

CIP Piping for Membrane Water Treatment

Case History CCH3010



Location: Robert W. Sokoll Water Treatment Plant
Waxahachie, Texas

Application: Odor control vent piping and Clean-In-Place (CIP) piping. The CIP piping, required to carry NSF approval, is used to carry backwash water for membrane water treatment equipment. Backwash stream consists of sodium hypochlorite, citric acid, and sulfuric acid in pH ranges of 2-12, 150°F, and up to 150psi service conditions.

Product(s): Over 570' of filament wound epoxy and vinyl ester pipe, over 349 plain-end and flanged-end vinyl ester and epoxy fittings, and over 425 prefabrication shop joints. Also included were expansion joints, gaskets, flange hardware, horizontal check valves, split-steel flange backing rings, and special flange coupling adapters to eliminate FRP field joints.

Features & Benefits: Cortrol's ability to offer many different pipe and fitting materials, coupled with project management and supplier coordination, resulted in a system installation that will provide excellent service in an emerging water treatment market.

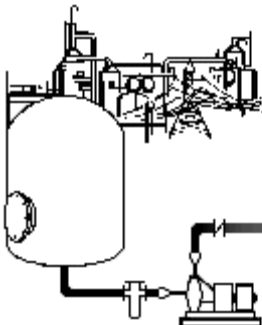
Quality Service Value

Why consider fiberglass?

- As much as 1/10th the weight of comparable metal systems can result in lower cost in structures and supports for pipe, valves, and accessories.
- Non-sacrificial corrosion liner means no scaling, rust, or reduction in wall thickness compared to metal, resulting in less flow loss and longer service life.
- Smoother internal surface combined with larger pipe ID potentially means less pump or blower horsepower and therefore less power consumed to operate over the life of the system.
- Span capabilities can exceed those of metal and thermoplastics.
- End loads due to thermal expansion and contraction are as much as 1/25th that of metal.
- Fiberglass pipe's very low modulus relative to steel results in significantly improved ability to handle expansion and contraction loads.
- Little to no maintenance required to maintain the system under normal operating conditions.
- Options available at the manufacturing stage for fire resistance, reduced smoke generation, and abrasion resistance.
- Wide range of resins and corrosion barriers allow for the use of fiberglass in many different service conditions and pressure ratings.
- Easily engineered for both above ground and below ground applications.
- Installation time of fiberglass can be as much as 35% of stainless steel for significant cost savings.
- Variety of finish colors available.

We can provide you products and services that fit your needs and requirements and meet National Standards:

- NBS
- USDA / FDA
- NFP
- ASME / RTP-1
- SMACNA
- ANSI
- ASTM
- BOCA
- NSF



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