



With you at every step



Keep up with COVID-19 by taking the right measures for your Water Treatment Equipment and Multiple Effect Evaporator



Bringing you knowledgeable insights and information that will keep your Water Treatment Equipment and Multiple Effect Evaporator up and running during and post lockdown period. Kindly refer to the Standard Operation Procedures (SOP) for the equipment that is applicable to you.

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Shut Down Preservation Procedure for UF Membranes

A	LONG TERM SHUT DOWN (More than 7 Days)
1	Where applicable, carry out Manual Air Scouring for 120 s
2	Carry out a CIP or Manual CEB (Chemical Enhanced Backwash) with Caustic Chlorine (200 mg/l @11.5 pH).
3	Soak for 1-2 h
4	Carry out Top & Bottom Backwash for 60-90 s or till backwash effluent is clear.
5	Carry out forward flushing for 30 s.
6	Repeat Step 2-5 with HCl @ pH 2
7	Flush the CIP Tank thoroughly. Prepare 1 -1.5 % SMBS solution in the CIP Tank with UF Permeate Water. For Example: For 100 L of Water, 1 to 1.5 Kg of SMBS powder is to be added. Ensure the solution is mixed till it is dissolved completely.
8	Drain the UF modules completely and then Recirculate the Preservative Solution (from permeate side) through the UF system for 15- 20 min.
9	Alternately, the preservative solution can also be prepared in a known volume of water in the RO CIP tank and the solution can be manually introduced through the permeate port.
10	Close all valves including all sample valves: This step will isolate the system and prevent any ingress of air into the system. In case of 9 above, ensure to fully box up the system.
11	Check the pH of the preservative solution once a week. When the pH become lower than 3 change the solution
12	Change the preservation solution once in a month
13	Before restarting system, flush out with feed water (in forward flush mode) for 60-90 min till all traces of preservative are removed.
B	SHORT TERM SHUT DOWN (< 7 Days)
1	Carry out CIP or CEB as per steps 1-6 above.
2	Carry out forward flushing for 15 min daily
NOTE	<i>Shut down preservation procedures must be strictly followed to prevent irreversible changes during long term shut down. TL will not be responsible for any loss of productivity or performance caused by the non-implementation of the proper shutdown preservation procedures and guidelines.</i>