

# BIO PUREMAX

Bringing Technology to Pharmaceutical Water

## Pure Steam 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.



Pure Steam Generator

## Pure Steam Generation System

Biopuremax's Pure Steam Generation unit 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 Pure Steam Generation system advantages

- Effective pyrogen removal
- Compact design
- Reduced complexity with inbuilt
- Non-Condensable Gas Removal
- Low Maintenance
- Easy operation
- CFR 21 part 11 and Annex 11 compatibility
- Meets USP, EP, JP and ANVISA standards

## State-of-the-Art Pure Steam Generation system

Biopuremax Pure Steam Generator 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:

- Double tube sheet for heat exchangers and pre-heaters
- Crevice-free construction to prevent bacterial growth
- 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
- Pure steam sampling with built-in heat exchanger
- Electro-polished piping with orbital welding and sanitary fittings
- Rockwool insulation, clad in AISI 304 stainless steel

PSG Model	Dimensions					Pure Steam Outlet Height	Output Capacity (Kg/Hr) @3 barg	Consumption Data @6 barg Industrial steam			Electricity (kW)
	Length mm	Depth mm	Height mm	Weight (Dry) Kg	Weight (Oper.) Kg			Steam Consumption KPH	Feed Water LPH 25°C	Cooling Water LPH 25°C	
100 PSGS	1375	1175	2700	450	540	2000	100	115	105	40	2
150 PSGS	1450	1250	2500	560	672	1745	150	175	157.5	40	2
300 PSGS	2100	1350	2800	600	720	890	300	345	345	40	2
500 PSGS	2100	1500	2950	770	924	1050	500	575	575	40	2
750 PSGS	2100	1500	3200	850	1020	1000	750	865	865	40	2
1000 PSGS	2050	1600	3350	940	1128	930	1000	1150	1150	40	2
1500 PSGS	2800	2000	4000	1350	1620	1950	1500	1800	1725	40	2
2000 PSGS	2950	2000	3850	1457	1749	1200	2000	2400	2300	40	2
3000 PSGS	2985	2715	4035	1500	1800	1380	3000	3600	3450	40	2

- **Compressed Air:** Flow of 5 CFM @ 6 Kg/cm2 pressure
- **Main Drain:** **100–1500 PSGS:** Ø152 mm flange – 3” OD piping | **2000 PSGS:** Ø190 mm flange – 4” OD piping | **All other drains:** Ø108 mm flange – 2” OD piping
- **Weight:** Is approximate considering standard equipment