blowdown. (Reduce saturation levels of minerals which cause scaling due to decreases surface tension and minerals stay in suspension)
- Reduce energy cost.
- Recirculated from holding tank will go through a STT EO chamber tube prior to entering cooling tower which will maintain antimicrobial sanitizing.
- Water will be filtered prior to holding tank with increase sediment removal due to decrease surface tension in water.
- Sustainability.

For Additional Information Contact Better Fresh Technology

www.betterfreshtechology.com

Ask about custom designs for your application available for complete water treatment and re-use through out your process and facility.

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