Why Soften?

Benefits of Water Treatment...

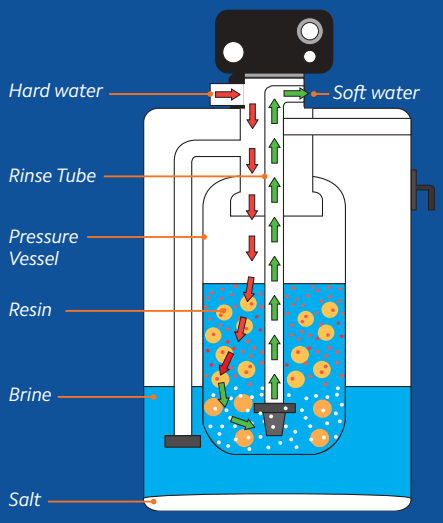
The increased levels of calcium and magnesium found in hard water will lead to premature scaling if left untreated. Problems such as early and increased replacement of heating elements, pipework and valves can often be costly and unpredictable but this can be reduced by installing a softener or conditioning system.

- **Improved system efficiencies**
- **Extended equipment lifespan protection**
- **Reduced business operational costs**
- **Low start up and running costs**
- **Prevents scaling**
- **RO Membrane protection**
- **Fewer engineer callouts**
- **Less chemical use**
- **Reduced energy consumption**

The Softening Process

Softening is the process of removing dissolved calcium and magnesium salts that cause hardness in water. It is achieved either by adding chemicals that form insoluble precipitates or by ion exchange. Ion exchange is accomplished by passing the water through columns of a natural or synthetic resin that trades sodium ions for calcium and magnesium ions.

Ion-exchange columns must eventually be regenerated by washing with a brine solution.



System Protection and Regeneration

Pre-Filtration

In order to help prolong the life of the internal components of a softener, in particular the valve, pre-filtration is highly recommended. This will help to maintain maximum system efficiency and remove unwanted particulate from water.

PSP

Polypropylene depth filters offer excellent protection against particulate ingress in a mains water application.

Housing

SPECTRUM housing systems are supplied as a kit which include; a wall mounting bracket, gauges and a bowl removal tool.

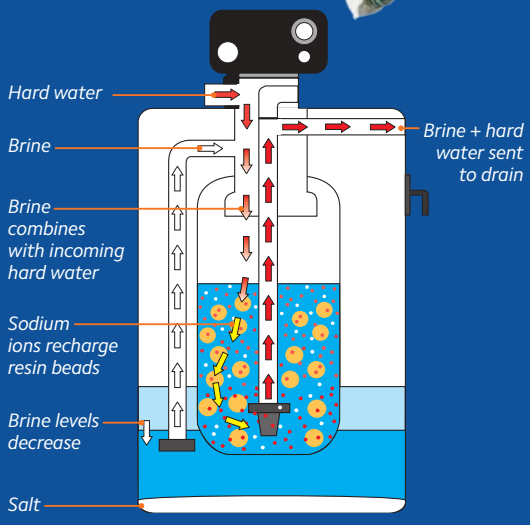
Part Number	Recommended	
	Housing	Pre-Filter
SWS-0.5M	EFHS-PK-10-¾	PSP-5-93/4
SWS-2.2M	EFH-PK-1-20LD-1	PSP-5-20LD
SWS-5.0M	SFH-SPC-3-10-2-GP-ML	PSP-5-93/4
SWS-12.5M	SFH-SPC-3-20-2-GP-ML	PSP-5-20
PWS-2.5M	EFH-PK-1-20LD-1	PSP-5-20LD
PWS-5.0M	SFH-SPC-3-10-2-GP-ML	PSP-5-93/4
PWS-12.5M	SFH-SPC-3-20-2-GP-ML	PSP-5-20

Hydrosoft Salt

This delivers consistent brining for easy and long term use.

The Regeneration Cycle

The regeneration cycle is important to ensure running costs are kept in line. At some point, resin beads will become saturated, preventing the production of soft water. To ensure process continuity, two options are available: either change the resin or regenerate it through a brine solution. The latter option is not only easier to perform but is also much more cost effective. The SWS and PWS systems use a regeneration cycle to regenerate the resin, a process which is triggered and controlled by the valve.



Which System Fits Your Needs?

Let us help you decide

	EWS Cartridge	SWS Cabinet	SWS Simplex	PWS Duplex
Water Flow (lpm)				
up to 15	✓			
up to 45				
up to 57		✓		
up to 116			✓	✓
Water Usage (lpd)				
up to 5,000		✓		
up to 12,500				
up to 21,000	✓			
up to 50,000			✓	✓
Contaminants				
Hardness	✓	✓	✓	✓
Heavy Metals	✓			
At a Glance				
Point-of-use applications	✓	✓		
Continuous 24h treated water	✓			✓
Silent running valve (<30db)		✓		
Fully integrated user interface		✓		
Wall mountable	✓			
Blending valve		✓	✓	
Organics & colour treatment				
Integral pre-filtration	✓			
No regeneration downtime	✓			✓

High Demand Scale Control

PED
Compliant
Article 4, Paragraph 3
Group 2 Liquids

WRAS
APPROVED MATERIAL

CE

SPECTRUM

SPECTRUM Valve

Provides complete control over treated water quality

SWS Simplex Systems

Up to 116 litres per minute

The SWS Simplex range is ideal for those industrial soft water applications with higher flow and capacity demands. The units incorporate the industry accepted SPECTRUM 7 valve which gives complete volumetric and chronometric control over the regeneration. The valve also offers a blending capability which provides control over the product water quality. These units are ideally suited for applications where the product water is stored in a tank or the demand for softened water is intermittent, to allow for regeneration.

Key Features

- Customisable electronic valve providing total control over capacity and regeneration
- Volumetric control measures the volume of soft water produced which optimises salt usage
- Supplied with easy-fill brine tank

SWS-5.0M
1 ¼" Ports

SWS-12.5M
1 ¼" Ports

Specification

Electrical Requirements 110-240V 50/60Hz

Operating Temperature Range 2 - 42°C

Operating Pressure Range 2 - 8 bar

Softening Resin SPECTRUM SRSO

SWS-5.0M includes 100L / SWS-12.5M includes 250L

Salt (hydrosoft) available to order separately

LCD Display
Clearly showing operational information

Flexibility
Immediate or delayed regeneration options

Part Number

Part Number	Optimal Flow Rate (lpm)	Resin Vessel Size	Total Hardness Capacity (mg)	Water Used Per Regen (L) *	Hardness (ppm)	Litres of Water Used Per Day (lpd)				
						500	1000	2000	4000	5000
SWS-5.0M	66	14" x 65"	5,000,000	434	100	8	4	2	1	
					200	4	2	1		
					300	2	1			
SWS-12.5M	116	21" x 62"	12,500,000	790	100	20	10	5	2	2
					200	10	5	2	1	1
					300	6	3	1		

Days Between Regen

* Based on 4 bar feed pressure 15°C feed temperature and optimal service flow rate