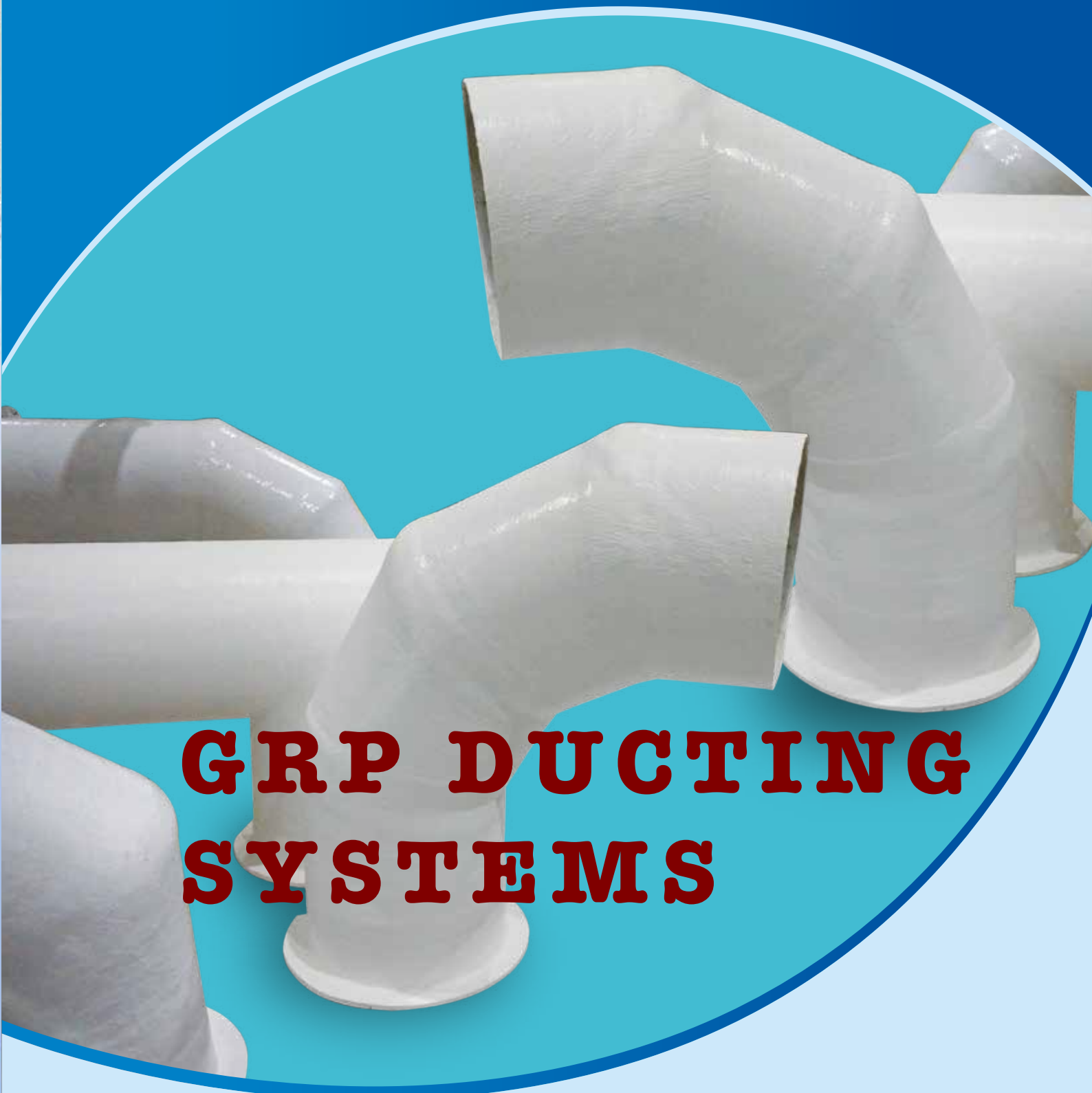


شركة جودوين قطر ذ.م.م
GOODWIN QATAR WLL

GATE NO. : 151, STREET NO: 24, ZONE NO : 81, NEW INDUSTRIAL AREA
PO BOX : 13066, DOHA - STATE OF QATAR
TEL. : +974 4468 22 25, FAX. : +974 4451 08 31
E-mail : info@goodwinqatar.com
Web. : www.goodwinqatar.com

مصنع جودوين قطر للانابيب

GOODWIN QATAR PIPES FACTORY



GRP DUCTING SYSTEMS

WRAS APPROVED MATERIAL

Exova ASTM E84 CLASS 1 FIRE RETARDANCE

qatar 2022

INTERNATIONAL ACCREDITATION FORUM ISO 9001:2015

ISOQAR REGISTERED UKAS MANAGEMENT SYSTEMS 0026

/goodwin Qatar @QatarGoodwin Goodwin Qatar in/goodwin-qatar goodwin.qatar





DESCRIPTION

The GRP Ducting Systems are specially designed and manufactured for environmental protection. The Ducting Systems are manufactured with low maintenance, low cost and extreme durability in mind. GRP hand lay-up manufacturing methods for square and rectangular style, but for the circular type can make filament wound winding methods and Ducting Systems are offers an ideal solution to many industrial infrastructure problems. Ducting Systems are manufactured using a custom-made GRP mould for square & rectangular style and circular type is manufactured using mandrils and by the application of Resin system and chopped strand mat according to the manufacturing method.





APPEARANCE

Appears smooth on the inside area, the side suitable for air flow and clean purpose, the external side of the GRP Ducting Systems is natural finish of glass reinforce plastic, upon the client and projects specifications can change the colors. The preferable colors for GRP Ducting Systems are grey or white color.

PROPERTIES

Lightweight - less density - 20% of steel; 70% of aluminum ❑ High Strength - stronger than structural steel Superior dimensional stability ❑ Wide temperature range uses ❑ Thermal expansion values better than 50% of steel, 35% of stainless steel & 25% of aluminum ❑ Thermal insulation - high strength and insulating values Corrosion resistance - harsh elements and environments ❑ Electromagnetic transparency ❑ Greater frequency freedom of movement for radio waves and microwaves ❑ Inherent colors ❑ Ease of fabrication and our Risin system include isopthalic & epoxy based vinyle ester apart from standard polyester.

ADVANTAGES & BENEFITS

Much stronger bond to all kinds of surface: **S**eams can be avoided and thereby ensuring safer protection, very little maintenance and ease of repair.

Lightweight & Durable: **A**llows easy handling, cutting, fixing, lifting and installation.

Cost Effective: **E**xtremely long life compared to metal and other plastic materials, completely maintenance free.

High Strength & Stiffness: **H**igh glass content and reinforcement, our hand lay-up application and filament winding method give extremely high strength and stiffness.

High Impact Resistant & Elastic:
Returns to original position without any permanent deflection or distortion within recommended allowable loads.

Superior UV Protection: **O**ur integral UV protection system gives long-term shield against the damaging effects of UV rays.

Non-Conductive & Non-Interferring: **C**omply international electrical safety specifications. Allows transmission of radio waves





Corrosion Resistance: **N**o rusting, peeling or flaking even under the most aggressive conditions in any part of the world.

Low Thermal Conductivity & Expansion Rate: **W**ill not transfer heat unlike metal.

Fire Retardant: **C**omplies with ASTM-E84 and BS 476 standards. Our standard finish is fire retardant resins, the construction will provide half hour fire resistance, compliant with BS 476 part 22 (retention of stability, integrity and insulation). Fire retardant resin is used to form a self-extinguishing laminate to BS 476 part 7, class-2 (surface spread of flame). Increased levels of protection can be offered if required. The products are tested as per QCS 2014 specification ASTM E84.

Easy to Joint: **T**hese permanent joints, which is a laminate of glass fibre mat and tissue with resin, predominantly used directly at job site, these types of joints guarantees safe and long-lasting connections that accommodate all axial strengths.

Special Futures: **G**RP Ducting Systems can be done at temperature unlike rubber lining, which require vulcanizing, GRP being a non permeable material completely eliminates the chances of soaking the highly harmful air discharges, thereby ensure the protection from chemical corrosion also which ultimately contributes to the longer life span. Our methods of manufacturing offers excellent physical strength and in general much better impact, it has capacity to withstand temperature up to 80°c in most applications.

By virtue of its superior material characteristics, GRP Ducting Systems have become the ultimate choice for replacing steel ducts for different process airflow for underground and aboveground applications. Well-engineered GRP Ducting systems can be totally forgotten after installation for its life period without catholic protection or periodic maintenance and for this reason, GRP Ducting systems are called as **"ZERO-MAINTENANCE DUCTING".** International Codes and specifications are available for GRP pipe design, construction, testing and installation. All service requirements are met by the GRP pipes in total by suitable and appropriate design. On the cost front, with optimum engineering and productivity matching the best of industries worldwide, we are able to compete with steel, ductile iron and other conventional GRP Ducting Systems material.

SIZE & AVAILABILITY

The size of our Ducting systems as per project specification and design, all the size and length are customized production for the projects requirements, but we conform the wall thickness 4mm minimum or as per the specifications. custom made design, Ducting systems can be manufactured and the designing the Ducting systems sizes according the airflow.

FEATURES

Corrosion Resistance ❑ No Rusting ❑ No Peeling No Flaking ❑ Suitable to use H2S Gas Area Impervious to Bacteriological growth ❑ Lightweight Durable ❑ Use in all climates & exposure to sunlight ❑ High Strength ❑ High Stiffness ❑ Long life Non-conductive ❑ Non-Interfering ❑ Non-magneticr long life ❑ Thermally inert ❑ Easy installation Low Maintenance ❑ Pleasing appearance Fire Retardant ❑ Non – Toxic ❑ Cost Effective Superior UV Protection ❑ Withstand temperatures up to 80°C ❑ High Impact Resistant & Elastic Resulting in longer service life ❑ Less maintenance Less repairs down time ❑ Easier & cheaper handling

CONFORMITY TO SPECIFICATIONS AS PER QCS 2014

Mechanical proprieties as specified are controlled at beginning of GRP Ducting Systems manufacturing (tests in plan, or independent laboratory or witnessed by agreed agency). Routine tests defined in agreement with consultant engineers are performed to guarantee the consistency of production. The GRP Ducting Systems manufacturing method as per QCS Specification 2014.



