

Pure Steam Generator

Overview:

- Built to the exacting standards of the pharmaceutical industry and cGMP requirements.
- Wide range of sizes in both vertical and horizontal configurations available to fit your unique requirements.
- All components manufactured by MECO in the U.S. using the most advanced methods for design and fabrication.
- Supported by MECO 24-hour customer service and MASTERSupport Online Service Center
- Backed by warranty.
- Vertical design / Minimal floorspace needed for vertical generators.

Vertical Product Highlights:

• Superior Design

- Vertical natural circulation evaporators
 - Scale effects reduced
 - Uniform wetting and heat transfer
- Meets/exceeds cGMP/USP standards
 - Sanitary construction and connections
 - Double tubesheet heat exchangers
 - Sloped piping and low point drains
 - Minimum deadlegs

• Superior Control

- PLC based control system
- PID loop control of feedwater level
- PID loop control of pure steam pressure
 - Allow 100% capacity turndown
- Horizontal design
- Perfect alternative when overhead space is limited



Horizontal Product Highlights:

• Superior Design

- Horizontal submerged tube arrangement
- Removable tube bundle
- Uniform wetting and heat transfer
- Meets/exceeds cGMP/USP standards
- Sanitary construction and connections
- Double tubesheet heat exchangers
- Sloped piping and low point drains
- Minimum deadlegs

• Superior Control

- PLC based control system
- PID loop control of feedwater level
- PID loop control of pure steam pressure
- Allow 100% capacity turndown

• Design Details

- 25 Ra standard process contact surfaces
- Galvanized rigid steel conduit
- Stainless steel airlines
- Blowdown cooler
- Mirror finish stainless steel cladding

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VERTICAL -Plant steam/pure steam pressure (psig)						
Model	100 / 60 lbs/hr	100 / 40 lbs/hr	110 / 60 lbs/hr	110 / 40 lbs/hr	120 / 40 lbs/hr	120 / 60 lbs/hr
CS280V	190	280	240	280	280	280
CS550V	300	480	370	550	440	560
CS800V	470	730	610	800	650	940
CS1700V	1150	1700	1430	1700	1700	1700
CS3000V	1930	3000	2430	3000	2880	3000
CS4000V	2740	4050	3420	4050	4060	4050
CS6600V	4300	6620	5370	6620	6340	6620
CS8100V	6440	8100	8000	8100	9440	8100
HORIZONTAL -Plant steam/pure steam pressure (psig)						
Model	100 / 60 lbs/hr	100 / 40 lbs/hr	110 / 60 lbs/hr	110 / 40 lbs/hr	120 / 60 lbs/hr	120 / 40 lbs/hr
CS5900H	2780	5220	3520	5950	4270	6660
CS10000H	4720	8900	6000	10130	7270	11310
CS13000H	6400	12040	8110	13680	9810	15310

Utility Steam Consumption, lbs/hr: 110% of pure steam output; Feedwater, lbs/hr: 110% of pure steam output; Feedwater Pressure, psig: 12-15 psig above pure steam pressure; Feedwater Quality: Hardness: None/Conductivity: <10µs/cm/Silica: <1.0 mg/lit; Feedwater Temperature: 70°F

