

Composite Solutions for Semiconductor Facilities

Fiber Glass Systems | 

Factory Mutual (FM) Ducting, Fittings and Dampers

Protection against fire spread and smoke

Benefits of Fiberglass FM Approved Ducting Systems

Fiber Glass Systems is now manufacturing ducting systems in accordance with Factory Mutual (FM) requirements at multiple facilities in the United States. The FM ducting performs safely and affordably in aggressive environments like semiconductor cleanrooms. This special fire-retardant ductwork is sprinkler-free and corrosion resistant to provide the lowest life cycle costs available. The system is designed to meet the requirements of the semiconductor manufacturing facility and has the following qualities:

- Cleanroom Safe
- Meets FM 4922 or FM 4910
- Superior Chemical Resistance
- High Structural Strength
- High Corrosion Resistance
- Easy to Install
- Lightweight

This extraordinary ducting system is the ideal solution for removing chemical smoke, dust and contaminated gases through physical absorption, as well as neutralization. In combination with scrubbers and dampers supplied by Fiber Glass Systems, we offer a complete ductwork package.

Types of Ducting Available

The flammability characteristics the Fire Protection Single Wall FRP Duct - 881 manufactured by Fiber Glass Systems has been approved by Factory Mutual under the FM 4922 classification for 12 in. (300 mm) to 60 in. (1500 mm) diameters. FM 4922 duct conforms to the material requirements of FM 4910. For sizes outside the range of FM 4922, the same materials and manufacturing methods are used to conform to FM 4910 material requirements and listed by FM under Fire Protection FP-22 clean room materials duct.



Name	FM Designation	Diameter / Sizes
Fire Protection Single Wall FRP Duct-881	FM 4922 Approved FM 4910 Clean Room Materials	12-60 in. (300 mm to 1500 mm)
Fire Protection FP-22	FM 4910 - Clean Room Materials	All Sizes
Fittings	FM 4922 Approved FM 4910 Clean Room Materials	12-60 in. Above 60 in.
Single/Multi Blade Dampers	FM 4910 - Clean Room Materials	Up to 192 in.

Other Semiconductor products offered by Fiber Glass Systems

Tanks & Scrubbers

Semiconductor facilities have numerous storage needs including wastewater, water treatment, and chemical storage in varying storage capacities. For us, there is no vessel too big or too small. Our FRP tanks and scrubbers come in a wide assortment of shapes, sizes, and capacities to meet virtually any storage and processing need. Shop tanks can be made up to 20 feet in diameter. For tanks beyond 20 feet in diameter, we can field assemble or field wind on your project site. We have been field winding FRP tanks since 1972 and can assemble tanks up to 120 ft (37 m) in diameter. We also manufacture dual laminate vessels, with PVC, CPVC, polypropylene, PDF, ECTFE and other thermoplastic liner materials.

We design, manufacture, inspect, test, and stamp FRP shop and field tanks in accordance with ASME RTP-1.

Our tanks and vessels are designed for your facilities needs and constructed to your site requirements. The large diameter field tanks are manufactured via:

- **Field assembled:** Tank shell sections are produced at our manufacturing facility, oblated to a truck shipping dimension, delivered to your job site, and field assembled by us.
- **Barge shipping:** FRP vessels are manufactured and completely assembled loaded onto barges, and delivered to your job site.
- **Field winding:** We erect specialized field winding equipment on your job site, filament wind the large FRP shells, and assemble the tanks on the final foundation or at a centralized job site assembly area.


Other Fiber Glass Systems Products

Fiber Glass Systems has manufacturing facilities located all around the world, we provide composite tanks, duct and piping systems, fittings and structures to the semiconductor, water, environmental, oil & gas, chemical & industrial, marine, offshore, fuel handling, mining and alternative energy industries.

As a leader in composite piping systems, fittings, and structures we're excited to present our family of trusted brands. Containment Solutions™, Belco™, Ershigs™, Fabricated Plastics™, Fibra™ Bondstrand™, Red Thread™, Green Thread™, Fiberspar™, Dualoy™, Star™, Z-Core™, F-Chem™, Ceram Core™, Silver Streak™, Red Thread IIA™, Polyplaster™, Centricast™, L.F. Manufacturing™ and Pipex™ to provide the right solution for any project.

To learn more about Fiber Glass Systems different applications, visit our website www.nov.com/fgs

Locations

 FM Approved
(Belton, TX, Giddings, TX and Sand Springs, OK)



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