

THCS Series Vertical “Clean Pak” Clean Steam Generator Specification

General: Furnish factory packaged vertical steam-to-steam vertical cross flow generator, tested on steam service ready for installation and startup.

Unit shall produce _____ lbs/hr of ____ psig clean steam 99% dry certified when supplied with _____ lbs/hr of ____ psig saturated plant steam.

The steam-to-steam generator shall be ASME Code constructed and stamped with the “UB” stamp, Section VIII for unfired vessels.

The shell shall be constructed of 316L stainless steel with 100% X-Ray of all seam welds per ASME Code and factory insulated with 2” of high-density fiberglass covered with metal jacket.

The internal heating coil shall be .049-wall seamless 316L stainless steel construction, and shall produce clean steam instantaneously without lag.

The tube sheet shall be a 2 Pass configuration and constructed of 316L stainless steel.

The plant steam supply head shall be ASME CODE Stamped fabricated steel.

Clean Steam Generator shall be furnished pre-piped, wired and tested with the following:

- Automatic TDS blowdown control system complete with 316L internal quill, NEMA 1 control panel and automatic surface and bottom blowdown valves in 316L stainless steel w/ jet after cooler, self acting cooling valve and thermometer to cool blowdown.
- Double tandem 316L stainless steel manual bottom blowdown valves
- ASME Section I safety relief valve with stainless steel wetted construction set for full rated capacity of plant steam at 3% overpressure
- 316 Stainless steel vacuum breaker
- Electronic Fail Safe operated pressure control valve with strainer and main drip steam trap. Control valve shall be modulating ball type for dead tight shutoff service.
- High capacity heating coil Float and Thermostatic steam trap complete with strainer and isolation valve
- Makeup water level control system with high and low level alarms (bell), 316 stainless steel control valve, plant steam shutoff system and Building Alarm and Automation Interface. Level controls shall be 316 stainless steel magnorestrictive fail safe type.
- Pressure gauge and temperature control panel
- Unit shall be hydro tested and steam tested prior to shipment with test papers furnished
- U-1 ASME Code Data Sheets furnished on shipment, factory startup provided.

Clean Steam Generator shall be model: THCS Vertical “Clean Pak” as manufactured by Thermaflo Engineering, Inc.