

# Akiki Engineering Est.

 $Water \ \mathcal{E} \ Steam \ Experts$ 



# 1.2. Softening Catalogue

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| Industrial Water Softener |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ! | ٦ |

#### Commercial Water Softener



Akiki Engineering Filtration Series Commercial Softeners constructed based on efficient and economical method for removing feedwater hardness. Fiberglass vessels provide maximum corrosion-resistance and have a five-year warranty. Motor driven brass or Noryl control valves are easily programmed to adapt to specific system requirements. Polyethylene brine tanks, complete with support bed, are durable and corrosion resistant.

Filtration Series Commercial Softener Systems include one fiberglass vessel with a top-mount regeneration controller for 7-day automatic operation and regeneration.

High Capacity cation resin, gravel support bed and one brine tank with air check valve are included with each system.

### Applications:

- Drinking Water
- Ice-Making
- Car Wash Water Reclamation
- Rinse Waters
- Biomedical Applications
- Laboratory Applications
- Photography
- Pharmaceutical Production
- Water used in chemical processes
- Cosmetics
- Restaurants
- Metal Plating Applications
- Water softening for swimming pools and industries
- Synthetic resin based or cement based products

#### Twin systems consist of

- Two vessels
- One meter
- One brine tank
- One top-mount control valve

### Duplex systems consist of

- Two vessels
- One meter
- One brine tank
- Two top-mount control valve

### Operating Specifications:

- Pressure: 30-110 psig
- $\bullet$  Water Temperature: 100F max
- Electric Rating: 220 VAC, 1, 50Hz, 10 watts

#### Options:

- Skid mounted system are preplumbed and wired and include isolation valves on the inlet and outlet
- 7 day time clock
- Volume initiated digital meter for totalized flow
- Volume initiated electromechanical timer controller
- Extra cam and switch for reverse osmosis cut-off
- ASME tank

#### Industrial Water Softener



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Akiki Engineering Filtration Series Industrial Water Softeners reduce the hardness in feedwaters using ion exchange resin. The water softener vessel contains high quality cation resin in the sodium form that removes hardness.

These softeners are available in vessel diameters from 20" through 54" and include polyethylene or fiberglass brine tanks. They are composed of carbon steel vessels with a front-mounted control unit for ease of service. Their backwash is controlled by a brass pilot stager. The stager directs hydraulic or pneumatic pressure to open or close the diaphragm valves. The stager is controlled by an adjustable backwash cycle timer. The diaphragm valve nest piping assembly contains a self-adjusting backwash flow control. Backwash is initiated on either time or differential pressure.

Akiki Engineering Filtration Series Industrial Water Softeners are engineered for 100 psig working pressure and tested at 150 psig. The carbon steel vessels are equipped with a top access port for media loading and 4"x6" hole(s) in the side shell. All vessels are painted for protection against corrosion.

Akiki Engineering Filtration Series Industrial Water Softeners include one carbon steel vessel complete with piping, valves, controller, one media layer and gravel support bed. Duplex systems include two carbon steel vessels with piping, valves, hand controller, media and gravel support bed.

#### Brine Tank

• The virtually indestructible polyethylene rotationally cast brine tank is impervious to rust and corrosion. It is equipped with a heavy duty dust cover to prevent dust and dirt build up and keep corrosive brine fumes in the tank.

## Operating Specifications:

- Capacities based on 15 Lbs. NaCl per cubic foot yielding 30 Kgrains per cubic foot.
- Actual capacity will depend on flow rate, TDS,Na: hardness ratio and other factors.

# Options:

• ASME tank

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