

Biopuremax Added Value

Electrolytic Scale Reduction (ESR™)

- No waste brine
- No salt and salt handling
- No organic resins
- No backwash or regeneration

Hydro Optical Dechlorination (HOD™) by UV

- No ACF - no biofilm
- No SBS - no chemical handling
- Environmentally safe

Complete Hot Water Sanitization for total system

- RO Pretreatment fully fabricated of SS316L
- The most straightforward and effective solution
for killing bacteria

CBR™ – Continuous Bioburden Reduction

Biopuremax Pretreatment Technology

Electrolytic Scale Reduction (ESR™)

An elegant solution that replaces both ion exchange softeners and antiscalant chemicals.

An electrical current generates a high pH near the cathode which deposits scale in the reaction chamber and releases CO₂.

Hydro Optical De-Chlorination (HOD™)

Treats the ESR water, by exposure to ultra violet radiation which decomposes the free chlorine and destruction of micro-organisms.



Complete System Supply

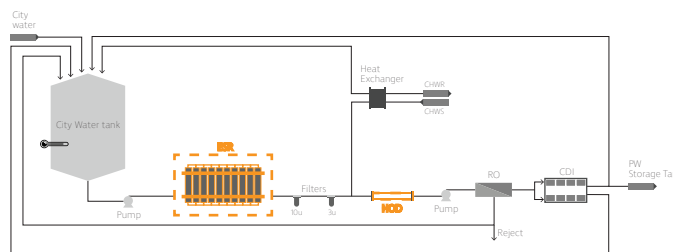
Standard configuration feed water specifications

Total Hardness (as CaCO₃): 80-200 ppm
 Chlorides: 10-100 ppm
 Iron: <0.2 ppm
 SDI < 3 ppm
 Chlorine < 1.0 ppm
 Chloramine < 0.25 ppm
 Silica: <10 ppm
 Manganese: <0.02 ppm
 CO₂: <20 ppm
 Conductivity: 200-500
 pH: 6.5 - 8.0

Note

Feed water specifications are for standard systems, the Biopuremax can be configured for nearly any type of feed water including high levels of incoming silica, iron and manganese.

Chemical and Media Free PW/WFI Production System PFD



Performance

Parameter	Feed water	After Biopuremax
Total Count (cfu/ml)	< 500	< 10
Pseudomonas (per ml)	0-10	0
E-Coli (per ml)	0-100	0
Coliforms (per ml)	0-100	0

PW capacity		Foot print		Operating weight (not including electrical cabinet)		Electrical	Chilled water (supply at 7°C, 45°F), cool after sanitization 3 Hrs		Steam 7 barg (sanitization heat up 2 Hrs)	
L/hr	gpm	mm x mm	ft.	Kg	lbs	kW	1000 Kg/Hr	1000 Lb/Hr	Kg/Hr	Lb/Hr
500	2.2	1,550x1,490	5.0'x4.9'	840	1,848	2.5	5.7	12.5	75	275
1,000	4.4	1,550x1,490	5.0'x4.9'	1,010	2,222	2.5	6.8	15.0	75	330
2,000	8.8	1,550x1,940	5.0'x6.4'	1,565	3,441	2.5	9.1	20.0	100	440
3,000	13.2	1,550x1,940	5.0'x6.4'	1,590	3,498	3.2	11.3	25.0	100	550
4,000	17.6	2,050x1,940	6.7'x6.4'	2,010	4,422	3.2	11.3	25.0	120	550
5,000	22.0	2,050x1,940	6.7'x6.4'	2,010	4,422	4.3	11.3	25.0	120	550
6,000	26.4	2,300x1,940	7.5'x6.4'	2,265	4,983	4.3	11.3	25.0	120	550
7,000	30.8	2,300x1,940	7.5'x6.4'	2,335	5,137	4.3	11.3	25.0	120	550
8,000	35.2	1,550x3,500	5.0'x11.5'	2,860	6,292	5.8	12.5	27.4	150	605
9,000	39.6	1,550x3,500	5.0'x11.5'	2,860	6,292	5.8	12.5	27.4	150	605
10,000	44.0	1,550x3,500	5.0'x11.5'	2,860	6,292	5.8	12.5	27.4	150	605
15,000	66.0	1,800x3,500	5.9'x11.5'	3,840	8,448	8.4	14.7	32.4	200	715
20,000	88.0	1,800x3,500	5.9'x11.5'	4,070	8,954	14.4	14.7	32.4	200	715

Note

The above data is pretreatment for single pass RO, if double pass RO is needed please state.