

# SOLAVITE

A PHYSICAL CATALYST

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REMOVES AND PREVENTS

SCALE BUILD-UP

IN WATER SYSTEMS

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ALL KIND OF SCALES:

CaCO<sub>3</sub>    SiO<sub>2</sub>    Fe(OH)<sub>2</sub>    Mg(OH)<sub>2</sub>  
(SO<sub>4</sub>)    Mn    (NO<sub>3</sub>)

# SCALES

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**SCALES ARE CAUSED BY MINERAL SALTS.**

**THE MOLECULES OF MINERAL SALTS EXISTING IN THE WATER ARE ATTRACTED BY THE PIPES WHETHER HORIZONTAL OR VERTICAL POSITION.**

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**SCALES ARE CAUSED BY IRON OXIDE.**

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**SCALES CAN BE FOUND IN METAL OR PLASTIC PIPES.**

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**SCALES CAN BUILD-UP IN COLD AND HOT WATER PIPES.**

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**SCALES ARE THE BIGGEST ONE PROBLEMS ON BUILDING, BOILER, COOLING TOWER, ENTIRE CITY .**

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## **WATER TREATMENTS . . . IN GENERAL**

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**To remove and prevent Scales several treatments are used:**

**Chemicals and Softners**

**And**

**A lot of descaling electrical treatments.**

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**Chemical products for removing scales are corrosive (and the anti-corrosive cause scale).**

**Softners (water softners) release sodium in water and not clean well glass and dishes.**

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**Electrical treatment - no comments...**

# SOLAVITE

IS THE “NON – CHEMICAL “ ALTERNATIVE TO  
CHEMICAL AND WATER SOFTENING.

## PRIMARY PORPOSE :

A )THE PREVENTION OF THE FORMATION OF  
MINERAL DEPOSITS ( SCALE AND ENCRUSTATIONS )  
IN PIPES AND FIXTURES,

B) THE REMOVAL OF EXISTING SCALES,

C) WITHOUT CAUSING CORROSION.

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SOLAVITE DOES NOT ADD ANYTHING TO NOR  
TAKE ANYTHING FROM THE LIQUIDS.

SOLAVITE IS A VERY UNIQUE  
PHYSICAL CATALYST.

IT CHANGES THE ATTRACTION PROPERTIES ( magnetic  
polarity attractions; no ions, no cations ) OF THE MINERALS  
SALTS IN THE LIQUID IN SUCH A MANNER THAT THEY  
ARE REPELLED FROM EACH OTHER AND FROM  
THE WALLS OF PIPES AND FIXTURES.

THIS PREVENTS THE FORMATION OF NEW SCALES  
AND  
REMOVES THOSE WHICH ARE EXISTING.



**SOLAVITE** >>>>>>> 6.

**HOTELS** .....

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**Benefits:**

**solavite...**

- **Removes existing scale without causing corrosion in the hydraulic system.**
- **Prevents the formation of new scale.**
- **Replaces softner and conditioner.**
- **No need for descaling chemicals and water softner (on boiler and system)**
- **Diminishes chlorine taste and odor. (It enhances the taste of water).**
- **Inhibits the growth of bacteria and germ in the system due to the absence of encrustations, their “habitat “.**
- **No alters water’s potability.**

- **Laundry : Use less soap and detergent. 7.**  
**Washing machine will last longer, no scales. Sheets and pillow cases do not turn yellow, but stay white ( if yellow... will clean up to be white).**
- **Kitchen : No spots on glass.**  
**No scales in dishwasher.**
- **Units : No scales on saucet.**  
**No scales on shower walls (after one week – *when used daily* - the wall can be cleaned with a paper towell . The scales will be soft )**
- **Toilets : Prolongs the life of mechanical valves and equipment, because no built up of scales. (Reduces the maintenance... and the costs )**

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**TO GET ALL THE ABOVE BENEFITS IT IS REQUIRED THE INSTALLATION OF ONLY ONE SOLAVITE APPARATUS IN THE “ENTRY” OF WATER ( OR IN EVERY “ENTRY” OF THE HOTEL)**

**ONE SOLAVITE APPARATUS IN THE “ENTRY” WILL TREAT ENTIRE HOTEL AND BOILERS.**

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**COOLING TOWER - IT IS REQUIRED ONE**

SEPARATE SOLAVITE APP ARATUS

WHAT IS SOLAVITE ???

8.

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IT IS AN APPARATUS WITH CATALYTIC CELLS.

THE *SOLAVITE CELL* IS A DIAMAGNETIC CATALYST  
WHOSE CONTAINER IS A HERMETICALLY SEALED  
CYLINDRICAL COPPER TUBE.

THE *CELLS* ARE ENCASED IN AN ALUMINUM HOUSING  
WHICH HAS A SPECIAL COATING.

THE QUANTITY OF CELLS IS DETERMINED BY THE VOLUME  
OF WATER FLOW TO BE TREATED.



THE SOLAVITE PROCESS USES NO EXTERNAL POWER OR  
CHEMICALS.

IT USES THE POWER OF THE NATURE.  
IT IS NATURAL!!! IT IS PHYSICAL!!! IT IS NOT AGGRESSIVE!!!



NO ELECTRICAL - NO MECHANICAL - NO CHEMICAL  
NO DANGEROUS !!!

# How SOLAVITE WORKS

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WHEN THE WATER ENTERS IN CONTACT WITH THE CATALYTIC CELLS IT CHANGES IMMEDIATELY THE ATTRACTION POLARITY OF MINERAL SALTS AND OTHER ELEMENTS THAT CAN CAUSE SCALES.

**NO CHANGE OF IONS AND CATIONS.**

ONLY IT CHANGES THE ATTRACTION BETWEEN THE PIPES AND MINERAL SALTS EXISTING IN THE LIQUIDS. MINERAL CRYSTALS FORMED DO NOT SCALE AND DEPOSIT AS THE NORMALLY WOULD, BUT ARE SUSPENDED IN THE WATER.

**THERE IS NO CHANGE IN WATER OR Ph or HARDNESS.**

NO CHANGE ON CHEMICAL WATER ANALYSIS.

**THE NET RESULT IS :**

**THE PREVENTION OF THE FORMATION OF NEW SCALES IN THE SYSTEM. ALREADY EXISTING OLD SCALES ARE ALSO AFFECTED AND GENTLY REMOVED.**

THE MINERAL ENCRUSTATIONS THAT ARE ALREADY EXISTING BECOME SOFT, AMORPHOUS SEDIMENTS WHICH ARE MOSTLY CARRIED THROUGH THE SYSTEM WITH THE WATER. WHERE THESE SEDIMENTS DO ACCUMULATE, THEY ARE EASILY FLUSHED AWAY, FOR EXAMPLE, IN THE "BLOW DOWN" WATER WASTED ROUTINELY FROM BOILERS.

## INSTALLATION INSTRUCTIONS AND MAINTENANCE



### \* INEXPENSIVE INSTALLATION \*

- THE **SOLAVITE CELLS** MUST BE HELD **PARALLEL** TO THE EARTH AND MUST BE ORIENTED IN THE **MAGNETIC NORTH-SOUTH DIRECTION**, OR IN OTHER WORDS, IN THE SAME DIRECTION AS THE NEEDLE OF A **COMPASS**.
- THE **APPARATUS** MUST BE ISOLATED WITH **PLASTIC NIPPLES**. **METAL NIPPLES SHOULD NEVER BE USED**.
- THE APPARATUS MUST BE PLACED SO THAT IT IS NOT IN CONTACT WITH MASONRY ( walls of floors ), METAL, OR EARTH.
- **THE APPARATUS SHOULD NEVER BE PAINTED.**
- DO NOT INSTALL THE APPARATUS CLOSER THAN 30 FEET TO MAGNETIC SWITCHES OR TO SIGNIFICANT MAGNETIC FIELDS.
- THE **SOLAVITE CELLS** MUST BE CLEANED EVERY 30 DAYS WITH VINEGAR - SALT - CURRENT WATER.



**SOLAVITE** >>>>>>>>>>

**HOMES ..... BUILDINGS**

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**Benefits:**

**solavite ...**

- \* Prevents the formation of scales and removes those which are existing. - All pipes and fixtures will be cleaned !!!
- \* No need of softner. - Save money !!!
- \* Diminishes chlorine taste and odor. - Water taste becomes better !!! -
- \* Inhibits the growth of bacteria and germ in the system due to the absence of encrustations, their “ habitat”.
- \* No spots on glass. - No scales in dishwater. -
- \* No scales on saucet. – No scales on shower walls (after one week - *when used daily* - the wall can be cleaned

with a paper towell. The scales will be soft ).

12.

\* Use less soap and detergent. - Save !!!  
Washing machine will last longer, no scales.  
Sheets and pillow cases do not turn yellow,  
But stay white ( if yellow... will clean up to be white)

• The hair - when washed by SOLAVITE water –  
becomes really soft.

\* No Electrical Hook-up.

\* No Drain required.

\* Inexpensive installation.

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• Organic taste and odor will disappear after few days.

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Your friends - *visiting your Home* - will feel the water  
taste difference.

You can drink the water from the faucet.

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**And ... the refill of the SOLAVITE CELL is once year!!!**

# **SOLAVITE >>>>>>>>**

## **BOILERS .....**

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## **Benefits :**

### **solavite...**

- \* No need for descaling chemicals and water softner.**
- \* Does not add anything to water.**
- Prevents the formation of scales.**
- Removes existing scale without causing corrosion.**
- After FOUR hours – by water analysis of suspended solids - the first results can be found.**

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**DRAIN ( blow down) must be done every 4 (four) hours.**

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**SOLAVITE IS AUTOMATIC AND DOES NOT  
EXPEND ANY ENERGY.**

**INSTALLATION: on the make-up water pipe.**

**SOLAVITE** >>>>>>>>> 14.

## **COOLING TOWERS .....**

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### **BENEFITS**

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**solavite...**

- \* Prevents the formation of new scales**
- \* Removes the existing scales**
- \* Does not provokes corrosion**
- \* Eliminates the use of chemical**
- \* Cleans pump, pipe line, water tower**
- \* Cleans condensor and compressor**

## RESULTS :

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1. after 04 hs you can accompany the beginning of results by Water analysis, *verifying the increase of solved solids in suspension.*
2. after Water analysis every 24 hours, or every week.
3. after 15 (fifteen) days by washing - with jet strong water – the inside walls of the cooling tower
4. observing the pressure of different apparatus, after installing Solavite
5. by opening condensers and compressors

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***AFTER 30 DAYS OPEN COMPRESSORS OR/AND  
CONDENSERS.***

***YOU WILL SEE SCALES INSIDE... PLEASE PUT  
YOUR HAND OR ANY OBJECT AND TOUCH THE  
SCALES...***

***YOU WILL CONSTACT THAT THE SCALES ARE  
SOFT... but are yet inside.***

***THIS HAPPEN BECAUSE – NORMALLY !! – THERE  
IS NO DRAIN ON COMPRESSORS AND  
CONDENSERS ... AND THE COOLING TOWER IS  
HIGHER THAN CONDENSER / COMPRESSOR...  
AND THE SCALES CAN NOT GO UP - TO THE  
TOWER - BECAUSE THE “ GRAVITY “.***

**IT IS NECESSARY TO WASH THE  
CONDENSER / COMPRESSOR  
USING A STRONG JET WATER.**

**AFTER THAT IT WOULD BE GOOD  
TO INSTALL A DRAIN ON  
CONDENSER / COMPRESSOR.**

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# **SOLAVITE APPARATUS**

**FOR COOLING TOWER is determined by the total water flow per hour circulating.**

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- 1. Take the total water flow of the circuit.**
- 2. Calculating 15% of the total water flow.**

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**INSTALLATION: after the pumps (after the tower).**

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