

Buy it for benefits!
Buy it for life!

PROXIMA

SYSTEMS

PART I

Make Every Building a Safe Building | Point of Entry (POE)



In a typical Strong Acid Cations process or a water softening process, the hard water is passed through a column containing polymer resin beads that are chemically synthesized to attract ion's such as calcium and magnesium. When these undesirable ion's bonds to a polymer bead, another ion, specifically a **Sodium** ion (Na_+) is released from that bead. This 'Give and Take' of Ions is necessary to maintain with tons of sodium chloride (salt) to balance the water. In this process all other ion's like silicates, bicarbonates, phosphates, sulfates and nitrates will be stripped of the ion's and then precipitate out as water is heated and build scale. Softened Water is soft but it's still not "Pure Water" and it's not optimal water for pipes and equipment in all homes and buildings.

The presence of sodium Ion's in softened water leaves the water with "**HIGH ELECTRICAL CONDUCTIVITY**". This high conductivity makes the likelihood of galvanic **corrosion** between dissimilar materials in the system, pipes, equipment made of **copper** and **iron**. Softening solves only **ONE** problem, that is removing calcium and magnesium Ion's from the source water. This will preserve the pipes, but now creates **TWO** potential problems by leaving the water in a state that's "Corrosive" to high electrical change and bad for health.

HOMES AND BUILDINGS

It's time to get serious about water softeners for Homes and Buildings



PART I: Residential System



REDUCTION OF ION'S IN WATER

Pure Water

Pure Water is the life and blood of all pipes, equipment and heating systems on every home, building and commercial applications. Its chemical characteristics can make a huge difference between a building that runs with **PROXIMA** and last's for decades without scale- corrosion and biofouling. On the other hand, system's that runs with Water Softeners can develops Expensive Corrosion issues causing bacteria to grow within months of startup.



Just as we maintain good health with low sodium in our own circulatory systems, it's important to maintain the health of water and water-based systems that run's or circulate through the heating system's we sell and service.

Pure Water consists of only Hydrogen (H+) and Hydroxides (OH-). It is colorless, tasteless and odorless. It should be for all reasons without sodium + Nitrates. Unfortunately, "Pure Water" cannot be made by any Reverse Osmosis or Water Softeners. All systems will provide years of reliable service because of a "**fortunate Proxima**" involving the **Purity** of the water source. Proxima systems are very unique because of the beads used in the system, the care taken when assembling the system, and its continuous operation without concentrate or using no chemicals for Antiscalants or sodium chloride for regeneration. All other systems are not "**fortunate**" because of these factors. One of the best ways to minimize the amount of **undesirable chemicals** within

the homes and buildings to demineralize the water with PROXIMA without using any Antiscalants or Regeneration's.

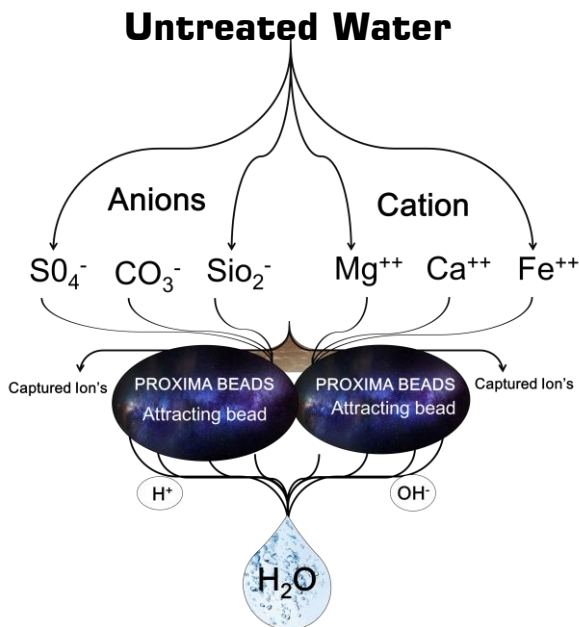
As its' name implies **PROXIMA**: Perfect Reverse Osmosis (**OXI**) Greek "without any concentrate" made in (MA) Mannheim by **Watch Water®**.

Demineralization involves removing **Undesirable Minerals** such as **sulfates-silicates- phosphates-nitrates-** (CO3) Carbonates- Calcium and magnesium compounds which are found in most ground waters and also in municipal Water Systems. Proxima System removes **Lead** and **Copper** from drinking water. Proxima is the only technology to capture these salts and wash them out at backwash process when conductivity is raised.



Dimension			
Dimension	Proxima ONE	Proxima TWO	Proxima THREE
Height in cm	74	107	120
Depth in cm	56	56	56
Width in cm	31	31	31

REDUCTION OF ION'S IN WATER



Pure Water with less electrical charges

Proxima Beads

Like Water Softening, it involves passing the source water through a column filled with "PROXIMA BEADS". However, these beads are Manufactured by **Watch Water**[®] Germany, and these beads are absolutely different than those used in water softeners. These beads are chemically structured and can capture both undesirable ion's **cations** as well as **anion's**. They release pure Hydrogen and Hydroxide ion's. The hydrogen cation has one positive change and the Hydroxide anion has one negative change.

When one hydrogen cation (H⁺) meets up with one hydroxide anion (OH⁻) they bound to form a neutral molecule of water (H₂O) **Above Figure** illustrates the overall process of Proxima Beads used for softening and partial demineralization. Water that has been highly (but not completely) demineralized has characteristics that are ideal for whole house buildings and best suited for all hot water systems. It's also an excellent water to be combined for cooling and making drinks.



Computer controlled Proxima Systems

There are an estimated 100 million residential water softeners currently installed in the whole world. All existing water softeners are inefficiently using large volumes of water during the regeneration process and regenerating more frequently than necessary.

Watch Water[®] with its' advanced technology have been able to reduce the chemical consumption using **Oxima beads** to almost ignorable amount. For example, **PROXIMA ONE** system uses only two Kg of **Oxima beads** to wash out all captured or collected salts. Additionally, Watch Water[®] has reduced water used during washing process to just 5 gallons, which increases water savings. **Oxima Beads** with its amazing chemistry will reduce the sodium contribution from existing water softeners to ZERO-ZERO-ZERO.

Watch Water[®] is interested and ensure that **PROXIMA SYSTEM'S** do not regenerate only when necessary, which could in turn reduce the overall consumption of Oxima and is a great alternative to all water softeners. **Watch Water**[®] would like to ensure that **PROXIMA UNITS** operate efficiently on all Oxima settings so that all End-users can choose a setting appropriate for their house or buildings and all commercials operations.

Installing the **PROXIMA SYSTEMS** could result in savings between **3000 and 6000 gallons per softener per year!** If all softener units are exchanged with **PROXIMA units** we could save between 7000 million and 7 billion gallons per year worldwide. Do not forget about the horrible impact of sodium for your health and its discharge to municipal systems that recycle waste water for irrigation or many other uses. **Using Proxima systems**, there are no addition water loss like concentrate of reverse osmosis to reduce TDS from source water. Reverse Osmosis water for drinking produce between 50 to 90 percent of concentrate which is absolute killing the municipalities to afford another 1 to 4 trillion of reverse osmosis concentrate.

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DEMINERALIZATION WITH PROXIMA WITHOUT CONCENTRATE

Proxima units are designed by **Watch Water®** are based on **counter-current** principle on economic and technical grounds, less leakage of cation's as well as anions, effective **removal** of hardness, nitrates, sulfates, Phosphates and Silicate including **removal** of organics. Up-flow cleaning of captured Ion's with very reduced amount of Oxima consumption. In the other words, the direction of flow during regeneration is opposite to inlet flow.

Permitted Concentration of Oxima

The feed time (suction of Oxima) for the backwash of concentrated Ion's or captured Ion's should not exceed 1 minute per 15 liters of **PROXIMA BEADS**. Oxima Beads Should be diluted [e.g. 50grams in 2-5 liters of concentration]. Washing of Oxima brine should be setup for minimum 30 minutes and final rinse should be properly applied to completely remove collected or captured ion's. Regeneration and backwash schedule every 14 days.

In order to satisfy demanding requirements **Watch®** has developed **Proxima System's** with the Trade name "**PROXIMA**". Proxima has far better performance properties than conventional Reverse Osmosis and ion Exchange Resins, with the great advantages of this new technology and the new demineralization generation as an approx. 90% less concentration of waste water, the use of this kind of **HIGH TECH PROXIMA SYSTEMS** is now state of the art in all.

Modern Water Treatment System's as well as in all Modern Homes, Building and in commercial applications. Your **Watch Water®** team for the sake of your environment and for all of us.

High quality ready to install models ONE-TWO and THREE with built in Oxima feed units, Brine valve ,Oxima beads and no level setting is required. Automatic shut-off to prevent overfilling

- Reduce hardness and TDS
- Reduce Nitrates and sulfates

**** Note: There should not be any organics, iron and manganese present in the raw water.**

System Specification					
PROXIMA	Inlet-Outlet	Oxima Storage pipe	Flow	Yearly Oxima Consumption	Proxima Volume
One	1"	1 kg	1 m ³ /h	Max 2 kg	10 liters
Two	1"	2 kg	1.5 m ³ /h	Max 4 kg	15 liters
Three	1"	3 kg	3 m ³ /h	Max 6 kg	30 liters

Electrical Specification	
AC Adapter	International
Supply Voltage	230V AC
Supply Frequency	50 Hz



Oxima Packaging:

1 kg/ bag
10 bags/box

Each Proxima system includes 1kg bag of Oxima beads.

Fahlachstraße 14
68165 Mannheim
Germany



Tel: +49 621 87951-0
Fax: +49 621 87951-99
Email: info@watchwater.de