Business Associates:





Eco Friendly
Pulse Plasma Rock
Fragmentation Technology











Carbon FRP System for Repair & Restrengthen of Pipe / Steel & RCC Structure – Bridges, Pillars

Professor Mo Ehsani from **USA** developed & patented some of the Carbon Fiber products & process to address the issues of repair, Rehabilitate & restrengthen of existing Pipe network of any shape as well as any structural strengthening due to salty or acidic corrosions or disastrous effect like earthquakes; flood, Tsunami, Hurricanes etc. The Products are broadly classified in following four areas:

StifPipe:

Patented technology that uses a lightweight core sandwiched between layers of carbon or glass FRP to build a lightweight and strong pipe for slip-lining pressure pipes and culverts. StifPipe® can also be directly installed on the inner surface of a pipe using the wet layup method. This revolutionary product is a customized per-manufactured Carbon FRP pipe that can be delivered to the job site in any length for quick final assembly inside the pipe. StifPipe® is the world's **first green and sustainable pipe** and can cut pipeline and tunnel repair costs to a fraction of that by conventional materials and techniques. Advantages are

- Repair any Profile & any size.
- Shorter repair time & less Grouting due to closer fit.
- No Lifting equipment required to handle pipe.
- Installed in Leaking Tunnel & Culverts.
- Act as a standalone structural liner.

InfinitPipe:

Allows construction of a pipeline of virtually any size and shape on-site! Most pipes manufactured to date require extensive heavy equipment that necessitates manufacturing in a plant.

- Built on-site to any length and diameter. No joints to leak
- Designed for any internal pressure & No Cathodic protection required.
- Virtually no transportation costs & Pipes are directly placed in trench

SuperLaminate:

Patented technology that uses a packer (or carrier) to install Carbon and glass FRP laminates for internal repair and strengthening of pressurized pipe made of steel, cast iron, corrugated metal, clay, brick, concrete, Prestressed Concrete Cylinder Pipe (PCCP) and wooden pipes and culverts with Carbon Fiber Reinforced Polymer (CFRP) and Glass Fiber Reinforced Polymer (GFRP) laminates. Such pipes are used for conveyance of water, sewer, storm water, oil, gas and other chemicals. Steel and concrete tanks for storage of water, oil, and other chemicals can also be repaired with SuperLaminateTM.

- The max. 90 meter rolls of SuperLaminateTM made of min. 0.7 mm thin & max. 1500 mm wide required access ports of 200 mm dia only.
- Its strength and stiffness allow it to be coiled in the field to create a shell of virtually any size in minutes, like an extremely strong and durable Sonotube
- Applications include repair and strengthening of deteriorated and corroded columns, underwater piles, utility poles, encapsulation of underwater piles in the tidal or splash zone
- It also offers unique solutions in post-disaster restoration of columns and piles following earthquakes, hurricanes, blast loading, etc.
- The Gas Technology Institute that resulted in the approval of this product for repair of steel gas mains.

Regd. Add: 903, Radhe Tower A, Race Course, Vadodara 390 007 India.

Office Add: 201, Tirth Avenue, Opp. Amin Party Plot, High Tension Road, Gotri, Vadodara India.

Web: www.dattatreyainc.com Telephone: +91 265 2974338

Business Associates:





Eco Friendly Pulse Plasma Rock Fragmentation Technology









DATTATREYA INC.

- 3-4 times stronger than steel & Material properties can be verified before the laminates are installed on the pipe surface.
- Available in carbon or glass & one size fits all pipes. No Specific size required to manufacture.
- Works equally well on concrete, steel and wood pipes. In construction of PileMedic Super Laminates a thin glass veil is included on both faces of carbon laminates.
- Therefore, all of our laminates can be directly applied to any pile whether made with steel or other materials. & also prevent corrission in longer run due to contacts between Carbon & steel.

WetLayup:

In this technique, FRP fabric is saturated with epoxy and is wrapped around the outside or pressed against the inside surface of the pipe. The technique can be implemented by hand or using a packer (or carrier) for smaller diameter pipes.

- The wet layup system is one of the most effective ways of strengthening high pressure pipes
- Repairs can be completed by accessing the pipe through small openings which allow the crew and the equipment to pass through; once inside the pipe, the equipment can be re-assembled by the workers.
- In some cases, saturate the rolls of fabric outside the pipe and pass it into the pipe through the access ports to the installation team.
- We can address repair of smaller diameter non mantry pipe of less than 600 mm using Carbon FRP saturated fabric wrapped on Packer, Ballon & CCTV.
- This approach is ideal for spot repair of pipes. It can be repeated over and over to repair a longer section of a pipeline.
- Final Epoxy top coat is usually applied to the entire pipe surface considering factors as abrasion resistance requirements, chemical composition of the water etc,
- The QuakeWrap® wet layup system meets the NSF-61 ANSI Standards for potable water pipes and tanks.

You are requested to visit their website for Brochures, Installation Videos, Magazine articles; Technical Papers; Product data sheet; Award winning Projects; webinar on pipeline repair etc. http://www.pipemedic.com/library.php

We at **Dattatreya Inc** are proud to associate with **Pipemedic Group** to launch Ground Breaking Technology in India. Please contact to address your issues of Repair, Rehabilitate, Restrengthen Pipeline or structure. Thanking you.

Sumul Patel

For **Dattatreya Inc.** www.dattatreyainc.com

sumul.patel@dattatreyainc.com

Cell no: +919824049872

Regd. Add: 903, Radhe Tower A, Race Course, Vadodara 390 007 India.

Office Add: 201, Tirth Avenue, Opp. Amin Party Plot, High Tension Road, Gotri, Vadodara India.

Web: www.dattatrevainc.com Telephone: +91 265 2974338