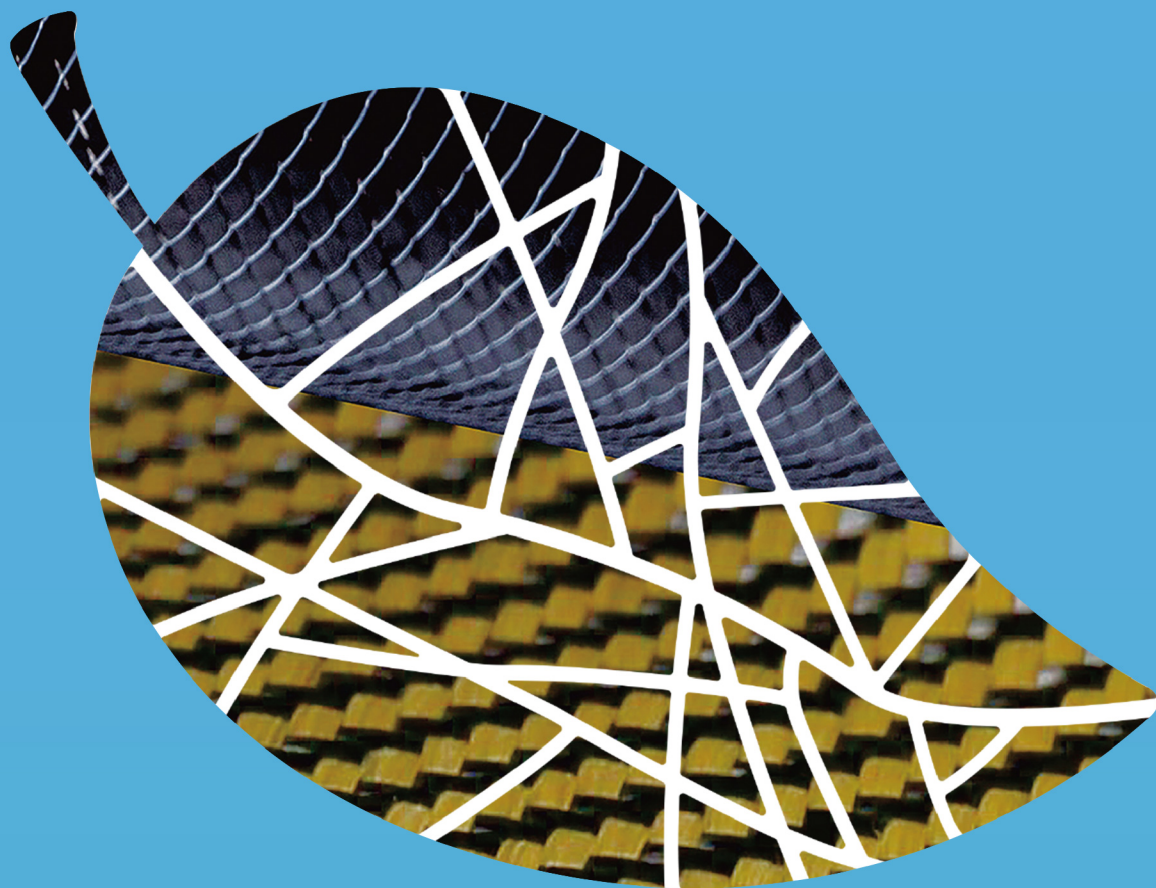


mmG™ 联洋



LINTEX®

High Performance Delivered

纤维增强材料

# 创造绿色材料

SUSTAINABLE COMPOSITES

mmG™

联洋

Marine

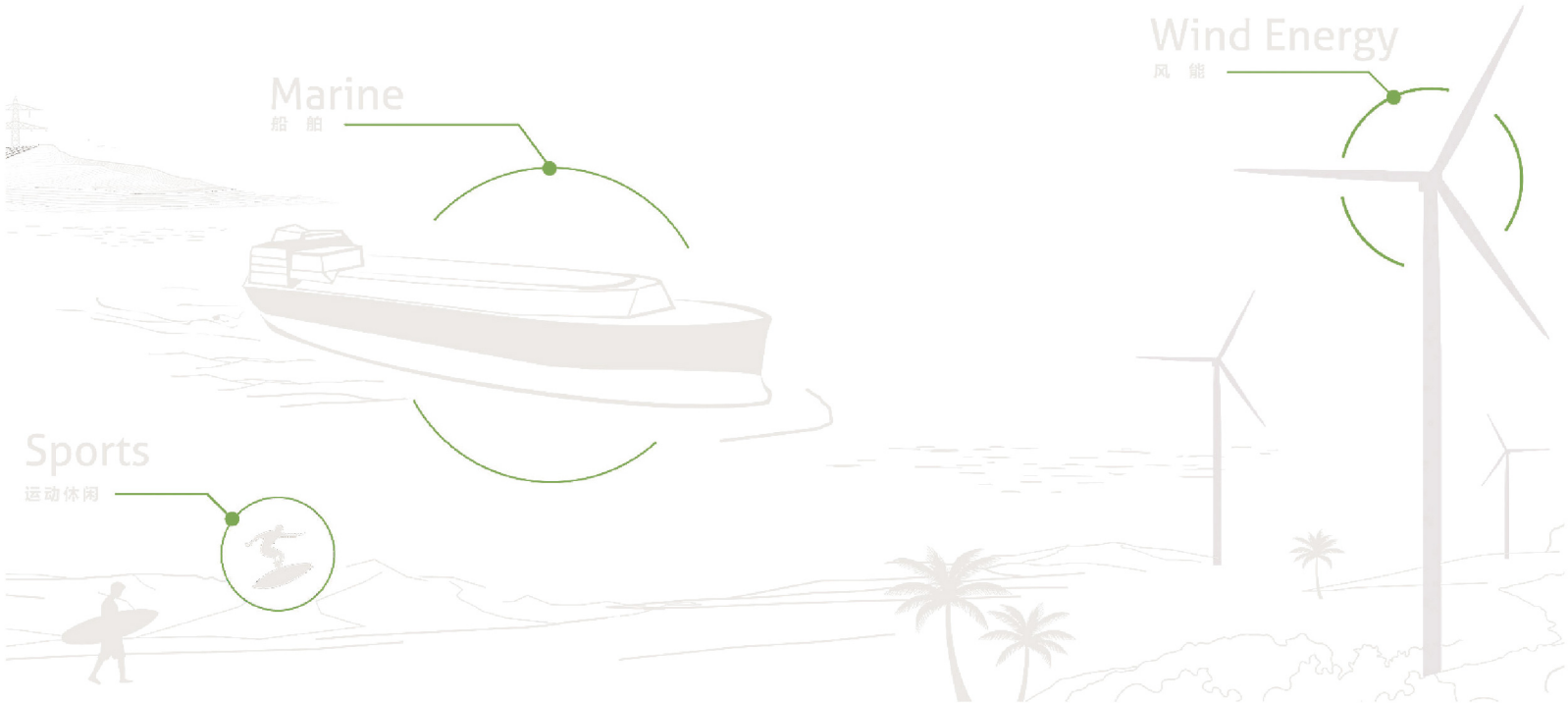
船舶

Wind Energy

风能

Sports

运动休闲

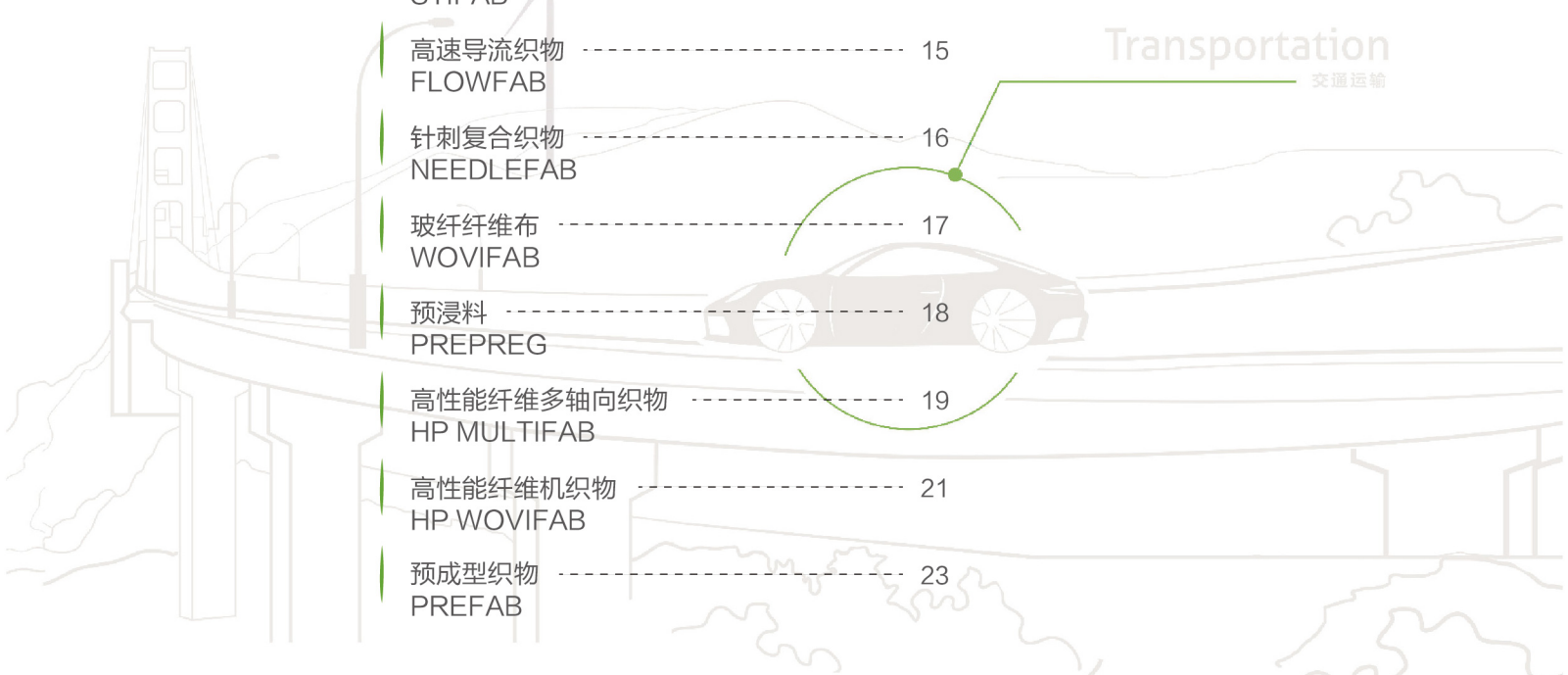


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# Company Profile

浙江联洋新材料股份有限公司，是一家专业从事高性能复合材料研发、制造和销售为一体的高新技术企业和国家级专精特新“小巨人”。公司紧紧围绕绿色化发展、国际化经营、数字化转型、创新性驱动的战略发展规划，主要为清洁能源领域提供系列产品和服务。公司在浙江桐乡、意大利戈里齐亚和泰国罗勇分别建立了创新智造基地，服务全球市场。

NMG, is a high-tech enterprise specializing in developing, manufacturing and selling high-performance composite materials and a state-level specialized special new "Little Giant". The company is isclosely around green development, international operation, digital transformation, and innovation-driven StrategicProgramming, mainly for the clean energy feld to provide a series of products and services. The company hasestablished innovative and itelligent manufacturing bases in Zhejiang,Gorizia (Italy) and Rayong(Thailand) to serve the global market.



NMG总部 (HQ)

为践行“创造绿色材料”这一崇高使命，联洋将持续发扬“燃烧激情、创新成长”的企业精神，秉承以“正念、正心、正道”为核心的价值观，恪守“以客户为中心”的经营理念，为实现全球绿色可持续发展而奋斗。

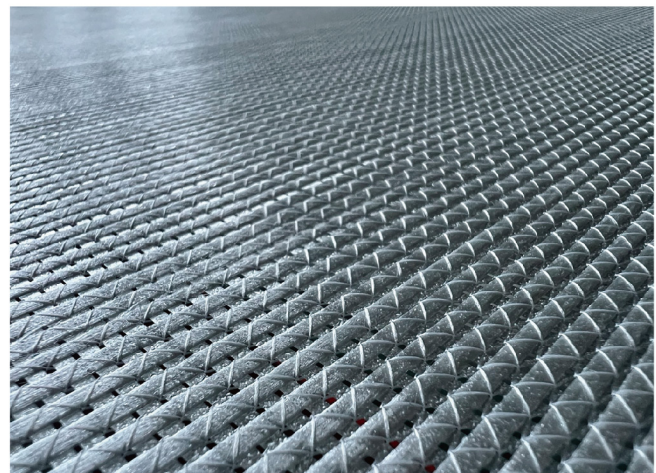
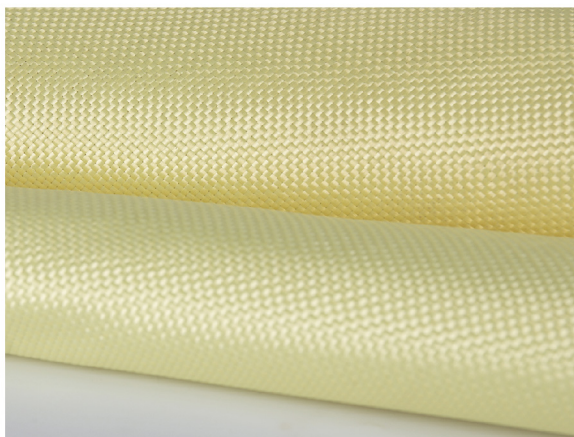
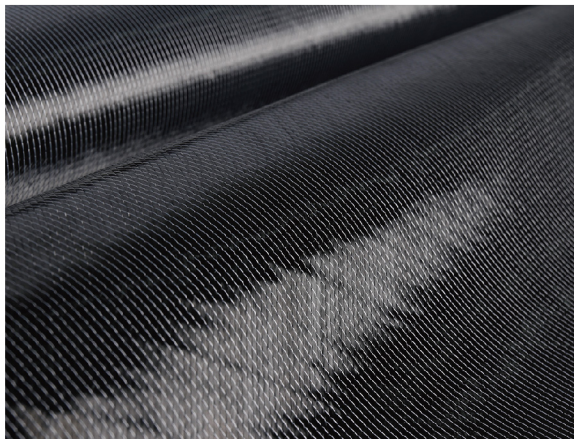
In order to fulfil the lofty mission of "Sustainable Composites", the company will continue to carry forward the enterprise spirit of "Burning passion, Innovative growth upholding the core value of "Mindfulness, Right Mindset, Right Path" abide by the business philosophy of "Customer-centric" to strive for global green and sustainable development.





LINTEX系联洋公司纤维增强材料的产品品牌，产品包括玻璃纤维织物、碳纤维等高性能纤维织物、预成型织物、预浸料等，为复合材料结构设计轻量化提供专业的材料解决方案，产品广泛应用于风能、船舶及海洋工程、汽车及轨道交通，运动休闲等领域。

LINTEX is NMG's fiber-reinforced material product brand, including glass fiber fabrics, high-performance fiber fabrics such as carbon fiber, preforming fabrics, prepregs and other products. NMG provides professional material solutions for lightweight composite structure design, and the products are widely used in the fields of wind energy, shipbuilding and ocean engineering, automobiles and rail transit, sports and leisure, etc.





# *Applications*

## 应用领域

# 制造能力 MANUFACTURING



公司按照智能工厂的要求来建造纤维增强材料车间，配备国内外先进的设备，可生产玻璃纤维织物、碳纤维等高性能纤维织物、预成型织物、预浸料等产品。

NMG is fully in accordance with the requirements of the smart factory to build fiber reinforcements factory, equipped with advanced equipment at home and abroad, can produce glass fiber fabrics, high-performance fiber fabrics such as carbon fiber, preforming fabrics, prepregs and other products.



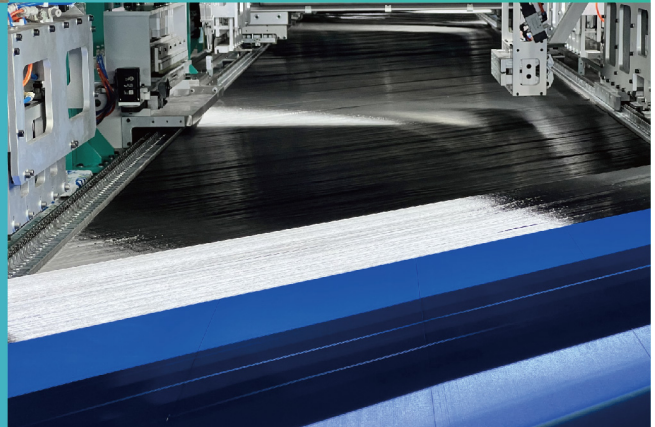




玻纤织物生产线  
Glass Fiber Fabrics Line



碳纤维多轴向织物生产线  
Carbon Multiaxial Fabrics Line



织物套材加工生产线  
Kitting Plant



全自动立体仓库  
Automation Warehouse



# 创新能力 INNOVATION



公司从2013年起被评为高新技术企业，现有产品及在研产品均具有自主知识产权，2017年荣获浙江省专利示范企业。建立浙江省博士后工作站，荣获国家级专精特新“小巨人”企业、省级高新技术企业研究开发中心、浙江联洋高性能复合材料研究院、省级企业技术中心和浙江省科技奖等荣誉。

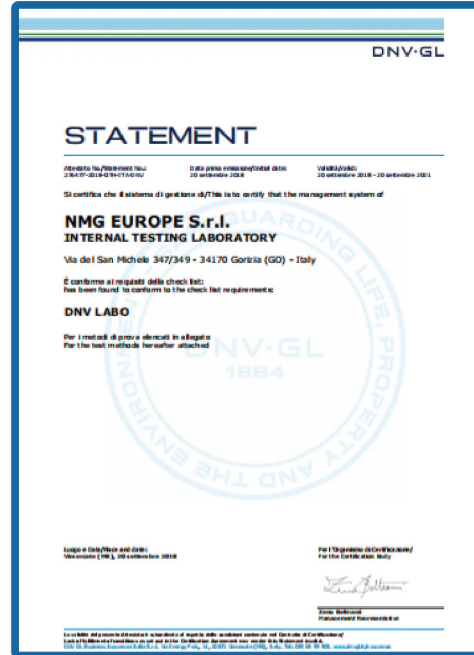
NMG was rated as Provincial High-tech Enterprise in 2013. Itsself-owned intellectual property rights cover all the products in existence and research.NMG has awarded a Patent demonstration enterprise in Zhejiang Province in 2017.

NMG has established provincial postdoctoral workstations and won the honors of national-evel specialized new“little giant”,Provincial R&D Center of High-tech Enterprise Zhejiang,NMG Research Institute of High-Performance Composites,Provincial Enterprise Technology Center and Zhejiang Science and Technology Award.



# Lab Qualifications

## 实验室资质



# Type Approval

## 产品认证



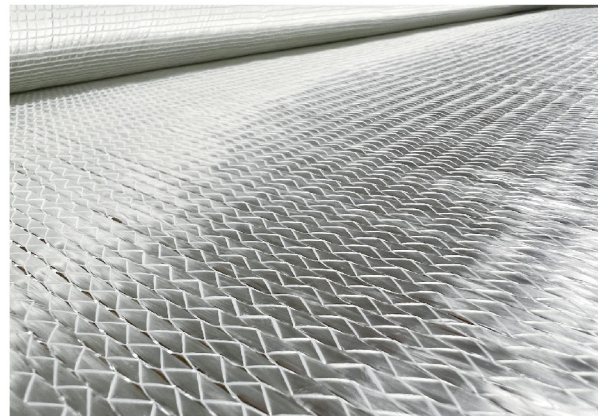
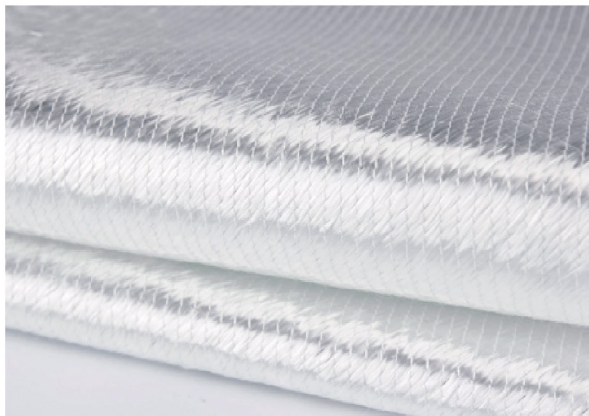


## 多轴向缝编织物 MULTIFAB

由经向（0°）、纬向（90°）或斜向（±45°）铺设的玻璃纤维无捻粗纱，或加以平铺均匀玻纤短切层，经聚酯缝编线缝编而成。克重200~2400g/m<sup>2</sup>，幅宽50~5200mm，可根据不同应用场景进行片材裁切，裁切年产能10000吨。产品广泛应用于风能、船艇、汽车零部件、管道修复、医疗器械、体育休闲等领域。

MultiFab is constructed with fiberglass untwisted roving laid in the warp direction(0°), weft direction(90°) or diagonal direction(±45°), or paved with even glass fiber short cut layer, stitched with polyester thread. Gram weight 200~2000g/m<sup>2</sup>, width 50~5200mm. It can be cut sheets according to different application, with an annual cutting capacity of 10000 tons. Products are widely used in wind energy, boat, automotive parts, pipeline repair, medical equipment, sports, leisure and other fields.

### ► 产品描述 / Description



#### 适用原料 Reinforcement materials

E 玻璃纤维	E glass fiber
H 玻璃纤维	H glass fiber
S 玻璃纤维	S glass fiber
表面毡	Surfacing mat

#### 产品系列 Fabric series

单轴向	Unidirectional
双轴向	Biaxial
三轴向	Triaxial
四轴向	Quadraxial
特殊定制	Tailor Made

#### 适用树脂 Resin compatibility

环氧树脂	Epoxy
聚氨酯树脂	Polyurethane
乙烯基树脂	Vinyl Ester
不饱和聚酯树脂	Unsaturated Polyester

#### 适用工艺 Suitable methods

真空导入	Infusion
树脂传递模塑	RTM
拉挤成型	Pultrusion
手糊成型	Hand lay-up



## 多轴向缝编织物 MULTIFAB

### ▶ 产品数据 / Data

规格型号 Code	总克重 Total Weight (g/m <sup>2</sup> )	0°克重 0° Weight (g/m <sup>2</sup> )	+45°克重 +45°Weight (g/m <sup>2</sup> )	90°克重 90°Weight (g/m <sup>2</sup> )	-45°克重 -45°Weight (g/m <sup>2</sup> )	短切层克重 Chopped Layer Weight (g/m <sup>2</sup> )	针密度 Gauge
L400	478	420	--	50	--	--	7
L900	944	850	--	83	--	--	7
L1200	1215	1152	--	50	--	--	7
T200	222	--	--	214	--	--	3.5/7
T300	307	--	--	300	--	--	3.5/7
LT400	405	203	--	194	--	--	7
LT600	582	331	--	240	--	--	7
LT800	811	413	--	387	--	--	7
LT1200	1221	672	--	536	--	--	7
LTM600/300	935	331	--	293	--	300	7
LTM800/300	1112	413	--	387	--	300	7
LTM1200/300	1522	673	--	536	--	300	7
LTM1700/100	1928	1344	--	469	--	100	7
BX400	409	1.3	200	1.3	200	--	6
BX600	611	1.3	301	1.3	301	--	6
BX800	811	1.3	401	1.3	401	--	6
TLX750	744	236	251	--	251	--	6
TLX1200	1176	567	301	--	301	--	6
TTX1200	1236	1.3	401	425	401	--	6
QX800	854	283	200	165	200	--	6
QX1200	1199	283	301	307	301	--	6
BXM600/225	837	1.3	301	1.3	301	225	6
BXM800/225	1036	1.3	401	1.3	401	225	6
TLXM1200/300	1476	567	301	--	301	300	6
QXM800/300	1154	283	200	165	200	300	6

备注：所有产品克重公差为±5%，或以双方协商为准。  
 Note: The weight tolerance of all products is ±5%, or subject to mutual agreement.

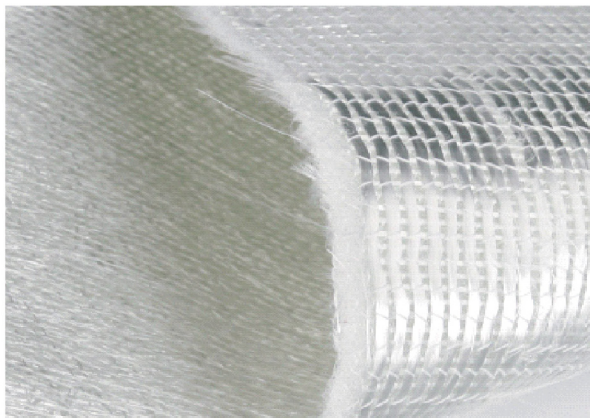


## 夹芯复合织物 CORECOMBI

由针刺无纺布作夹芯导流层，两面加以均匀玻纤短切层或多轴向的玻纤直接纱层经聚酯缝编线缝编而成的具有三明治夹芯结构的织物。克重400~2000g/m<sup>2</sup>，幅宽50~3000mm。产品可有效提高树脂导流和浸透速率，广泛应用于风电机舱罩、船艇、汽车零部件等领域。

CoreCombi consists of needled non-woven fabric used as a guide layer, a sandwich structure composed of two evenly cut layers of glass fiber or multiple axial layers of glass fiber straight yarn stitched with polyester stitches. Gram weight 400~2000g/m<sup>2</sup>, width 50~3000mm. The product can effectively improve the resin flow conductivity and penetration rate, widely used in wind power engine room cover, boat, auto parts and other fields.

### ▶ 产品描述 / Description



#### 适用原料 Reinforcement materials

E 玻璃纤维	E glass fiber
PP无纺布	Non woven fabric

#### 产品系列 Fabric series

多轴向夹芯复合毡	Multiaxial Core Mat
短切夹芯复合毡	Chopped Core Mat

#### 适用树脂 Resin compatibility

环氧树脂	Epoxy
聚氨酯树脂	Polyurethane
乙烯基树脂	Vinyl Ester
不饱和聚酯树脂	Unsaturated Polyester

#### 适用工艺 Suitable methods

真空导入	Infusion
树脂传递模塑	RTM
手糊成型	Hand lay-up



## 夹芯复合织物 CORECOMBI

### ▶ 产品数据 / Data

规格型号 Code	总克重 Total Weight (g/m <sup>2</sup> )	0°克重 0°Weight (g/m <sup>2</sup> )	90°克重 90°Weight (g/m <sup>2</sup> )	短切层克重 Chopped Layer Weight (g/m <sup>2</sup> )	夹芯层克重 Core Layer Weight (g/m <sup>2</sup> )
LTNM600/P3/300	1090	331	267	300	180
LTNM600/P3/600	1394	331	267	600	180
LTNM800/P3/300	1311	413	405	300	180
LTNM800/P3/450	1461	413	405	450	180
CCM200/P1/200	592	--	--	200×2	180
CCM300/P1/300	794	--	--	300×2	180
CCM300/P2/300	866	--	--	300×2	250
CCM450/P1/450	1096	--	--	450×2	180
CCM600/P1/600	1400	--	--	600×2	180

备注：LTNM系列产品克重公差为±5%，CCM系列产品克重公差为±10%，或以双方协商为准。

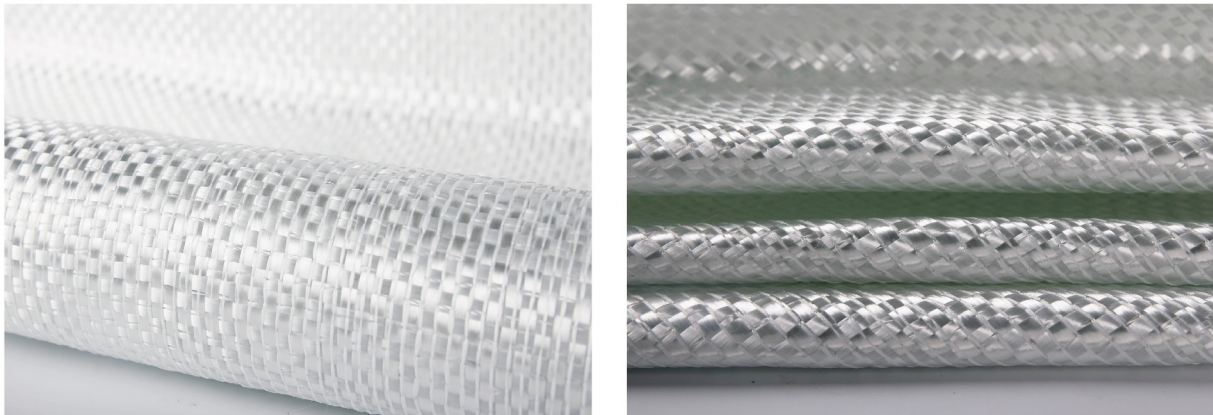
Note: The weight tolerance of LTNM series products is ±5%, and the area weight tolerance of CCM series products is ±10%, or subject to mutual agreement.



## 方格布复合织物 WOVICOMBI

由玻纤方格布加以平铺均匀短切层经聚酯缝编线缝编而成的织物。克重300~2000g/m<sup>2</sup>，幅宽50~3200mm。产品适合制造大型复合材料零件，如风电机舱罩、管道、储罐等。

WoviCombi is a fabric made of fiberglass checkers with even cut layers sewn with polyester thread. Gram weight 300~2000g/m<sup>2</sup>, width 50~3200mm. The products are suitable for manufacturing large composite parts, such as wind power engine room covers, pipes, storage tanks, etc.



### ► 技术参数 / Specification

规格型号 Code	总克重 Total Weight (g/m <sup>2</sup> )	短切层克重 chopped layer weight (g/m <sup>2</sup> )	方格布克重 Woven roving Weight (g/m <sup>2</sup> )	针密度 Gauge
WRM300/300	610	300	300	3.5
WRM600/300	912	300	600	3.5
WRM800/450	1280	450	816	3.5
WRDM300/600/300	1212	300X2	600	3.5

备注：所有产品克重公差为±8%，或以双方协商为准。  
 Note: The weight tolerance of all products is ±8%, or subject to mutual agreement.





## 针织短切织物 STIFAB

由短切原纱切割成定长，呈均匀无定向排列，以聚酯缝编线缝编而成的织物。克重150~1800g/m<sup>2</sup>，幅宽35~3200mm，产品适合制造管道内衬，拉挤型材、透明板、绝缘板等。

StiFab is a fabric made of staple yarn cut to a fixed length, arranged uniformly and without direction, and stitched with polyester thread. The gram weight is 150~1800g/m<sup>2</sup>, the width is 35~3200mm. The products are suitable for manufacturing pipe lining, pultruded profiles, transparent board, insulation board, etc.



### ▶ 技术参数 / Specification

规格型号 Code	总克重 Total Weight (g/m <sup>2</sup> )	短切层克重 chopped layer weight (g/m <sup>2</sup> )	针密度 Gauge
SCS200G7	212	200	7
SCS300G7	312	300	7
SCS450G7	462	450	7
SCS600	613	600	3.5
SCS1300	1320	1300	3.5

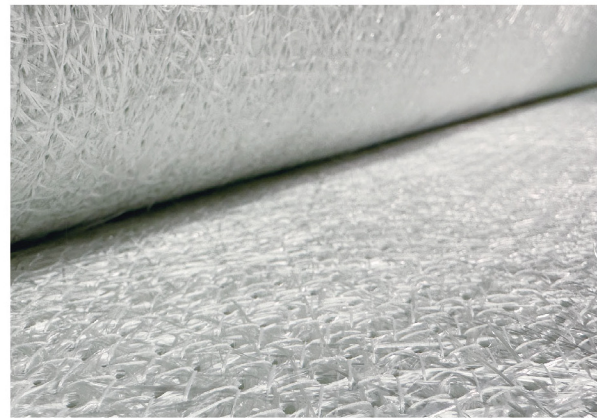
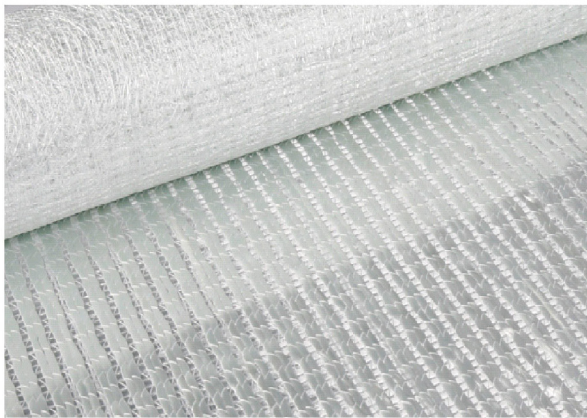
备注：所有产品克重公差为±8%，或以双方协商为准。  
 Note: The weight tolerance of all products is ±8%, or subject to mutual agreement.



## 高速导流织物 FLOWFAB

专为复合材料真空导入成型工艺而设计的织物，独特的结构设计，使得产品铺层后内部形成导流通道，极大改善树脂导流和渗透效果。克重800~2400g/m<sup>2</sup>，幅宽50~3200mm，主要用于风能、造船等领域。

FlowFab is specially designed for the vacuum leading-forming process. The unique structure design enables the product to form a guiding channel inside the layer, which greatly improves the penetration effect of resin channelling lake mouth. It weighs 800-2400g/m<sup>2</sup> and has a width of 50-3200mm. It is mainly used in wind energy, shipbuilding and other fields.



### ▶ 技术参数 / Specification

规格型号 Code	总克重 Total Weight (g/m <sup>2</sup> )	0°克重 0°weight (g/m <sup>2</sup> )	90°克重 90°weight (g/m <sup>2</sup> )	导流层克重 Flow media Weight (g/m <sup>2</sup> )	短切层克重 chopped layer weight (g/m <sup>2</sup> )	连续毡克重 CFM(g/m <sup>2</sup> )
LTM800/225i	1070	448	385	--	225	--
LTC800/225i	1070	448	385	--	--	225
LTCM800/225/225i	1295	448	385	--	225	225
LTKM600/120/600	1367	336	300	120	600	--
CCKM300/200/300	816	--	--	200	300X2	--

备注：LT系列产品克重公差为±5%，CCKM系列产品克重公差为±10%，或以双方协商为准。

Note: The weight tolerance of LT series products is ±5%, and the weight tolerance of CCKM series products is ±10%, or subject to mutual



## 针刺复合织物 NEEDLEFAB

由玻璃纤维基布表面平铺均匀短切层，经针刺使毡层玻纤之间、毡层玻纤与基布之间相互缠结而形成。克重200~1800g/m<sup>2</sup>，幅宽50~3200mm，产品广泛用于拉挤型材、管道修复、火车、滑雪板等。

NeedleFab is formed by laying an evenly cut layer on the surface of glass fiber wiki cloth, and entangling between felt glass fiber and base cloth through needling. Weight 200~1800g/m<sup>2</sup>, width 50~3200mm. The products are widely used in pultruded profiles, pipeline repair, trains, skis and so on.



### ▶ 技术参数 / Specification

规格型号 Code	总克重 Total Weight (g/m <sup>2</sup> )	短切层克重 chopped layer weight (g/m <sup>2</sup> )	基布克重 Base Fabrics Weight (g/m <sup>2</sup> )
ENC200/200	395	200	195
ENC300/300	618	300	318
ENC400/300	708	300	408
ENC600/300	900	300	600

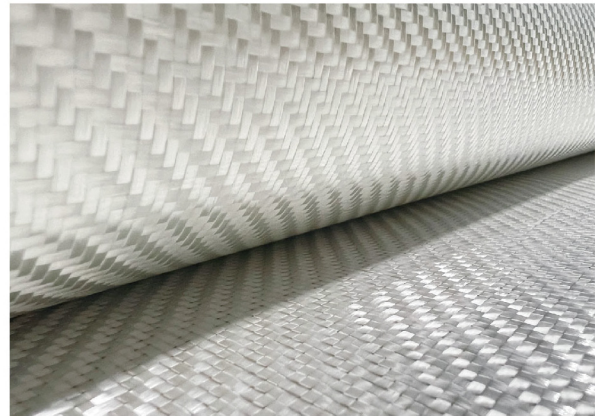
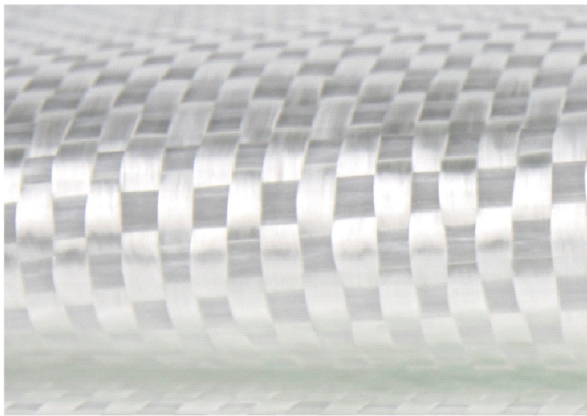
备注：所有产品克重公差为±10%，或以双方协商为准。  
 Note: The weight tolerance of all products is ±10%, or subject to mutual agreement.



## 玻纤纤维布 WOVIFAB

由无碱玻璃纤维粗纱在织机经纬方向以不同规律交织而成的具有平纹、斜纹或缎纹等不同组织纹路的织物。克重200~1100g/m<sup>2</sup>，幅宽100~3200mm，产品广泛用于制造冲浪板、船体、容器、车厢板、帆板、管道等复合材料制品。

WoviFab is woven by utilizing a weaving process in which alkali-free glass roving is interwoven in different patterns in the warp and weft directions of the loom, having different patterns of weave, such as plain, twill, or satin. Weight 200~1100g/m<sup>2</sup>, width 100~3200mm. The products are widely used in the manufacture of surfboards, boat hulls, FRP tanks, carriage plates, sailboards, FRP pipes and other FRP products.



### ▶ 技术参数 / Specification

规格型号 Code	总克重 Total Weight (g/m <sup>2</sup> )	经向克重 Warp Weight (g/m <sup>2</sup> )	纬向克重 Weft Weight (g/m <sup>2</sup> )
EWR200	195	120	75
EWR300	300	150	150
EWR400	408	204	204
EWR500	504	264	240
EWR600	600	300	300
EWR800	816	432	384
WRT500	504	264	240

备注：所有产品克重公差为±7%，或以双方协商为准。

Note: The weight tolerance of all products is ±7%, or subject to mutual agreement.



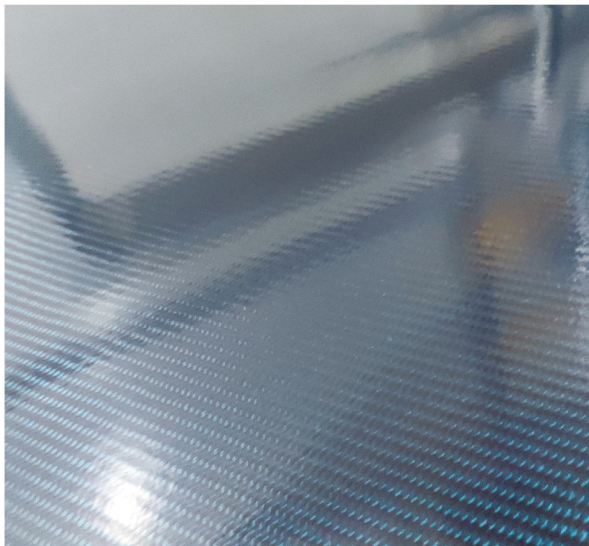
## 预浸料 PREPREG

### ► 产品简介 / Product Introduction

预浸料是一种已含浸树脂的增强纤维的复合材料中间材料，增强纤维可以是单向的纤维纱或其织物。主要用于体育休闲、医疗器械、汽车零部件等领域。

Prepreg is a composite intermediate material that has been resin-impregnated to increase the strength of the fiber, the reinforced fiber can be one-way fiber yarn or other fabrics. It is mainly used in sports leisure, medical equipment, auto parts and other fields.

### ► 产品描述 / Description



### ► 产品特点 / Features

- 力学性能优异;
- 可塑性好：覆模性好，成型容易，便于加工；
- 树脂含量均匀；
- 可设计性强：树脂类型、树脂含量、纤维类型和纤维面密度均可设计
- Excellent mechanical properties
- Good plasticity: good moldability, easy forming, easy processing
- Uniform resin content
- Strong designability: resin type, resin content, fiber type and fiber surface density can be designed

#### 适用原料 Reinforcement materials

玻璃纤维	Glass
碳纤维	Carbon
芳纶纤维	Aramid
混合编织	Hybrid

#### 适用树脂 Resin compatibility

通用环氧树脂	General Epoxy
耐高温环氧树脂	Heat-resistant Epoxy
阻燃环氧树脂	Flame Retardant Epoxy

#### 产品系列 Fabric series

单向	Unidirectional
织物	Wovenfabric

### ► 技术参数 / Specification

规格型号 Code	总克重 Total Weight (g/m <sup>2</sup> )	纤维种类 Fibre Type	组织结构 Construction	纤维克重 Fibre Weight (g/m <sup>2</sup> )	树脂含量 Resin Content (%)	幅宽 Width(mm)
GWP200/4340	337	玻璃纤维/glass fiber	平纹/plain	202	40	1250
GWP400/4340	670	玻璃纤维/glass fiber	平纹/plain	402	40	1250
GWP600/4340	1000	玻璃纤维/glass fiber	平纹/plain	600	40	1250
CU150/1033	224	碳纤维/carbon fiber	单向/unidirectional	150	33	1000
CWP200/1144	357	碳纤维/carbon fiber	平纹/plain	200	44	1000
CWT200/1144	357	碳纤维/carbon fiber	斜纹/twill	200	44	1000

备注：所有产品克重公差为±5%，或以双方协商为准。  
Note: The weight tolerance of all products is ±5%, or subject to mutual agreement.



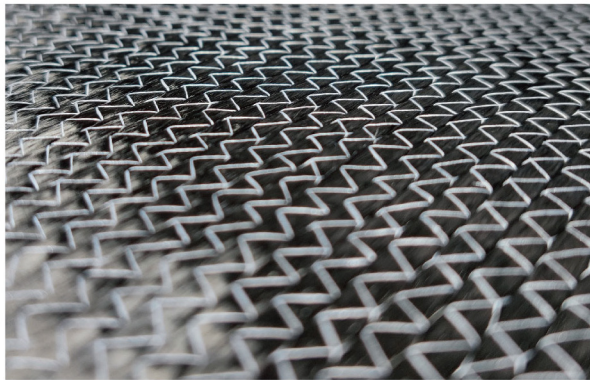
## 高性能纤维多轴向织物 HP MULTIFAB

### ▶ 产品简介 / Product Introduction

由经向 (0°)、纬向 (90°)或斜向 (±45°)纤维层经聚酯缝编线缝编而成。产品广泛应用于船舶、建筑工程、风力叶片、体育休闲等高性能纤维复合材料制品。

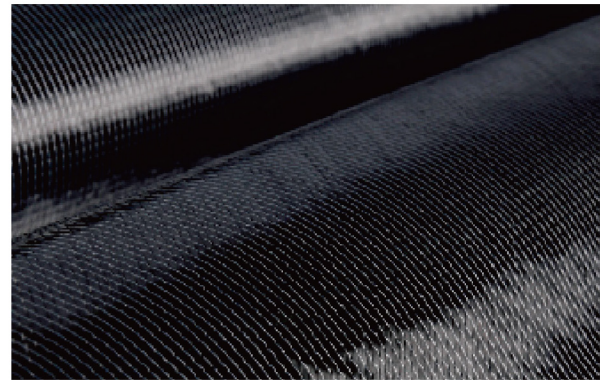
High Performance Multiaxial Fabrics is composed of warp (0°), zonal (90°) or oblique (±45°) fiber layers stitched with polyester thread. The products are widely used in ships, construction engineering, wind blades, sports leisure and other high-performance thousand-dimensional composite products.

### ▶ 产品描述 / Description



### ▶ 产品特点 / Features

- 可设计性：各层克重和纤维类型可设计选择；
  - 纱线无屈曲：纱线平行伸直，更好的发挥材料的力学性能；
  - 树脂导流性好：经编织物树脂导流速率和渗透性优于机织物；
  - 高效叠层：多层复合，铺层效率高于机织物。
- Designability: The gram weight of each layer and fiber type can be selected by design
  - Non-buckling yarn: Straight parallel yarn, can better demonstrate the mechanical properties of the material
  - Good resin conductivity: The resin conductivity and permeability of warp-knitted fabrics are better than those of woven fabrics
  - High-efficiency lamination: Multilayer composites, the layup efficiency is higher than that of woven fabric



#### 适用原料 Reinforcement materials

碳纤维	Carbon
芳纶纤维	Aramid
玄武岩纤维	Basalt
纤维混编	Hybrid

#### 产品系列 Fabric series

单轴向	Unidirectional
双轴向	Biaxial
三轴向	Triaxial
四轴向	Quadraxial
特殊定制	Tailor Made

#### 适用树脂 Resin compatibility

环氧树脂	Epoxy
聚氨酯树脂	Polyurethane
乙烯基树脂	Vinyl Ester

#### 适用工艺 Suitable methods

真空导入	Infusion
模压	Mould Pressing
树脂传递模塑RTM	RTM



## 高性能纤维多轴向织物 HP MULTIFAB

### ▶ 产品数据 / Data

规格型号 Code	总克重 Total Weight (g/m <sup>2</sup> )	0° 克重 0° Weight (g/m <sup>2</sup> )	+45° 克重 +45° Weight (g/m <sup>2</sup> )	90° 克重 90° Weight (g/m <sup>2</sup> )	-45° 克重 -45° Weight (g/m <sup>2</sup> )	纱线类型 Fibre Type
CL300	334	300	--	16	--	Carbon
CL400	426	410	--	8	--	Carbon
CL600	625	589	9	--	9	Carbon
CLT200	204	100	--	100	--	Carbon
CLT300	304	150	--	150	--	Carbon
CLT400	404	200	--	200	--	Carbon
CLT600	606	300	--	300	--	Carbon
CLT800	806	400	--	400	--	Carbon
CBX100	103	--	50	--	50	Carbon
CBX150	154	--	75	--	75	Carbon
CBX200	204	--	100	--	100	Carbon
CBX300	304	--	150	--	150	Carbon
CBX400	404	--	200	--	200	Carbon
CBX600	605	--	300	--	300	Carbon
CBX800	805	--	400	--	400	Carbon
CTLX600	605	200	200	--	200	Carbon
CTLX800	805	400	200	--	200	Carbon
CQX600	605	150	150	150	150	Carbon
CQX800	805	200	200	200	200	Carbon
AL180	229	184	--	32	--	Aramid
ALT180	189	92	--	84	--	Aramid
ALT350	364	184	--	167	--	Aramid
HLT330AG	346	175	--	158	--	Aramid/Glass

备注：所有产品克重公差为±5%，或以双方协商为准。  
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## 高性能纤维机织物 HP WOVIFAB

### ▶ 产品简介 / Product Introduction

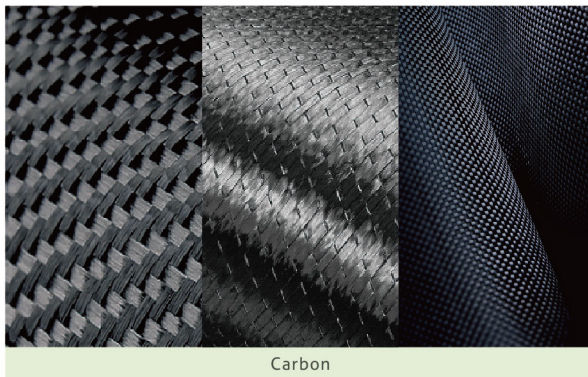
由碳纤维、芳纶纤维等高性能纤维在织机经纬方向以不同规律交织而成的具有平纹、斜纹或缎纹等不同组织纹路的织物。产品广泛应用于汽车内外饰件或结构件、建筑补强、光伏热场、体育休闲等领域。

High Performance Woven Fabrics is made of high-performance fibers such as carbon fiber and aramid fiber interwoven with different rules in the warp and weft direction of the loom. It has different weave patterns such as plain weave, twill weave or satin weave. Products are widely used in automotive interior and exterior decoration or knot components, building reinforcement, hot field, sports and leisure and other fields.

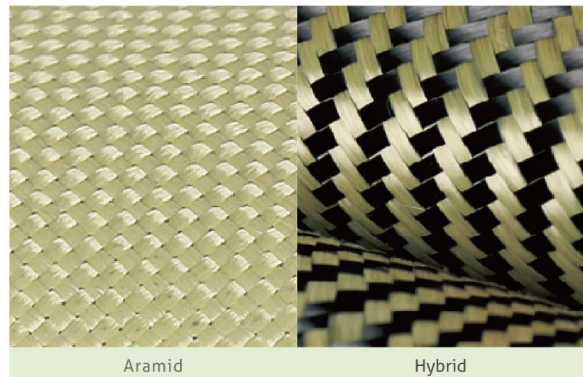
### ▶ 产品特点 / Features

- 可设计性：纤维类型、密度，织物结构纹理均可根据需要设计；
  - 张力均匀：经纬纱平行排列呈扁平状；
  - 尺寸稳定性好：不易变形，易于操作。
- Designability: Fiber type, density, and fabric texture can be designed as required.
  - Even tension: Warp and weft yarns are arranged in parallels and flat.
  - Good dimensional stability: Uneasy in deformation and easy in handling.

### ▶ 产品描述 / Description



Carbon



Aramid

Hybrid

#### 适用原料 Reinforcement materials

碳纤维	Carbon
芳纶纤维	Aramid
玄武岩纤维	Basalt
LCP纤维	LCP
纤维混编	Hybrid

#### 织物组织 Weave pattern

平纹	Plain
斜纹	Twill
缎纹	Satin
提花	Jacquard

#### 适用树脂 Resin compatibility

环氧树脂	Epoxy
聚氨酯树脂	Polyurethane
乙烯基树脂	Vinyl Ester
酚醛树脂等	Phenolic

#### 适用工艺 Suitable methods

真空导入	Infusion
模压	Mould Pressing
树脂传递模塑	RTM





## 高性能纤维机织物 HP WOVIFAB

### ▶ 产品数据 / Data

规格型号 Code	总克重 Total Weight (g/m <sup>2</sup> )	编织类型 Weaving Style	纱线密度(根/cm) Count (ends/cm)		纱线类型 Fiber Type
			经纱Warp	纬纱Weft	
CWP200	200	平纹/Plain	5	5	Carbon
CWP240	240	平纹/Plain	6	6	Carbon
CWP400	400	平纹/Plain	2.5	2.5	Carbon
CWP600	600	平纹/Plain	3.8	3.7	Carbon
CWT160	160	斜纹/Twill	4	4	Carbon
CWT200	200	斜纹/Twill	5	5	Carbon
CWT400	400	斜纹/Twill	2.5	2.5	Carbon
CWT450	448	斜纹/Twill	2.8	2.8	Carbon
CWT600	600	斜纹/Twill	3.8	3.7	Carbon
AWP60	60	平纹/Plain	14.4	12.6	Aramid
AWP200	200	平纹/Plain	6	6	Aramid
AWT200	200	斜纹/Twill	6	6	Aramid
LWP18	18	平纹/Plain	8	8	LCP
LWP22	22	平纹/Plain	20	20	LCP
HWP200CG	200	平纹/Plain	5	5	Carbon/Glass
HWT200CG	200	斜纹/Twill	5	5	Carbon/Glass
HWP200CA	200	平纹/Plain	5	5	Carbon/Aramid
HWT200CA	200	斜纹/Twill	5	5	Carbon/Aramid

备注：所有产品克重公差为±3%，或以双方协商为准。  
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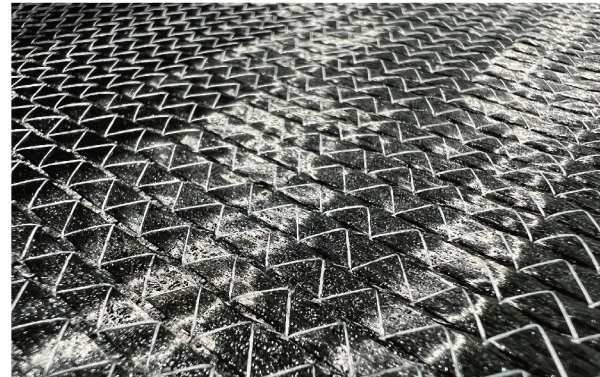
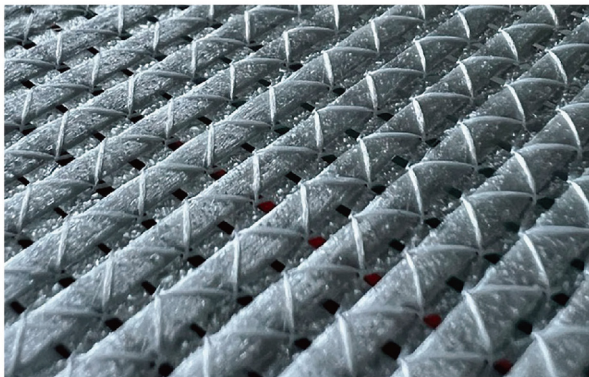
## 预成型织物 PREFAB

### ▶ 产品简介 / Product Introduction

预成型织物是将一定颗粒细度的定型粉均匀地分散在织物表面，经过加热熔融和冷却使定型粉粘附在织物表面制得的一种织物。产品主要应用在新能源汽车电池盒和汽车板簧等复合材料零部件领域。

Prefab is a kind of fabric made by evenly dispersing the fineness of a certain particle on the surface of the fabric, and making the powder adhere to the surface of the fabric after heating, melting and cooling. The products are mainly used in the field of composite parts such as battery boxes for new energy vehicles and plate springs for automobiles.

### ▶ 产品描述 / Description



### ▶ 产品特点 / Features

- 经编结构具有良好的树脂渗透性；
  - 具有良好硬挺度，可根据自动化预成型工艺要求进行设计；
  - 产品安全环保，满足ROHS要求；
  - 织物定型性好，裁剪不松散；
- Warp knitting structure has good resin permeability.
  - It has good rigidity and can be designed according to the requirements of automatic preforming process.
  - Product safety and environmental protection, meet the requirements of ROHS.
  - Fabric is well shaped and not loosely cut.

#### 适用原料 Reinforcement materials

玻璃纤维	Glass
碳纤维	Carbon
芳纶纤维	Aramid
纤维混编	Hybrid

#### 产品系列 Fabric series

单轴向	Unidirectional
双轴向	Biaxial
机织物	Woven Fabric
特殊定制	Tailor Made

#### 适用树脂 Resin compatibility

环氧树脂	Epoxy
聚氨酯树脂	Polyurethane

#### 适用工艺 Suitable methods

高压树脂传递模塑	HP-RTM
湿法模压	Wet Compression Molding



## 预成型织物 PREFAB

### ▶ 产品数据 / Data

规格型号 Code	总克重 Total Weight (g/m <sup>2</sup> )	0° 克重 0° Weight (g/m <sup>2</sup> )	+45° 克重 +45° Weight (g/m <sup>2</sup> )	90° 克重 90° Weight (g/m <sup>2</sup> )	-45° 克重 -45° Weight (g/m <sup>2</sup> )	定型粉克重 Binder Content (g/m <sup>2</sup> )
BX400P	424	1.3	200	1.3	200	14
LT400P	419	203	--	194	--	14
LT550P	582	331	--	222	--	18
LT600P	628	331	--	272	--	14
BX600P	625	1.3	301	1.3	301	14
LT800P	829	413	--	387	--	18

备注：所有产品克重公差为±5%，或以双方协商为准。  
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