Product Guide



## Changzhou Kele New Material Technology Co.,Ltd

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Maximum varieties for your minimum quantities

As a professional fiberglass manufacturer affiliated to Sino Composite, Changzhou Kele New Material Technology Co., Ltd, through the integration of products design, development, production and sales, provides the most comprehensive and diverse products to satisfy global customers' requirements in various fields.

Kele's products have been widely applied in extensive sectors, including wind energy, rail transportation, aerospace, construction, marine, general industry, recreational facilities, anti-corrosion pipeline, battery separators and other relevant industries.

### Warp knitted fabrics

non-crimp fabrics

### [ Product Description ]

Warp knitted fabrics, also known as non-crimp fabrics (NCF), are made of layers of parallel glassfiber rovings laid in designed orientations, stitched by polyester yarn. There are four main types including unidirectional, biaxial, triaxial and quadriaxial fabrics. Chopped mat or nonwoven fabric can be combined during the stitching.

### [ Product Advantage ]

- Excellent mouldability and permeability for improvement of production efficiency.
   High fiber content, light weight and improved mechanical properties for parts.
  - Good appearance for parts without noticeable print through,
  - Non-crimp glassfibers for optimum mechanical properties.

### [ Product Application ]

Marine, Sports equipment, Rail transportation and Automotive, Construction, Wind energy.

### **RTM moulding mat**

#### [ Product Description ]

Here our prime product is RTM moulding mat. The typical RTM moulding mat has a three-layer structure, including one interlayer of non-woven PP flow media, and chopped glass fiber yarns with length of 50mm as upper and lower layers, stitched with polyester yarn. One of the two chopped glass fiber layers can be replaced with NCF fabrics or woven roving fabrics, or only one layer of chopped glass fiber is kept and stitched alongside PP flow layer, according to customer requests.

### [ Product Advantage ]

- Products made without chemical binders, good compatibility with different types of resin.
   Integrated structure design provides better resistance against resin flushing and wrinkle.
- Parts have good surface appearance, uniform thickness, homogeneous glass fiber distribution and high glass fiber content,
  - Dedicated PP flow layer provides better resin flow and permeability.
    - Excellent mouldability for different complex moulds.
    - Available for varied thickness requirement of parts.

### [ Product Application ]

Resin transfer moulding (RTM), VARTM, Light RTM, VARTM Relevant technology.Automotive, Yacht &Boat, Wind blades, Rail transportation, General industry. etc.

# Stitched & Combo Mat, Woven Roving Combi Mat

### [ Product Description ]

The stitched mat is made of chopped strands which are randomly dispersed and stitched together by polyester yarn. The product has properties of uniform thickness, good wet tensile, high mechanical strength and easy operation. Stitched mat is mostly used in pultrusion, RTM, filament winding processes.

Stitched &combo mat: A layer of glass fiber surface veil acts as the base material, and then compounded with a layer of glass fiber chopped glass yarn, and then stitched with polyester yarn together.

Woven Roving &combi mat: Composed of a layer of E-glass woven roving fabric and a layer of uniform, non-directional chopped yarns stitched together.

### [ Product Advantage ]

- Products are customizable on the basis of roving TEX.
- Compatible with polyester and epoxy resin system
  - Fast wet out, good permeability.
  - Excellent mechanical properties

### [ Product Application ]

Application in Pultrusion and hand lay-up processes with products of pultruded profiles, radome, fairing etc.



### **Chopped Strand Mat**

### [ Product Description ]

It is a non-woven E glass fiber mat product manufactured by spreading chopped glass fiber of 50mm in length randomly and uniformly in combination with chemical binder in powder or emulsion form.

### [ Product Advantage ]

- Lower consumption of the resin
- Uniform weight distribution
- Excellent mouldability
- Easy air releaseFast wet out

#### [ Product Application ]

It is suitable for the applications of various sheets and panels, boat hulls, sanitaryware, cooling towers, anti-corrosion materials. etc.

### **Woven Roving**

MALL BANK

### [ Product Description ]

Glass fiber woven roving is a bidirectional fabric made by interweaving direct rovings, It is an important reinforcement for hand lay-up process.

### [ Product Advantage ]

- Excellent permeability for improvement of production efficiency.
   Excellent mechanical properties
  - Multi-resin-compatible

### [ Product Application ]

Sports equipment, Yacht &boat,
Parts of plane and automotive, Furniture,
All kinds of glass fiber reinforced plastic products,

### **SURFACE MAT**

### [ Product Description ]

Surface mat is widely used in the skin coat of FRP moulds and products. There are two types of surface mat applied in two different processes accordingly, filament winding process and hand lay-up process.

### [ Product Advantage ]

- $_{\mbox{\scriptsize 0}}$  Good surface appearance of finished products
  - Excellent fiber distribution
  - Low binder content
  - Corrosion resistantGood mouldability

### [ Product Application ]

Filament winding type: pipes and storage tanks, Hand lay-up type: contact moulding for FRP moulds and parts.