

1.0 SCOPE

This specification covers requirements for a FRP Wye (Y) Strainers used in chemical piping systems that require continuous contact with corrosive fluids operating at elevated temperature and pressures.

2.0 STRAINER DESIGN

- 2.1 Strainer type shall be oversized flanged wye.
- 2.2 Basket shall be PVDF, Perforations 1/8" on 3/16" centers.
- 2.3 Minimum area ratio of pipe to basket shall be 10 to 1.
- 2.4 Cover shall have 1/2" minimum drain/blowdown port.
- 2.5 Strainer shall be hydrostatic tested at 110% of pressure rating.
- 2.6 Maximum operating temperature (limited based on fluid chemical properties):
 - 2.6.1 Max operating temperature shall be 180F will be Derakane 411, Hetron 922 or equal.
 - 2.6.2 Max operating temperature shall be 220F will be Derakane 470, Hetron 970 or equal.
- 2.7 Flanges shall be ASME/ANSI 16.5 Class 150 manufactured per ASTM D5421.
- 2.8 Flange bolt holes are spot faced and coated with resin.
- 2.9 Gaskets shall be EPDM or specified for fluid compatibility.

3.0 CONSTRUCTION

- 3.1 The body shall have a 100 mil chemical resistant liner with 10% glass content, an anti-wicking layer of chopped mats with 25% glass content, and a structural filament wound layer with 65% glass content.
- 3.2 Strainer body shall be vinyl ester FRP filament wound pipe per ASTM-D2996 with joint overlay of greater strength.
- 3.3 Exterior coating shall have a minimum 10 mil layer of unsaturated polyester resin based, high quality gel coat with UV protective inhibitors to maximize service life.

4.0 MANUFACTURER

- 4.1 Manufacturer shall have minimum five year service history in industry.
- 4.2 Manufacturer shall maintain as-built dimensions of each strainer.
- 4.3 Manufacturer shall be ISO 9001:2015 Certified.
- 4.4 Manufacturer shall supply minimum one year warranty on covers, baskets, and gaskets to cover defect in material or workmanship.
- 4.5 Manufacturer shall supply minimum five year warranty on FRP shell to cover defect in material or workmanship.
- 4.6 Known Approved manufacturers
 - 4.6.1 Fluidtrol Process Technologies, Inc. www.fluidtrol.com

