

## Contemplating replacing, or installing new, a water softener?

### One alternative to consider

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The traditional water softener typically costs between \$800 - \$1000 to purchase (June '22 prices), with additional costs for fitting/ installing which would involve a trade plumber, unless one is a DIY-er and may take 3-4 hrs to install..

The unit is large and heavy basically being a large salt/water tank with a resin based scrubber unit inside it.

Ongoing costs are the salt tablets (\$5-6 a bag) required to load in the storage tank – often 5 or 6 bags for the initial loading, with about 1 x 40lb bag a month thereafter.

The system is then automated, depending on the hardness of water and water use in the home, and will run through regular flushing cycles approximately every 2 weeks, using up both salt and approximately 35-65 gallons (150-300 l) of water per cycle.

A typical life span of a water softener is around 10-15yrs depending on the hardness and water use.

### The alternative:

#### Electronic water conditioners

Originating in Europe, an alternative to the typical installation is the electronic water conditioner. This does not remove the minerals in the water, but alters the chemical / physical structure of those minerals to prevent the crystallised deposits which clog pipes and appliances.

Advantages:

- about half the price of a traditional system (typically around \$4-500 in Home depot / Amazon)
- can be installed by owner in about 15 mins (NO plumbing) – simply wrapping 2 flying leads around the main water intake pipe for the house
- is very small and compact (approx the size of a paperback book)
- has zero consumables - water and salt use
- needs a simple plug in to a nearby standard electric socket and uses minimal power
- is literally plug in and forget about it

#### Personal experience shared

I can only write about my own personal experience which I am happy to share here.

Initially I confess to wondering how effective this 'magic' process might be (though I had read and understood the science behind the system), and 5 yrs on can confirm a total conversion to this method, after many years experience of the traditional salt/water system method & maintenance.

I bought it (a Calmat system, manufactured in Germany) at the local Home Depot for \$440. I already had a handy nearby electric socket and it took about 20 mins to fix it securely in place and wrap the leads around the pipe. Switched it on, chose the program (adjustable for the material and diameter of the house main feed pipe), and forgot about it (for 5+yrs & counting). (pictures follow)

Results (after 5+yrs):

We have no crystal mineral deposits on any appliances (e.g no furring of a kettle & coffee maker). The water quality feels roughly the same as the traditional method (perhaps a little less 'slippery'). The water tastes and looks no different, and soap works just the same as before.

If water is spilt and dries (e.g. around a chrome faucet, or on a work surface) there is a very faint and thin clouding/dust layer which simply wipes away with a finger or cloth.

In the last couple of months, out of curiosity, I decided to flush my domestic hot water tank system – this had never been touched in the 6yrs we have been in the house (and possibly not in the 5 preceding years since the house was built).

The result astounded me – the drained water, and the vigorous flush through, had no deposits or sludge at all. It looked as clean as the water coming from the taps normally. THIS completely convinced ME of the effectiveness of these electronic systems, for once and for all.

I have heard reports of similar results on much larger capacity systems which have surprised even experienced plumbers, who were previously very sceptical.

A photo of our simple installation:



