

SALT FREE WATER CONDITIONER AND DESCALER



Did you know water softener is polluting the environment?

X4 neat and clean chemical free scale prevention media to convert hardness minerals to harmless inactive sub-micron crystals, making X4 truly the effective alternative technology to water softeners for the prevention of scale due to water hardness.

X4 media does not remove healthy minerals or add sodium to the water supply

X4 beads enable the Nucleation site to transform the calcium bicarbonate $\text{Ca}(\text{HCO}_3)_2$ into aragonite form of calcium carbonate CaCO_3 crystals. These crystals are formed through decomposition and Crystallization process forming very stable and harmless crystals that does not adhere to surfaces up to 80°C .

Nucleation Assisted Crystallization is the basis of reliable Scale Prevention capability of X4.

The transformation of water hardness takes place in the following steps:

1. Continuous transformation of water hardness makes the immediate crystal growth possible with unidirectional chemical equilibrium viz.
 $\text{Ca}(\text{HCO}_3)_2 \rightarrow \text{CaCO}_3 + \text{CO}_2 + \text{H}_2\text{O}$
2. The crystals developing on the surface of the X4 bead, grow rapidly and nucleates.
3. After a short time the micro-emulsion of CO_2 and CaCO_3 forms colloid particle and leaves the media bead surface in neutral form. The transformation of CaCO_3 are sub micro-meter scale and are transform into insoluble crystals that prevent scale without any additional chemicals."

Why is X4 the BEST?

No TDS change: As X4 does not remove or add anything to the water. As no ion-exchange chemistry is used, the TDS of the water remains unchanged before and after the treatment.

No pH change: pH value of the water remains the same. This factor makes the treated water suitable for almost any use where corrosion is concerned

Biocidal effect: The NAC process creates the conditions that water dissolved CO_2 agglomerate to form micro-bubbles. These CO_2 bubbles actively destroy bacterial membranes acting as a biocide. Along with the scale prevention X4 also helps to prevent Biofouling.

GREEN TECHNOLOGY



- No salt required
- No Brine Tank
- No backwashing required
- No regeneration cycle required
- No increase in sodium content in water
- Removes the previous scales of plumbing
- Catalytic process converts Ca and Mg into harmless micro crystals
- Maintenance free
- No extra cost incurred
- No chemicals required for disinfection
- No electrical connections required
- No drain connections required
- No control valves required
- Very easy to install
- Great savings against conventional salt based water softeners
- Provides the best quality healthy water without the addition of Sodium or Phosphates
- No costly repairs to appliances due to scale

PREMIUM QUALITY

MADE IN GERMANY

X4 has proven itself in a variety of applications as an alternative to ion exchange softening or other conventional water treatment methods. The maintenance-free characteristics make it especially suited for Foodservice and Commercial applications where equipment maintenance is often overlooked. X4 treated water preserves the essential minerals Calcium and Magnesium, making the water most healthiest drink available.

Home Appliances: Faucets, water pipes, shower heads, shower cabins, toilets. All beverage systems, kitchen machines, dish washers, ice cubes, compact washers and dryers.