# **Breakthrough Scale Prevention Technology**





RED-OXYTREATMENT FILT RATION ADSORPTION

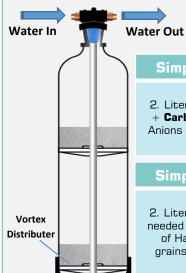
FILTERSORB



# SCALE PREVENTION MEDIA BASED ON NAC TECHNOLOGY

# FILTERSORB® 100 Process Description

# **Nucleation Assisted Crystallization**



## Simple Calculation

#### Chamber 1.

2. Liters of Filtersorb SPA + CarbonTrapp to Remove Anions From Hardwater upto 50 grains.

#### Simple Calculation

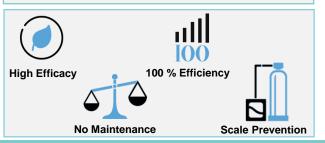
#### Chamber 2.

2. Liters of **Filtersorb SP3**needed to treat 1000 liters
of Hardwater up-to 50
grains Life of Media 7-10
years

- A. Up Flow Tank Adapter R 1'' 1½'' 2" Flow Rates 0.5m<sup>3</sup> to 20m<sup>3</sup>
- B. Vortex tanks 40% Chamber 1 60% Chamber 2

For Sizes please ask Watch Water®

C. Tools to Fill Chambers 1 and 2.



# **○ 100% Scale Prevention**

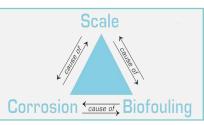
# Watch Water® Challenge

All over the world, the ground water contains geologically – caused **Calcium, Magnesium, Silicate** and **Sulphate** in high concentration. The overall water hardness can reach values of more than 20 to 80 grains. (1) Grain is equal to 17.1mg of **CaCO**<sub>3</sub>. Hardwater causes many problems in both private households and Industry. Therefore everybody has to install a water softener system to remove this significantly increased content of Calcium and Magnesium but they also have to remove silicates and sulphates which cannot be removed through a water softener. To remove this they have to install partial desalination and this is very expensive.

With FILTERSORB® SP3 and FILTERSORB® SPA each household can save 2 Euro per cubic meter compared with the use of household water softener.

At the same time, the **FILTERSORB**® **100%** process provides 100% corrosion protection that means better water quality than traditional softening systems. The toxic metals such as Lead and Copper are reduced 100%. This is the reason to give it the name "**FILTERSORB**® **100**".





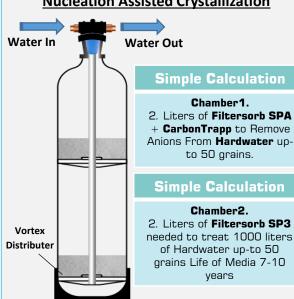


FILTRATION ADSORPTION LTERSORB

# DESCRIPT

# Filtersorb 100 Process Description

#### **Nucleation Assisted Crystallization**



- Up Flow Tank Adapter R 1" 11/2" 2" Flow Rates 0.5m3 to 20m3
- Vortex tanks 40% Chamber 1 60% **Chamber 2**

For Sizes please ask Watch Water®

C. Tools to Fill Chambers 1 and 2.

#### Products to Order

- > Magic Filter
- My Filtersorb-SP 100
- > My Titan Filter
- My Katalox-Light Filter
- My Catalytic Carbon Filter
- > My Trappsorb Filter
- My Nitrotrapp Filter





### **HOW FILTERSORB® 100 WORKS**

The Iron and Manganese free Hardwater flows through the FILTERSORB® SP3 chamber 2 here the Partial Softening takes place Temporary Hardness, Calcium, Magnesium and Carbonate hardness are separated into CaCO<sub>3(S)</sub> crystals and  $CO_{2(q)}$  . Water flows with  $CaCO_3$  crystals and Anions such as Sulphates and silicates including carbon dioxide. The produced carbon dioxide, sulphates and silicates are removed in upstream Chamber No. 1 via FILTERSORB® SPA. From the Chamber No.1 the treated water moves the following application.



**Drinking Water** 

#### Benefits

- > Effective removal of hardness, Lead, Copper, Sulphates, Silicates and CO<sub>2</sub> from water.
- > Simultaneous removal of Cations and Anions without corrosion effects of CO<sub>2</sub> in water.
- > Zero Operating Costs without any Electric and Regeneration Costs.
- Problem free operation with absolute no automation.
- > Fast capacity increases by FILTERSORB® SP3 and **SPA** addition.
- Especially Environmentally friendly process
- ightharpoonup Reduce 100%  ${
  m CO_2}$  the greenhouse gas (Carbon Dioxide) during the operation
- > Can be installed Worldwide to produce Scale Free Operation.





#### Watch-Water® GmbH

Fahrlachstraße 14 68165 Mannheim, Germany Tel. +49 621 87951-0 Fax +49 621 87951-99 info@watchwater.de