

# CABINET WATER SOFTENERS



## Why fit a Water Softener?

- To protect a hot water system from scale
- To save money on Detergent and Soap
- To improve the enjoyment of Showers and Baths
- To stop scum forming on the surface of cooking water
- To stop scaling of shower heads
- To stop scaling of dishwashers, washing machines and kettles
- To help some people with their skin care
- To make baths and wash-basins easier to keep clean
- To save money on the maintenance of hot water systems, washing machines etc.
- To keep the boiler working at peak efficiency
- To slowly descale existing systems and pipe work
- To reduce fuel bills where scale formation is reducing efficiency
- To extend the life of heating elements such as kettles and immersion heaters

## Why use one of our Softeners?

- Unsurpassed range of sizes
- Easy installation
- Unsurpassed quality of components and assembly
- Simple programming
- Unsurpassed reliability
- Choice of either Time Clock or Water-Metered versions
- Available with optional digital displays
- Available with adjustable salt dosing facility and built-in fault diagnosis facility

## What is Hard Water?

The original source of all the water we use is rain, which itself is soft. Once it falls however, it dissolves mineral salts, such as Calcium and Magnesium, from the rock it percolates through. In areas of the country where the rock contains Calcium we therefore have hard water at the tap. The Calcium in the water then forms a scale on hot surfaces, such as kettle elements, boilers, washing machines and showerheads, which insulates the elements and thus reduces heat transfer efficiency. By eliminating scale we can substantially reduce running and maintenance costs. Soap and detergent is "used up" by hard water so cost savings up to 50% will be achieved. Some individuals with sensitive skin may also benefit from using soft water because less soap can be used and skin often feels softer. All in all, softening makes the household a more pleasant place to live; cooking, cleaning, washing, showering and bathing are all nicer in softened water. Although drinking softened water has been acknowledged to be harmless we recommend that a hard water drinking supply should be available in each household and this is usually easily arranged.



## How do water softeners work?

Water Softeners work by a process known as ion exchange. The hard water passes through a resin column inside a pressure vessel. The resin removes the Calcium and Magnesium ions and exchanges them for Sodium. When the resin becomes exhausted it is regenerated by drawing a solution of common salt, called brine, through the resin which reverses the process. The unwanted Calcium is then flushed down the drain. Regeneration takes about an hour and is repeated as often as necessary by either a time clock at 2a.m. or by a meter which triggers regeneration when the resin has been exhausted. No maintenance is required from the customer other than the regular checking and replenishing of the salt level.



Trojan



Titan & Hood



Trident



Caribbean

## How do I choose which softener to install?

### Choice of Size

The bigger the softener the longer the time between regenerations. Typically, the softener should be large enough to deliver soft water continuously for 24 hours so that regeneration can be timed to take place each night when usage is at its lowest. The size needed will depend mainly on the amount of water used, the size of the house and the number of people living there in addition to the hardness of the water. The installer will be responsible for sizing the softener and setting it up to suit each individual customer's normal usage habits.

### Choice of Cabinet

Some cabinets are available with a hood. Use the illustrations in the brochure and the chart to compare and choose from the options available.

### Choice of Valve

The heart of any automatic water softener is the valve head assembly which controls regeneration and normal service. While we stock a wide range of valves their basic function is similar. However the valve type and size can be tailored to suit the customer's normal usage:

1. The valve size needs to be appropriate for the size of the resin bed and the flow rate.
2. The valve can be either meter controlled or timer controlled depending on which will be most efficient for the customer's normal usage:
3. The valve can have digital or mechanical triggering of regeneration
4. The 6700 valve can have a variable brining facility for fine tuning salt efficiency



Autotrol 255 Time Clock



Fleck 5600 Metered



Fleck 6700



Fleck 5600 Time Clock

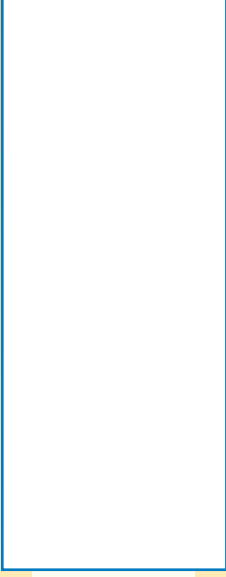


Fleck 5600 SE



Autotrol 255 Metered

Cabinet Style	Trojan				Titan			Trident			Caribbean		
	4	7	10	14	7	10	14	7	10	14	20	25	30
Resin Capacity (litres)	535mm	635mm	635mm	780mm	630mm	630mm	770mm	635mm	635mm	780mm	—	—	—
Total Height (no hood)	550mm	660mm	660mm	805mm	650mm	650mm	790mm	—	—	—	1120mm	1120mm	1120mm
Total Height (with hood)	230mm	230mm	230mm	230mm	270mm	270mm	270mm	230mm	230mm	230mm	340mm	340mm	340mm
Width	450mm	450mm	450mm	450mm	490mm	490mm	490mm	450mm	450mm	450mm	520mm	520mm	520mm
Depth	Fleck - 3/4" BSP Male Autotrol - 3/4" BSP Female				Fleck - 3/4" BSP Male Autotrol - 3/4" BSP Female			3/4" BSPM			1" BSPM		
Inlet/Outlet Connections	0.16	0.28	0.40	0.56	0.28	0.40	0.56	0.28	0.40	0.56	0.80	1.00	1.20
Service Flow m <sup>3</sup> /hr (at 1 bar pressure drop)	668	1,169	1,670	2,338	1,169	1,670	2,338	1,169	1,670	2,338	3,340	4,175	5,010
Capacity between regenerations (litres at 300ppm total hardness)	0.56	0.98	1.40	1.96	0.98	1.40	1.96	0.98	1.40	1.96	2.80	3.50	4.20
Salt Used per regen (kgs)													



The Right Product  
 ...At the Right Price  
 ...At the Right Time

