

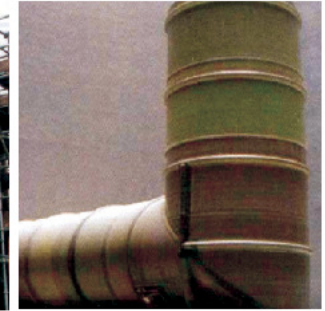


FIBRO PLASTICHEM (INDIA) PVT. LTD.
(An ISO 9001-2008 Company)



FIBROGLAS[®]

HYDRAULICALLY EFFICIENT
AND
CORROSION RESISTANCE PIPING SYSTEM



FIGHTING CORROSION WITH GRP PIPING

Above and below the ground, on land and at sea, there are all manner of structures and equipments that have to survive in corrosive environments. Water, Chemicals, Gases and Salt can all take their toll on traditional materials.



Glass reinforced plastic (GRP) piping is the material of choice for handling corrosive fluids and is especially suitable in corrosive external conditions, typically caused by corrosive soils, saline water or by chemical fumes. FIBROGLAS filament-wound GRP piping systems are Custom engineered and custom fabricated for the particular corrosive environment, mechanical and thermal loading.



By tailoring these parameters, a more reliable and longer pipe-life is achieved due to superior properties, higher design factors and higher corrosion resistance.



By custom designing the pipe laminate, superior axial strength and stiffness can be achieved. This can be used to advantage to increase support span thus reducing costs associated with pipe supports. GRP pipes are also designed to be more tolerant of the localized stresses caused by pipe supports. This is accomplished by the design of the laminate and by the addition of special reinforcements in support regions.



Stiffeners are often a very cost effective way to handle load conditions which cause the pipes to buckle and collapse. Examples are vacuum loading, soil loading and traffic loading. The stiffener. Laminate, the stiffener size and the stiffener spacing are all 'fine tuned' for the most efficient and cost effective design.



FIBROPLASTICHEM

Why FIBROGLAS GRP Piping?

Salient Features :

High corrosion resistance	High insulating properties	Lesser number of joints
High strength-to-weight ratio	Light weight	Minimum slime build-up
Excellent dimensional stability	Easy installation	Low maintenance cost

Longevity

FIBROGLAS GRP pipes are designed for a minimum life time of 50 years, in accordance with present standards of GRP pipes.

Freedom from Maintenance

Based on extremely good corrosion resistance FIBROGLAS GRP pipes donot need periodic maintenance or cathodic protection for below ground installations.

No Leaks

FIBROGLAS GRP pipes are delivered in standard lengths of 6Mtrs. and 12Mtrs., hence, fewer joints than in pipes made from traditional materials. Fewer joints mean, less chance of any problems arising out of leakage.

Light Weight and Easy Installation

The light weight (1/5th the weight of steel pipes) and long sections of FIBROGLAS GRP pipes considerably reduces installation cost, while fewer joints and feasibility of rapid field fabrication leads to faster installation.

Best Long Term Cost/performance Relationship

FIBROGLAS GRP pipes are not always the cheapest alternative based on the initial piping cost, but considering over all installation, long term maintenance savings, corrosion resistance and the toal life time, GRP piping offers the best / performance relationship.

Applications :

Process piping

Chemical plants, paper & pulp, oil & gas, Metal Industries (Ferrous & non-ferrous), Desalination plants, Mines etc.

Power Plant Piping:

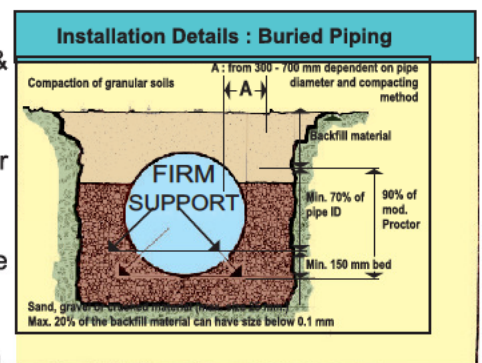
Seawater / Brackish & Sweet water Intake, Cooling & DM Water Lines, Coal Dust Suppression, Utility Lines etc.

Marine & Off-shore Piping

Ship-board & Off-shore Platforms - Ballast Lines, Bilge Lines, Fire Fighting Lines, Utility Lines etc.

Potable Water, Sewage & Industrial Effluents Piping

Raw Water Intake, Over ground / Under ground Cross Country Piping,



Installation & joining methods

- Mechanical Joints
- Flanged Joints
- Adhesive Joints

Design Codes & Standards :

ANSI / AWWA C-950	:	For GRP pressure pipes
ASTM D2996	:	For filament wound GRP pressure pipes.
ASTM D3517	:	For GRP pressure pipes
ASTM D3754	:	For GRP Sewer & Industrial pressure pipes
ASTM D2323-72	:	For installation of buried GRP pipes
ASTM D4161	:	For GRP pipe joints using flexible elastomeric seal
BS 7159-89	:	Design & construction of GRP piping system for industrial plants or sites

Availability :

- Diameter : 25mm to 4000 mm
- Lengths : 6 meters to 12 meters
- Pressure rating : 6 bar (0.6 Mpa) to 30 bar (3 Mpa)
- Reinforcement : Unidirectional glass fibre Rovings
- Resin Matrix : Polyester, Epoxy, Vinyl ester and Phenolic.

FIBROPLASTICHEM INDIA PVT. LTD.

(An ISO 9001-2008 Company)

Regd. Office : 3, Ambika Mukherjee Road, Belgharia, Kolkata - 700 056, Tel. : 2553 2653 / 2564 2189, Fax : +91 33 2553 5788

Sales Office : CD - 82, Sector - I, Salt Lake, Kolkata - 700 064, Tel. : (033) 2334 8136 / Telefax : +91 33 2321 1382

Works : Kharial, Dankuni - 712 310, West Bengal, Tel. : 2659 0722 / 2659 2572, Fax : +91 33 2659 1214

E-mail : fibroplastichem@gmail.com, fpl@vsnl.net, fpls@vsnl.net Website : www.fibroplastichem.com

