

Membrane Cleaning Skid

CS Series

Cleaning Skid Series



Standard Features

The cleaning skid is designed for manual operation through a local control box located on the skid. A chemical storage tank is mounted on its own stand and connected to the skid with either hard PVC piping or quick disconnect fittings and flexible hoses. This gives the unit the ability to be mounted in a permanent location or totally portable if desired. The piping is schedule 80 PVC that is hydrostatically tested at the factory. The electrical enclosure is NEMA 4X. All skid wiring is completed and tested before shipment.

- Skid mounted unit
- Chemical solution tank with cover
- PVC piping
- 316L Stainless cleaning pump
- 5 micron cartridge filter with stainless steel housing (CS8) or polypropylene (CS4)
- Local flow meter
- Tank level switch (CS 8)
- 220V/1Ph/60Hz or 460V/3Ph/60Hz

Available Options

- 220V/1Ph/50Hz or 380-415V 3Ph 50Hz
- pH Controller
- Electric heater for chemical tank with temperature controller
- Flexible hoses for cleaning connection
- Wheel mounted skids for smaller units
- Mixer

Applications

- Membrane cleaning
- Descaling

Membrane Cleaning Chemicals

Acid and alkaline cleaning chemicals are most commonly used for membrane cleaning. Acid cleaners are designed to remove inorganic and iron deposits. Acid cleaning should be performed at a pH of about 2. Alkaline cleaners are designed for removal of biological matter, organic foulants, and silica deposits. Alkaline cleaning is performed at a pH of about 12.

Membrane Cleaning Process

Reverse Osmosis membrane elements can experience a decline in performance due to the accumulation of deposits on the membrane surface. Mineral scale, colloidal particles, biological matter, and insoluble organic compounds are the usual causes of membrane fouling. When production of a Reverse Osmosis system drops by at least 10 percent, or the differential pressure increases by 15 percent (over normal operating conditions), membrane cleaning should be performed. The following is a summary of the design of Pure Aqua, Inc. cleaning stations and cleaning chemicals. More details instructions are available in the Operating and Maintenance manual for the Pure Aqua, Inc. Cleaning Stations.

Model No.	Number of pressure vessels to be cleaned at a time	Pipe Material	Pipe Size	Tank Capacity	Shipping Weight
CS4-1	1 (4")	Schedule 80 PVC	1"	50	300
CS4-2	2 (4")	Schedule 80 PVC	1"	100	350
CS4-3	3 (4")	Schedule 80 PVC	1"	150	375
CS8-1	1 (8")	Schedule 80 PVC	1.5"	150	500
CS8-2	2 (8")	Schedule 80 PVC	1.5"	200	600
CS8-3	3 (8")	Schedule 80 PVC	2"	300	700
CS8-4	4 (8")	Schedule 80 PVC	2"	360	800
CS8-5	5 (8")	Schedule 80 PVC	2"	500	900
CS8-6	6 (8")	Schedule 80 PVC			