

INDUSTRIAL WATER SOFTENER

(from 3,2 to 21 m³/h)

OPERATING PRINCIPLE

Water softeners modify the physical and chemical composition of water, reducing both calcium and magnesium, which cause scaling.

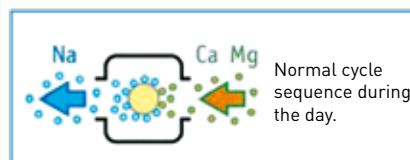
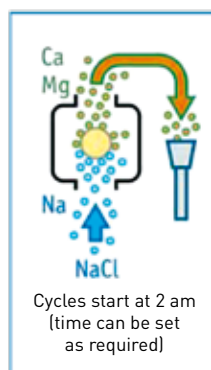
The water to be softened transits through ion exchanging resins (strong cationic resins), which change the calcium and/or magnesium into sodium.

The water delivered by the softener no longer causes scaling, and has become 'soft'.

The purpose of the water softener is to provide maximum protection against scaling in pipes and other equipment. As the water passes through, the resins become saturated with calcium and magnesium.

A regeneration cycle is then necessary, to recharge the resins in sodium ions, from a sodium chloride solution or brine (salt and water), which the softener takes from the salt box. Regeneration is activated automatically, during the night, by an automatic system integral with the softener head. Regeneration can be activated in 2 ways:

- based on volumes consumed (volume mode),
- based on time interval (time mode).



FIELDS OF APPLICATION

Industrial softeners are designed for any installation treating large volumes and flows. They can be installed on systems with one or more water points.

The most frequent installations are in: hotels, industrial plants (process/general system), schools, etc, community buildings, medical sector (hospitals, clinic, retirement homes).

Softeners are installed on pipes carrying cold water that is to be heated to provide sanitary hot water, in all public or community buildings (public health laws).

MAJOR ADVANTAGES of the softener

- A softener maintains protected systems at their nominal performance levels (boilers, panel exchangers, washing tunnels, osmosis units, kitchens (oven and dish washer), sterilising equipment and sanitary wear).
- A softener is also recommended for optimum operation of Jacuzzis, Turkish baths and hydrotherapy.
- The softener is adjusted electronically, to ensure optimum efficiency and minimum salt and water consumption.

TECHNICAL CHARACTERISTICS

- Noryl or bronze head, electronic volume measurement.
- Regeneration: 5 phases.
- Electrical system: 24 V 50 Hz (transformer supplied).
- Service pressure: 2 to 8 bars.
- Service temperature: 2 to 40 °C.
- Supplied with salt box floor and dual safety float.
- Supplied with remineralising (mixing) valve compatible with the installation.
- Food grade resin, approved by the Ministry of Health.

SOFTENER SIZING

CWTI specialists size your softener to ensure safe, effective and reliable operation.

To size the softener, the following parameters must be defined:

- monthly or annual consumption,
- peak rating in m³ per hour,
- incoming water hardness (°F),
- source of water (e.g. public supply, source, pre-treated water, etc.),
- pressure in system (in bars),
- maximum residual hardness (outgoing hardness value required),
- application.

INSTALLATION / MAINTENANCE

- We help you install the equipment, and our technicians manage the initial startup.
- Servicing assistance to ensure a long and reliable life cycle for your installation.
- Resins should be disinfected once or twice per year.
- The salt should be filled, and the level checked regularly.

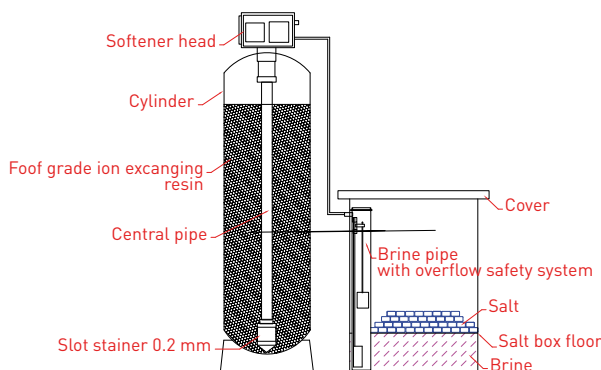
GUARANTEE

1 year parts and labour, excluding consumable items and transport.

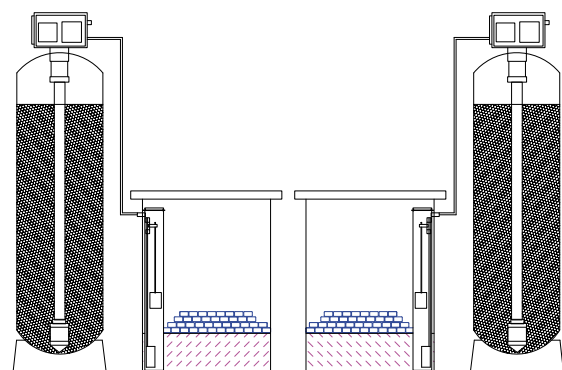
OPTIONS

- Upstream filtering.
- Automatic chlorination by salt electrolysis.
- Low salt level detected by acoustic resonance.
- Initial salt charge.

SIMPLE CONFIGURATION



2-HEAD DUPLEX CONFIGURATION



Part number	Softener type	Resin volume (l)	Cylinder size (")	Exchange capacity (°F x m ³)	Salt box volume (l)	Salt box dimensions (Ø x h/mm)	Peak rating* (m ³ /h)
Q342011001	Simplex	50	10 x 54	275	150	530 x 800	3,2
Q342012001	Simplex	75	13 x 54	412,5	150	530 x 800	4,6
Q342013001	Simplex	100	14 x 65	550	200	555 x 980	6,2
Q342009001	Simplex	125	16 x 65	687,5	300	685 x 975	7,2
Q342014001	Simplex	150	16 x 65	825	300	685 x 975	8
Q342015001	Simplex	50	10 x 54	275	150	530 x 800	3,2
Q342016001	Simplex	75	13 x 54	412,5	150	530 x 800	4,6
Q342017001	Simplex	100	14 x 65	550	200	555 x 980	6,2
Q342018001	Simplex	150	16 x 65	825	300	685 x 975	9
Q342019001	Simplex	200	18 x 65	1100	300	685 x 975	10,5
Q342003001	Simplex	250	21 x 60	1375	300	685 x 975	12
Q342004001	Simplex	300	24 x 69	1650	400	860 x 900	16
Q342020001	Simplex	400	30 x 72	2200	500	875 x 1110	21
Q342021001	Duplex	2 x 50	10 x 54 (x 2 cylinders)	550	150	530 x 800	3,2
Q342001001	Duplex	2 x 75	13 x 54 (x 2 cylinders)	825	150	530 x 800	4,6
Q342005001	Duplex	2 x 100	14 x 65 (x 2 cylinders)	1100	200	555 x 980	6,2
Q342010001	Duplex	2 x 125	16 x 65 (x 2 cylinders)	1375	200	555 x 980	7,2
Q342006001	Duplex	2 x 150	16 x 65 (x 2 cylinders)	1650	300	685 x 975	8
Q342022001	Duplex	2 x 200	18 x 65 (x 2 cylinders)	2200	300	685 x 975	10,5
Q342007001	Duplex	2 x 250	21 x 60 (x 2 cylinders)	2750	400	860 x 900	12
Q342023001	Duplex	2 x 300	24 x 69 (x 2 cylinders)	3300	400	860 x 900	16
Q342008001	Duplex	2 x 400	30 x 72 (x 2 cylinders)	4400	500	875 x 1110	21

* Consult us for higher ratings.