

ECOMIX[®]



SUPER SOFTENER

SIMPLE SOLUTION
FOR 5 PROBLEMS:

hardness |

iron |

manganese |

natural organic matter |

ammonium |

WHAT ECOMIX® IS

ECOMIX® is a multi-component, complex filter material for softening and removing major contaminants from well or municipal water.

ECOMIX® is a scientifically grounded technology, confirmed by 6 patents and service world-wide since 1998.

DISTRIBUTED TO MORE THAN 50 COUNTRIES OF THE WORLD IN:
EUROPE, ASIA, AMERICA, AFRICA AND AUSTRALIA



ECOMIX® is certified in EU for compliance with LFGB requirements for foodcontacting materials by TÜV SÜD. Meets the requirements: LFGB, ResAP(2004)3, EU Guideline 2002/72/EG



The quality of ECOMIX® is confirmed by the Gold Seal certificate (USA), which proves its safety in contact with drinking water. ECOMIX® is certified in compliance with NSF/ANSI standards:

NSF/ANSI 61 Drinking Water System Components – Health Effects

NSF/ANSI 44 Residential Cation Exchange Water Softeners

NSF/ANSI 372 Drinking Water System Components – Lead Content

REDUCING OF IRON AND MANGANESE

FERROSORB IS A PROPRIETARY SORPTION MATERIAL FOR IRON AND MANGANESE REDUCTION

Mechanism of iron and manganese reduction:

ADSORPTION | OXIDATION |
ACTIVE LAYER FORMATION |
AUTOCATALYTIC OXIDATION |

This chain works to reduce iron in the dissolved ferrous form (clear water iron). The surface layer of FerroSorb contains active sites for reduction of manganese.

The best efficiency of iron and manganese removal is achieved when water is supplied from the well directly to the filter with ECOMIX®.

Aeration and oxidative pre-treatment must be avoided.

Treat water against iron bacteria before installing ECOMIX®.



REDUCING OF ORGANIC MATTER

HUMISORB IS A PROPRIETARY SORPTION MATERIAL FOR REDUCTION OF NATURAL ORGANIC MATTER (REDUCES COLOR AND CHEMICAL OXYGEN DEMAND)

Organic compounds and organic iron are reduced due to hydrophobic and electrostatic interactions with HumiSorb.

Check the level of chemical oxygen demand before using ECOMIX® when natural organic matter reduction is desired.

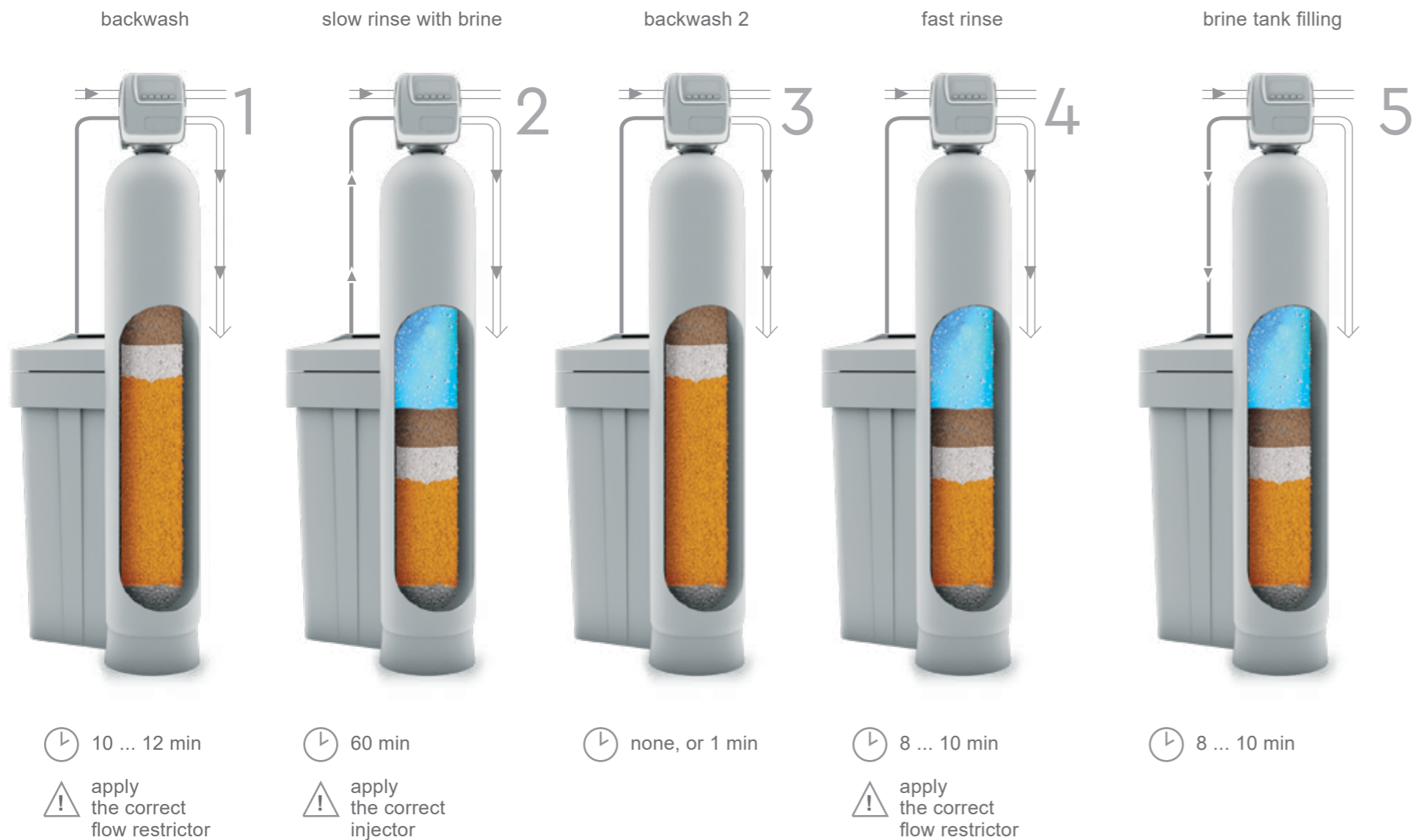
ECOMIX® is intended for the treatment of well water and municipal water.

ECOMIX® is not intended for surface water treatment (lakes, ponds, rivers, swamps etc).

Water from a shallow well located close to the surface water should be checked for organic matter concentration and microbiological safeness.

Microbiologically unsafe water cannot be treated by ECOMIX®.

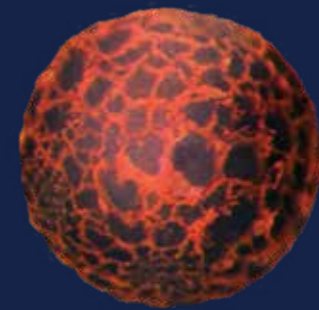




ECOMIX® REGENERATION AS A STANDARD SOFTENER

ECOMIX® IS REGENERATED WITH THE SAME STEPS AS NORMAL SOFTENERS:

- BACKWASH |
- BRINE RINSING |
- FAST RINSING |



Calcium and magnesium ions are displaced from the cation exchange resin matrix with sodium ions. Iron and manganese compounds are removed by surface friction of **FerroSorb** beads in fluidized bed during backwash. **HumiSorb** exhibits a reversible mechanism of sorption of organic molecules, and is regenerated with chloride ions.

| Vessel size | Flow restrictor (DLFC**) | Injector ** | |
|-------------|--------------------------|-------------|-------------|
| 0844 | 037 | B | purple |
| 1054 | 027 | E | white |
| 1252 | 042 | F | blue |
| 1354 | 053 | G | yellow |
| 1465 | 065 | H | green |
| 1665 | 075 | I | orange |
| 2162 | 130 | K | light green |

Use the ECOMIX® calculator to select the correct injector and DLFC.

* For pressure tanks larger than 1665, typical duration of each stage should be 20...30% longer.

** Injectors and DLFCs are shown for Clack Corporation control valves.

ECOMIX® EFFICIENCY AND LIMITATIONS





| ECOMIX® P | ECOMIX® A | ECOMIX® C |
|---|--|---|
| For well or tap water with low organic matter | For well or tap water with moderate organic matter | For well or tap water with high organic matter |
| Requires stable quality of water | Handles seasonal variations in water composition | Handles seasonal variations in water composition even with significant changes in raw water quality |

Raw water quality requirements and efficiency of purification

| | | | |
|---|-----|---------------------|---------------------|
| Hardness, ppm CaCO ₃ | 750 | 750 | 750 |
| Iron, mg/L | 15 | 15 | 15 |
| Manganese, mg/L | 3 | 3 | 3 |
| Chemical Oxygen Demand, mg/L O ₂ | 3 | 20 (Reduces by 50%) | 20 (Reduces by 80%) |
| Ammonium, mg/L | 4 | 4 | 4 |
| Service life, years | 3 | 5 | 5 |

ECOMIX® TECHNICAL SPECIFICATIONS

When designing ECOMIX® units, refer to the following figures:

| Parameter | Value |
|---|---|
| Service flow rate, m/h | 20–25 |
| Backwash flow rate, m/h | 10–15!  |
| Brine (slow rinse) flow rate, m/h | 3–5 |
| Minimum bed depth, mm | 500 |
| Recommended bed depth, mm | 800 |
| Freeboard, % | 40 or more!  |
| Salt consumption, g/L | 100* |
| Brine concentration, % | 8–10 |
| Water consumption per regeneration, L/L | under 10 |

* If using potassium chloride increase salt dosage to 150 g/L.



— if the backwash rate is not followed, the iron removal efficiency will be reduced

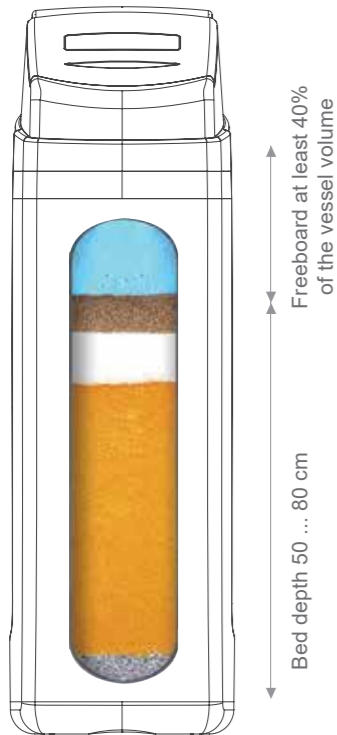


— if the volume of ECOMIX® in the vessel is more than 60%, backwash may not be sufficiently effective

The use of resin cleaner or other harsh regeneration aids will reduce the efficiency of ECOMIX®.

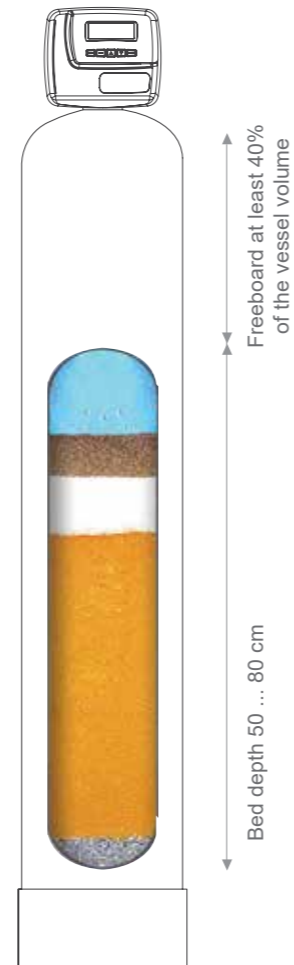
ECOMIX® AND BED DEPTH

COMPACT FILTERS
cabinets 8 x 35" and larger



It is not recommended to use ECOMIX in filters with a vessel height less than 35"

STANDARD FILTERS
vessel 8 x 35" and larger



ECOMIX® TECHNICAL SPECIFICATIONS



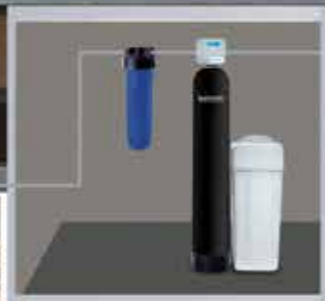
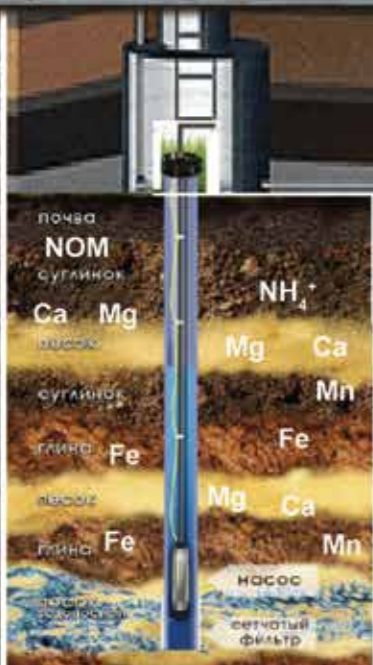
| Size of vessel | 1035 | 1054 | 1252 | 1354 | 1465 | 1665 | 2162 |
|---|------|------|------|------|------|------|------|
| Ecomix® volume, L | 25 | 37 | 50 | 62 | 75 | 100 | 150 |
| Service flow rate, m ³ /h | 1.3 | 1.3 | 1.8 | 2.2 | 2.5 | 3.3 | 5.5 |
| System capacity, kg CaCO ₃ * | 0.7 | 1.2 | 1.5 | 1.9 | 2.3 | 3.0 | 4.5 |
| Salt per regeneration, kg | 2.5 | 3.8 | 5.0 | 6.2 | 7.5 | 10.0 | 15.0 |
| Backwash flow rate, m ³ /h | 0.6 | 0.6 | 0.9 | 1.1 | 1.2 | 1.6 | 2.7 |

*The ion exchange capacity ECOMIX® C.

ECOMIX® is supplied in two size types: Bag – 25L and Half bag – 12L

Visit ecosoft.com or ecomix.us to use the ECOMIX® calculator

**ECOMIX® —
THE BEST
SOLUTION
FOR THE
WELL WATER**



ECOMIX® is a specially developed material that can be used for treatment of the well water and tap water

ECOMIX® IN HOUSES



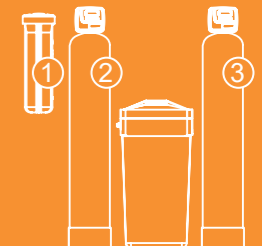
COMPACT SOLUTIONS:

| Model type (2) | Number of bathrooms |
|-----------------|---------------------|
| FK1035CABCEMIXC | 1...2 |
| FK1235CABCEMIXC | 2...3 |



STANDARD SOLUTIONS:

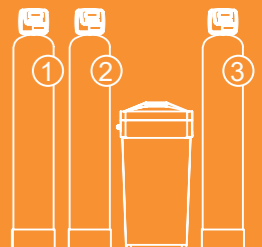
| Model type (2) | Number of bathrooms |
|----------------|---------------------|
| FK1054CEMIXA | 1...2 |
| FK1252CEMIXA | 2...3 |
| FK1354CEMIXA | 3...4 |



SOLUTIONS FOR LARGE

COTTAGES:

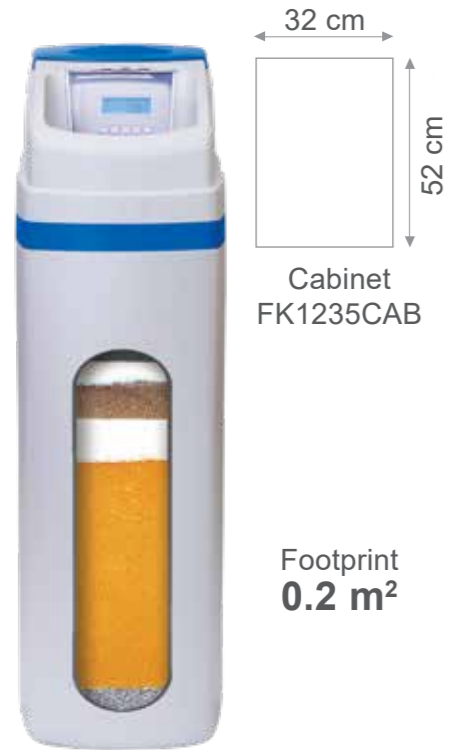
| Model type (2) | Number of bathrooms |
|----------------|---------------------|
| FK1465CEMIXA | 3...6 |
| FK1665CEMIXA | 5...6 |



1. Sediment filter for sand, rust and silt removal
2. ECOMIX® system for hardness, iron, manganese, natural organic matter & ammonium removal
3. Centaur carbon system for hydrogen sulfide removal

ECOMIX® HAS INCREASED EFFICIENCY

COMPACT SYSTEM:
Solution with ECOMIX®



CLASSIC SYSTEM
to remove hardness, iron, manganese,
natural organic matter, ammonium



ECOMIX® HAS INCREASED EFFICIENCY

WITH LESS AREA
AND LESS WATER
DISCHARGE



3 times
SMALLER AREA

2 times
LESS COST

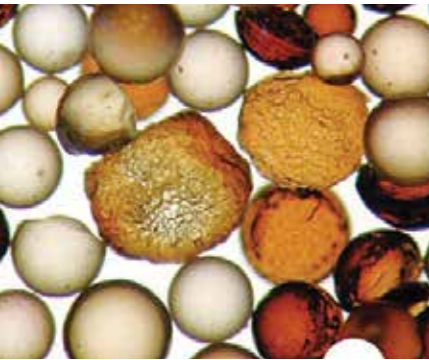
3 times
LESS VALVE
MAINTENANCE

30%
LESS SALT
CONSUMPTION

2 times
REDUCES OPERATING
WATER COSTS

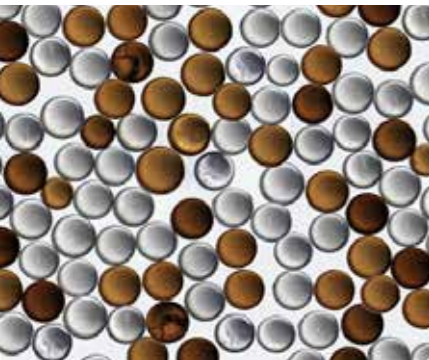
2 times
LESS MAINTENANCE
SPENDING

ECOMIX® VS OTHER COMPLEX MATERIALS



ECOMIX®

The universal solution for most water without special precautions. Simple calculation of the capacity and resource of the filter, which are influenced only by the hardness of water.



RESIN MIX

Materials based on a mixture of commercially available resins are generally the most affordable. Remove iron, but quickly lose efficiency. Typically, after 20-30 regenerations (about 6 months of operation), such materials lose up to 30% of their capacity.



ZEOLITES

Zeolite — natural occurring media — used for removal of hardness, iron, manganese, for ammonia reduction and pH correction. They can be poisoned by hydrogen sulphide and organic matter, and also require careful consideration in calculating the size of the filter and filter cycle.

| | ECOMIX® | RESIN MIX | ZEOLITES |
|---|--|---|---|
| Removed impurities | hardness, iron, manganese, ammonium, organic matter | hardness, iron, manganese | hardness, iron, manganese, ammonium |
| Capacity | 30-40 g CaCO ₃ /L | 40-50 g CaCO ₃ /L by hardness and iron salts | 25 g CaCO ₃ /L |
| Service life | Ecomix C, A — 5 years Ecomix P — 3 years | 2-3 years | 2-3 years |
| Salt dose | 100 g/L | 140-160 g/L | 130 g/L |
| Water consumption per regeneration per 1 liter of material | 8-10 L | 10-13 L | 14-16 L |
| Restrictions: | | | |
| Hardness | No | No | Hardness must be > 50 ppm CaCO ₃ and TDS > 80 mg/L |
| Iron | 15 mg/L Ecomix A, C reduces ferrous and organics iron | 10 mg/L (After each regeneration, the filter capacity decreases by 0.7-1.4%). If the iron content is high, the filtration rate must be reduced. | 10 mg/L. Inorganic iron only |
| Manganese | 3 mg/L | 2 mg/L. There may be emissions of manganese in treated water | Fe + Mn < 15 mg/L |
| Ammonium | 4 mg/L | No data | Requires reducing the flow rate 2.5 times |
| Organic matter | Ecomix C reduces by 80%; Ecomix A reduces by 50%; Ecomix P does not remove | No, they can irreversibly poison resin | No, organic impurities will irreversibly reduce capacity |
| Regeneration aid chemicals | Not needed, only pelletized salt | Periodic regeneration with special reagents is required | In case of hydrogen sulfide poisoning, regeneration with soda is needed |

CALCULATION OF **ECOMIX**[®] VOLUME CAPACITY

The volume capacity is calculated in a simple way using only influent water hardness and the media's ion exchange capacity as follows:

- ECOMIX C — 30 g CaCO₃/L**
- ECOMIX A — 35 g CaCO₃/L**
- ECOMIX P — 40 g CaCO₃/L**

$$\text{Volume Capacity (m}^3\text{)} = \frac{\text{Ecomix volume (L)} \times \text{Ion-exchange capacity (g CaCO}_3\text{/L)}}{\text{Influent Hardness (ppm CaCO}_3\text{)}}$$

The volume capacity doesn't have to be corrected for the influent iron and manganese levels.

Example is given for FK1252 ECOMIX A:

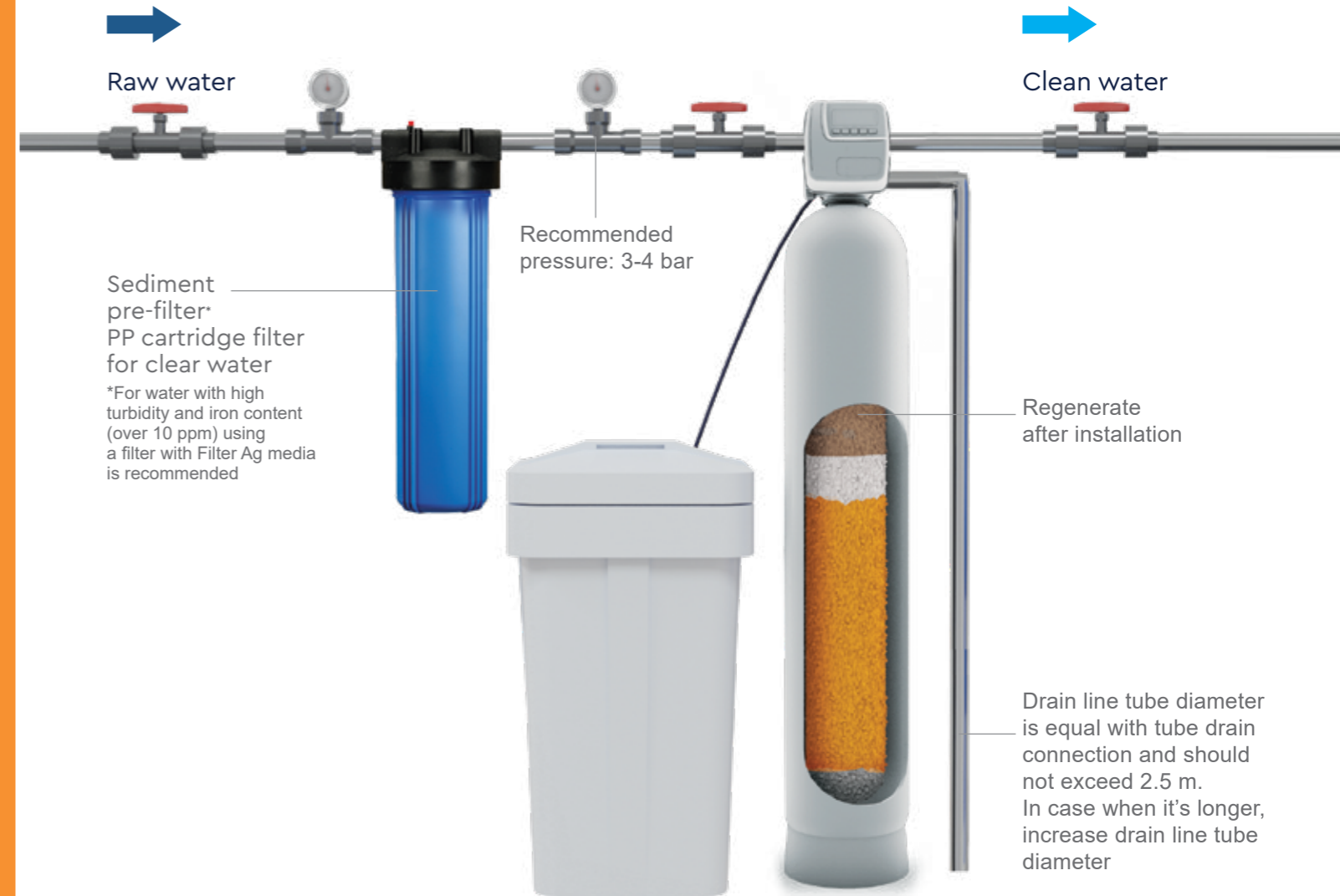
ECOMIX A - 35 g CaCO₃/L

25L + 25L

Water test:
Iron - 8 mg/L;
Manganese - 0.28 mg/L;
Hardness - 400 ppm CaCO₃

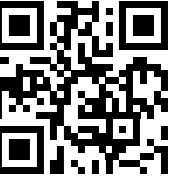
$$\text{Volume Capacity} = \frac{50 \text{ L} \cdot 35 \text{ g CaCO}_3\text{/L}}{400 \text{ ppm CaCO}_3} = 4.3 \text{ m}^3$$

FILTER INSTALLATION SCHEME



DOES **ECOMIX**[®] REALLY WORK SO WELL?

For more information
visit our website



Zhytomyr, Ukraine

| ECOMIX [®] : Type A | | | | |
|------------------------------|-----------------------|--------------|-------------|---------------|
| Test description | Units | Requirements | Raw water | Treated water |
| Hardness | ppm CaCO ₃ | <350 | 500 | 5.0 |
| Iron | mg/L | <0.2 | 11.4 | 0.2 |
| Manganese | mg/L | <0.05 | 0.34 | <0.01 |
| TOC | mg/L | <5.0 | 1.9 | 1.5 |
| Ammonium | mg/L | <0.5 | 2.8 | 0.05 |
| TDS | mg/L | <1000 | 720 | 810 |
| pH | | 6.5-8.5 | 6.9 | 6.2 |

Kiev, Ukraine

| ECOMIX [®] : Type P | | | | |
|------------------------------|-----------------------|--------------|-------------|---------------|
| Test description | Units | Requirements | Raw water | Treated water |
| Hardness | ppm CaCO ₃ | <350 | 525 | 10 |
| Iron | mg/L | <0.2 | 2.59 | <0.01 |
| Manganese | mg/L | <0.05 | 0.34 | <0.01 |
| TOC | mg/L | <5.0 | 2.3 | 2.2 |
| Ammonium | mg/L | <0.5 | 0.4 | 0.05 |
| TDS | mg/L | <1000 | 705 | 739 |
| pH | | 6.5-8.5 | 6.9 | 6.2 |

Srebrno jezero, Velico Gradište, Serbia

| ECOMIX [®] : Type C | | | | |
|------------------------------|-----------------------|--------------|-------------|---------------|
| Test description | Units | Requirements | Raw water | Treated water |
| Hardness | ppm CaCO ₃ | <350 | 676 | 9 |
| Iron | mg/L | <0.2 | 9.3 | 0.18 |
| Manganese | mg/L | <0.05 | 0.15 | <0.05 |
| TOC | mg/L | <5.0 | 12.7 | 3.9 |
| Ammonium | mg/L | <0.5 | 0.45 | 0.05 |
| TDS | mg/L | <1000 | 742 | 870 |
| pH | | 6.5-8.5 | 6.9 | 6.9 |

West Palm Beach, FL, USA

| ECOMIX [®] : Type C | | | | |
|------------------------------|-----------------------|--------------|------------|---------------|
| Test description | Units | Requirements | Raw water | Treated water |
| Hardness | ppm CaCO ₃ | <350 | 585 | 15 |
| Iron | mg/L | <0.2 | 1.9 | 0.07 |
| Manganese | mg/L | <0.05 | 0.04 | <0.03 |
| TOC | mg/L | <2.0 | 6.5 | 0.27 |
| TDS | mg/L | <1000 | 625 | 660 |

Zhibek Zholy, Kazakhstan

| ECOMIX [®] : Type A | | | | |
|------------------------------|-----------------------|--------------|-------------|---------------|
| Test description | Units | Requirements | Raw water | Treated water |
| Hardness | ppm CaCO ₃ | <350 | 1150 | 40 |
| Iron | mg/L | <0.2 | 0.63 | 0.17 |
| Manganese | mg/L | <0.05 | 2.13 | <0.05 |
| TDS | mg/L | <1000 | 3730 | 3767 |
| pH | | 6.5-8.5 | 7.45 | 7.95 |

Grammene, Belgium

| ECOMIX [®] : Type A | | | | |
|------------------------------|-----------------------|--------------|-------------|---------------|
| Test description | Units | Requirements | Raw water | Treated water |
| Hardness | ppm CaCO ₃ | <350 | 510 | 25 |
| Iron | mg/L | <0.2 | 2.9 | 0.178 |
| Manganese | mg/L | <0.05 | 0.25 | 0.043 |
| TOC | mg/L | <5.0 | 1.6 | 1.32 |
| Ammonium | mg/L | <0.5 | 2.8 | 0.4 |

Vattenprov, Sweden

| ECOMIX [®] : Type A | | | | |
|------------------------------|-----------------------|--------------|-------------|---------------|
| Test description | Units | Requirements | Raw water | Treated water |
| Hardness | ppm CaCO ₃ | <350 | 468 | 28 |
| Iron | mg/L | <0.2 | 1.6 | 0.15 |
| Manganese | mg/L | <0.05 | 0.65 | 0.014 |
| Ammonium | mg/L | <0.5 | 0.84 | 0.3 |
| pH | | 6.5-8.5 | 7.3 | 7.35 |

Beregovo, Ukraine

| ECOMIX [®] : Type A | | | | |
|------------------------------|-----------------------|--------------|------------|---------------|
| Test description | Units | Requirements | Raw water | Treated water |
| Hardness | ppm CaCO ₃ | <350 | 155 | 2 |
| Iron | mg/L | <0.2 | 9.5 | 0.1 |
| Manganese | mg/L | <0.05 | 3.2 | 0.02 |
| TOC | mg/L | <5.0 | 2.0 | 1.7 |
| Ammonium | mg/L | <0.5 | 1.0 | 0.4 |
| TDS | mg/L | <1000 | 375 | 475 |
| pH | | 6.5-8.5 | 6.6 | 6.6 |

Velyka Aleksandrovka, Ukraine

| ECOMIX [®] : Type P | | | | |
|------------------------------|-----------------------|--------------|--------------|---------------|
| Test description | Units | Requirements | Raw water | Treated water |
| Odor | Units | <2 | 0 | 0 |
| Turbidity | mg/L | <0.58 | 2.9 | 0.21 |
| Hardness | ppm CaCO ₃ | <350 | 525 | 10 |
| Iron | mg/L | <0.2 | 0.592 | <0.01 |
| Nitrates | mg/L | <50 | 4 | 3 |
| TDS | mg/L | <1000 | 701 | 737 |

Ovruch, Ukraine

| ECOMIX [®] : Type P | | | | |
|------------------------------|-----------------------|--------------|-------------|---------------|
| Test description | Units | Requirements | Raw water | Treated water |
| Odor | Units | <2 | 0 | 0 |
| Turbidity | mg/L | <0.58 | <0.2 | <0.2 |
| Hardness | ppm CaCO ₃ | <350 | 590 | 30 |
| Iron | mg/L | <0.2 | 0.32 | <0.01 |
| Nitrates | mg/L | <50 | 43 | 43 |
| TDS | mg/L | <1000 | 763 | 954 |

Pancevo, Serbia

| ECOMIX [®] : Type A | | | | |
|------------------------------|-----------------------|--------------|-------------|---------------|
| Test description | Units | Requirements | Raw water | Treated water |
| Hardness | ppm CaCO ₃ | <350 | 535 | 14 |
| Iron | mg/L | <0.2 | 2.2 | 0.16 |
| Manganese | mg/L | <0.05 | 0.05 | 0.03 |
| Ammonium | mg/L | <2.0 | 1.3 | 0.05 |
| TDS | mg/L | <1000 | 709 | 783 |
| pH | | 6.5-8.5 | 7.7 | 7.7 |

Linköping, Sweden

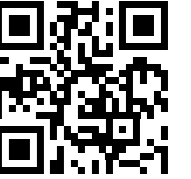
| ECOMIX [®] : Type A | | | | |
|------------------------------|-----------------------|--------------|-------------|---------------|
| Test description | Units | Requirements | Raw water | Treated water |
| Hardness | ppm CaCO ₃ | <350 | 159 | 10 |
| Iron | mg/L | <0.2 | 0.68 | 0.17 |
| Manganese | mg/L | <0.05 | 0.41 | 0.04 |
| Ammonium | mg/L | <0.5 | 0.12 | 0.1 |
| pH | | 6.5-8.5 | 7.8 | 7.9 |

Dormagen, Germany

| ECOMIX [®] : Type A | | | | |
|------------------------------|-----------------------|--------------|--------------|---------------|
| Test description | Units | Requirements | Raw water | Treated water |
| Hardness | ppm CaCO ₃ | <350 | 425 | 20 |
| Iron | mg/L | <0.2 | 0.396 | 0.178 |
| Manganese | mg/L | <0.05 | 4.89 | 0.043 |
| TOC | mg/L | <5.0 | 1.4 | 1.32 |
| Ammonium | mg/L | <0.5 | 0.4 | 0.02 |
| pH | | 6.5-8.5 | 7.4 | 7.6 |

Deerfield, Wisconsin, USA

| ECOMIX [®] : Type A | | | | |
|------------------------------|-----------------------|--------------|------------|---------------|
| Test description | Units | Requirements | Raw water | Treated water |
| Hardness | ppm CaCO ₃ | <350 | 550 | 17 |
| Iron | mg/L | <0.2 | 1.8 | 0.1 |
| Manganese | mg/L | <0.05 | 1.7 | 0.01 |
| TDS | mg/L | <1000 | 615 | 648 |
| pH | | 6.5-8.5 | 7.1 | 7.2 |



Can I regenerate with untreated water?

Regenerating with untreated or raw water will not affect the performance of ECOMIX®.

Why is the softening capacity of ECOMIX® so low compared to cation softening resin?

The softening capacity is not lower. The capacity of the cation resin component of ECOMIX® is rated lower because a bag of ECOMIX® contains more than just cation resin. Cation softening resin is only one of the five components in ECOMIX®.

Should I use resin cleaners or salt with resin cleaners when I regenerate ECOMIX® system?

No, resin cleaners should not be used with ECOMIX®. There are several reported cases when ECOMIX® efficiency was severely impaired after usage of resin cleaners. Regular softener salt and proper regeneration sequencing will keep ECOMIX® clean.

How will the TDS change after the system with ECOMIX®?

The TDS after the ECOMIX® system will increase by an average of 10% of the original content. This is due to the replacement of hardness cations with harmless sodium cations during ion exchange.

My tank holds a bag and a half of media. Can I use half a bag of ECOMIX® and save the other half for another installation?

Each bag contains 5 separate components in specific amounts. ECOMIX® components are thoroughly mixed during production and there should be no problem using half a bag. If you intend to use just half it is important to shake the bag before loading the vessel. To avoid the trouble, you can order ECOMIX® in full AND half bags. Specify packaging when ordering from your supplier.

Is it possible to use ECOMIX® when iron content in water is higher than the limit of 15 ppm?

There are ECOMIX® units in operation which successfully remove iron in even greater concentrations. However, before doing so you should contact your water treatment specialist with a complete water analysis.

Can I use ECOMIX® if there is aeration or oxidant dosing ahead of the unit?

We do not recommend installation of oxidation and/or aeration before the ECOMIX® system. If you have to use aeration or oxidant dosing for any reason we highly recommend pretreatment with a multimedia sediment filter and an activated carbon filter to remove residual active chlorine.

Is ECOMIX® sensitive to H₂S?

ECOMIX® is not sensitive to hydrogen sulfide content in well water and its efficiency will not be affected.

Will ECOMIX® reduce H₂S?

Sometimes ECOMIX® may slightly reduce the rotten odor of H₂S but it is not recommended as a solution.

Can I use ECOMIX® if it was accidentally frozen during storage?

Freezing of ECOMIX® should be avoided as it may cause damage to its components. To avoid freezing, ECOMIX® should be stored in a dry room protected from sunlight at temperatures of 35–80 °F (2–27 °C). If it does freeze, ECOMIX® should be thawed out slowly at room temperature before loading and use. Do not treat frozen ECOMIX® with heat or steam.

Why is a top basket distributor necessary?

This distributor is necessary in order to prevent ECOMIX® from being lost during the backwashing sequence of regeneration.

What happens if I operate the ECOMIX® system without that first regeneration?

The system will not remove the contaminants properly. There are 5 components in one bag of ECOMIX®. For proper filter operation these components need to be “layered”. When ECOMIX® is being regenerated, the mixture self-classifies into layers making it becoming ready for usage.

Is it true that ECOMIX® will remove all types of iron, including ferric?

ECOMIX® will not remove ferric or oxidized iron efficiently. In applications where ferric iron is present we recommend to install a sediment filter before the ECOMIX® system to trap ferric iron particulates.

Can I use ECOMIX® in cases of high iron, manganese or tannins content and with low hardness level?

ECOMIX® will operate successfully under these conditions. However, raw water hardness must be used to program the control valve and you must set the “Day Override” to 3 or 4 days. Be sure to contact your water treatment specialist if you have any questions.

My application is a well that is placed close to the surface water (lake, rivers, canals, ponds).

Water in shallow which are close to the surface water may be a mixture of well and surface water and may have higher than normal TOC and color. It could be microbiologically contaminated. In these situations, ECOMIX® is applicable but additional treatment may be required. We recommend paying attention to the color of the water and doing a tannin test. You must strictly follow the test instructions. For example, commonly used LaMotte test kits require a 30-minute wait before the results are indicated. Once complete, please send the water analysis and the tannin test results with a picture of the water in a white bucket to your water treatment specialist.

Is the Ferrosorb an ion exchange based product that is also regenerated by salt?

Ferrosorb is regenerated due to surface scouring mechanism during backwash. This is the reason why we always draw attention on the proper backwash flow rate.

Can I use ECOMIX® to just remove organic matter and tannins?

ECOMIX® should not be used if organic matter reduction is the only purpose of treatment. But ECOMIX® can be used to reduce organic matter (color) and to soften water from well or municipal supply. The unit’s capacity should still be rated based on raw water hardness.

I have customers who use surface water (lake, rivers, canals, ponds) rather than well water. Can I use ECOMIX® for this application?

ECOMIX® is intended for well, but not the surface water treatment. Surface water may be microbiologically contaminated, have high levels of TOC (total organic carbons), tannins and color that often exceed ECOMIX® limitations. Surface water can be treated with ECOMIX® only after chlorination and sediment filtration followed by activated carbon filter.

Is ECOMIX® sensitive to active chlorine, pH level or TDS?

ECOMIX® shows stable operation with active chlorine levels below 1 ppm and pH in the range of 5 to 9. ECOMIX® is not affected by the anion composition of the water and is stable with feed water TDS below 4000 ppm.

ECOMIX® IN FIGURES

ECOMIX® eliminates 5 most common water quality problems:

hardness | iron | manganese |
natural organic matter (oxidizability) |
ammonium |

ECOMIX®

up to **10** years
of service life

Simple calculation of the volume capacity using influent water hardness only

High efficiency, which does not depend on water pH level (5 ... 9), presence of H₂S and anionic composition

No acidic, alkaline or deironing chemicals are required for regeneration, only regular tableted salt

No pretreatment with oxidizing agents is required due to remove iron and manganese

No dumping of iron and manganese even if the service run exceeds the softener's volume capacity

Low salt requirement — 100 g of NaCl per 1 liter of filter loading for one regeneration

Low water consumption for regeneration — 5-10 of filter loading volumes

NSF/ANSI and TÜV SÜD quality certifications

ECOMIX® is not only a unique water treatment technology, ECOMIX® has been a firm platform for the corporate success of numerous companies around the globe