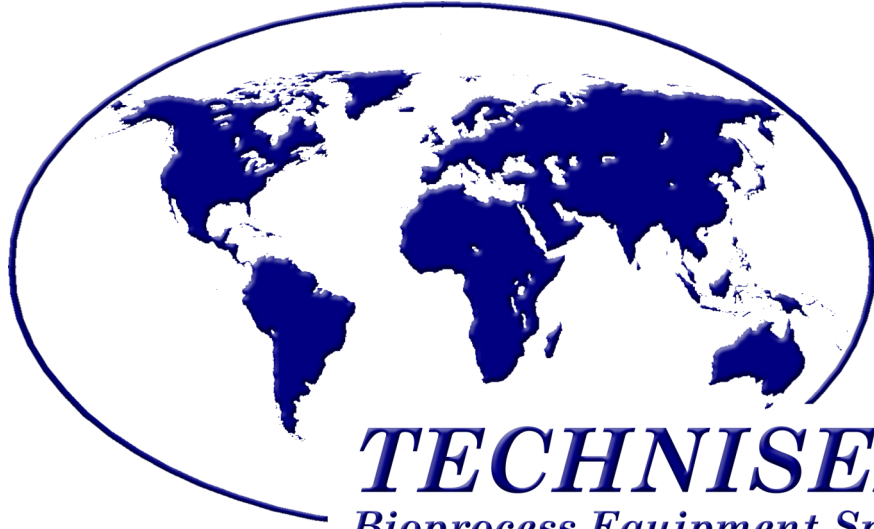
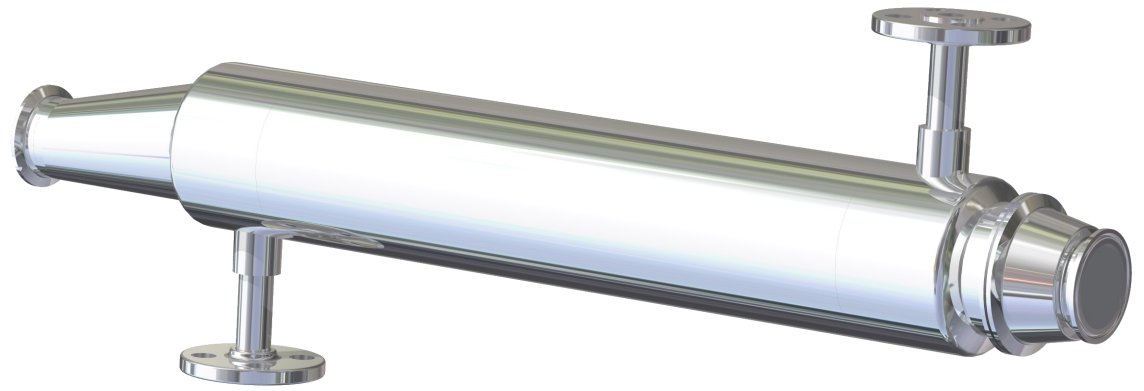


TECHNI-PURE VH High Purity Vent Heater



TECHNISERV, INC.
Bioprocess Equipment Specialists





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TECHNI-PURE VH

High Purity Exhaust Vent Heaters

Techniserv, Inc. is proud to offer the **TECHNI-PURE VH** series Bioreactor and Fermentor exhaust vent heaters to meet the demands of the pharmaceutical and biotech industries. Heating the exhaust gas raises its dew point, minimizing the potential for condensate blocking of the sterile vent filter. The exhaust vent heater provides a degree of foam removal from the gas stream. It also aids during system sterilization, helping maintain clean steam temperature on the path out through the sterile vent filter. With this offering we strive to maintain the consistency of quality, fit, and finish that our customers have come to expect from Techniserv, Inc. products.

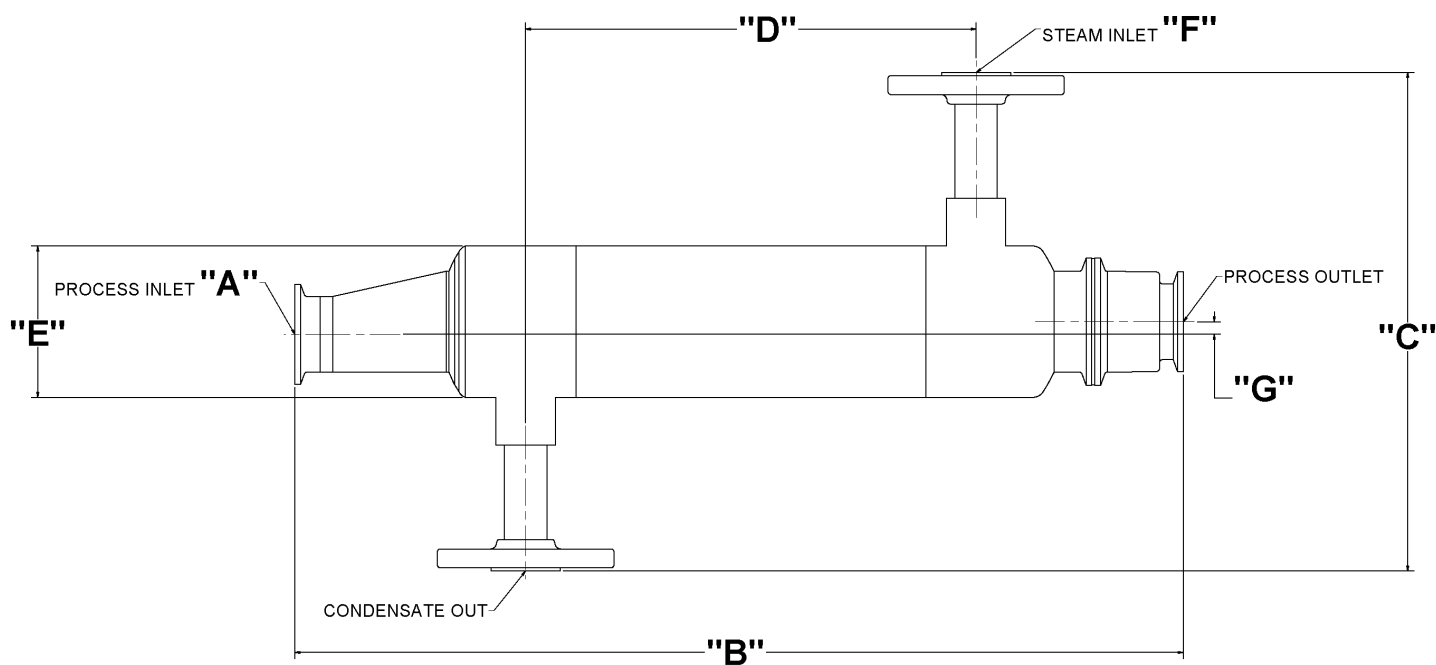
FEATURES AND BENEFITS

- Material of Construction is 316L SS
- 15 Ra EP product contact internals
- 35 Ra externals
- ASME BPE standard Tri-Clamp connections on tube side connections
- ANSI flange or ASME BPE standard Tri-Clamp connections on shell
- Simple tube in tube design, fully drainable
- CIP/SIP-able in place
- COP-able and easy removal of the inner baffle, if heater is fouled by broth components
- Pressure drop similar to comparable tube size/length (≤ 0.2 psid at maximum flow at 5 psig inlet)
- Design features to maximize gas turbulence in inner tube and steam turbulence in shell
- Standard sizes ranging from 1" through 3"
- Custom sizes available through 4"
- GMP Documentation package available with each agitator including:
 - Material Cert's
 - Weld documentation
 - Passivation and Surface Finish Cert's
 - Assembly Drawing w/BOM



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TECHNICAL DETAILS

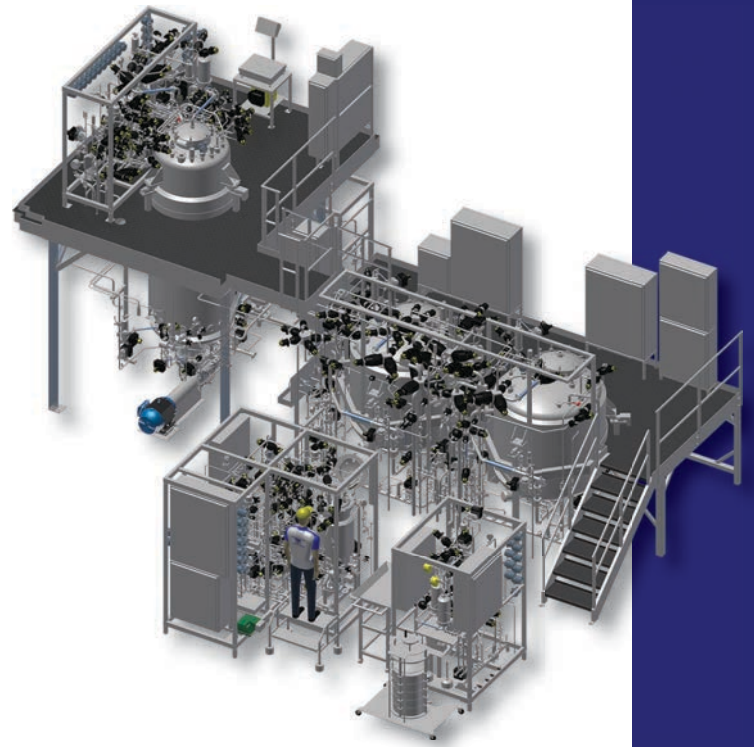


Model	Inlet/Outlet "A"	Dim "B"	Dim "C"	Dim "D"	Dim "E"	Dim "F"	Dim "G"	Min Gas Flow (SLPM)	Max Gas Flow (SLPM)
VHE-1010	1"	13-5/8"	8-7/8"	6-7/16"	2"	1/2"	1/4"	100	250
VHE-1215	1-1/2"	17-5/8"	10"	8-15/16"	3"	1/2"	1/4"	250	750
VHE-2420	2"	29-15/16"	11"	18-15/16"	4"	1/2"	1/2"	750	2500
VHE-4830	3"	57"	11-1/2"	44-1/4"	6"	3/4"	1/2"	2500	6000

Each Scal-Tech Gas Heater is designed to operate with 20 PSIG steam at 5 lb/hr steam flow rates. The effective temperature rise through the heater will be a minimum of 5°C (9°F) ΔT at 5 PSIG inlet pressure, at the maximum flow rates.



Established in 1982, **Techniserv, Inc.** is a custom equipment manufacturer located in Berwick, Pennsylvania, USA. We provide components and fully integrated equipment for the food, fine chemical, pharmaceutical, and biotech industries.



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