

Genpro STS

Steam-to-Steam Pure & Clean Steam Generators



Purpose-Built for Demanding Sterile Production

The Genpro STS is configured to support your specific production requirements, whether you need to feed a single sterilizer, serve as a centralized steam source, meet WFI-quality output standards, or support clean room humidification. Built to your exact capacity and utility requirements, the Genpro STS delivers tight clean steam output pressure control and steam quality you can trust, backed by a comprehensive documentation package and our expert US-based field service team.

- ASME pressure vessel with 316L stainless steel construction.
- 316L stainless steel piping and valves.
- Non-proprietary components throughout.
- Single or double-tube-sheet construction.
- Capacities from 50 lbs/hr up to 5000 lbs/hr.
- Fully drainable design with automatic blowdown system.
- Allen-Bradley or Siemens PLC Controls
- Available in cGMP, laboratory, or food-grade configurations.



Biopharma

Pure and clean steam is a critical utility in pharmaceutical and biotech manufacturing, supporting equipment sterilization, aseptic filling, and sterile production environments.



CDMO

Contract manufacturers operating multiple sterilizers or pieces of process equipment rely on the Genpro STS as a centralized pure or clean steam source, delivering consistent steam quality across every point of use.



Food

Food and beverage production relies on clean steam for sterilization-in-place, direct steam injection into food products, and sterilizing processing equipment where chemical contamination is not an option.



Beer

breweries use clean steam for keg decontamination, eliminating the chemical residues and contamination risks associated with plant steam or chemical cleaning methods.

Intelligent Controls for Precise Steam Management

Industrial-grade PLC controls continuously monitor steam pressure and temperature to maintain consistent output. Optional feedwater and steam conductivity monitoring provides an additional layer of steam quality oversight for applications requiring documented compliance.

Allen-Bradley or Siemens PLC controls maintain precise steam pressure and temperature throughout operation.

Touchscreen HMI with optional secondary panel provides intuitive real-time monitoring and control with remote operation capability.

Integrated data recording and automatic fault monitoring maintains a traceable log of system data and alerts operators to process anomalies before they affect steam quality or production.





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Models	100 PSIG	7 bar	80 PSIG	6 bar	65 PSIG	5 bar
CSG 50	50 lbs/hr	23 kg/hr	34 lbs/hr	15 kg/hr	18 lbs/hr	8 kg/hr
CSG 100	100 lbs/hr	45 kg/hr	68 lbs/hr	31 kg/hr	36 lbs/hr	16 kg/hr
CSG 150	150 lbs/hr	68 kg/hr	102 lbs/hr	46 kg/hr	54 lbs/hr	24 kg/hr
CSG 200	200 lbs/hr	90 kg/hr	136 lbs/hr	62 kg/hr	72 lbs/hr	32 kg/hr
CSG 250	250 lbs/hr	113 kg/hr	170 lbs/hr	77 kg/hr	90 lbs/hr	40 kg/hr
CSG 300	300 lbs/hr	136 kg/hr	204 lbs/hr	92 kg/hr	108 lbs/hr	49 kg/hr
CSG 350	350 lbs/hr	158 kg/hr	238 lbs/hr	108 kg/hr	126 lbs/hr	57 kg/hr
CSG 400	400 lbs/hr	181 kg/hr	272 lbs/hr	123 kg/hr	144 lbs/hr	65 kg/hr
CSG 500	500 lbs/hr	227 kg/hr	340 lbs/hr	154 kg/hr	180 lbs/hr	81 kg/hr
CSG 800	800 lbs/hr	363 kg/hr	544 lbs/hr	246 kg/hr	288 lbs/hr	130 kg/hr
CSG 1000	1000 lbs/hr	454 kg/hr	680 lbs/hr	308 kg/hr	360 lbs/hr	163 kg/hr
CSG 1500	1500 lbs/hr	680 kg/hr	1020 lbs/hr	462 kg/hr	540 lbs/hr	244 kg/hr
CSG 2000	2000 lbs/hr	908 kg/hr	1360 lbs/hr	616 kg/hr	720 lbs/hr	326 kg/hr
CSG 2500	2500 lbs/hr	1134 kg/hr	1700 lbs/hr	771 kg/hr	900 lbs/hr	408 kg/hr
CSG 3000	3000 lbs/hr	1360 kg/hr	2040 lbs/hr	925 kg/hr	1080 lbs/hr	489 kg/hr
CSG 4000	4000 lbs/hr	1814 kg/hr	2720 lbs/hr	1233 kg/hr	1440 lbs/hr	653 kg/hr
CSG 5000	5000 lbs/hr	2268 kg/hr	3400 lbs/hr	1542 kg/hr	1800 lbs/hr	816 kg/hr

*Plant steam heated models @ various plant steam pressures with 45 PSIG clean steam output pressure

Pure Steam. No Additives. No Compromises.

The Genpro STS is available with an optional steam separator for applications requiring pure steam output. The steam separator directs generated clean steam through a tortuous path where residual moisture and impurities are stripped and discharged to drain. When condensed and tested, the resulting pure steam meets U.S. Pharmacopeia (USP) standards and Water for Injection (WFI) requirements, making it suitable for the most demanding sterile production and life science applications.

Steam-to-Steam Operation Overview

Plant steam is utilized as a heat source to transform RO or DI feedwater into pure or clean steam. The plant steam enters the shell side of the heat exchanger, to heat the feedwater within the tubes. As the feedwater heats and evaporates, it travels up the tubes where additional heat removes residual moisture, producing clean, dry, saturated steam at the outlet. Concentrated feedwater and dissolved solids remaining in the vessel are automatically purged via the blowdown system, maintaining consistent feedwater quality and steam output throughout operation.

