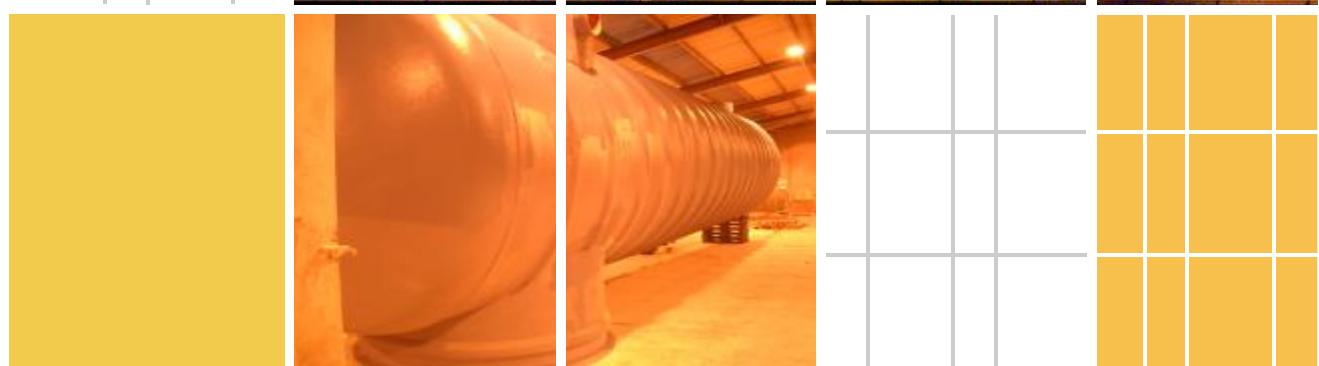
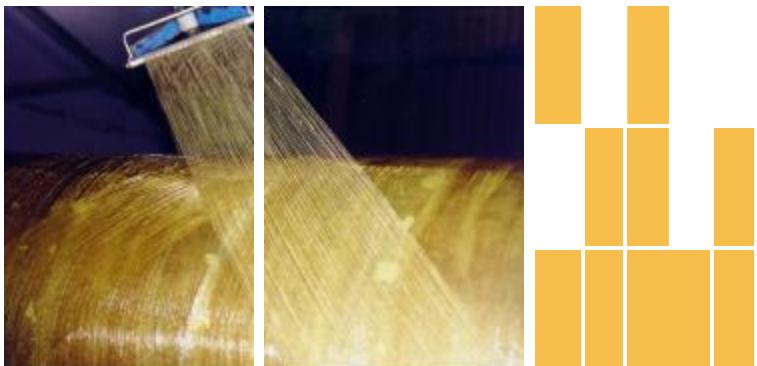


GRP Engineers

Company Profile





One Single Source For All Your



“ When you choose **GRP** you work with some of the finest professionals in the business-professionals who understand your goals and will put their skills and resources to work for you-professionals who will earn your trust and confidence, everyday and on every project. ”

Chemical Handling Equipment Needs

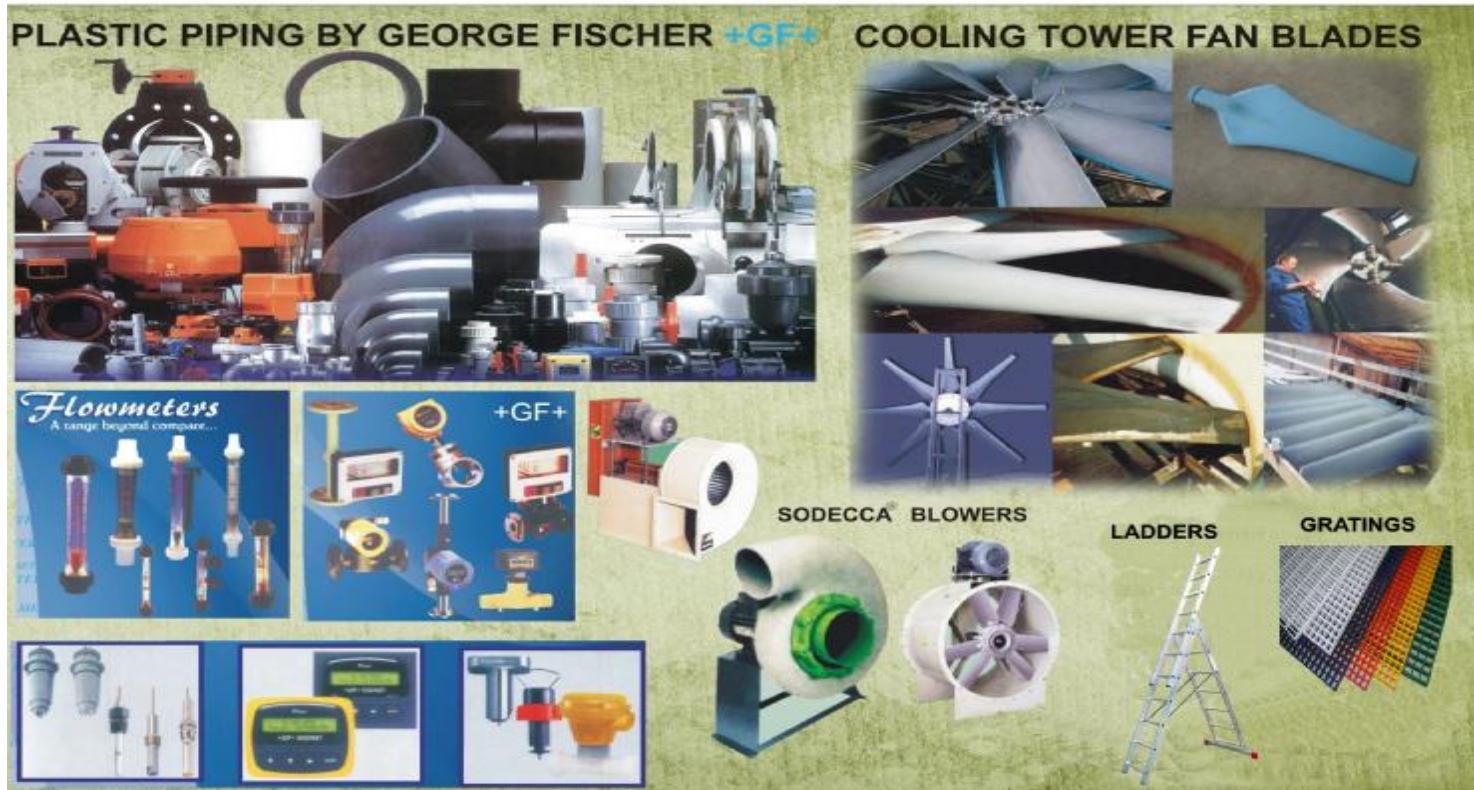


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Introduction

The GRP (Glass Reinforced Plastics) Engineers was established as a proprietorship concern in March 1980 to provide a broad range of Fibreglass Products, Raw materials, Machinery, Engineering & Design services to both the Public & Private Sector Industries by Engr. Muhammad Javed Khalid.

Later in 1992, GRP Engineers specialised in on-site services covering all aspects of turn key based projects and product development including design & engineering, moulds and product development, erection & installation, trial run and commissioning.

In 1994 GRP Engineers expanded its activities to supply and services to CPIs for Liquid Handling Equipment like Pumps, Pipes & Fittings, Instruments, Valves, Flow meters, Flexible hose, Semi finished plastic products (Teflon, PPH, PVC etc.); Repair and Rebuilding with Cold Welding Polymers for Metals. During the years Sole Distribution rights have been acquired for:

- ¥ **March Manufacturing Inc., USA** for Sealless Magnetic Drive Pumps for Chemicals.
- ¥ **Neptune Chemical Feed Pumps, USA** for Metering/Dosing Pumps.
- ¥ **CEPIC s.r.l , France** for Graphite Industrial Equipments
- ¥ **Standard Pumps Inc, USA** for Barrel & Hand Pumps
- ¥ **SODECA, Spain** for Fans & Blowers
- ¥ **Regal Gas Chlorinator System , USA** for Gas Chlorinators
- ¥ **Uriarte Safy boxes, Spain** for Electrically insulated enclosures
- ¥ **VAN AIR SYSTEMS. USA** for Air Dryers, Filters & Accessories, Canada
- ¥ **DIAMANT Metallplastic, GmbH, Germany**
Many Other similar companies

GRP Engineers has assembled an excellent team of Chemical, Mechanical and Metallurgical engineers together with professional experts in Administrative & Financial affairs. This enables the company to undertake projects of diversified nature and magnitude in various sectors of the industry. In fact through streamlining the manufacturing and administrative process, we are able to deliver our product to the customer quicker than ever; whether you need it in any part of the country.

INTRODUCTION

Our Capabilities:

Since its establishment in 1980, the company has earned a good will and reputation among Private & Public Sector Organizations for having executed high quality work on large scale strictly within the frame work of agreed schedules. The scope of such services for which necessary expertise and professional experience is already available can be enlisted as:

Designing, fabrication and installation of chemicals handling equipment on site like storage tanks, vessels, reactors, towers, scrubbers, mixers, screw conveyors, pipes, pipe fittings, fume collectors / extractors, ducts, blower fans, cooling tower stacks, fans, louvers, neutralizing pits, troughs, floorings, pump bases, drip trays, mixing troughs, splash guards, filter plates, structural form, gratings, ladders, platforms, and pallets.

Moreover, Designing and fabrication of miscellaneous equipment of diversified nature for all engineering disciplines according to customer's requirements.

This mainly includes:

- a) HCl handling system including unloading, storage, distribution and processing complete with transfer & metering pumps, pipes & fittings, measuring, monitoring and controlling instruments.
- b) Sodium Hypo Chlorite production with storage, distribution and processing complete with transfer & metering pumps,

pipes & fittings, measuring, monitoring and controlling instruments.

- c) Designing, fabrication and installation of Sulphuric Acid dilution system with storage, distribution and processing complete with transfer & metering pumps, pipes, measuring, monitoring and controlling instruments.
- d) Centri -Cleaners for paper & pulp industry.
- e) HCl Filters, Ejectors, etc
- f) Drinking water storage facilities for industrial & domestic market.

AT EXHIBITIONS

Exhibitions offer amazing opportunities to meet prospective customers and market your products and services. That is why GRP Engineers participates at exhibitions across the country to promote our products among the clients. GRP Engineers has already participated in several Trade fairs and consumer fairs and have successfully demonstrated their latest products, service and get recent market trends and opportunities.



AT EXHIBITIONS





Our Products Range



PIPING SYSTEM

Pressure contact moulded pipe in standard 20' length in diameters from 2" to 54". Filament wound pipe in 20' lengths in diameters from 1" to 60". GRP pipes are suitable for handling a wide variety of chemicals at pressures up to 40 bars. Custom engineered systems for higher pressure and vacuum to meet specific design requirements can be managed with ease.



Our Products Range

TANKS & PROCESS VESSELS

Custom Engineered tanks and process vessels are fabricated by contact moulding process. Standard tanks are available in sizes from 0.5 M to 10 M in diameter ranging in capacities from 500 liters to +100 M³ in all configurations. Custom tanks or process vessels in special sizes and configurations (vertical, horizontal, rectangular and spherical) with or without agitators and drives or for special services can be managed. Storage tanks for 100000 liter capacities have already been designed and developed for clients in Pakistan.

GRP Engineers custom fabricate storage tanks and reaction vessels in non-metallic materials, reinforced plastics with polyesters, epoxies and vinyl ester resins. GRP Engineers pioneered the use of UPVC, CPVC, PPH and PVDF liners with fiberglass for severe chemical services to offer superior corrosion resistance. This system offers a cost effective alternative to titanium and corroding stainless steel.



Our Products Range

OTHER CHEMICAL RESISTANT EQUIPMENT & TURN KEY BASED PROJECTS.

Scrubbers, fume hoods, blower fans up to 50,000 M³/HR, ducts, stacks, bins, silos, chutes, floorings, structural forms, walk ways, cooling towers, louvers, fan blades up to 28 ft., butterfly valve up to 4ft, centri cleaners up to 700 ltr/min, chlorine headers & cell boxes, hoppers, agitators, baffles. Lining of new and old structures, Noise Abatement Kiosks.



Our Products Range

LINING & COATINGS OF CORRODED/ERODED STRUCTURES

Lining of old structures which are attacked by direct contact of chemicals or due to contact with fumes is undertaken at sites. These include storage tanks, reservoirs, reaction vessels, ducts, flue gas chimneys, DSFs, neutralizing pits, collection pits, pump bases, floors, effluent channels and alike areas. Coatings of high quality, both epoxy or rubber based, are applied on sandblasted surfaces to which stand 98% H_2SO_4 .



PRODUCTS FOR CONSTRUCTION INDUSTRY

Fibreglass Domes up to 20' diameter, pyramid type sky lights up to 10' x 10', GRP ticketing and security booths, kiosks, water tanks up to 100000 litres, amusement park facilities like Merry-go-round, Twin dragon, Astrojet, children slides, spa pools, patio planters, reliefs, murals, shutterings (exotic styles only): artificial falls, helmets (safety).



Our Products Range

MARINE PRODUCTS

Power boats up to 27 ft lengths, paddle boats, rescue boats, assault boats, logistic & survey boats, floating chambers, life jackets, buoys, Out Board Motors.



COATINGS

Arcor Coatings, USA

- Ŷ Resist Exposure to Salt Water, Caustics, Alcohols and Acids
- Ŷ Epoxy Rebuilding Compound
- Ŷ Repair burst pipes, tanks, pumps
- Ŷ Rebuilding Compound Filled with Micro-sized Ceramic Beads
- Ŷ Coal Crushers, Coal Chutes, Pumps, Impellers, Propellers, Valves, Hydro-Wheels, Pipe Elbows.
- Ŷ Excellent Resistance to Cavitation
- Ŷ Slurry pumps, blades, runners, gates in Hydro Electric Plants.
- Ŷ Epoxy Topcoat for Aggressive Acid and Alkali Environments

Aggressive Chemical Tank Linings and Secondary Containment Areas,

- Ŷ Amine Cured 100% Solids Epoxy Primer, Topcoat
- Ŷ 98% Sulfuric, Aggressive Chemical Tank Linings and Secondary Containment Areas, Industrial Floorings.
- Ŷ Ceramic Filled Epoxy Primer for Excellent Abrasion Resistance Condensers, Heat Exchangers, Circ. Pipe, Water Screens, Pumps, Impellers, Filters, Valves, Hydro Wheels, Tank Linings, Ion Exchange Filters.

Glass Flake Inc, USA

The primary application glass flakes found was as a filler to improve both barrier properties and reinforcement in anti-corrosive coatings. Since then the use of glass flake filled materials in coating systems has grown significantly, as their inherent benefits have become more widely known. Nowadays, glass flake based coatings are recognised to give superior protection in a variety of industry sectors such as: marine, oil & gas, mining, power generation, chemical plants and storage facilities, paper pulp mills and many other areas.

Our Products Range

COLD WELDING MATERIALS

DICHTOL

DICHTOL^R is 1-component liquid impregnation system. The easy application of (dipping, brushing, injecting and spraying) allows impregnation – even on complex structures. It fulfils the need of the foundry industry and resistant to physical, thermal and chemical stress. In contrast to welding the material is extremely gentle to castings and enhances the surface and varnish properties of castings



PLASTIC METAL
Plasticmetal^R is a perfect material for small and medium surface repairs on any kind of metal. The high amount of fillers in it has a very good metal finish and is machinable like metal. It consists of two components-the hardener liquid and base powder. The base powder can be combined with any of the 8 hardener liquids to obtain special properties.

MULTI METAL

Multi Metal^R is a 2-component system that involves resin and hardener, supplied in correct quantities and ready to mix. Choice is dependent on the type of material and viscosity. It restores eroded, corroded or damaged metal surfaces and brings them back to operational use with good visual appearance and anti-corrosion properties.



ULTRA METAL



Ultra Metal^R is a 2-component system that involves resin and hardener, supplied in correct quantities and ready to mix. Choice is dependent on the type of material and viscosity. It restores eroded, corroded or damaged metal surfaces and brings them back to operational use with good visual appearance and anti-corrosion properties.

Our Products Range

COLD WELDING MATERIALS

RR METAL (RAPID REPAIR)

RR-Metal^R is a quick curing 2-component repair material for wet surfaces and underwater repairs. By adding special raw materials and additives it is possible, to carry out repairs shortly and under difficult service conditions. It cures even at temperatures of 25 °C and contains more than 90% of metallic fillers.



DWH

DWH^R is a precision alignment system for joint faces in machine and machine tools by using molding techniques. These techniques allow an in place molding to a precision down to the micron with an exact replica of the tool surface. The material can be either caused to stick to the molding surface or released by the inclusion of a micro thin layer of release agent (DIAMANT^R liquid



PROCOAT

Excellent wear resistance against corrosion, erosion and cavitations. It is highly resistance to repair and maintain wear parts of all kinds specially pumps worn by extreme mechanical, chemical and thermal loads.



MOGLICE

It is mouldable low friction wayliner to produce high precision sideways with anti-stick slip properties. The moulding method allows to create complex forms and structures down to micron without chemical machining.

Our Products Range



Air Operated Double Diaphragm pumps (AODD)



Horizontal Centrifugal Pumps



Air Operated Piston Type Pumps



Plunger Pump



Vertical Centrifugal Pumps

Our Products Range

CHEMICAL RESISTANT FLOW EQUIPMENT

PUMPS

Industrial Pumps of all kinds including Centrifugal with mechanical seals, seal less in plastic as well as in SS 316; Air Operated Double Diaphragm Pumps, Electric Operated Double Diaphragm Pumps; Disc pumps; Screw and Progressive Cavity, Gear, Vane and Lobe type Positive displacement Pumps; Boiler Feed Water & Booster Pumps; Submersible pump and Sludge Pumps; Barrel Pumps, Water Jetting Pumps, Chopper Pumps, and Vacuum Pumps which includes the companies:

a) Air Operated Double Diaphragm (AODD) pumps :

- Sandpiper, Graco, Yamada, All-flo.
- b) Air Operated Piston Type Pumps:
Kecol, Graco
- c) Centrifugal Pumps:
 - Y Horizontal Centrifugal Transfer Pumps with Mechanical Seals:
Showfou, Griswold, AOLI, Cattaneo.
 - Y Horizontal Centrifugal Sealless Magnetic Drive Transfer Pumps:
March, CEPI, Dickow.
 - Y Vertical Centrifugal Pumps
Cepic, Savino Barbera, Showfou.
- d) Plunger Pumps
- e) High Pressure Water Jetting Pumps
- f) Dosing Pumps



VALVES

316 SS Valves of all kinds, PVC-U Valves of all kinds, PVC-C Valves of all kinds, Motorised Valves for High pressure applications, Electric/Pneumatic Actuated Valves of all kinds in plastics and SS 304/316, Non Return/Check Valves in Plastic and SS 316/SS304/CS.

Butterfly valves both Manual or Actuated ranging from 3" thru 60" with rubber, Teflon and ceramic linings.

Our Products Range



Georg Fisher—Switzerland.

Quality Plastic Piping System from **Georg Fisher—Switzerland**. Products include flow equipment like Pipes, Pipes Fittings and Unions for solvent cement jointing, Adaptor Pipe Fittings, Adaptor Unions, Pipe Fittings threaded, Ball Valves, Ball Check (Non-Return) Valves, Diaphragm Valves, Butterfly Valves, Angle Seat Valves, Process Control Valves, Strainers and Screen Assemblies, Flanges, Seals, Installation Accessories, Accessories and special parts in PVC-U, PVC-C, PP, PE, ABS & PVDF.

316 SS Valves of all kinds, PVC-U Valves of all kinds, PVC-C Valves of all kinds, Motorised Valves for High pressure applications, Electric/Pneumatic Actuated Valves of all kinds in plastics and SS 304/316, Non Return/Check Valves in Plastic and SS 316/SS304/CS. Butterfly valves both Manual or Actuated ranging from 3" thru 60" with rubber, Teflon and ceramic linings.



Accessories:



Our Products Range

ANODES

MAGNESIUM ANODE

Magnesium anode is a common sacrificial anode material used in electrochemical cathodic protection engineering. This galvanic anode is connected to steel structures to prevent or slow down rusting. This magnesium sacrificial anode has high chemical activity, its electrode potential is rather negative, and the driving voltage is quite high. Besides, magnesium anode is difficult to form effective protective film on the magnesium surface. In water medium, the protective film is easy to dissolve, and the magnesium self-corrosion is quite strong.



ALUMINIUM ANODE



Aluminum anode is used as a part of a technique called cathodic protection (CP). The Aluminum sacrificial anode is also a conductive rod that is attached to metal structures or installed into metal devices. This part is used to reduce corrosion in metal objects including buildings, structures, and home appliances like water heaters. The Aluminum anode can be widely applied to high-temperature area platform, oil-water separator, heat exchanger, boiler, high-temperature pipeline, etc. Aluminum sacrificial anodes have several advantages, such as lighter weight and much higher capacity than zinc anodes

ZINC ANODE



Zinc anode is a kind of zinc component used to help galvanized steel and other objects. It is often used to prevent corrosion and help other materials corrode more slowly and last longer. The sacrificial zinc anode is also a part of a large system which gives objects corrosion resistant abilities.

They are common among metallic marine applications, such as boats with metal hulls and metal crab pots. Saltwater is very corrosive and will quickly rust the metal, unless the galvanic coupling (voltaic couple) is formed with the sacrificial zinc anode, which can greatly increasing its useful life in the water. Sacrificial zinc anodes are widely used in cathodic protection of tank bottom, pipeline, and water pipe in soil environments.



Our Products Range

ANODES

SILICON CAST IRON ANODE

High Silicon Cast Iron Anodes have been used successfully in the Cathodic Protection industry as one of the most reliable anodes. High Silicon Iron Anode can be utilized in variety of electrolytes, soil, fresh water, and brackish water environments. It is also suitable for use in deep and conventional ground bed applications. Since the tubular anode is produced by Centrifugal Casting Technology, the quality of the alloy is high and the composition is highly uniform.



MIXED METAL OXIDE ANODE

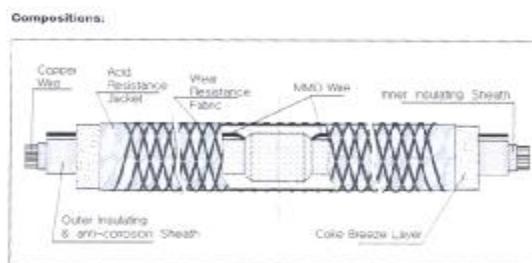


Mixed metal oxide anodes (MMO anodes) are anodes made by titanium coated with mixed metal oxide. It is a crystalline electrically-conductive coating that activates the titanium and enables it to function as an anode. MMO anodes have an extremely low consumption rate. They are widely used in soil, sea, mud, sewage and fresh water environments, etc.

FLEXIABLE ANODES

MMO/Ti FLEXIBLE ANODE

MMO/Ti flexible anode integrates the advantages of large current of MMO anode and excellent conductive performance of copper conductor cable. Due to its large current and small grounding resistance, it can be buried in the place far away from the anode structure. M MO/Ti flexible anode is especially suitable for the cathodic protection of high resistance region or pipeline with damaged coating. Mixed metal oxide titanium flexible anode can also be used in the impressed current cathodic protection of large storage tank floors. The essence of M MO/Ti flexible anode is to use titanium wire to replace the conductive polymer cable between the original flexible anodes. M MO wire has good electrochemical performance. When the coke powder is consumed completely, mixed metal oxide titanium flexible anode can be used alone as auxiliary anode. Theoretically speaking, its life is much longer than flexible anode.



ANODES

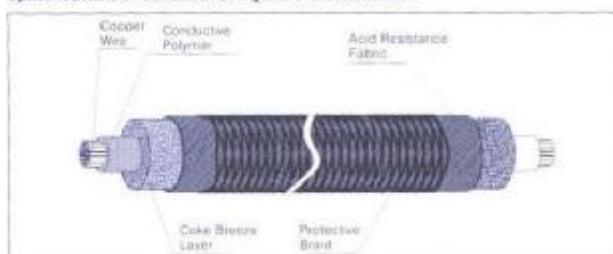
FLEXIBLE ANODES

CONDUCTIVE POLYMER FLEXIBLE ANODE

Conductive polymer flexible anode uses a long line of successive secondary anode and conductive polymer as its basic material. This flexible anode can not only solve the problem of the old pipeline cathodic protection, but also settle some technology difficulties of some traditional cathodic protection, such as the interference from external structures, application problems in environments with high resistance rates, current distribution problems in tank bottom, and so on. Conductive polymer flexible anode has many advantages, such as current distribution, low energy consumption, long lifetime. This flexible anode has become a new important technology both at home and abroad.



Specifications of Conductive Polymer Flexible Anode:



Principals

LIST OF PRINCIPALS



Graco, Inc.- U.S.A



March Manufacturing Inc.,



Standard Pumps Inc



Regal Gas Chlorinator, USA



VAN AIR SYSTEMS. USA



DIAMANT Metallplastic, Germany



George Fischer - Switzerland



HI-FAB Engineers PVT. LTD



SODECA, Spain



Uriarte Safy boxes, Spain



CEPIC s.r.l. , France



Pumper Parts LLC



AOLI

Parts for all these Pumps available:



Yamada America, inc



SANDPIPER



Dorian Drake International Inc.





LETTERS



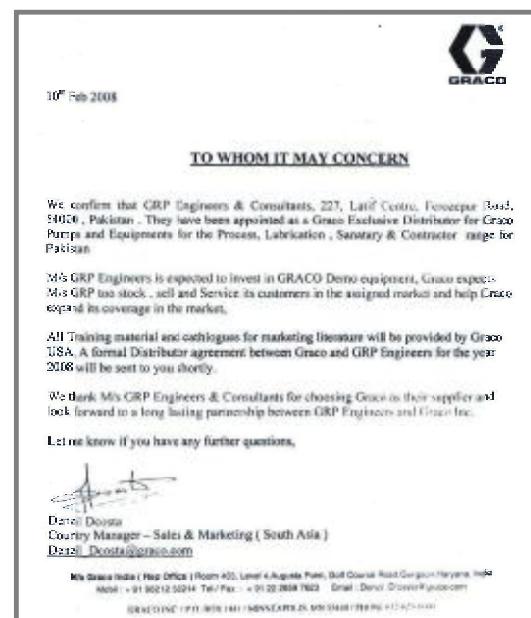
Dorian Drake International Inc



Diamant Metallplastic GmbH



Georg Fischer Piping System



Graco Inc

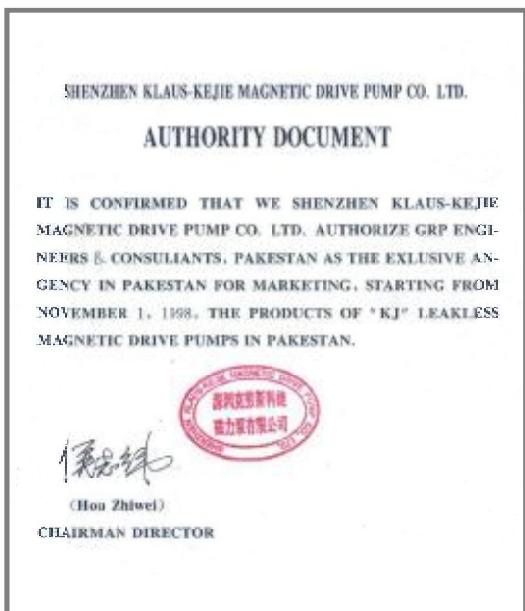
LIST OF AUTHORITY LETTERS FROM FOREIGN PRINCIPALS:



Neptune Chemical Pump Co. Inc



Pumper Parts LLC



Shenzhen Klaus-Kejie,
Magnetic driven Pump Co. Ltd.

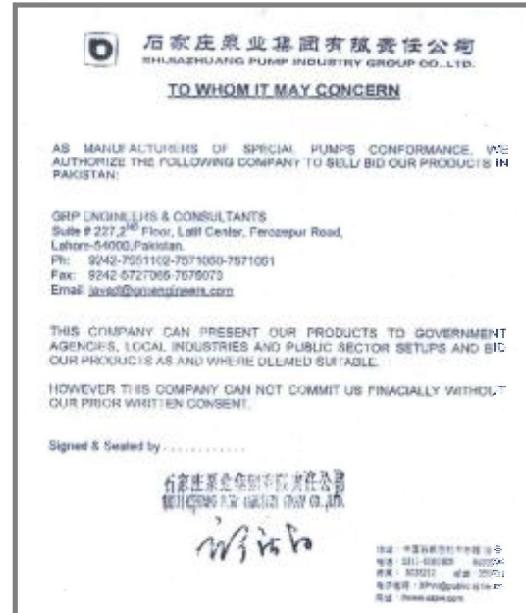


HI-FAB Engineers Pvt. Ltd

LIST OF AUTHORITY LETTERS FROM FOREIGN PRINCIPALS:



Seil Enterprise Co.



Shijiazhuang Pump Industry Group Co. Ltd.



Van Air Systems Inc.



Sandpiper Pumping Solutions

MAJOR CLIENTS

An Invisible Company With a lot of Visible Clients:



KANSAI
PAINT



CLARIANT



Rafhan Maize
PRODUCTS CO LTD

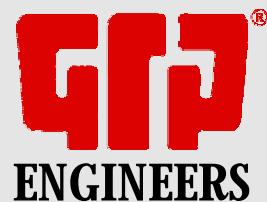


MAJOR CLIENTS

An Invisible Company With a lot of Visible Clients:



Chempro Pakistan PVT (LTD)



One single source for all your
chemical handling equipment needs

OFFICE: 88-T COMMERCIAL AREA,
OPPOSITE DHA CINEMA, PHASE-II,
DHA, LAHORE – 54792, PAKISTAN.

PHONE #: 92-42-35707737-39

FAX #: 92-42-35707748

EMAIL: grp@brain.net.pk, grp@grpendgeers.com

WEB: <http://www.grpendgeers.com>