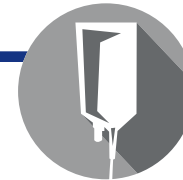


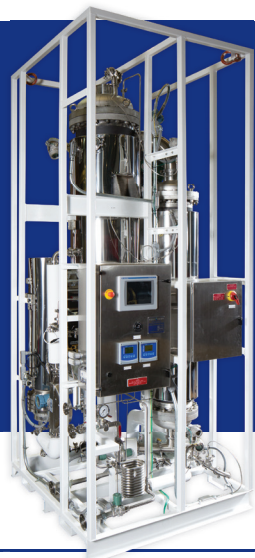
# PSG-7500

## 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

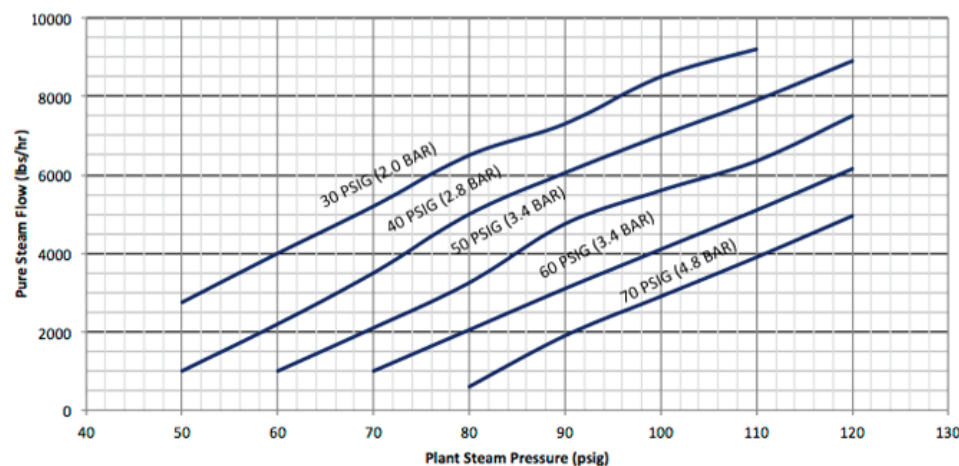
- Thermo-syphon separator section creates max centrifugal force for elimination of remaining water droplets
- PID Level Control for optimal feedwater level control
- Double tubesheet evaporator and heat exchanger(s) for long term reliability
- New evaporator gasket design improves seal integrity and 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-7500				
DESIGN						
Nominal Capacity, lb/hr (kg/hr) <sup>1,2</sup>		7,500 (3,402)				
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)	2750	1000				
60 (4.0)	4000	2200	1000			
70 (4.8)	5200	3500	2100	1000		
80 (5.5)	6500	5000	3250	2050	600	
90 (6.2)	7300	6050	4750	3100	1900	
100 (6.9)	8500	7000	5600	4100	2900	
110 (7.6)	9200	7900	6350	5100	3900	
120 (8.3)		8900	7500	6150	4950	

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