



Double Shell Series Industry

---

---

---

# THE POWER OF MAGNETIC WATER

---

---

---

Made in Germany

# The Power of Magnetic Water

## CHAPTER I: ABSTRACT

### MAGNOLITH – MAIN FEATURES

Our product "MAGNOLITH DSSI" is designed for heavy agricultural / industrial use, and very high mineral water content.

It is produced and developed under strict quality management (DIN EN ISO 9001)

Magnolith is an extremely effective device for the magnetic conditioning of water. It improves the physical, chemical and biological nature of water. The water becomes 'active' in Pipes!

Magnolith is a 100% environmental friendly, cost and energy effective way to treat water at the state of the art.

### PRIMARY BENEFITS

- Magnolith is an auto-active system.
- No external sources of energy.
- No chemicals
- No energy costs
- Simple installation

### Agriculture

When used in agriculture the water becomes "biological active" for crop and animals!

#### Plants

1. Plants grow faster, stronger and healthier
2. Less water usage
3. Fertilizer usage is reduced
4. Ph-level of the soil is much lower
5. Salt content in soil is reduced
6. Magnetically treated water affects plants indirectly via soil population: microflora and microfauna! They seem to be really activated!

#### Diary Animals

1. Using our method reduces the firmness of the udder and effectively makes it easier to milk.
2. Dairy animals that drink magnetically treated water also show signs of enhanced disease resistance.
3. Dairy animals that drink magnetically treated water show drastically decreased amount of bacteria in milk.

### Poultry Farming

1. Magnetized water has been shown to benefit growth and development of some bone structure in chickens and other animals.

### Industry

Magnolith is an anti-furring system. It protects piping and water installations against furring (lime) and corrosion (e.g. rust). Existing lime deposits in piping and water installations are dissolved. For industrial use it

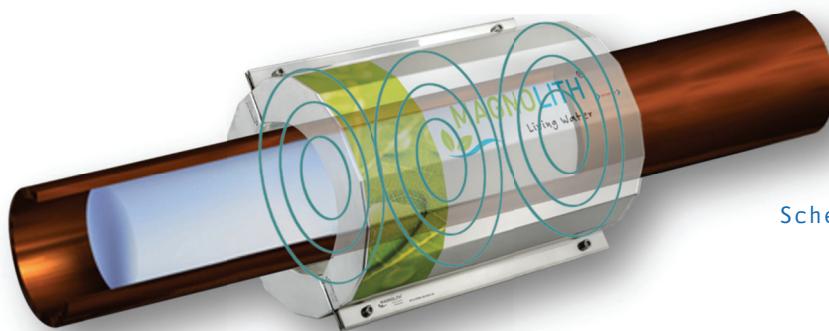
1. prevents and reduces furring and corrosion
2. prevents and reduces any kind of scale build-up and slurry
3. stabilizes the process water
4. eliminates, reduces downtime, maintenance and cleaning costs

## HOW IT WORKS I

Magnolith is designed to magnetize the water as it is passing through a pipe. It transfers the elemental force of magnetism to water. With an ingenious system of up to **208 cascaded magnetic fields**, with alternating strength between 4.500 and 8.000 Gauss / 450 to 800 mT (milli Tesla), energy is imparted in the water. Its special design gives the device almost **ten times the efficiency of similar constructions**, and, because of the inbuilt know how, makes it impossible to copy!

Magnetic water treatment can be explained by a phenomenon called "Magnetic-Hydromagnetic resonance" under the action of Lorentz's force. The primary impact is the energization and the structural change of the water. The key parameters that influence the magnetic treatment are the velocity of water flow in the pipe and the intensity of magnetic induction.

**Magnolith deals with two of the most fundamental factors of nature:  
Magnetism and water**



Schematic illustration

Magnolith works by using a clever system of permanent magnets in a cascade style order, it does not only use a single large hollow magnet.

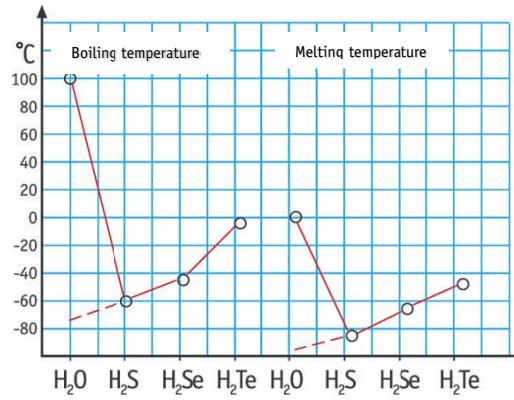
The main effect is gained when water runs through the scope of Magnolith. The force of the magnets is rhythmically turned on and off. When the rhythm lies within the area of natural frequency of water clusters, resonance occurs. That is, water clusters are opened.

## CHAPTER II: THE ANOMALY OF WATER

Due to its extraordinary characteristics water has an absolute exceptional position in nature!

Therefore one talks about the „abnormality of water”.

- Water should freeze at  $-120^{\circ}\text{C}$  and boil at  $-100^{\circ}\text{C}$ !  
Actually it freezes at  $0^{\circ}\text{C}$  and boils at  $+100^{\circ}\text{C}$ .
- Water has its largest density at  $+4^{\circ}\text{C}$
- Its smallest density is reached at solid state
- The point water has its lowest specific heat is reached at  $+37,5^{\circ}\text{C}$ . Generally water has a large capacity to retain heat. It has a good temperature balance.

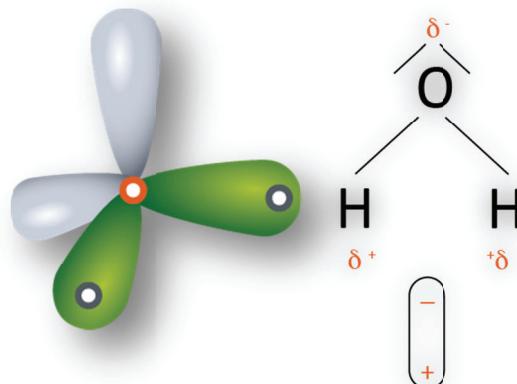


### A BAND OF THREE BUILDS A DIPOLE

The reason for the „abnormality of water” lies within the dipole nature of the water molecule.

Therefore one talks about the „abnormality of water”.

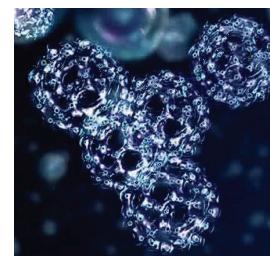
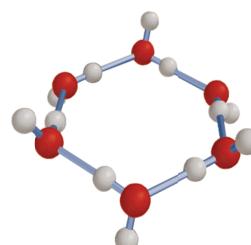
- Chemically water is a molecule which is composed out of two hydrogen molecules and one oxygen molecule.
- The mentioned band of three always builds a stable unity forming an angle.
- Within such a compound, the partners share the electrons, which are responsible for the bonding. Water has a different division of charge though since diverse partners are involved. Hence the water molecule is electrically not neutral, but has a negative and a positive pole



Orbital model of the water molecule

Structure of the water molecule

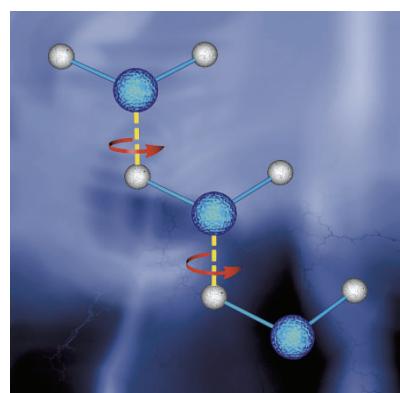
Water molecules pool to larger formations



## LIQUID WATER A liquid crystal

Water is at least a 2-phase system. It consists of dynamic, unstructured water I and of a liquid-crystal part (Liquid-Crystal-Cluster), called water II. The variation of the possible cluster structures is astronomical.

Due to the rotation of water molecules the electromagnetic linking in these Liquid-Crystal-Clusters is very strong. Quite as strong as „normal“ covalent chemical bonds. Quantum mechanical calculations were able to prove this.



Synchronous rotation of the water molecules. It evokes a very strong electromagnetic linking in water II

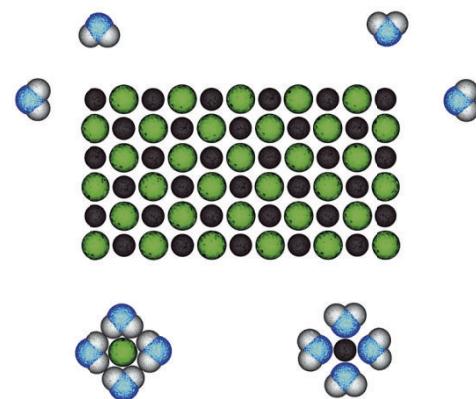
## WATER – AN EXCELLENT SOLVENT

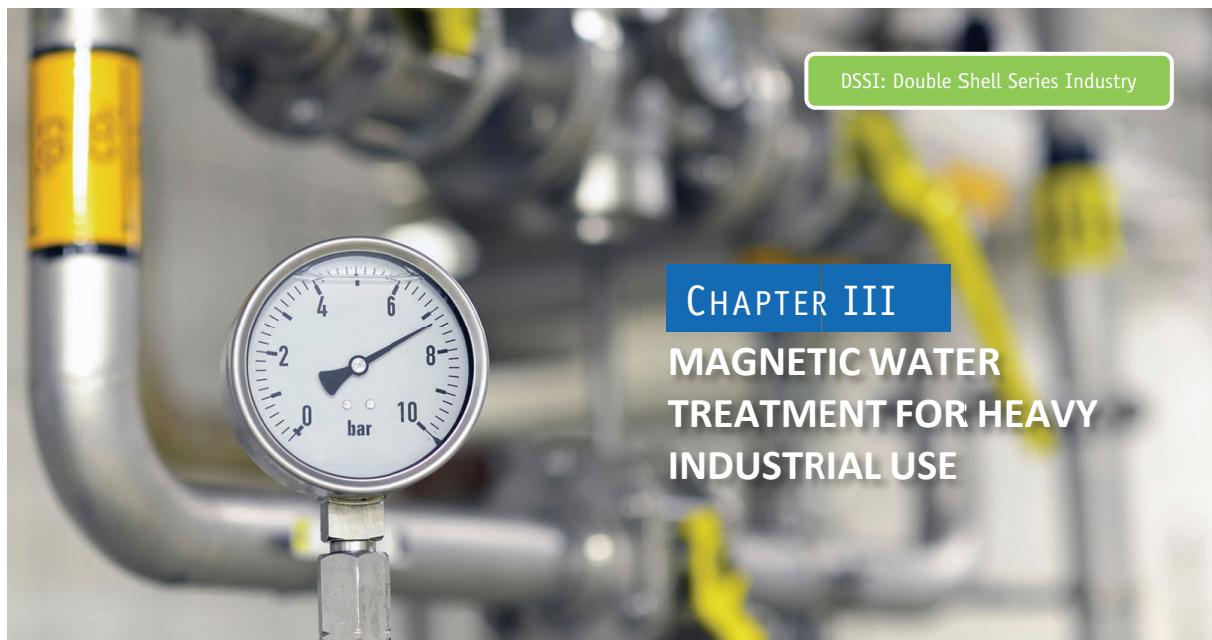
The dipole characteristic of the water molecule is responsible for the excellent characteristics of water as a solvent.

Other polar connections such as alcohol but especially salts, which are built from charged particles, the so-called ions, are soluble in water.

When salts are dissolved, the salt components (ions) are wrapped by the water molecules. Hundreds of molecules can be part of such hydrate covers. Bigger airborne particles, even gases are embedded by such cages.

Dissolution process of common salt in water





**CHAPTER III**  
**MAGNETIC WATER  
TREATMENT FOR HEAVY  
INDUSTRIAL USE**

**WATER AND MAGNETISM**  
**THE WATER BECOMES "ACTIVE" IN PIPES!**

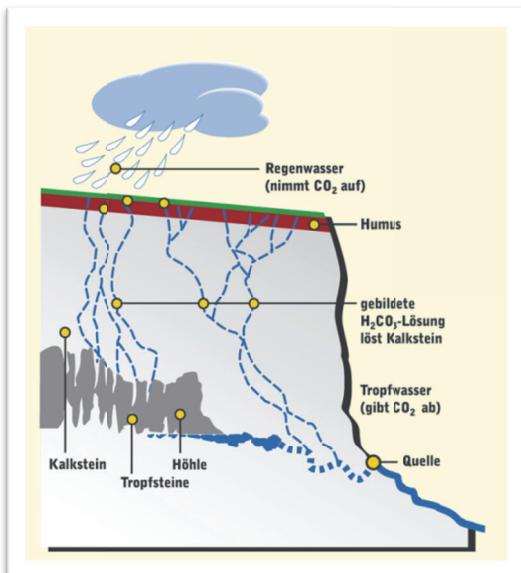


## HARD WATER (LIME WATER)

In nature there is no such thing as chemically pure water. Water is always enriched with miscellaneous solute inorganic and organic substances. If water derives from limestone regions, it will naturally contain a large amount of calcium and magnesium salts.

### WHY IS THERE LIME IN WATER?

Lime is mainly composed of calcium carbonate and magnesium carbonate.



Calcium carbonate is hardly water soluble. It gets into the water taking a chemical loop way. The acesonnt rain water dissolves the lime out of the rock. The chemical process behind is a so-called joint balance which exists of several single sequences.

To sum up:



or better



When carbon dioxide is eluded, the balance of the reaction is dislocated to the left and the heavily soluble  $\text{CaCO}_3$  appears again. Therefore it builds up on the walls of the pipes.

Especially calcium and magnesium ions ( $\text{Ca}^{2+}$ ,  $\text{Mg}^{2+}$ ) build stable agglomeration complexes (lime!).

### MAGNOLITH - A PROTECTION FOR LIME BUILT-UP

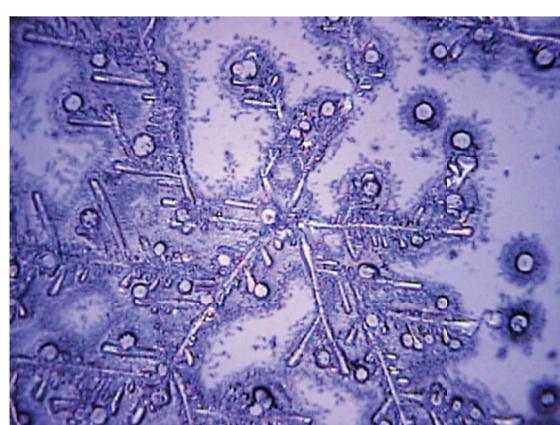
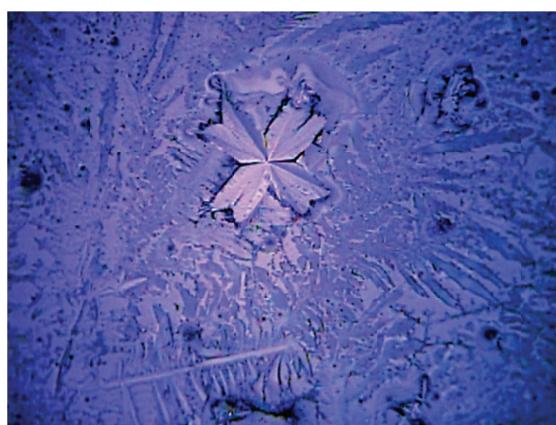
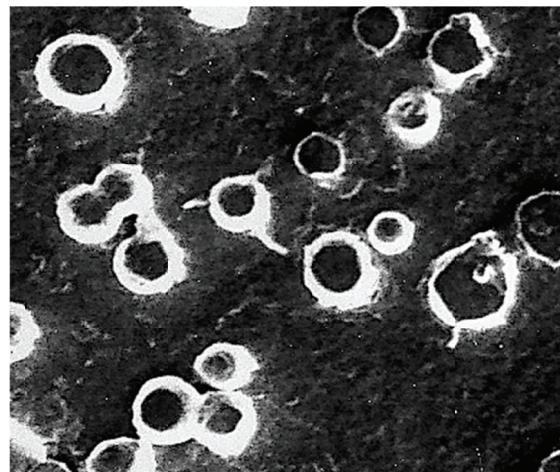
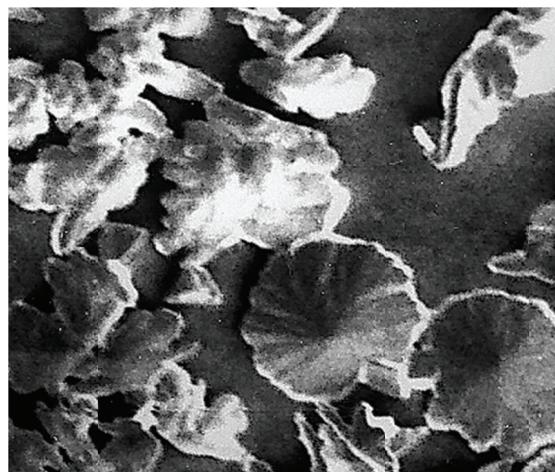
The Magnolith energizes water and changes its structure! Water clusters which keep impurities or small calcium crystals are broken up.

Within the energized water sprouts can grow floatingly. Instead of the hard, weird looking lime crystals, soft and round shaped crystals develop. They do not stick to the inside walls of pipes; they are washed away with water.

The Magnolith energizes water and changes its structure! Water clusters which keep impurities or small calcium crystals are broken up.

One can say that sprouts are energized or polarized and their water cages are broken up from the inside. Then they are floating crystal sprouts as well.

Crystals of lime before and after using the Magnolith



## CORROSION - THE CHALLENGE IN PIPES

The Protection layer against corrosion ist stimulated. Existing corrosion is reduced.



## YOUR BENEFITS

- Existing scale is removed and new scaling is prohibited.
- The Protection layer against corrosion is stimulated. Existing corrosion is reduced.
- Iron content in water is reduced.
- Electrical conductivity is reduced.
- The Ph-Value of limewater slightly increases
- Viskosity of the water decreases.
- Density of the water decreases.
- Surface tension of the water is reduced.



## WATER AND MAGNETISM

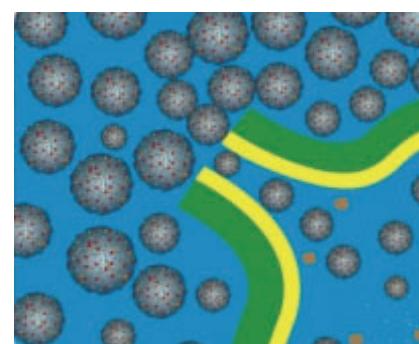
### THE WATER BECOMES “BIOLOGICAL ACTIVE” FOR CROP!

#### NUTRIENTS SUPPLY

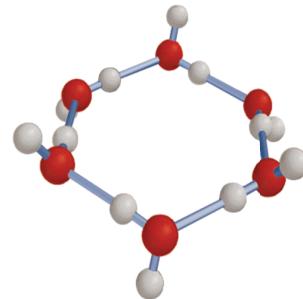
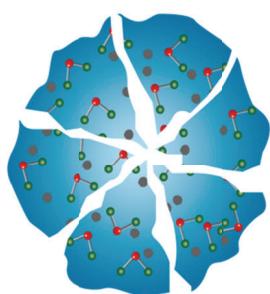
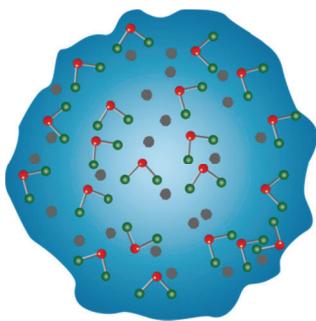
To get healthy plants, certain chemical elements (nutrients) and compounds are necessary for plant growth, plant metabolism and their external supply.

Plants must be able, to uptake them through the roots!

Big Water Clusters cause problems. The bigger stable agglomeration complexes cause problems. As these water molecule clusters pass by the cell membrane, many of them are sloughed off because they are too large or because of the toxins contained, which the plant is programmed to reject. It requires a great deal of unstructured water to hydrate a plant.

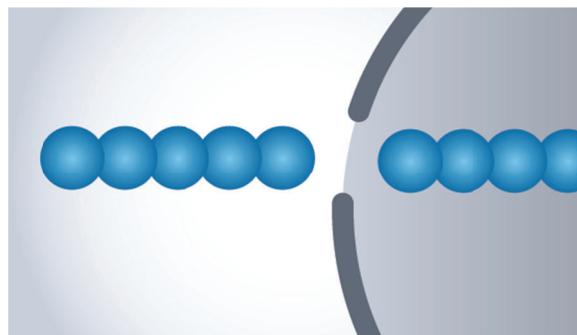
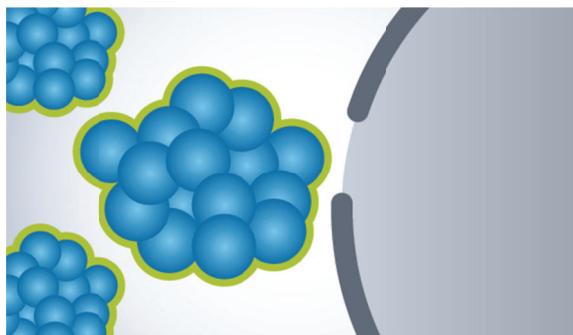


MAGNETIC TREATMENT BREAKS UP THE BIG H<sub>2</sub>O CLUSTERS INTO MUCH SMALLER CLUSTERS, ALLOWING THEM TO PASS THROUGH PLANT CAPILLARIES MORE READILY.



Non-magnetized water clusters have difficulties passing through plant capillaries and cell walls.

Magnetized water clusters enter the plant capillaries and cell walls easily.



THIS RESULTS IN HIGHER WATER PRODUCTIVITY, BECAUSE A BIGGER PERCENTAGE OF WATER IS MADE AVAILABLE FOR PLANTS TO TAKE IT IN AT FINE ROOT ZONES.

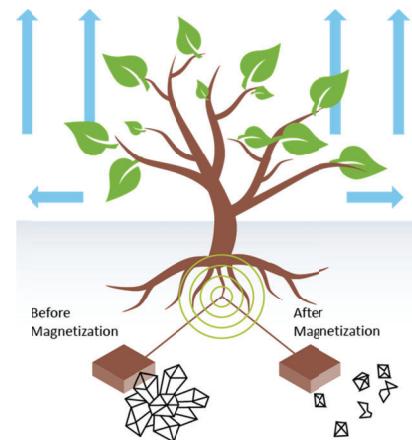


## FERTILIZER USAGE IS REDUCED

**Nutrients applied are dissolved and also made available for plants to take up at fine root zones.**

The bottom line results are dramatic: maximum hydration with healthy water and higher uptake of minerals results in greater yields, larger and better produce, earlier maturation, longer shelf life, and healthier plants.

Usage of water and pesticides is reduced also!



## YOUR BENEFITS

### DRYLAND SALINITY



A high salt concentration present in the water and soil negatively affects the crop yields, degrades the land and pollutes groundwater.

The quality of the irrigation water plays an essential role in arid areas affected by high evaporation rates and cause high concentrations of salt accumulating in the soil.



### SALTY WATER CAN BE USED

Magnolith magnetic systems make it possible to use traditionally unsuitable salty water (salt content up to 7500 ppm and more) efficiently for irrigating crops. Obviously, when you irrigate with salty water, you subsequently increase the level of soil salinity which interferes with plant nutrient absorption. After magnetic treatment of water, there is a change of the physiochemical characteristics of water leading to improved filtration and dissolvability e.g. plant capillaries start to let either salt crystals or crystals of different chemical elements and suspensions pass more easily.

## SOIL SALINITY IS REDUCED

Magnetically treated water washes 3-4 times more salts out of the soil than non-magnetized water. The salt seems to be broken down by the structured water, causing it to sink deep into the soil, away from plant roots, and washed away. The desalination happens quickly over a season, creating much healthier plants, greater yields, and a better final produce.

**At the same time oxygen concentrations increase up to 10%!**

## THE ADVANTAGES OF USING MAGNETIC WATER FOR IRRIGATING CROPS ARE AS FOLLOWS:

1. Vegetation period can decrease up to 15-20 days, therefore the crops ripe up to 15-20 days earlier than normal.
2. Crop production increases from 15% up to 100%.
3. Plant disease rates dramatically decrease.
4. The taste of agricultural produce improves.

## SUMMARY I

Magnetic treatment to your water can:

- Reduce water usage by minimum 10% and up to 30%
- Reduce fertilizer usage
- Reduce pesticide and herbicide usage
- Increase yields by at least 10%
- Improve taste of produce
- Increase shelf life of produce
- Improve soil pH and remove/dissolve impurities from soils year after year
- Increase nutrient content in produce

## MAGNETICALLY TREATED WATER AFFECTS PLANTS INDIRECTLY VIA SOIL POPULATION: MIRCOFLORA AND MICROFAUNA!



Magnetically treated water affects plants indirectly via soil population: microflora and microfauna! They seem to be really activated!

### **POULTRY FARMING**

Magnetized water has been shown to benefit growth and development of some bone structure in chickens and other animals.



Chicks drinking magnetically treated water had an increase in their bone formation process as well as improved blood morphology.

1. A decrease by 2-3 times of death rates.
2. increase of mass (average weight gain increases by 5-7%) .
3. Increase egg-laying qualities by 10%.
4. Also the quality of meat improved.

## MAGNOLITH - NO CHANCE FOR BACTERIA, MICROBES ETC.

Magnolith vitalizes the water. In vitalized water there are far fewer bacteria and microbes than in non-vitalized water. They are prevented from multiplying and spreading.

## DIARY FARMING

### MAGNETICALLY TREATED WATER CAN ALSO HELP THE SOMETIMES DIFFICULT PROCESS OF MILKING.

1. Using our method reduces the firmness of the udder and effectively makes it easier to milk.
2. Dairy animals that drink magnetically treated water also show signs of enhanced disease resistance.



## SUMMARY II

Magnetic treatment to your water can:

- Increase seed germination percentage and speed of seedling emergence
- Drastically reduce heat stress
- Increase water flow
- Save energy and resource
- Prevent and remove scaling from irrigation pipes
- Soil desalinization takes effect in the first year 1/1.5 meters deep
- Increase productivity and reduce disease in live stock and general animal breeding
- Increase weight and reduce disease in aquaculture industry
- Bacteria and microbes are prevented from multiplying and spreading.

## MAGNETIC FIELD THERAPY FOR YOUR WATER

## CHAPTER V

### INDUSTRIAL APPLICATIONS

1. Water transmission in general
2. Process water
  - Boiling feed water
  - Cooling water quality
3. Sewerage transmission
4. Waste water treatment



#### Benefits for process water

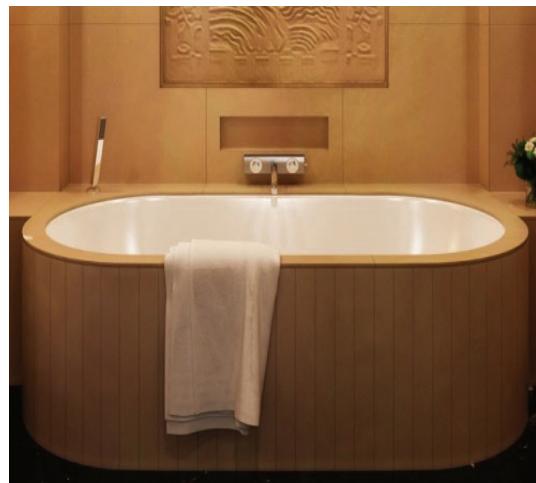
Process water covers the wide range of boiler feed water, cooling water for heat exchangers or engine, chemicals dilution, etc.

- Process water is stabilized.
- Use of chemicals is reduced.
- Eliminates, reduces downtime, maintenance and cleaning costs.
- Furring and corrosion is prevented and reduced.

### OTHER FIELDS OF APPLICATIONS

#### Hotels

- Increased system protection: devices and technical plants are less impacted, the need for maintenance decreases.
- Water characteristics are changed. Washing and showering with energized water has a special feeling of wellness.
- Lesser cleaning agents are needed.
- Decreased cleaning maintenance.



## Swimming Pools

Noticeably softer water and fewer chemicals through Magnolith.

- Water characteristics are changed.
- Noticeable improvement of the quality of swimming pool water.
- Reduced use of chemicals Chlorine).
- Disinfecting expenses are reduced.
- Lesser cleaning agents are needed.
- Decreased cleaning maintenance.



## MAGNOLITH PRODUCT LINE

MAGNOLITH is a 100% environmental friendly, cost and energy effective way to treat water at the state of the art.

