













Fiberglass Solutions to OPEN MOLDING





Spray-up

Spray-up Roving

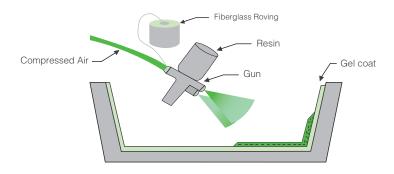
Hand Lay-up

CSM Woven Roving Combo Mat Knitted Mat Surface Mat

Open Molding Process: Spray-up & Hand Lay-up

Spray-up

Fiberglass assembled roving is chopped & sprayed along with resin mix onto the open mould evenly, compressed for complete impregnation & air bubble removal and cured.



Spray-up Process

Fiberglass Product for Spray-up

Spray-up Roving

[Description]

Spray up roving is coated with silane-based sizing, compatible with UP, VE resins and widely used to produce sanitary devices and marine vessels.



[Properties]

- Consistent linear density
- O Low static & fuzz
- Applicable for robotic operation

[Identification of Product Code]

Eg. ERS 240 - T132BS

E: E-glass

RS: Assembled/Multi-end Roving

240: Linear Density 2400tex

T132BS: Sizing & Product Code

[Products]

Product Code	Linear Density tex	Linear Density yield	Application Features	Finished Products
T132BS	2400,3100	207,160	General Purpose	Sanitary Ware, Yacht, Truck Components
T132N	2400	207	Good Anti-slip on Large Vertical Surface	Swimming Pool, Large Boat Hull
T132D	2400	207	Easy Roll-out, Good Conformity to Mould Structure	Products of Multi-angle & Complex Structure

Hand Lay-up

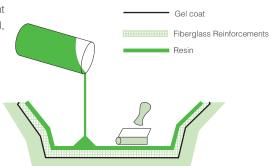
Resin mix and fiberglass reinforcements (roving, woven roving or mat) are put into mold layer by layer, completely impregnated with air bubble removed, laminated to designed thickness and cured

Fiberglass Products for Hand Lay-up

CSM

[Description]

Chopped Strand Mat is made of chopped fiber in specified length, randomly & evenly distributed on conveyor, bonded together by polyester powder or emulsion binder and cut into certain widths and lengths after heat forming, It is mainly applicable for hand lay-up process.



Hand Lay-up



[Properties]

- © Even area weight
- Second Fast wet out and low resin consumption
- Medium rigidity and optimum molding performances

[Identification of Product Code]

Eg. EMC 450 - 1040

E: E-glass

MC: Chopped Strand Mat

(Powder Bonded)

450: Area Weight (g/m²) 1040: Width (mm)

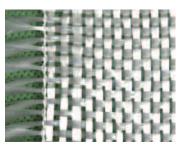
[Products]

Product Code	Width mm	Area Weight g/m²	Wet Out Speed s	Styrene Solubility s	Moisture Content %	Binder
EMC series	100 – 3000	100 – 900	≤100	≤40	≤0.20	Polyester Powder
EMCL series	150 – 2540	100 – 900	≤180	≤40	≤0.40	PVAc Emulsion

Woven Roving

[Description]

Woven roving is made on looms by weaving direct roving into fabrics, including plain weave, twill weave, etc. It gives bi-directional (0°/90°) reinforcement, compatible with UP, VE & EP resin systems and is mainly used for hand lay-up process.



[Properties]

- High mechanical strength of finished products Eg.
- © Even area weight
- Second Fast wet-out
- © Flexible inputs of warp & weft

[Identification of Product Code]

Eg. E WR 570 – 1270

E: E-glass

WR: Woven Roving
570: Area Weight (g/m²)

1270: Width (mm)

[Products]

Product Code	Area Weight g/m²	Width mm	LOI %	Moisture Content %
EWR200	200	1270	≤0.80	≤0.20
EWR300	300	1270	≤0.80	≤0.20
EWR400	400	1270	≤0.80	≤0.20
EWR570	570	1270	≤0.80	≤0.20
EWR600	600	1270	≤0.80	≤0.20
EWR800	800	1270	≤0.80	≤0.20

Surface Mat

[Description]

Surface mat is used in the interior & exterior surface laminates of FRP/GRP, to improve the chemical corrosion resistance, appearance and extend the service life.



[Properties]

- © Even distribution of fiber
- $\ensuremath{\,\circ}$ Smooth and soft surface
- © Excellent molding property

[Identification of Product Code]

Eg. A E MS – 30 – 1000

A: Taishan

E: E-glass

MS: Surface Mat

30: Area Weight (g/m²)

1000: Width (mm)

[Products]

Specification	Specification Area Weight g/m²		Typical Application
AEMS	25–50	50–2080	FRP/GRP surface laminates

Combo Mat

[Description]

Combo mat is made by stitching with polyester yarn one layer of chopped fiber onto woven roving, or one layer of chopped fiber on both sides of woven roving. It is compatible with UP,VE resins,etc.



[Properties]

© Free of any binder

© Even thickness

○ Fast wet-out

 Assorted fiber alignment and optimized directional strength

 Combined fabric construction improves placement efficiency

[Identification of Product Code]

Eg. E CW 450 / 800 - 1500

E: E-glass

CW: Multi-layer Fabrics

450: Area Weight of Chopped Fiber (g/m²) 800: Area Weight of Woven Roving (g/m²)

1500: Width (mm)

[Products]

Product Code	Area Weight g/m²	Chopped Fiber g/m²	Woven Roving g/m²	Width mm	Num. of Layer
ECW300/500	800	300	500	1270	2
ECW300/600	900	300	600	1270	2
ECW300/800	1100	300	800	1270	2
ECW450/800/450	1700	450/450	800	1270	3

Knitted Mat

[Description]

Knitted mat is composed of E-glass fiber chopped in specified length, randomly dispersed & stitched together by polyester yarn, and it is compatible with UP & EP resins.



[Properties]

- Free of any binder
- © Even thickness
- Section Fast wet-out
- © Excellent isotropy of properties
- Good molding property

[Identification of Product Code]

Eg. E MK 450 – 1500

E: E-glass
MK: Knitted Mat

450: Area Weight (g/m²)

1500: Width (mm)

[Products]

Product Code	Area Weight g/m²	Width mm	Num. of Layer
EMK300	300	250–1500	1
EMK380	380	250–1500	1
EMK450	450	250-1500	1



About Us

Taishan Fiberglass Inc., is a wholly owned subsidiary company of China National Materials Co., Ltd., and a National Key High-tech Enterprise.

Its leading products cover several different types and specifications, including E-glass Roving, Chopped Strand Mat, Yarn, Electronic Fiberglass Fabrics, Chopped Strands, Multiaxial Fabrics, Knitted Fabrics, Woven Roving, etc., among which E-glass Roving and Chopped Strand Mat are both certified as "China Top Brand". Its products are exported to over 60 countries and regions, including the US, Europe, ME, etc. and "CTG" has been awarded "China Well-known Trademark".

Taishan Fiberglass Inc., is committed in scientific and standardized management and has acquired certificates of International Quality Management System (ISO9001), Environmental Management System (IS014001); Occupational Health and Safety Management System (GB/T28001) and products are awarded Det Norske Veritas Type Approval Certificate (DNV), Lloyd's Register of Shipping (LR), Germanischer Lloyd (GL) and China Classification Society (CCS), etc.

Taishan Fiberglass Inc., will adhere to sustainable development and provide customers with superior products and services, to keep contributing to the progresses of China fiberglass industry and in pursuit of becoming a globally prestigious fiberglass manufacturer.



	Filament Winding; Centrifugal Casting	
Fiberglass Solutions to Pipes & Tanks	Direct Roving for Filament Winding, Chop Roving, Chopped Strand Mat, Woven Roving, Axial Tape, Knitted Mat, Surface Mat, Hobas Roving	
	Spray-up; Hand Lay-up	
Fiberglass Solutions to Open Molding	Spray-up Roving, CSM, Woven Roving Combo Mat, Knitted Mat, Surface Mat	
Fiberglass Solutions to Pultrusion	Pultrusion	
	Direct Roving for Pultrusion, Knitted Mat, Surface Mat	
Fiberglass Solutions to Continuous	Continuous Panel Molding	
Panel Molding	Continuous Panel Roving, Chopped Strand Mat	
Fiberglass Solutions to Compression	SMC/BMC Compression Molding	
Molding	SMC Roving, Chopped Strands for BMC	
Fibergless Devine for Mate 9 February	Weaving Mat Production	
Fiberglass Roving for Mats & Fabrics	Direct Roving for Multi-axial Fabrics, Direct Roving for Geo-grids, Direct Roving for Fabrics, Roving for Mat	
	Extrusion & Injection; LFT (Long Fiber Thermoplastic): LFT-G and LFT-D GMT (Glass Mat reinforced Thermoplastics)	
Fiberglass Solutions to Thermoplastics	Continuous Roving for Thermoplastics, Chopped Strands LFT Roving, GMT Roving	
File angles a Calutions to Wind France	Prepreg (Pre-forming); Vacuum Infusion (Vacuum Bagging); Hand Lay-up	
Fiberglass Solutions to Wind Energy	Multi-axial Fabrics for Wind Energy, PP Core Mat	
Floatrania 9 Industrial Fiberglass Verns		
Electronic & Industrial Fiberglass Yarns		
Electronic Fiberglass Fabrics		



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