

# TWINTeC<sup>XL2</sup>

Third Generation

## Non-electric Block Salt Water Softener





## 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 heating 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 can be a factor in many skin conditions including eczema. It also causes dry cracking skin.



No electrics

No time clocks

No computers

# 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 things 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

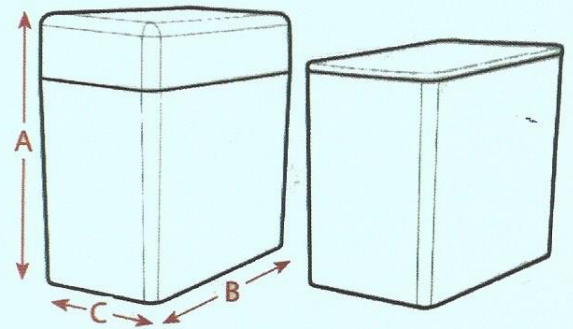
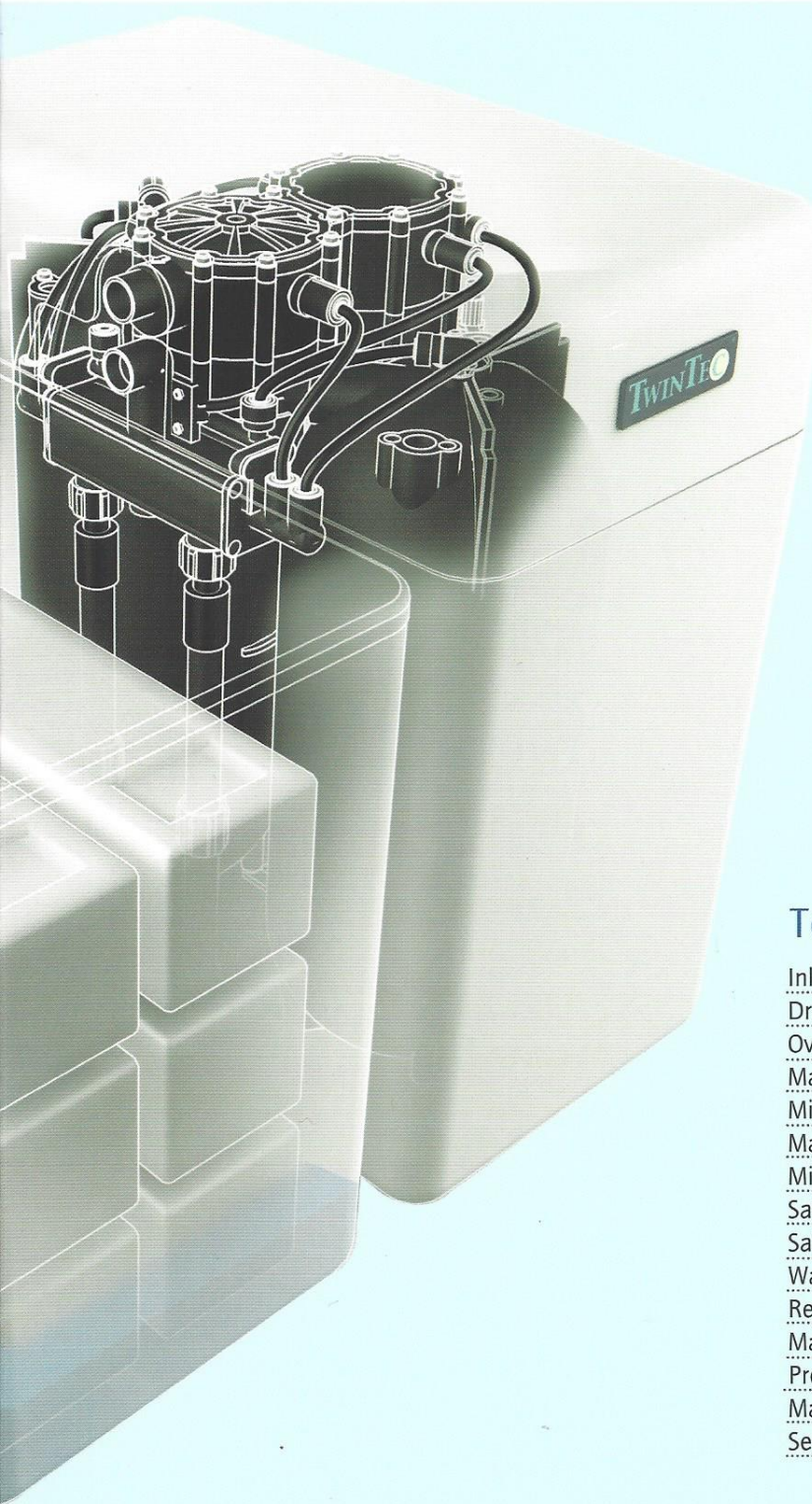
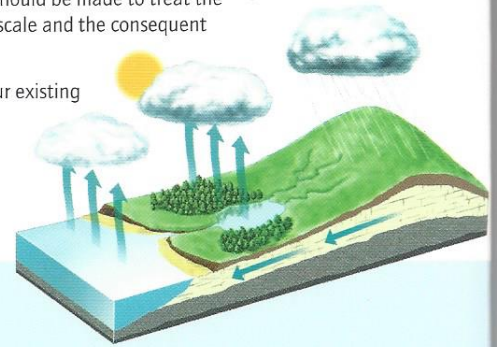
# Where does hard water come from?

Naturally soft rain water flows underground and picks up the minerals calcium and magnesium. These are the minerals that make water hard.

Guidance issued under the Building Regulations\* indicates that where the water hardness exceeds 200ppm, provision should be made to treat the feed water to water heaters and the hot water circuit of combination boilers to reduce the rate of accumulation of limescale and the consequent reduction in energy efficiency.

Whilst this guidance only applies to new houses or the fitting of a new boiler, it makes sense to do something before your existing system scales up.

\*(Domestic Building Services Compliance Guide: 2010 Edition)



Dimensions	Softener	Salt Cabinet *
A: Height	500mm (19 3/4")	390mm (15 1/2")
B: Depth	440mm (17 1/2")	440mm (17 1/2")
C: Width	250mm (10")	250mm (10")
Inlet/Drain Height	385mm (15")	-
Outlet Height	465mm (18")	-
Overflow Height	-	265mm (10")

\* - A tablet salt brine cabinet is also available on request.

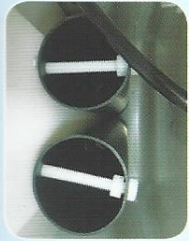
## Technical Specification

Inlet/Outlet Connections	1" bsp male - 3/4" adaptors
Drain	1/2" hose spigot
Overflow	1/2" hose spigot
Maximum Working Pressure	8 bar (6 bar daytime)
Minimum Working Pressure	1 bar dynamic
Maximum Working Temperature	20°C
Minimum Working Temperature	Protect from freezing
Salt Storage	24kg (6 x 4kg blocks)
Salt Used Per Regeneration	0.9 - 1.3kg
Water Used Per Regeneration	37 litres
Regeneration Time	20 min
Maximum Flow Rate	80 L/min
Pressure Loss	>0.6 bar at 30 L/min
Maximum Daily Capacity @ 300ppm	6,444 litres
Service Between Regenerations	1600-3200 litres

## 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.

## What makes the TwinTec more advanced?



### TWIN BRINE VALVES

The TwinTec XL range of water softeners have twin brine valves fitted. This allows for greater efficiency where higher volumes of softened water are required and for areas where the water is extremely hard.



### 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 NANO RESIN BEADS

TwinTec Nano 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.

## 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 ELECTRICITY

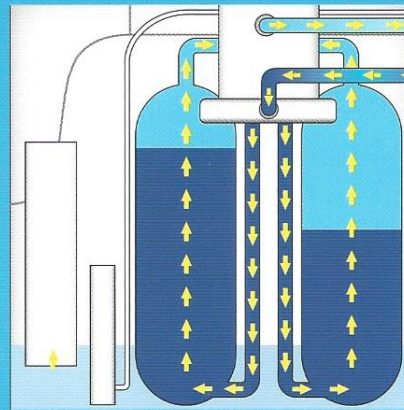
TwinTec uses the flow of water to operate the control module. This is why the softener can cope with fluctuations in water demand in any household, without the need to alter time clocks or computer controls.

The TwinTec caters for a household of 1-20 people and requires

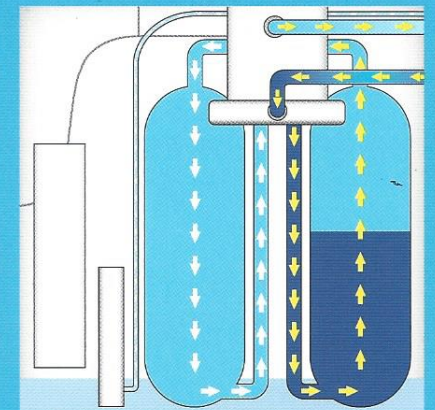
### NO PROGRAMMING

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.

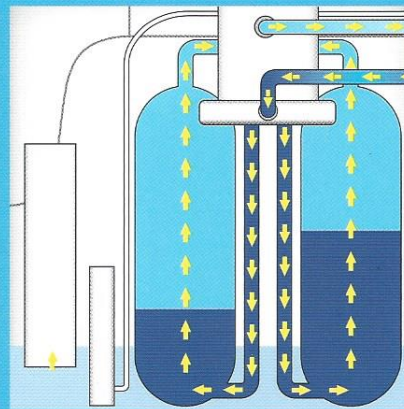
Simple, efficient and luxurious!



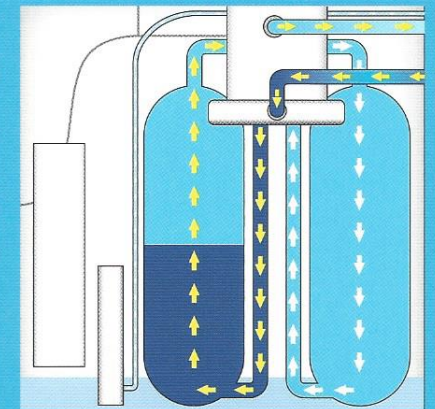
1 During normal service both cylinders A and B supply softened water.



2 When cylinder A stops to regenerate, cylinder B continues in service.



3 After regeneration, both cylinders A and B continue to give service.



4 When cylinder B stops to regenerate, cylinder A continues in service.

## Can I install a TwinTec myself?

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

## Typical installation of a TwinTec water softener

Our authorised plumbers will always give you the option to have a hard water tap. Bypass valves are also fitted to facilitate isolation of the softener from the system or complete removal when you move home.

No heavy sacks

Suitable for all

No costly annual

# Features and Benefits

## 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 two drips.

## Twin Brine Valves

For greater efficiency when high volumes of softened water are required and for areas of extreme hard water.

## Resin

The latest technology gives the finest granulometry of all.

## Regeneration

The TwinTec has the most efficient regeneration, which only uses 37 litres of water per regeneration in only 20 minutes.

## Performance

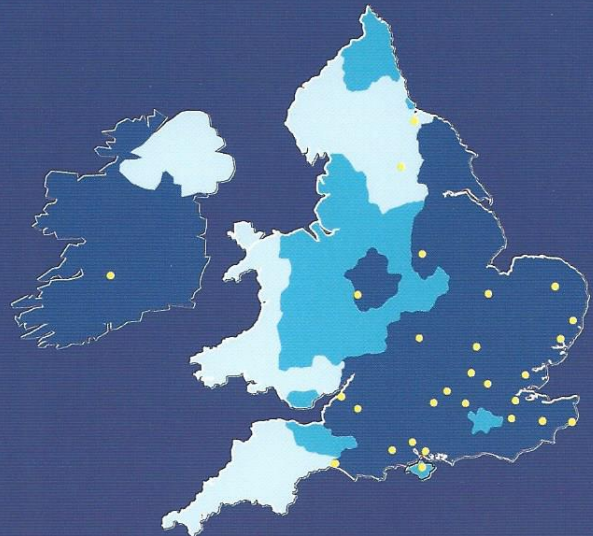
The TwinTec out performs any other twin cylinder water softener and is second to none!

## Installation

The TwinTec is designed for all modern day installations.

UK hard water areas and dealer network

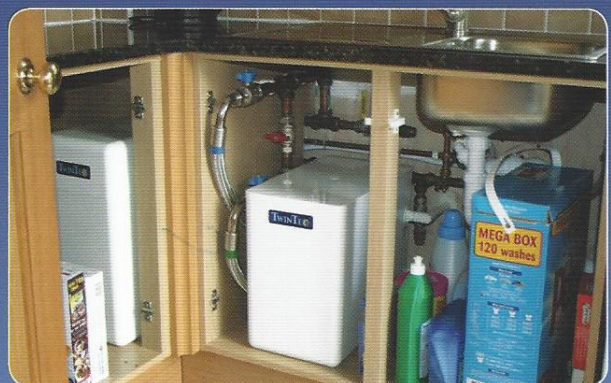
Find your local dealer at [www.twintec.com](http://www.twintec.com)



- = Aggressively hard water area
- = Hard water area
- = Areas under 150ppm
- = TwinTec dealership location



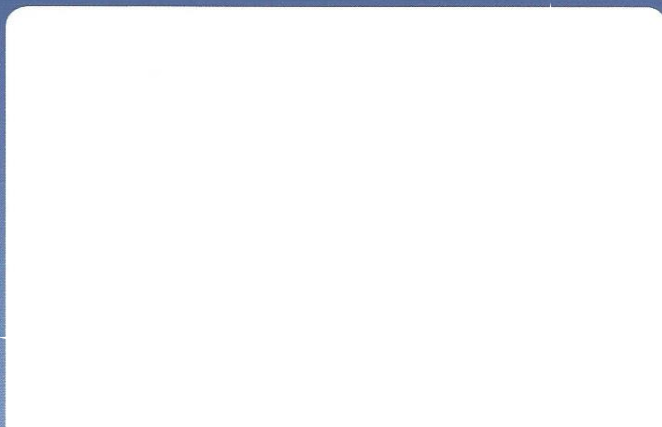
Loading the salt blocks is quick and easy.



The TwinTec installed under a kitchen sink.



Your authorised dealer is:



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