



## CIP System (Online Membrane Cleaning)

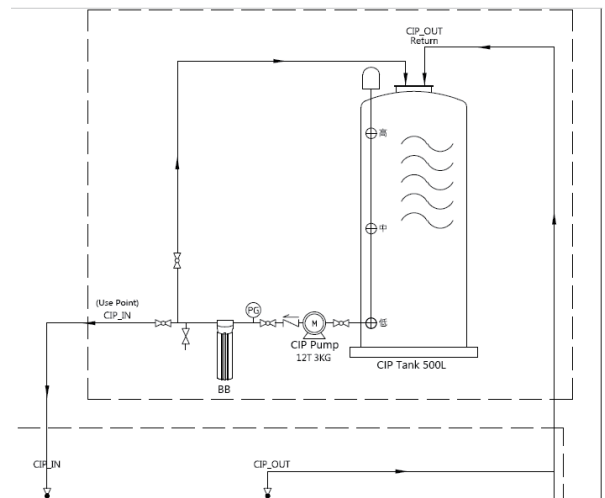
Membrane cleaning systems are compatible with all RO systems, efficiently cleaning membranes without removal, thus maximizing performance and prolonging membrane lifespan.

In cases of severe clogging and scaling in the reverse osmosis system, online cleaning is employed. The CIP cleaning device not only conducts online cleaning but also conducts pre- and post-cleaning membrane tests, showcasing the cleaning effectiveness and membrane performance recovery to customers visually.



### Features

- With separate acid and alkali chemical tanks, chemical usage is minimized.
- The system utilizes SCH80 PVC piping and SUS#316 materials for durability.
- Routine membrane cleaning restores over 95% of RO membrane functionality, and the device is easily managed by personnel.



### Application

When should you be alerted to system abnormalities and need to review and clean the system?

- A reduction in reverse osmosis water production by over 20% under normal water supply pressure.
- TDS increases exceeding 10% or a removal rate below 95%.
- 15% increase in the pressure difference between feed and wastewater within the initial 24-48 hours of operation.
- 10-15% drop in water production volume under normal water supply pressure compared to standard values.
- 10-15% increase in water supply pressure after temperature correction to maintain normal water production.
- 10-15% decline in produced water quality and a corresponding increase in salt permeability.
- 10-15% rise in water supply pressure.

There is a significant increase in pressure differential between sections of the system (there may be no instrumentation monitoring this parameter).

In the case where the operating data is not standardized, the above cleaning principles can still be applied if the key parameters have not changed.