

# Industrial Water Softeners

*Filtec automatic water softeners are available in a versatile range of seven standard models, capable of outputs up to 30 m<sup>3</sup>/hr of softened water for almost any requirement. Larger designs by request.*

Water softeners can be utilised in a large variety of commercial and industrial applications to prevent the formation of hard water scale deposits, (calcium and magnesium), remove some undesirable dissolved minerals and remove low levels of iron and manganese. These contaminants can result in unnecessary plant down time, excessive maintenance costs and increased operating costs (fuel, labour, chemicals, etc.)

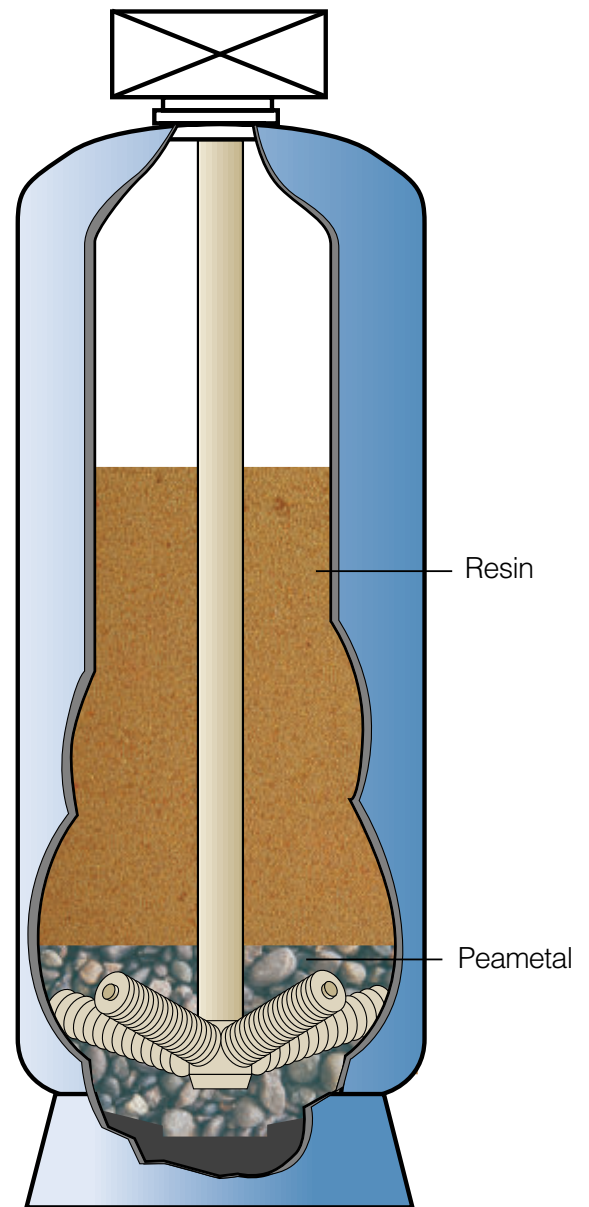
By using an Filtec Water Softener these problems can be overcome. To do this the water is passed through a bed of ion exchange resin and as the water passes through, the calcium and magnesium ions are absorbed by the ion exchange resin and in return sodium ions are released. The result is softened water. Other minerals can be removed in a similar manner. This process continues until all the sodium ions are exchanged for calcium or magnesium, at which point the resin will then become exhausted. In order to obtain a further supply of softened water, the resin must be regenerated and this is achieved automatically by passing a solution of brine through the resin to remove the hardness minerals.

## Features

AquaFlo systems are robust, corrosion resistant designs with a five cycle automatic control valve and glass fibre reinforced pressure vessel. The brine tank is polyethylene.

## Applications

- Boilers and Heating Systems
- Circulating Cooling Systems
- Laundries
- Food and Beverages
- Cosmetics and Pharmaceuticals
- Industrial Processes
- Resorts and Caravan Parks
- Hotels, Motels and Home Units
- Hospitals, Laboratories and Schools
- Renal dialysis units



## Control Valve Options



Magnum / 962



180 / 440i



Performa

## GENERAL SPECIFICATIONS

Fully automatic softeners with Autotrol valves giving timer or demand regeneration with turbine meter and microprocessor control to minimise running costs. System includes valve, controller, fibreglass resin tank and brine tank. For example SF330A is autobackwashing based on time, while the SF330C or D is autobackwashing based on volume of water used. The SF330D-96TW is a highflow/twin alternating tank system which offers either duty, standby or highflow with both tanks working together.

### Pressure Vessels

Wound resin bonded fibreglass filament for strength and polyethylene inner shell for chemical inertness.  
 Working Pressure 200 - 1040 kPa. (30 - 150 psi)  
 Operating Temperature 5 - 40°C maximum

### Valves\*

Autotrol Performa, 180, Magnum or 172.

### Controllers

- OPTION A - a standard 440i, 740 or 942 day timer for either daily or alternate day backwash. These are less economical as they regenerate regardless of water usage.
- OPTION C - Auto-regeneration by water usage with 460i or 760 controller.
- OPTION D - Auto-regeneration by water usage with 962 controller which provides additional programming and control of reserve capacity, plus flow monitoring.

### Instructions

Installation and Operating Instructions are included with all Water Softeners.

## SYSTEM SPECIFICATIONS

Model	Flow Rate (m <sup>3</sup> /hr)			Valve Cont-roller	Inlet/Outlet (mm)	Drain (mm)	Approx. Softening Capacity kg CaCO <sub>3</sub>	Resin Volume (Litres)	Differential Pressure (kPa)		Softener Size dia x h (mm)	Brine Tank base (mm)	Salt/ Regen (kg)
	Norm	Peak	B/Wash						Norm	Max			
SF300	3	4	1.0	255	25	15	4	75	105	170	300 x 1400	410 <sup>2</sup>	13
SF330	4	5.5	1.2	268	25	20	6	100	105	170	330 x 1850	410 <sup>2</sup>	15
SF400	5.5	6	1.6	268	25/40	25	7.5	125	105	170	400 x 1850	Ø900	19
SF500	10	14	2.2	180	50	40	12	200	105	170	500 x 1850	Ø900	30
SF600	14	17	2.9	Magnum	50	40	18	325	105	170	600 x 1850	Ø900	48
SF750	17	27	4.7	172	50	50	26	425	105	170	750 x 2m	Ø1000	72
SF900	23	30	6.8	172	50	50	36	575	105	170	900 x 2m	Ø1000	90

A minimum 200 kPa (30 psi) operating pressure is required.

Larger units are available.

For more information contact...

**FILTEC**  
 Making Water Safer

### Resin

High quality resin is used in all Water Softeners.

### Pipe Work

Standard pipe work, where fitted, connecting filter vessel to valving is rigid PVC. Galvanised pipe is available as an option.

### Installation

Any regulatory requirements pertaining to plumbing and drainage connections are the responsibility of the client. Plant should be installed under cover protected from direct sunlight, rain and frost.

### Additional Options

- Twin Alternating or Highflo configuration available for continuous, uninterrupted soft water.
- Skid Mounted Plant
- Water meter initiated regeneration with batch register and automatic reset.
- Automatic shut-off of hard water bypass during regeneration.
- Flow monitors or flow totalisers
- Micro switches for regen alert/pump control

### Client to Provide:

- Single phase 230 volt power.
- Drain for backwash.
- All connecting pipe work and valving from control unit.
- Minimum 200 kPa (30 psi) operating pressure
- Water flow or pump operation at 2.00 am to allow for Automatic regeneration.

\* Filtec reserves the right to offer an alternative valve(s) depending on customer requirements.

Local Agent: