# CUMI COMPOSITES



CORROSION RESISTANT COMPOSITE SOLUTIONS

WE PROTECT... WE RESTORE... WE INNOVATE...



PRODORITE DIVISION

#### INTRODUCTION

CUMI is one of the flagship companies of Murugappa Group. It is the market leader in the field of Abrasives, Super Refractories, Electro Minerals, Industrial Ceramics, Ceramic Fibres and Anti-Corrosive products. CUMI-PRODORITE division manufactures acid-alkali-chemical resistant products, FRP fabrication including chemical handling systems and polymer concrete electrolytic cells.

CUMI-PRODORITE division in CUMI is one of the leading players in India to put up the FRP manufacturing facility as early as in 1965 and are pioneers since then supplying high quality chemical and corrosion resistant FRP based industrial products for aggressive and demanding service conditions.





CUMI has recently upgraded and put up a new state of the art manufacturing facility for its FRP Products. These include:

- CNC Filament winding machine for Tanks, Pipes and Ducts, 3.5 øx12.5 ML
- Pultruded Machine for high strength members for varying applications,
- RTM and Infusion machines for 1-side and 2-sided finish mouldings and also includes complete testing facilities as per applicable ASTM, DIN, IS, BIS and AWWA standards.
- Grating Machine for manufacturing FRP Moulded grating products"

It is very heartening to note that a very large number of FRP equipments supplied to various customers long long ago are still in excellent working condition presently and this reflects CUMI's FRP Products' excellent quality and unparallel reliability.

The range of FRP products manufactured by CUMI-PRODORITE broadly include storage tanks, vessels, scrubbers and other pollution control equipments, cooling towers, pipes & fittings, ducts & stacks, gratings, cable tray roofing sheets and a variety of other custom-built items. It's FRP product line includes FRP and dual laminates like PVC-FRP, PP-FRP and PVDF-FRP based products. In addition to that, we make Abrasion resistant FRP products for conveying slurries targeted at power plant and mineral processing plants.

The choice of the material of construction for a given product depends on the nature and concentration of chemicals handled and service conditions. CUMI-PRODORITE with its vast experience has data bank for recommending the resin

suitability and in case of new or complex chemical operating conditions has the capability of conducting accelerated testing to recommend the preferred resin for such situations.

For the plant engineers, the versatility of the resin / glass matrix offer a wider scope of usage as a proven structural material in FRP, which is light, yet very strong and corrosion resistant. The fabrication techniques offer great flexibility of usage and the resulting laminates are tough, rigid, and resistant to mechanical shock and are non-porous. They are resistant to a wide range of inorganic and organic acids, alkalis, salts and solvents.







#### FIELD OF APPLICATION

FRP is used in three major applications:

as a lining material (membrane) to structures, built in mild steel, concrete etc., which are usually prone to attack by the corrosive media. as a free standing structural material providing corrosion resistance as a reinforcing material for thermoplastic materials like PVC, CPVC, PP and PVDF, enhancing their mechanical and thermal properties.

#### **INDUSTRIES SERVED**

Automobiles, Battery, Chemical, Chlor-Alkali, Construction, Defence, Dye Stuff, Electricals & Electronics, Fertilizer, Iron & Steel, Metals & Minerals, Paper & Pulp, Petrochemicals, Pharmaceuticals, Phosphoric & Sulfuric acid plants, Power plants, Effluent treatment plants, Desalination, etc.

#### **FABRICATION RANGE**

- Storage tanks / Process Vessels
- Scrubbers
- Wet Electrostatic Precipitator Casings
- Absorption towers
- · FGD Spray Header
- · Fume exhaust system
- FGD Slurry lines
- Launders
- Ducts, Hoods and Stacks
- · Pipes and fittings, Dampers
- · Gratings, channels, and I beams
- Roofing sheets and Panels
- Custom built process equipments
- Pultuded profiles
- · Wind mill components etc,.

#### DESIGN

CUMI-PRODORITE scope includes not only the fabrication of the equipments to our customers' specification but also involves complete design. CUMI-PRODORITE Designs various equipments as per applicable international standards like BS 4994, ASTM D 2996, 3299, 4097, PS-15-69, IS-14402, AWWA C-950, ASME.RTP-1.

#### **ADVANTAGES**

- Custom built
- · Excellent Corrosion resistance
- · Higher Strength to Weight ratio
- · Electrically Non Conductive
- Non Magnetic
- · Low Thermal Conductivity
- · Economical and Lower life cycle cost
- · Maintenance-free and No Painting
- Shape and Size No Constraint
- · In-situ fabrication & Easy Repairing









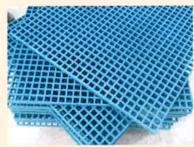
### **INSPECTION & QUALITY ASSURANCE**

Quality is built into every aspect of its operation right from the raw material through in process inspection, up to final inspection. Fabrication is carried out in a systematic manner as per the Quality Assurance Plan, for each and every job. The repeat orders received from various prestigious customers speak about the quality of our products and its durability.

#### **RESEARCH & DEVELOPMENT**

We have the capabilities to develop new FRP products, shapes & designs in collaboration with customers to provide higher performance solutions.







#### **EXECUTION & ERECTION**

- Large size equipments can be fabricated at customers site, to prevent transit damages.
- We also specialize in the timely erection of scrubbers, pipelines, tanks etc., at customers plants.
- · Leading turnkey contractors like L&T, CECL, Uhde India, VaTech Wabag, Durr India have placed their confidence on our capabilities.

#### RECOGNITION

Our products and services are approved by various Indian and Overseas consultants like Krebs & Cie, Davy Powergas India Ltd, Engineers India Ltd., UHDE India Ltd, Tata Consulting Engineers, Projects and Consultants of India Ltd, Ruthner -Austria, Kennedy and Donkins, ALSTOM, Andtriz Technologies and many others.



## CARBORUNDUM UNIVERSAL LIMITED

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