# Commercial Hot & Cold Water Softeners

Essential water softening technology for:

- Hotels
- Restaurants
- Hospitals
- Nursing homes
- Food processing plants
- Many commercial applications

European WaterCare Systems

# Commercial Hot & Cold Water Softeners

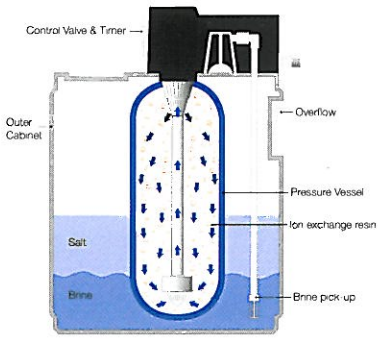
## Applications

An extensive range of water softeners providing treatment of hard water for all commercial and industrial plant such as dishwashers, glasswashers, laundry equipment, heating systems etc.

## Benefits

Softening water provides important financial and operational benefits:

- prevents scale formation on metal surfaces
- improves performance of heating elements
- lowers servicing costs
- reduces machines downtime
- increases equipment life
- improves cleaning quality
- reduces outlay on cleaning chemicals




Cabinet softener operation

## Operation

Water passes through a cylinder containing ion exchange resin beads. The hardness salts - calcium and magnesium ions - are attracted to the resin and removed from the water supply. The resin is automatically cleaned or 'regenerated' by rinsing a small amount of brine through the cylinder. The accumulated hardness does not enter the water supply, but is automatically flushed away to a nearby drain. Refreshed by regeneration, the resin is again ready to remove hardness minerals.

## Controlling regeneration

The frequency of regeneration depends on the hardness and volume of water being used. It takes place automatically and is initiated in one of the following ways:

### Timer Controlled

The frequency is set by pushing in the pins on the skipper wheel. Once set the softener will automatically regenerate at the pre-determined interval - normally at 2am. There is also a manual override to enable a regeneration to be initiated at any other time.

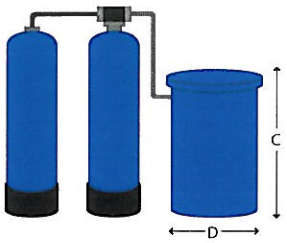
### Commander Control

Regeneration still typically takes place at 2am. This unit measures the daily water usage and statistically averages the last 7 days consumption - ignoring very low or zero water usage. The computer will determine if the softener has sufficient remaining capacity to supply the next days needs. If not it will initiate regeneration.

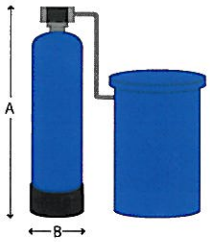
### Duplex Meter Controlled

The system comprises of two cylinders and a control valve. The softening capacity of each vessel is entered into the control valve and regeneration is initiated once the first cylinder is exhausted. The second cylinder will then operates whilst the first regenerates and vice versa. This system provides an uninterrupted soft water supply and is by far the most versatile and the most cost effective for salt consumption.

| CABINET WATER SOFTENERS (Cold, Hot) | | | | | |
|---|---|---|---|---|---|
| MODEL> | AT5 | AT10/ HW10 | AT14/ HW14 | AT18/ HW18 | AT23 |
| HEIGHT (mm) | 540 | 7311 | 14624 | 17062 | 28437 |
| WIDTH (mm) | 275 | 5849 | 11699 | 13648 | 22750 |
| DEPTH (mm) | 450 | 222 | 263 | 263 | 263 |
| CAPACITY (Ltrs) | 660 | 1494 | 2250 | 2900 | 3700 |
| SALT (Kg) per regeneration | 0.7 | 1.5 | 2.4 | 2.8 | 3.5 |
| WATER PRESSURE | Minimum 1.5 Bar. Maximum 4.0 Bar | | | | |
| WATER TEMPERATURE | Maximum 35°C. 60°C. Protect from freezing. | | | | |
| ELECTRICAL SUPPLY | 24/240v VAC 3 amps - must be on a maintained supply (constant) | | | | |
| CONNECTIONS | ¾ inch inlet and outlet (other fittings available on request) Adequate drainage and overflow facilities required. | | | | |




Duplex configuration for 24 hour supply




Simplex configuration

| SIMPLEX & DUPLEX WATER SOFTENERS (Cold, Hot) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CYLINDER MODEL> | 10 | 14 | 18 | 20 | 23 | 30 HW30 | 40 | 50 HW50 | 60 | 70 | 80 HW80 | 120 | 180 | 250 |
| A (mm) | 652 | 779 | 845 | 982 | 820 | 1109 | 1338 | 1592 | 1440 | 1592 | 1592 | 1831 | 1795 | 2024 |
| B (mm) | 204 | 204 | 238 | 204 | 254 | 254 | 254 | 254 | 305 | 331 | 331 | 356 | 534 | 610 |
| C (mm) | 584 | 584 | 628 | 628 | 800 | 800 | 800 | 870 | 870 | 1060 | 1060 | 1060 | 1080 | 1080 |
| D (mm) | 324 | 324 | 444 | 444 | 465 | 465 | 465 | 560 | 560 | 560 | 560 | 560 | 755 | 755 |
| CAPACITY (Ltrs) | 1494 | 2278 | 2929 | 3255 | 3743 | 4882 | 6643 | 8304 | 9965 | 11625 | 13286 | 19930 | 29895 | 41520 |
| SALT (Kg) per regeneration | 1.5 | 2.4 | 2.8 | 3 | 3.5 | 4.2 | 5.6 | 7 | 8 | 9.5 | 10.5 | 16 | 23.5 | 32 |
| Minimum 1.5 Bar. Maximum 4.0 Bar | | | | | | | | | | | | | | |
| Maximum 35°C. 60°C. Protect from freezing. | | | | | | | | | | | | | | |
| 24/240v VAC 3 amps - must be on a maintained supply (constantly connected) | | | | | | | | | | | | | | |
| ¾ inch to 2 inch, dependant on unit size (other fittings available on request) Adequate drainage and overflow facilities required. | | | | | | | | | | | | | | |

European Water Care, Regal House, South Road, Harlow, Essex, CM20 2BL Tel: 01279 780250 E-mail info@watercare.co.uk www.watercare.co.uk