

# SOFT NO R<sup>®</sup>

## Commercial Anti Scale

### Salt-free Water Treatment Systems

## THE GREEN TECHNOLOGY

### Benefits

- Scale is virtually eliminated!
- No salt.
- No Brine Tank.
- No backwash.
- No electricity.
- Easy installation.
- Removes pre-existing scale.
- No costly repairs to appliances due to scale.

### The Solution

**Watch<sup>®</sup> Anti-Scale** Treatment Systems transform Calcium ions into Calcium crystals, which are stable and cannot attach to pipes, surfaces, hardware of heat exchanger components. The crystals are so small they are easily rinsed away by the water flow

**SOFTNOR** System eliminates previous scales within a few weeks



### The Problem

Calcium creates scale in pipes, on appliances and other plumbing surfaces. This leads to higher heating and energy costs and expensive repairs to appliances, such as ice machines, coffee makers, dishwashers and cooling towers in commercial building



Before treatment

Scale can also be a source or bacteria to grow, which can be a health concern in drinking water applications.

Calcium, on the other hand, is important to human health, and supplements are recommended if Calcium is reduced or totally void in one's diet.

**Scale  
Of  
Fluid  
Treated  
NO Regeneration**

**WATCH<sup>®</sup>**  
WATCH WATER  
*a Water Company*

The leading manufacturer of water filtration medias and systems

WWW.WATCHWATER.DE

## Commercial SOFT-NO-R Installation - 1" Pipe

The flow direction of the Commercial **SOFT-NO-R** anti-scale System is upward. Therefore, the inlet and outlet connections are opposite of traditional water treatment equipment.

The flow rate must not exceed the maximum specified flow rate of the system. A flow control device will be required for applications where flow rate may exceed the specified maximum flow rate.

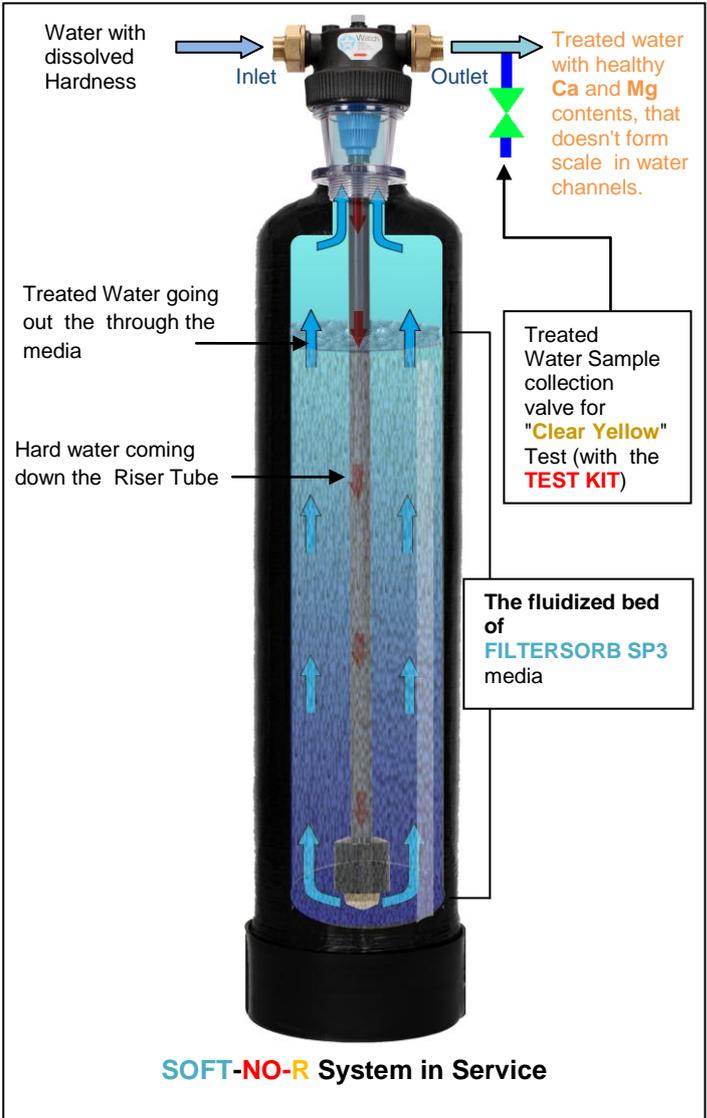
### Installation Instructions:

1. Place system on a smooth flat surface.
2. Install the fittings.
3. Connect incoming cold water to the inlet of the system.
4. Connect system outlet to service water of the house.
5. Partially open a valve downstream of the system to allow the air to purge from the system.
6. Slowly open inlet valve and allow the system to fill with water.
7. Close the downstream valve five minutes after the air has been purged from the system and plumbing. This flushes any fines out of the system.
8. Check for leaks and repair as required.
9. System is ready to use.

### Conditions of Operation:

- Minimum pressure 1bar
- Maximum Pressure 10 bar
- Minimum operating temperature 2 °C
- Maximum operating temperature 49 °C
- Water pH range 6.0 to 9.0
- Maximum feed water hardness is 1340 ppm
- Pre-treatment required for Hydrogen Sulfide, Iron and Manganese
- Maximum Chlorine 3ppm, de-chlorination recommended
- Oil and grease should not be present

**Warning:** Do not exceed specified flow rates



**SOFT-NO-R System in Service**

UNIT Name	Flow rate (m <sup>3</sup> /h)	Flow rate (m <sup>3</sup> /h)		Type of Pressure Vessel	Amount of FILTERSORB SP3 (liter)	Pressure (bar)	
		min	max			min	max
WATCH SOFT-NO-R	500	0.4	0.5	7 x 17	1.5	1	10
WATCH SOFT-NO-R	1000	0.8	1.0	6 x 35	3	1	10
WATCH SOFT-NO-R	1500	1.2	1.5	7 x 44	4.5	1	10
WATCH SOFT-NO-R	2000	1.6	2.0	10 x 44	6	1	10
WATCH SOFT-NO-R	2500	2.0	2.5	10 x 44	7.5	1	10
WATCH SOFT-NO-R	3000	2.4	3.0	10 x 44	9	1	10
WATCH SOFT-NO-R	5000	4.0	5.0	12 x 52	15	1	10

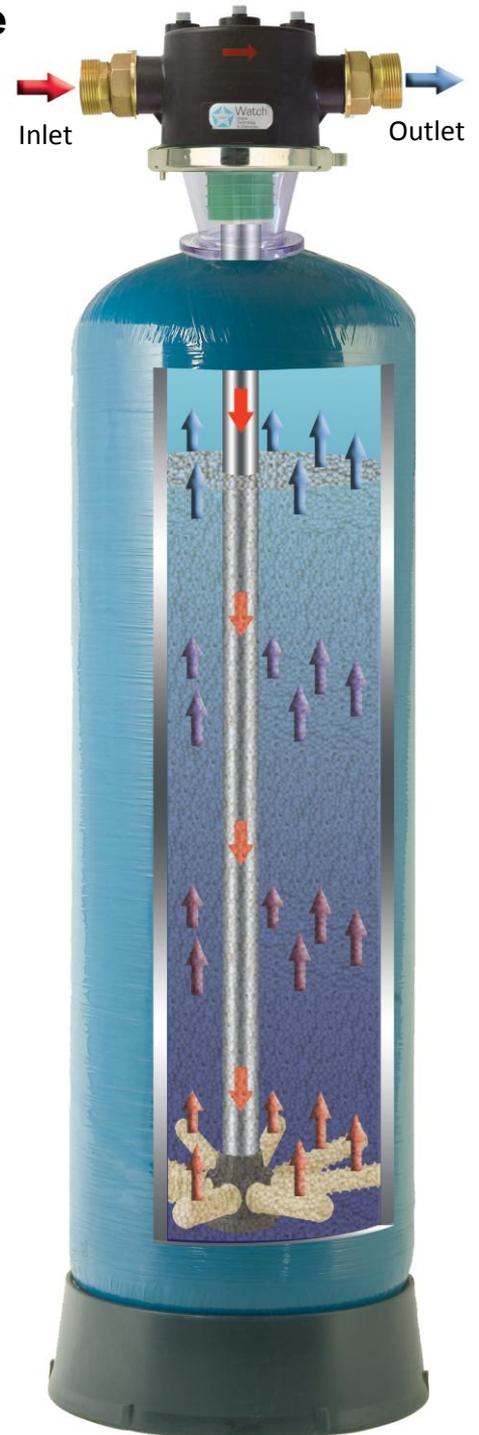
The amount of **FILTERSORB SP3** listed in the table is based on the calculation to treat the hardness up to **420 ppm/ 25 gpg (USA)**. To determine media amount for treating water hardness over 420ppm check the hardness-vs-flowrate table in the **FILTERSORB SP3** brochure.

**Note:** Do not use where water is microbiologically unsafe or with water of unknown quality without adequate disinfection before or after the unit. System must be maintained according to manufacturer's instructions. Pre-treatment for sediment, Iron, Hydrogen Sulfide, Manganese, hydrocarbons and Copper may be required depending on conditions. Install systems in new facilities with copper pipe after six weeks of water use.

## Commercial SOFT-NO-R Installation - 2" Pipe

The flow direction of the Commercial SOFT-NO-R anti-scale System is upward. Therefore, the inlet and outlet connections are opposite of traditional water treatment equipment.

The flow rate must not exceed the maximum specified flow rate of the system. A flow control device will be required for applications where flow rate may exceed the specified maximum flow rate.



### Installation Instructions:

1. Place system on a smooth flat surface.
2. Install the fittings.
3. Connect incoming cold water to the inlet of the system.
4. Connect system outlet to service water of the house.
5. Partially open a valve downstream of the system to allow the air to purge from the system.
6. Slowly open inlet valve and allow the system to fill with water.
7. Close the downstream valve five minutes after the air has been purged from the system and plumbing. This flushes any fines out of the system.
8. Check for leaks and repair as required.
9. System is ready to use.

### Conditions of Operation:

- Minimum pressure 1bar
- Maximum Pressure 10 bar
- Minimum operating temperature 2 °C
- Maximum operating temperature 49 °C
- Water pH range 6.0 to 9.0
- Maximum feed water hardness is 1340 ppm
- Pre-treatment required for Hydrogen Sulfide, Iron and Manganese
- Maximum Chlorine 3ppm, de-chlorination recommended
- Oil and grease should not be present

**Warning:** Do not exceed specified flow rates

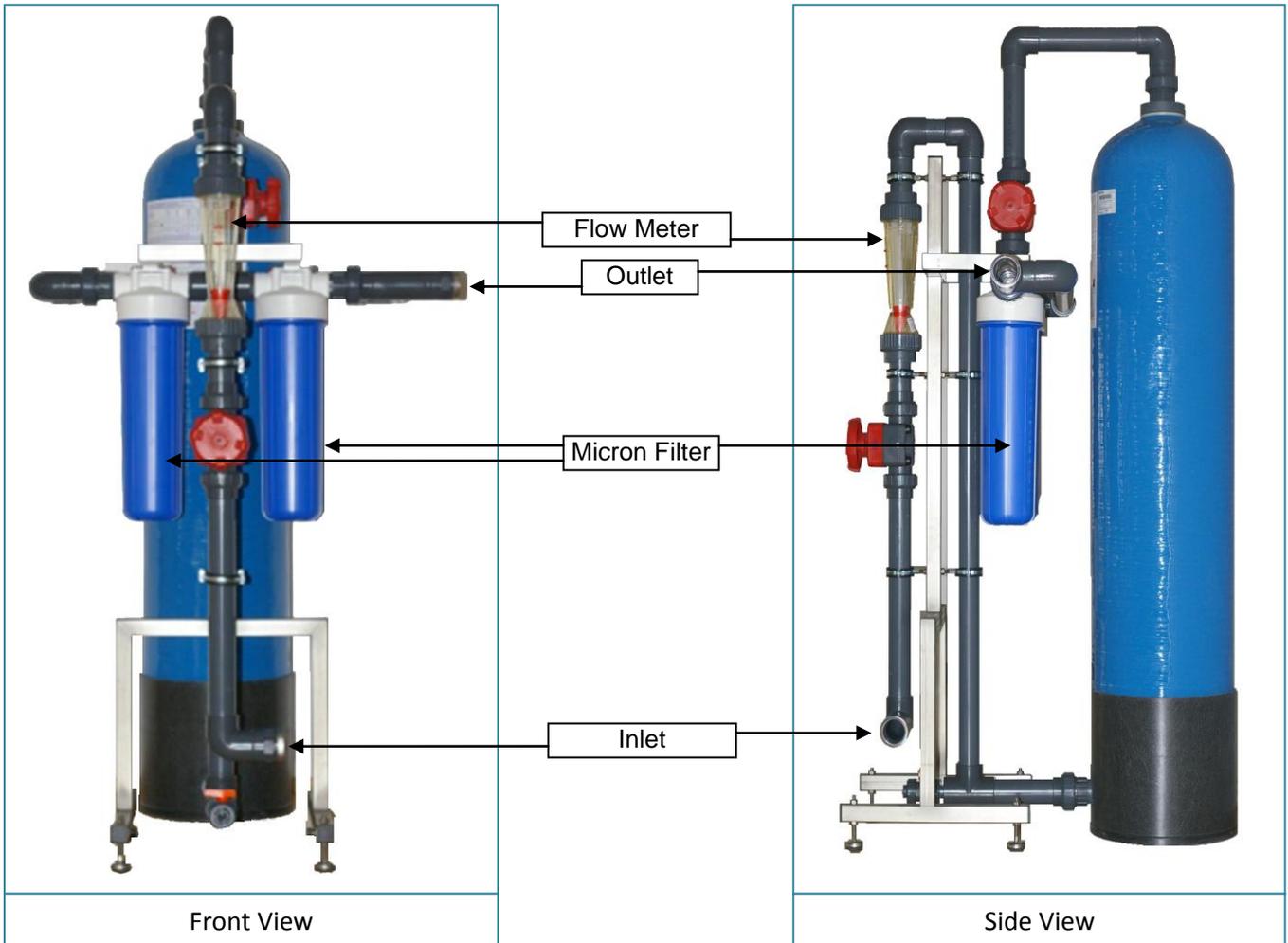
UNIT Name		Flow rate (m <sup>3</sup> /h)		Type of Pressure Vessel	Amount of <b>Filtersorb SP3</b> (liter)	Pressure (bar)	
		min	max			min	max
WATCH <sup>®</sup> SOFT-NO-R	6000	4.8	6	12 x 52	18	1	10
WATCH <sup>®</sup> SOFT-NO-R	8000	6.4	8	14 x 65	24	1	10
WATCH <sup>®</sup> SOFT-NO-R	10000	8.0	10	16 x 65	30	1	10
WATCH <sup>®</sup> SOFT-NO-R	12000	9.6	12	18 x 65	36	1	10

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**Note:** Do not use where water is microbiologically unsafe or with water of unknown quality without adequate disinfection before or after the unit. System must be maintained according to manufacturer's instructions. Pre-treatment for sediment, Iron, Hydrogen Sulfide, Manganese, hydrocarbons and Copper may be required depending on conditions. Install systems in new facilities with copper pipe after six weeks of water use.

**Commercial SOFT-NO-R Installation 4" Pipe**

For convenient operation we recommend our SOFTNOR High Flow Kits, which are skid-mounted units. These systems include ball/membrane valves, PVC piping, flow controller/flow meter, one or several parallel-installed tanks with top/bottom openings and 20 (or 50) micron filters in outlet (would increase the SP3 media efficiency) all mounted on a stainless-steel frame. The units are supplied ready to install (plug and play).



UNIT Name		Flow rate (m <sup>3</sup> /h)		Type of Pressure Vessel	Amount of Filtersorb SP3 (liter)	Pressure (bar)	
		min	max			min	max
WATCH SOFT-NO-R	15000	12	15	18 x 65	45	1	10
WATCH SOFT-NO-R	20000	16	20	21 x 60	60	1	10
WATCH SOFT-NO-R	25000	20	25	24 x 69	75	1	10
WATCH SOFT-NO-R	30000	25	30	30 x 72	90	1	10
<b>Parallel System Configuration:</b>							
WATCH SOFT-NO-R	2 x 20000	35	40	2 x 2160	2 x 60	1	10
WATCH SOFT-NO-R	2 x 25000	45	50	2 x 2469	2 x 75	1	10
WATCH SOFT-NO-R	2 x 30000	50	60	2 x 2469	2 x 90	1	10
WATCH SOFT-NO-R	2 x 35000	60	70	2 x 2469	2 x 100	1	10
WATCH SOFT-NO-R	2 x 40000	70	80	2 x 3072	2 x 125	1	10
WATCH SOFT-NO-R	2 x 50000	90	100	2 x 3672	2 x 150	1	10
WATCH SOFT-NO-R	2 x 60000	110	120	2 x 3672	2 x 175	1	10
WATCH SOFT-NO-R	2 x 65000	120	130	2 x 4278	2 x 200	1	10
WATCH SOFT-NO-R	2 x 85000	160	170	2 x 4882	2 x 250	1	10

The amount of FILTERSORB SP3 listed in the table is based on the calculation to treat the hardness up to 420 ppm/ 25 gpg (USA). To determine media amount for treating water hardness over 420ppm check the hardness-vs-flowrate table in the FILTERSORB SP3 brochure.