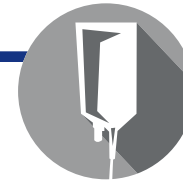


# PSG-2500

## PURE STEAM GENERATOR



The new Aqua-Chem Pure Steam Generator design incorporates the quality, performance and reliability that have made us an industry leader, into a more economically competitive package. Our design incorporates double tubesheet evaporators with a new baffled, tangential steam entry centrifugal separator (i.e. thermos syphon) design to provide pure, dry steam for your Life Science applications per USP 23 requirements for water-for-injection.

Simple. Effective. Reliable. Aqua-Chem.



### STANDARD FEATURES

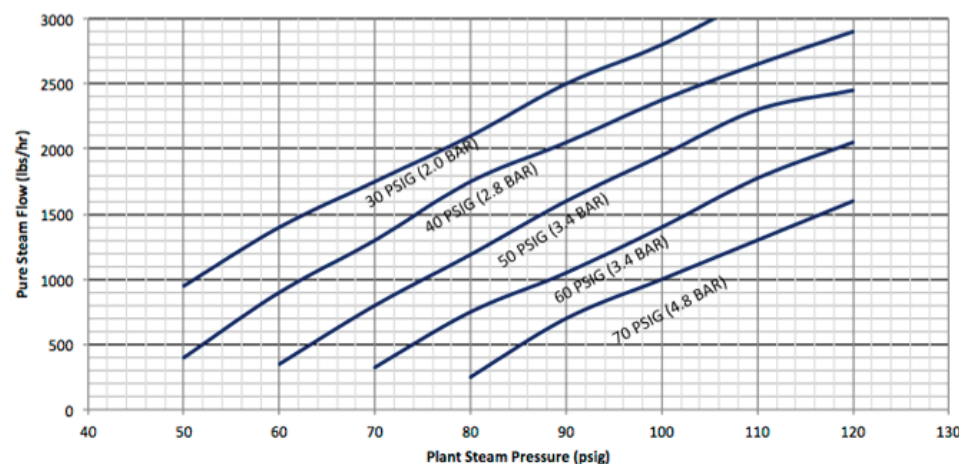
- Thermo-syphon separator section creates max centrifugal force for elimination of remaining water droplets
- PID Level Control for optimal feedwater level control
- Double tubesheet evaporator and heat exchanger(s) for long term reliability
- New evaporator gasket design improves seal integrity and life
- Shell-side evaporation design ensures heat transfer surface will resist the formation of scale
- Submerged-tube, rising-film design eliminates dry tube "hot spots"
- 304 SST Frame and Supports
- Fully automated control, with central control system integration capability

### OPTIONS & UPGRADES

- Feedwater pump
- Feedwater conductivity monitoring
- Pure steam sample cooler
- Plant Steam control valve
- Electropolished feedwater and pure steam product contact surfaces
- Epoxy-coated carbon steel frame
- Insulation of all hot surfaces
- Validation (IQ/OQ) Package

MODELS		PSG-2500				
DESIGN						
Nominal Capacity, lb/hr (kg/hr) <sup>1,2</sup>		2,900 (1,315)				
Design Type		Straight Tube (Double-Tube Sheet) Vertical Thermosiphon Reboiler, TEMA BEM Shell with Single-Segmental Baffles				
Feedwater Quality		No Hardness, Chlorine, or Amines Silica: < 1ppm Conductivity: < 10 µS/cm				
Feedwater Flow		110% of Pure Steam Output				
Feedwater Pressure		P				
PLANT STEAM PRESSURE	PURE STEAM PRESSURE					
PSIG (BAR)	30 (2.0)	40 (2.8)	50 (3.4)	60 (4.0)	70 (4.8)	
50 (3.4)	950	400				
60 (4.0)	1400	900	350			
70 (4.8)	1750	1300	800	325		
80 (5.5)	2100	1750	1190	750	250	
90 (6.2)	2500	2050	1600	1050	700	
100 (6.9)	2800	2375	1950	1400	1000	
110 (7.6)	3175	2650	2300	1775	1300	
120 (8.3)		2900	2450	2050	1600	

OUTPUT PRESSURE CURVE



<sup>1</sup>Capacity based upon max plant steam pressure at 50psig pure steam outlet pressure  
<sup>2</sup>Based upon 70°F (21°C) feedwater temperature