



CORPORATE PROFILE



FUTURE PIPE INDUSTRIES



“To deliver Water and Energy to the world, in the most efficient way”



Employees

3300

Sales offices

20

Customers

400

in Countries

50

Factories

13

Production lines

53

Build-up Area

681,000 sqm

Output Capacity

4,800 km/year

Pioneers in the conversion of world pipe demand into fiberglass

OUR MISSION

To elevate fiberglass to a material of choice and position FPI as the recognized market leader by:

- Working alongside our customers
- Differentiating our offering through evolving into a focused solution provider
- Delivering innovative pipe systems and bespoke services

OUR HISTORY

Future Pipe Industries (FPI) is the worldwide leader in engineered, performance-based, fiberglass pipes. With the world's most comprehensive product portfolio of fiberglass pipe systems, FPI has built a solid reputation for designing, manufacturing and installing bespoke pipe solutions for leading companies in the fields of infrastructure, oil and gas, industrial, water and marine.

FPI was established in Dubai, UAE in 1984, with the objective of creating a company that would be a leading manufacturer and technology developer of fiberglass pipe systems. From the mid-nineties, FPI embarked on a global expansion plan by developing its own pipe system technology, acquiring know-how and continuing to expand the production capacity.

Recently, and continuing on its global growth strategy, FPI acquired Specialty Plastics Inc. (SPI) based in Baton Rouge Louisiana. SPI manufactures FIBERBOND® advanced composite piping system specially used for the offshore rig and floating production and storage of oil (FPSO) and marine vessels market

FPI also acquired Protecciones Plásticas, S.A.U. (Protesa) in Spain, a pioneer in the production of GRP pipes, with the aim of researching, designing,

producing, marketing and installing GRP (Glass Reinforced Polyester) pipes and fittings.

Today FPI's operations span across four continents with a presence throughout the Middle East, Africa, Europe, North America and Asia, with 13 factories located in UAE, Oman, Qatar, Egypt, KSA, USA, The Netherlands, Spain, India, Indonesia and over 20 sales offices and 3,300 employees globally serving more than 300 major customers in over 50 countries across the Oil & Gas, Water and Industrial sectors.

The company has achieved prominence in its field by strict adherence to the highest levels of quality in manufacturing, as well as by its commitment to meeting client needs. Through its global network of manufacturing plants, sales offices, engineering consultancies and representative offices, FPI provides engineering, installation and logistics support as well as commissioning services. As a result, through its vast experience, the company has built a reputation for reliability and integrity, two qualities that embody FPI's commitment to excellence.

Global leader in
integrated pipe
manufacturing and
engineering



Integrated solutions:

- Product Range
- Manufacturing
- R&D and Testing
- Site Services

WHAT WE DO

With the largest product portfolio of large diameter, high pressure, high-temperature, fiberglass pipe systems, FPI is the only company in the world that provides bespoke solutions across the three product segments; Water, Oil & Gas and Industrial.

Managing a unique global delivery model, driven by engineering excellence, and committed to customer needs, FPI's Vision is to deliver water and energy to the world in the most efficient way.

With the world pipe market demand projected to be USD130 billion, FPI has already a focused dominant global footprint with a presence throughout the Middle East, Africa, Europe, North America and Asia..

FPI facilities are state of the art. With advanced manufacturing, testing and process control systems FPI operates 49 product lines spread over 681,000 square meters and with more than 160,000 kilometers installed worldwide, FPI serves more than 300 international major Oil and Gas operators, municipal authorities and industrial facilities.

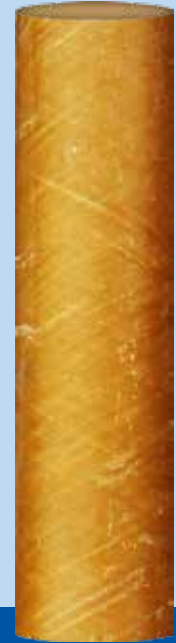
All FPI products are manufactured in accordance with stringent customer specifications and the most demanding international standards, using the latest technology, FPI offers the largest and most versatile large diameter fiberglass pipe product range in the market today. With diameters ranging from 12mm up to 4000mm, with an ability to withstand immense pressures of up to 3000 PSI, FPI's fiberglass-composite non corrosive pipe systems can transport water, oil, gas and petrochemicals including H₂S.

FPI's promise of excellence has led to an impressive list of accreditations and certifications by major independent international bodies in the fields of safety, quality and environmental protection. FPI was the first manufacturing company in the Middle East to be awarded the service quality certification Kitemark accreditation which is most frequently used to identify products where safety is paramount.



OUR PRODUCTS

WAVISTRONG®
 Ø 25 mm – 1 600 mm
 Up to 50 bar



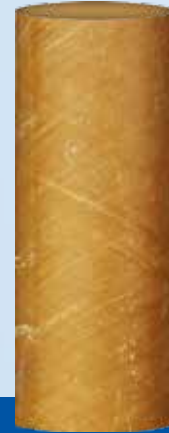
WAVISTRONG®
 Up to 4000 mm
 Up to 25 bar



WAVISTRONG® FR
 Ø 25 mm – 1 600 mm
 Up to 50 bar



FIBERMAR®
 Ø 25 mm – 1 600 mm
 Up to 16 bar



FIBERTUBES™
 Ø 25 mm – 1 600 mm
 Up to 50 bar



FIBERFLOAT®
 Ø 25 mm – 1 600 mm
 Up to 50 bar



RED BOX®
 Ø 50 mm – 450 mm
 Up to 241 bar



YELLOW BOX®
 Ø 50 mm – 450 mm
 Up to 241 bar



BLUE BOX®
 Ø 50 mm – 450 mm
 Up to 241 bar



FIBERSTRONG®
 Ø 80 mm – 4000 mm
 Up to 25 bar



TANKS
 Up to 4000mm
 Up to 68000 L



FIBERBOND®
 Ø 25 mm – 1 600 mm
 Up to 50 bar



GLASS REINFORCED EPOXY

HIGH PRESSURE

GLASS REINFORCED POLYESTER

OFFSHORE

Ø Diameter (mm)

Pressure (bar)

Capacity (L)



Future Pipe Industries
has produced enough
pipe to circle the globe
more than four times

MANUFACTURING



HELICAL FILAMENT WINDING PROCESS

FPI machine-made Glass Reinforced Epoxy (GRE) pipes are produced using the helical (reciprocal) filament winding process. Filament winding is the process of impregnating glass fiber reinforcement with resin, then applying the wetted fibers onto a precision steel mandrel in a prescribed pattern. Repeated application of wetted fibers results in a multilayered structural wall construction of the required thickness.



CONTINUOUS FILAMENT WINDING UP TO DN 4000 MM

FIBERSTRONG® pipe system is produced on FPG's continuous filament winding machine which is a representative of the modern state-of-the-art filament winding technology for use in the manufacturing of glass fiber pipes.

Simply, this machine consists of a mandrel composed of a helical wound continuous steel band, supported in a cylindrical shape by beams. As the beams turn, friction pulls the steel band around and roller bearings allow the band to move in longitudinal pipe direction so that the entire mandrel moves continuously in a spiral path towards the exit assembly.



HIGH PRESSURE HELICAL WINDING PROCESS

The glass rovings pass through the bath, around the tension guide Bars, and are delivered to the mandrel in a complete 360 degree Configuration without laps or gaps common to the side winder Process.

All rovings pass through the resin tank positioned above the head and tension bars. Each roving is completely submerged and Saturated in resin prior to encountering the mandrel.

R&D AND TESTING

DESIGN

- Product Design and Engineering
- Full-Scale Testing
- Verification by Finite Element Analysis

INSTALLATION, TRAINING & SUPERVISION

- In-House Training Facility
- Complying to International Standards: ASME B31.B and ISO14692
- Programs certified by Independent Third party such as DNV, BV

TESTING

- Facilities to test up to 800 bar, Up to 100 degree C

24 Pressure points

Automated logging and control

Up to 800 bar,
Up to 100°C

Third party witnessed and verified

SITE SERVICES

Future Pipe Industries offers a full range of professional field assistance services carefully designed to ensure that the installation is executed strictly in accordance with FPI's recommendations and method statements; your project is completed on time, on budget, and meets all necessary regulations and quality standards.

Working to your requirements, FPI's highly experienced personnel can effectively control and supervise every aspect of your project from commissioning to completion:

- Installation, jointing, and pipe laying activities
- Supervising the pipe installation
- Failure analysis and repair
- Field testing and commissioning assistance

The process starts with an initial visit to your site to brief and demonstrate the handling and jointing procedures of your chosen product, before deploying a specialist site crew to carry out the jointing. Afterwards FPI's team can provide continuous supervision and technical assistance, all of which provides a number of benefits:

- Ensures the correct execution of construction projects
- Assures the quality, functioning and standard conformity of materials, equipment and systems
- Guarantees that all necessary regulations are followed
- Enhances safety on site
- Helps to quickly reach project goals

FPI is also proud to offer a range of customised training and certification programs at its dedicated in-house facility. Here your personnel can receive expert training and certification in pipe handling and pipe jointing which comply with the most up to date international standards.



FPI is the only Fiberglass Pipe Supplier in the world that provides complete pipe systems solutions across three sectors



OUR SECTORS

WATER



- Water Transmission Lines
- Water Distribution Networks
- District Heating Networks
- Sewerage Networks
- Drainage Networks
- Irrigation Networks

OIL & GAS



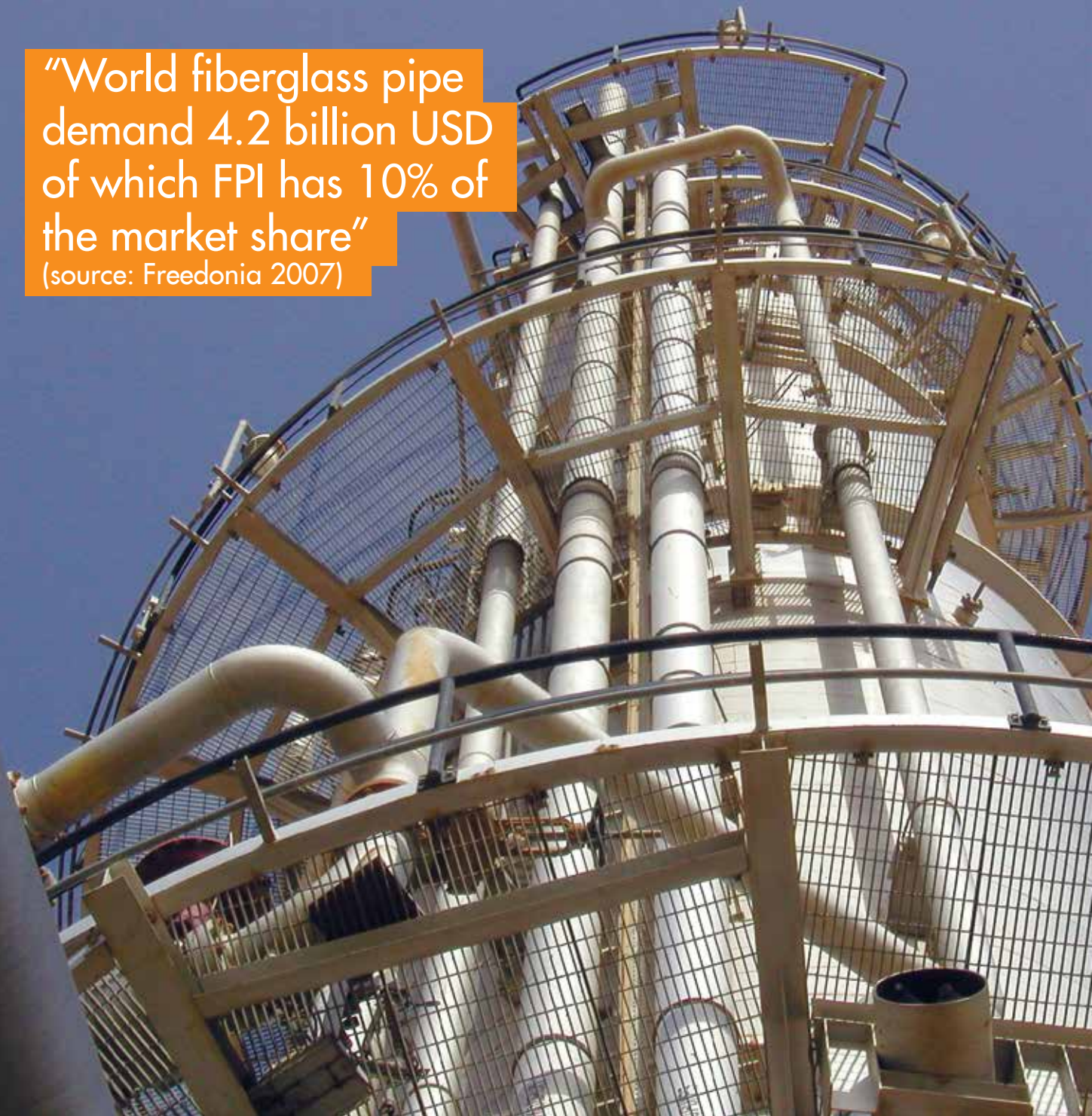
- Crude Oil Conveyance
- Offshore Platform Piping
- Refinery Utility Piping
- Fire Water Lines/Fire Fighting Networks
- Marine & Offshore Platform Piping Refinery Piping
- Production Wells Including Thermal, Oil and Gas
- Municipal and Commercial Water Wells
- Salt Water Injection Lines
- Water Flood Lines
- CO2 Recovery Lines
- Brine Disposal
- Well Casing
- Chemical Pipe Systems

INDUSTRIAL



- Industrial Plant Piping
- Cooling Water Networks
- Mining
- Petrochemical Plants
- Sea Water Systems
- Heavy Duty Chemical
- Ballast Piping
- Ballast Water Treatment System
- Seawater Cooling Systems
- Crude Oil Washing

“World fiberglass pipe demand 4.2 billion USD of which FPI has 10% of the market share”
(source: Freedonia 2007)



ENGINEERING LEADERSHIP



ENOIA is a high profile, world class consulting and engineering group that provides epcm and multi-disciplinary engineering services and boasts a longstanding industry experience of nearly 30 years. It was founded in Athens Greece in 1987, quickly earned an excellent reputation and achieved a remarkable growth due to its outstanding practices as well as highly successful mergers. The Group's global network now includes engineering excellence centers in Athens Greece, Cairo Egypt, Dubai UAE and Chennai India, in addition to offices in Al Khobar Kingdom of Saudi Arabia, Abu Dhabi UAE and Erbil Iraq.

Enoia group is structured in the following 4 divisions, providing a comprehensive range of services in diverse markets and industries:

- ENERGY & INDUSTRIAL
- INFRASTRUCTURE
- FRP PIPING SYSTEMS
- MANUFACTURING ENGINEERING

Enoia group's fundamental business strategy is building long term relationships with our clients. We enforce this strategy by employing top notch executives and by implementing the industry's leading project management, design and engineering techniques to ensure that all projects are executed seamlessly on time and budget.

www.enoia.com

QUALITY EXCELLENCE

Not only does FPI have the largest product portfolio in the industry, it also has an impressive list of accreditations and certifications from major independent international bodies in the fields of safety, quality and environmental protection. This stands as a testament to FPI's commitment to excellence on the world stage.



All of Future Pipe Industries' factories are ISO certified

OUR COMMITMENT

Enhance our fiberglass market share through organic and non-organic growth

Strategically position fiberglass as a superior alternative to more traditional pipe material

Grow the existing addressable fiberglass pipe market through research and development

Maintain our leading position and strong reputation



