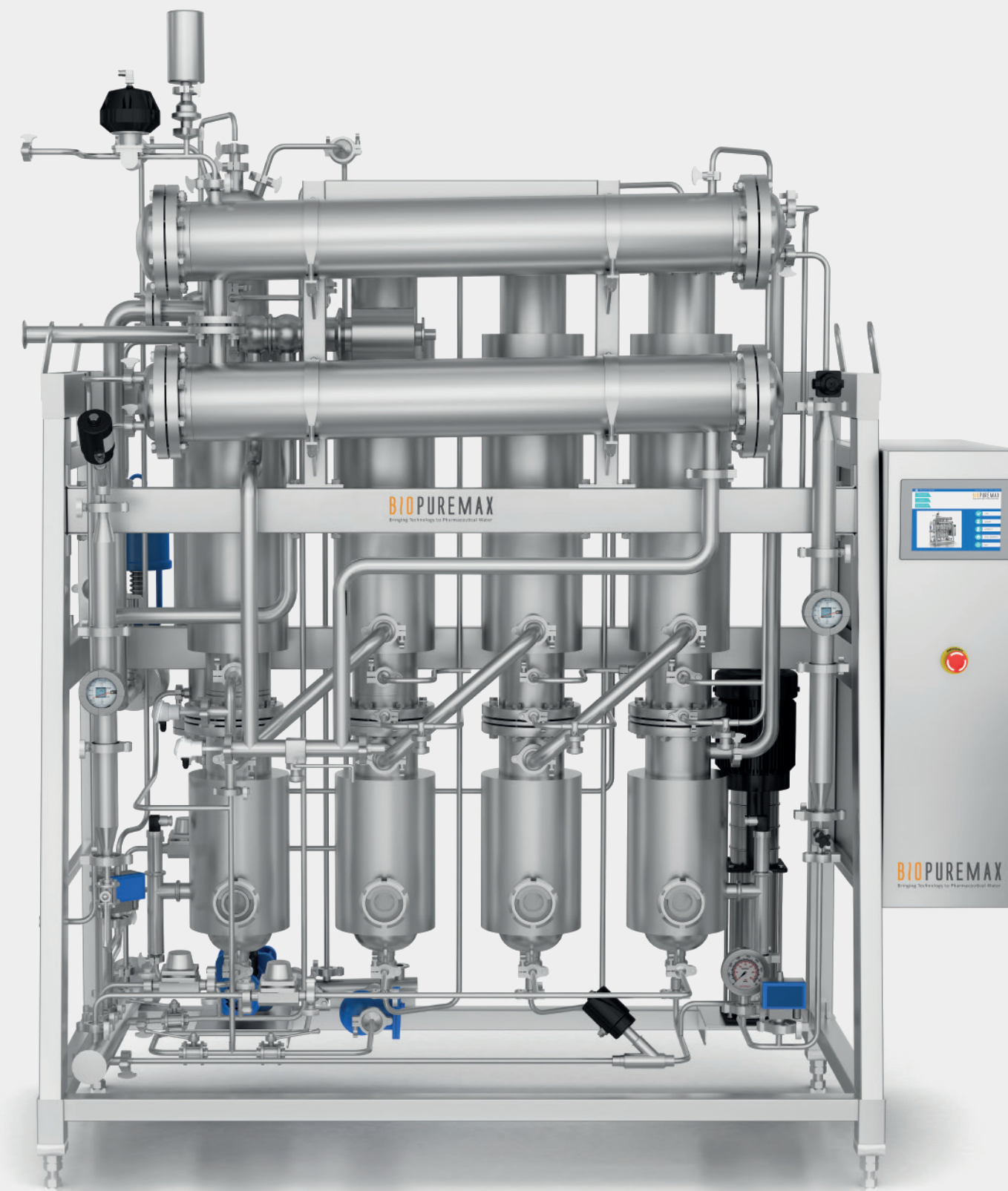


BIOPUREMAX

Bringing Technology to Pharmaceutical Water

Water for Injection Generation
Systems for the Pharma and
Biotech Industry

Biopuremax brings over 30 years of expertise in pharmaceutical water systems. We specialize in PW/WFI/PS for the pharma and biotech industries.



Multi Effect Distillation

Unique Pyrogen Removal System

Biopuremax's multi-effect distillation, features pyrogen removal processes: advanced centrifugal separation and specialized separators with a unique purging system. This ensures endotoxin reduction of more than 3 Log.

Biopuremax Multi Effect Distillation system advantages

- Effective pyrogen removal
- Compact design
- Integral Non-Condensable Gas Removal
- Low Maintenance
- CFR 21 part 11 and Annex 11 compatibility
- Meets USP, EP, JP and ANVISA standards

State-of-the-Art Pure Steam Generation system

Biopuremax multi-effect distillation system uses tube-and-shell heat exchangers with falling-film evaporation, ensuring every drop of water reaches the needed temperature. The separation of pyrogenic load is done by centrifugal action generated during upward flow of the steam.

Key Features:

- First Column Double Tube Sheet
 - Crevice-free construction to prevent bacterial growth
 - Two terminal cGMP coolers
 - Siemens/Allen Bradley PLC-based operation with interlocks and validated logic
 - Comprehensive documentation package
 - Full AISI 316L stainless steel construction
- Orbital-welded piping joints
 - Pharma-grade PTFE, silicone gaskets
 - Electro-polished piping with orbital welding and sanitary fittings
 - Full validation package: DQ-IQ-OQ with computer software validation
 - Rockwool insulation, clad in AISI 304 stainless steel

Model	No. of Columns	Plant Steam 3 to 6 barg (143°C to 165°C)					Plant Steam @ 8 barg (175°C)					Dimensions mm			Electrical Load (kW)	Weight-Kg (Dry)	WFI Outlet Height-mm
		WFI-LPH	Steam Kg/Hr	Feed water - LPH	Cooling water - LPH	Weight-Kg (Oper.)	WFI-LPH	Steam Kg/Hr	Feed water - LPH	Cooling water - LPH	Weight-Kg (Oper.)	Height	Length	Width			
80	4	80	37	92	140	900	N.A	N.A	N.A	N.A	N.A	2300	2200	1050	2	600	1300
150	4	150	69	172	225	1290	284	131	326	426	1750	2700	2200	1050	2	775	1900
	7	N.A	N.A	N.A	N.A	N.A	284	115	326	85	1580	2700	3325	1050	2	1000	1900
300	4	300	138	345	420	2045	568	261	653	795	2930	2500	2450	1100	2	1050	1800
	7	N.A	N.A	N.A	N.A	N.A	568	230	653	159	2525	2500	3800	1100	2	1375	1800
500	5	500	135	575	650	3000	918	248	1055	1193	4250	3100	2550	1250	2	1500	2250
	8	N.A	N.A	N.A	N.A	N.A	918	218	1055	239	3790	3100	3900	1250	2	2125	2250
700	5	700	189	805	910	3995	1200	324	1379	1560	5490	2900	3050	1400	2	1900	2400
	8	N.A	N.A	N.A	N.A	N.A	1200	285	1379	312	4900	2900	4550	1400	2	2725	2400
1000	5	1000	270	1149	1300	5545	1918	518	2205	2493	8290	3400	3425	1500	2.5	2550	2700
	8	N.A	N.A	N.A	N.A	N.A	1918	456	2205	499	7180	3400	5075	1500	2.5	3700	2700
1500	5	1500	405	1724	1950	7340	2750	743	3161	3575	11080	3750	3425	1500	2.5	2850	3000
	8	N.A	N.A	N.A	N.A	N.A	2750	654	3161	715	9085	3750	5075	1500	2.5	4100	3000
2000	6	2000	460	2299	1500	8885	3834	882	4407	2876	13185	3700	4300	1500	5	4200	2900
	8	N.A	N.A	N.A	N.A	N.A	3834	794	4407	575	11855	3700	5650	1500	5	5500	2900
3000	6	3000	690	3448	2160	13330	5500	1265	6322	4125	19285	4100	4700	1600	5	6400	3300
	8	N.A	N.A	N.A	N.A	N.A	5500	1139	6322	825	17515	4100	6150	1600	5	8400	3300
5000	6	5000	1150	5747	3000	21590	9584	2204	11016	5900	31735	4500	5650	1850	5	10700	3600
	8	N.A	N.A	N.A	N.A	N.A	9584	1984	11016	1180	29400	4500	7250	1850	5	13800	3600