



# Non-electric Block Salt Water Softener



## Features and Benefits

### Small & Compact

This is the world's smallest twin cylinder non-electric water softener.

### Twin Cylinders

For a continuous supply of softened water 24 hours a day.

### Non-Electric

No time clocks. No computers. No worries!

### Displacement Meter

Full displacement meters allow maximum and minimum flow rates of water, even measuring down to one drip.

### Brine Valve

The unique brine valve fitted on the TwinTec allows for fine-tuning and for greater salt efficiency.

### Resin

The latest technology gives the finest granulometry of all.

### Regeneration

The TwinTec has the most efficient regeneration, which only uses 17 litres of water per regeneration in only 10 minutes!

### Performance

The performance of the TwinTec outperforms any other twin cylinder water softener and is second to none!

### Installation

The TwinTec is designed for all modern day installations.



Your authorised dealer is:

Manufacturer  
TwinTec  
Castleworks  
Woking  
Surrey  
GU22 9LQ

UK hard water areas and dealer network

Find your local dealer at [www.twintec.biz](http://www.twintec.biz)



The TwinTec installed under a kitchen sink.



Loading the salt blocks is quick and easy.



The TwinTec installed in a waterproof housing outside.



The TwinTec installed in the garage.



[www.twintec.biz](http://www.twintec.biz)

A family business established in 1977.

All information in this brochure is correct at the time of going to print.

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## The TwinTec Block Salt Water Softener

Simple, effective and easy to use

## Soft Water Benefits

### Bathroom

Bathrooms with softened water will not need harsh cleaning products or scrubbing. They stay cleaner for longer and will shine. Of course bathing in softened water is luxury in itself too.



### Scale and scum

Softened water will remove all the existing built up scale from your plumbing work and keep it that way, which leaves you to enjoy the saving on your heating bills.



### Kitchen

Benefits of scale free water are most obvious in the kitchen. Hard work and harsh cleaning products will be a thing of the past. A quick wipe over will leave your kitchen sparkling.



### Appliances

Any existing lime scale built up on your kitchen appliances can be removed for good with softened water. The elements in your kettle and dishwasher will shine like new.



### Skin and hair

Softened water can greatly improve certain skin conditions such as eczema, psoriasis and dry skin. Both skin and hair will feel softer and hair will be left shinier and more manageable.



No user controls

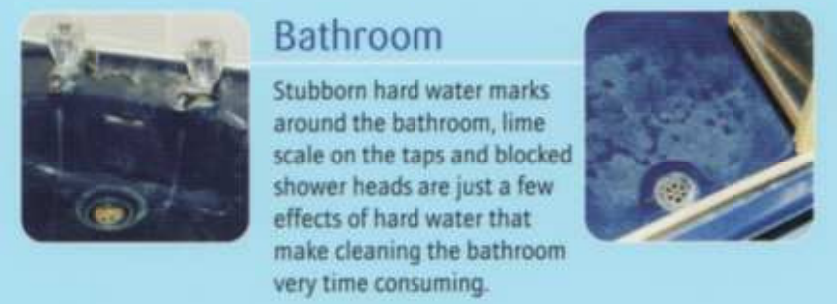
Compact and stylish

Simple to use



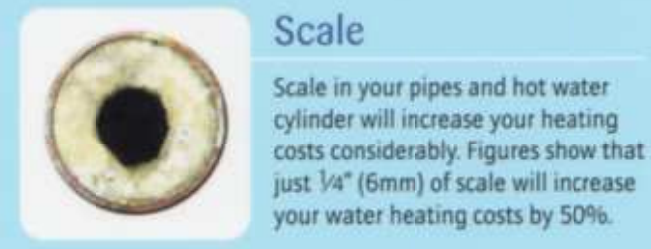
# Hard Water Effects

**Bathroom**



Stubborn hard water marks around the bathroom, lime scale on the taps and blocked shower heads are just a few effects of hard water that make cleaning the bathroom very time consuming.

**Scale**



Scale in your pipes and hot water cylinder will increase your heating costs considerably. Figures show that just 1/4" (6mm) of scale will increase your water heating costs by 50%.

**Kitchen**



Hard water causes unsightly deposits of limescale on sink surfaces and taps. Extra cleaning time and harsh chemical cleaners are needed to remove it.

**Appliances**



Limescale causes scaling of heater elements in kettles, dishwashers and washing machines, resulting in expensive premature failure and shortened life of the appliance.

**Skin and hair**



Hard water leaves scum deposits in hair and on skin and is a factor in many skin conditions including Eczema. It also causes dry cracking skin and dull, lifeless and unmanageable hair.



## What makes the TwinTec more advanced?



**THE UNIQUE ADJUSTABLE BRINE VALVE** fitted to the TwinTec allows for fine-tuning the salt used per regeneration thus saving you salt and money.



**The displacement meter** Our patented metering system does not use turbines but a pressure differential system, which can cope with low and high flow rates, enabling it to measure down to two drips per second.



**TWINTEC RESIN BEADS** are the latest technology. They are micro beads of uniform size and give higher flow rates and greater exchange capacity than other twin cylinder softeners.



A = 490mm (19")  
 B = 440mm (17")  
 C = 205mm (8")  
 D = 235mm (9")\*  
 \*to allow for plumbing connections

## Typical installation of a TwinTec water softener

This picture shows how a TwinTec fits into a domestic plumbing system. Our authorised plumbers will always give you the option to have a hard water tap. By-pass valves are also fitted to facilitate isolation of the softener from the system or complete removal when you move home.

## Can I install a TwinTec myself?

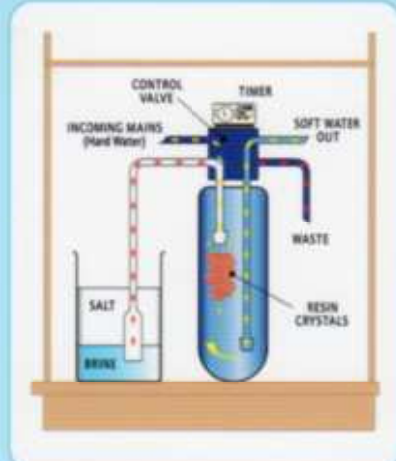
Yes you can! TwinTec softeners can be supplied with a fully comprehensive installation kit for the DIY enthusiast.

## How is hard water softened?

The key working part of any softener is a cylinder containing millions of resin beads. As hard water from the main supply passes through the resin, the hardness minerals of calcium and magnesium are removed from the water and stick to the beads. The end product in the process – known as 'ion exchange' – is softened water. The tinier the beads are, the greater their total surface area. So, softeners with smaller and consequently more resin beads are quite simply better at softening water. Periodically the resin bed needs to be 'regenerated' to flush the accumulated hardness minerals down the drain. This is achieved by passing salt water through the resin. This is followed by rinsing to remove any traces of salt and it is then ready to start softening again.

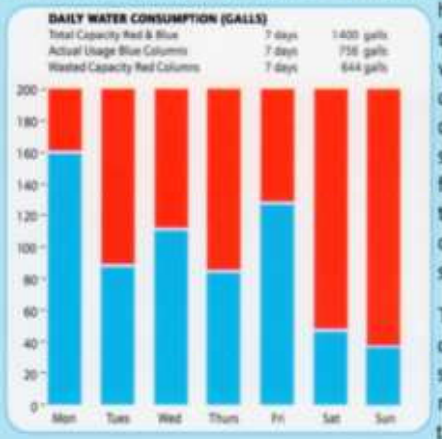
## How an ordinary electric softener works

Ordinary softeners only have one resin cylinder, which requires an electrical supply to power a mechanical or computerised timer. The timer is needed to control the regeneration process. Single cylinder softeners cannot regenerate during the day whilst water is likely to be used, so they are regenerated at



night. With this type of softener, if water is used during regeneration it will be hard. This process typically takes an hour or more in an ordinary softener and during this time no soft water is available.

Neither can they use the full capacity of the resin because it could exhaust itself during the day and would produce hard water. To avoid this possibility they are programmed to trigger a regeneration when a proportion of the resin has been used, which is inefficient. In homes with a water tank in the roof or with a pressurised system, using water during regeneration will



harden all of the stored water, hot or cold and it can take some time for the water to become completely soft again.

Twin cylinder softeners do not suffer this problem because, when one cylinder exhausts itself the other one takes over. (See 'How our non-electric TwinTec softener works') They therefore efficiently use the full capacity of the resin and can regenerate at any time, even when water is being used.

## How our non-electric TwinTec softener works

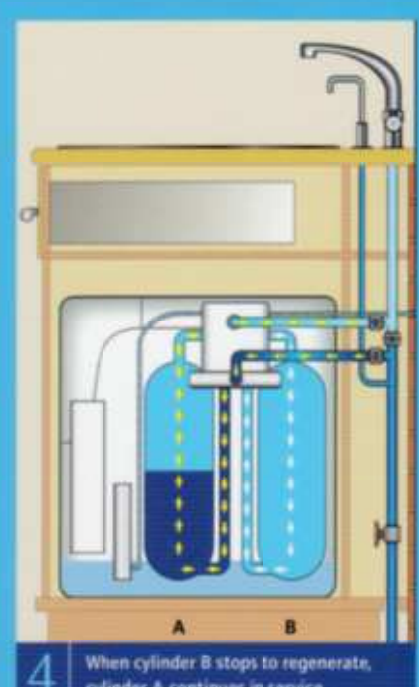
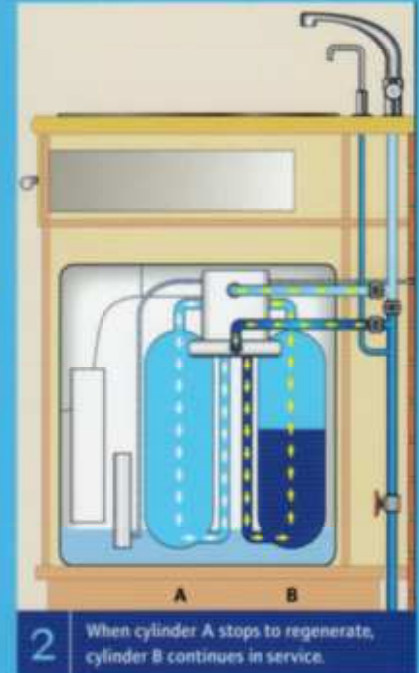
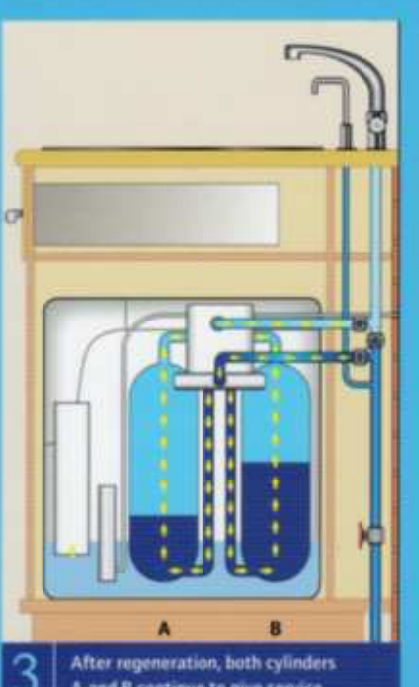
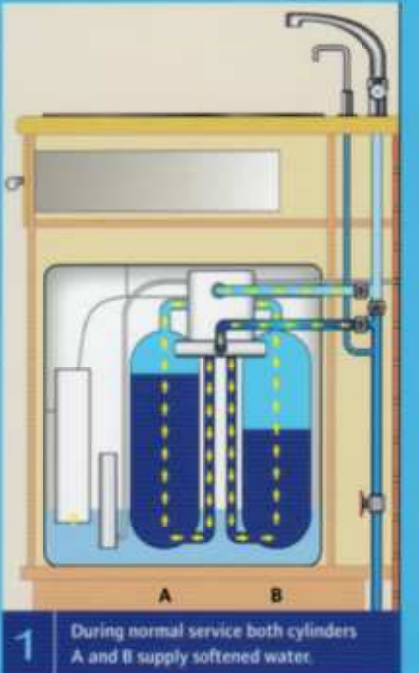
The obvious difference between an ordinary softener and the TwinTec is the fact that our water softener has two cylinders as opposed to one. This makes the regeneration process much more efficient, as shown in the diagram below.

**NO PROGRAMMING**  
 or maintenance other than keeping it topped up with salt blocks. Rest assured that if you go away on holiday the softener will not waste water or salt by regenerating unnecessarily, it simply waits for you to return and start using the water again.

**NO ELECTRICITY**  
 TwinTec uses the flow of water to operate the control module. This is why the softener can cope with fluctuations in water demand in any household, without the need to alter time clocks or computer controls.

The TwinTec caters for a household of 1-10 people and requires **NO PROGRAMMING** or maintenance other than keeping it topped up with salt blocks. Rest assured that if you go away on holiday the softener will not waste water or salt by regenerating unnecessarily, it simply waits for you to return and start using the water again.

Simple, efficient and luxurious!



No electrics

No time clocks

No computers

Water powered

Accurate metering

7 yr guarantee

No heavy sacks of salt

Suitable for all plumbing systems

No costly annual servicing required