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COMPOSITE
MATERIAL
MANUFACTURING EXPERT
高端复合材料制造专家

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**高端复合材料**制造专家



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上海骁雀实业有限公司
Shanghai Xiaoque Industrial Co., Ltd
Phone : +86 19121157199
Address: Room 112, 1st Floor, Building 42, No.111 Kangqiao East Road, China (Shanghai)


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上海骁雀实业有限公司
Shanghai Xiaoque Industrial Co., Ltd




# CONTENTS
目录

关于骁雀 | About Us 02

公司生产设备 | Company Production Equipment 03-04

产品介绍 | Product Introduce

碳纤维系列 – 碳纤维双向编织布 | Carbon Fiber 05-06

芳纶纤维系列 – 芳纶纤维编织布 | Aramid Fiber 07-08

预浸布 | Prepreg Fabric

单向碳纤维预浸布 | Unidirectional Carbon Fiber Prepreg Fabric 09-10

碳纤维编织预浸布 | Carbon Fiber Prepreg Fabric 11-12

混编布 | Hybrid Fabric

金银丝布 | Glitter Carbon Fabric 13-14

多轴向布 | Multi-axial Fabric 15-16

多轴向布应用领域 | Multi-axial Fabric Applications 17-18

碳纤维短切 | Chopped Carbon Fiber 19

建筑加固系列 | Building Reinforcement Products 20

# ABOUT US
## 关于骁雀

Shanghai Xiaoque Industrial Co.,LTD. We are a 20 - year - old enterprise with an 8,000 -square - meter factory. The daily output of carbonfiber cloth can reach 50,000 square meters.Meanwhile, we have obtained CE certificates, ISOcertificates and green environmental protectioncertificates, and have served millions of enterprisecustomers.
All employees are dedicated, innovative and honestto jointly establish a stable

上海骁雀实业有限公司。是一家拥有20年历史的企业，拥有一座占地8,000平方米的工厂。碳纤维布日产量可达50,000平方米同时，我们已获得CE认证、ISO认证以及绿色环保认证，并已服务于数百万企业客户。所有员工都兢兢业业、富有创新精神且诚实守信，共同致力于构建稳定的市场并提升企业形象。

为了推动创新发展，公司秉持着"以创新促进长期进步、互惠共赢与合作"的理念。除了专注于技术研发外，公司还大举投入建设中国首个面向加固行业的互联网平台，并与业内顶尖企业展开合作，为加固与翻新领域的发展贡献力量。




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我们一直坚持以市场为重心，以人才科技为向导，以勤劳俭朴为准则，大市场经济大朝中奋发搏击，不断壮大。公司将继续坚持，以质取胜，以信至远，开拓求实，团结进取，为社会各界朋友提供最理想的产品和服务，为我国复材事业作出自己的贡献！

# COMPANY PRODUCTION EQUIPMENT

## 公司生产设备

面对社会市场的激烈竞争，XIAOQUE 围绕“人才、媒体、技术、网络”四大强势资源拓展经营领域，通过知识资本增殖管理提升企业核心竞争力，实现企业跨越式发展。

企业时刻保持敏锐的市场触觉和专业的工作水准凭借先进的设备和科学的管理，架起联接企业和客户之间的桥梁，为企业发展创造最大价值，为客户提供一流专业服务。


涂胶机


预浸设备


织布机

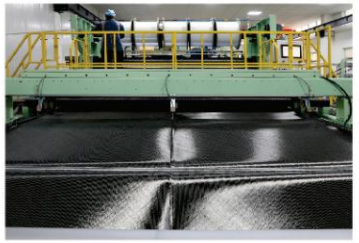

预浸料


预浸纱架


经编机

Facing the fierce competition in the social market, xiaoque Enterprise has expanded its business field aroundthe four strong resources of "talent, media, technology, and network", and enhanced its core competitivenessthrough knowledge capital proliferation management to achieve leapfrog development. The enterprise always maintains a keen market sense and professional working standards. Withadvanced equipment and scientific management, it builds a bridge between the enterprise and custom-ers, creates maximum value for enterprise development, and provides customers with first-classprofessional services





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# CARBON FIBER

碳纤维

## 碳纤维双向编织布

Carbon Fiber
Bi-direction Fabric

### 产品介绍 | Product Description

以 1K,3K,6K,12K,24K 等为原材料进行平纹、斜纹、缎纹编织。产品主要应用于航空航天、汽摩配件、运动器材、建筑加固及各种装饰件等。

It is weaved by 1K,3K,6K,12K,24K carbon fiber, weave pattern including plain, tiwll, satin. Its application mainly including aerospace auto parts sports equipment building reinforcements decorations.

### 其他延伸产品 | Derivative Products

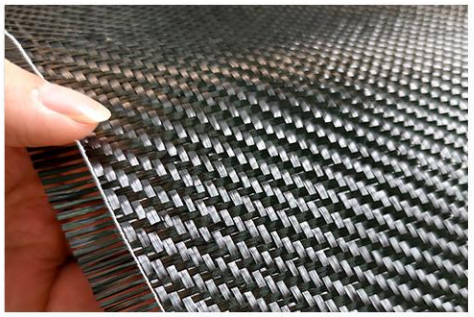
金银丝布、提花布、与其他高性能纤维材料（芳纶纤维、玻璃纤维等）混维布、单向布、编织带、套管、短切、制品、3D 立体织物等。

Carbon gitter fabric, Carbon Jacquard fabric, Hybrid fabric with other high performance fibers (aramid, UHMWPE, basalt, fiber Textile tape, Textile see/braid, Chopped fiber,3D textile. glass..) Unidirectional fabric.

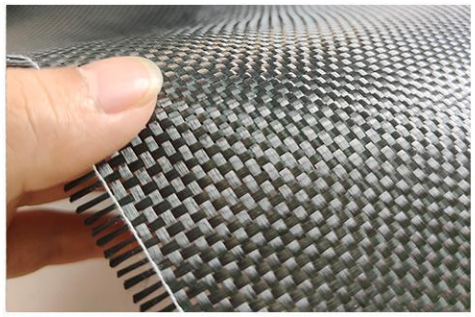
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3K 斜纹



3K 平纹

### 主要参数 | Main Parameter

| 型号 Type | 纤维种类 Yarm | | 织物结构 Weave | 经纬密度 Fiber count (10mm) | | 幅宽 Width (mm) | 厚度 Thickness (mm) | 重量 Weight (g/m²) |
|---|---|---|---|---|---|---|---|---|
| | 经向 Warp | 纬向 Weft | | 经向 Warp | 纬向 Weft | | | |
| XQ-1 | 1K | 1K | 平纹 (Plain) | 9 | 9 | 1000~1270 | 0.16 | 120 |
| XQ-1 | 1K | 1K | 斜纹 (Twill) | 9 | 9 | 1000~1270 | 0.16 | 120 |
| XQ-3 | 3K | 3K | 平纹 (Plain) | 5 | 5 | 1000~1270 | 0.26 | 200 |
| XQ-3 | 3K | 3K | 斜纹 (Twill ) | 5 | 5 | 1000~1270 | 0.26 | 200 |
| XQ-3 | 3K | 3K | 平纹 (Plain) | 6 | 6 | 1000~1270 | 0.32 | 240 |
| XQ-3 | 3K | 3K | 斜纹 (Twill) | 6 | 6 | 1000~1270 | 0.32 | 240 |
| XQ-6 | 6K | 6K | 平纹 (Plain) | 4 | 4 | 1000~1270 | 0.42 | 320 |
| XQ-6 | 6K | 6K | 斜纹 (Twill) | 4 | 4 | 1000~1270 | 0.42 | 320 |
| XQ-6 | 6K | 6K | 平纹 (Plain) | 4.5 | 4.5 | 1000~1270 | 0.48 | 360 |
| XQ-6 | 6K | 6K | 斜纹 (Twill) | 4.5 | 4.5 | 1000~1270 | 0.48 | 360 |
| XQ-12 | 12K | 12K | 平纹 (Plain) | 2.5 | 2.5 | 1000~1270 | 0.53 | 400 |
| XQ-12 | 12K | 12K | 斜纹 (Twill) | 2.5 | 2.5 | 1000~1270 | 0.53 | 400 |
| XQ-12 | 12K | 12K | 平纹 (Plain) | 3 | 3 | 1000~1270 | 0.64 | 480 |
| XQ-12 | 12K | 12K | 斜纹 (Twill) | 3 | 3 | 1000~1270 | 0.64 | 480 |

# ARAMID FIBER

芳纶纤维

## 芳纶纤维编织布

Aramid Fiber
Fabric

### 产品介绍 | Product Description

以对位芳纶为主，以 200D、400D、600D、800D、1000D、1500D、3000D 等为原料进行平纹、斜纹、缎纹编织。产品主要应用于航空航天、防弹衣、机电、建筑、汽车、体育用品等。

It is weaved mainly by para-aramid fiber 200D\400D\1600D\1800D\1000D\1500D\3000D.Weave pattern including plain, twill, satin. Its application mainly including aerospace, bulletproof vest, electromechanic equipment, building reinforcement, auto and sports equipment.

### 其他延伸产品 | Derivative Products

提花布、与其他高性能纤维材料（碳纤维、玻璃纤维等）混编布、单向布、编织带、套管、短切、制品、3D 立体织物等。

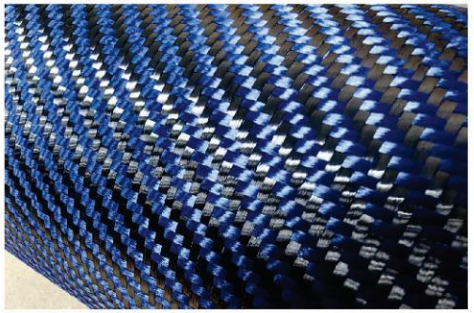
Aramid jacquard fabric hybrid fabric with other high performance fibers (carbon, uhmwpe, basalt, fiberglass..) unidirectional fabric, textile tape, textile sleeve/braid, chopped fiber, 3d textile.

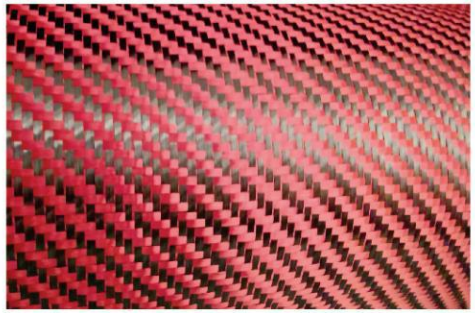
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芳纶布





### 主要参数 | Main Parameter

| 型号 Type | 纤维种类 Yarm | | 织物结构 Weave | 经纬密度 Fiber count (10mm) | | 幅宽 Width (mm) | 厚度 Thickness (mm) | 重量 Weight (g / m²) |
|---|---|---|---|---|---|---|---|---|
| | 经向 Warp | 纬向 Weft | | 经向 Warp | 纬向 Weft | | | |
| XQ-200 | 200D | 200D | 平纹 (Plain) | 13.5 | 13.5 | 1000~1270 | 0.08 | 50 |
| XQ-400 | 400D | 400D | 平纹 (Plain) | 12 | 12 | 1000~1270 | 0.14 | 80 |
| XQ-600 | 600D | 600D | 平纹 (Plain) | 8 | 8 | 1000~1270 | 0.15 | 100 |
| XQ-800 | 800D | 800D | 平纹 (Plain) | 7 | 7 | 1000~1270 | 0.16 | 115 |
| XQ-1000 | 1000D | 1000D | 平纹 (Plain) | 6 | 6 | 1000~1270 | 0.22 | 140 |
| XQ-1000 | 1000D | 1000D | 平纹 (Plain) | 7 | 7 | 1000~1270 | 0.24 | 160 |
| XQ-1000 | 1000D | 1000D | 斜纹 (Twill) | 7 | 7 | 1000~1270 | 0.24 | 160 |
| XQ-1000 | 1000D | 1000D | 平纹 (Plain) | 9 | 9 | 1000~1270 | 0.26 | 200 |
| XQ-1000 | 1000D | 1000D | 斜纹 (Twill) | 9 | 9 | 1000~1270 | 0.26 | 200 |
| XQ-1500 | 1500D | 1500D | 平纹 (Plain) | 5 | 5 | 1000~1270 | 0.23 | 170 |
| XQ-1500 | 1500D | 1500D | 平纹 (Plain) | 6 | 6 | 1000~1270 | 0.26 | 200 |
| XQ-1500 | 1500D | 1500D | 斜纹 (Twill) | 6.5 | 6.5 | 1000~1270 | 0.28 | 220 |
| XQ-3000 | 3000D | 3000D | 平纹 (Plain) | 4.5 | 4.5 | 1000~1270 | 0.40 | 300 |
| XQ-3000 | 3000D | 3000D | 平纹 (Plain) | 6.5 | 6.5 | 1000~1270 | 0.70 | 450 |

# PREPREG FABRIC

预浸布

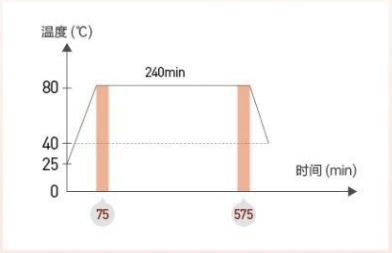
## 主要产品 | Main Product

包括：单向碳纤维预浸布（24T、30T、36T、40T）、碳纤维编织预浸布（1K，3K，6K，12K）、各类混编预浸布等。单向纤维重量可从 30g/m² 到 600g/m²，树脂含量均匀度控制在 0.5% 以内，纤维重量与树脂含量可按照客户要求进行生产。

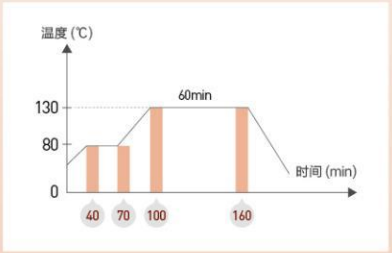
The main products include:unidirectional carbon fiber prepreg (24T,30T,36T,40T),and carbon fiber woven prepreg (1K,3K,6K,12K),all kinds of hybrid prepreg and so on.Unidirectionalfabric weight is from 30g/m² to 600g/m², the resin content uniformity controlled within 0.5%.Weight of the fiber and the resin content can be produced according to customer requirements.



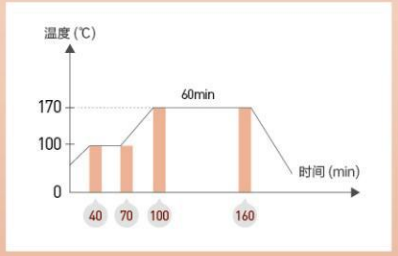
环氧树脂预浸料（经编织物 80℃）固化曲线图
Curingcuve of epoxyresin prepreg(warp kitng85℃)




环氧树脂预浸料 (130℃) 固化曲线图
Curing curve of epoxy resin prepreg (warp kitting 130°C)




环氧树脂预浸料 (170℃) 固化曲线图
Curing curve of epoxy resin prepreg (warp kitting 170°C)




## 单向碳纤维预浸料

Unidirectional Carbon Fiber Prepreg Fabric



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## 主要参数 | Main Parameter

| 型号 Type | 纤维重量 Dry weight (g/m²) | 预浸润总重量 Total weight (g/m²) | 树脂含量 Resin content (%) | 幅宽 Width (mm) | 厚度 Thickness (mm) |
|---|---|---|---|---|---|
| XQ-03000 | 30 | 76 | 55 | 1000 | 0.03 |
| XQ-05000 | 50 | 91 | 45 | 1000 | 0.06 |
| XQ-07500 | 75 | 121 | 38 | 1000 | 0.08 |
| XQ-10000 | 100 | 150 | 33 | 1000 | 0.10 |
| XQ-12500 | 125 | 187 | 33 | 1000 | 0.13 |
| XQ-15000 | 150 | 224 | 33 | 1000 | 0.15 |
| XQ-17500 | 175 | 261 | 33 | 1000 | 0.18 |
| XQ-20000 | 200 | 298 | 33 | 1000 | 0.20 |
| XQ-22500 | 225 | 337 | 33 | 1000 | 0.23 |
| XQ-25000 | 250 | 374 | 33 | 1000 | 0.25 |

# PREPREG FABRIC

预浸布

## 碳纤维编织预浸布

Carbon Fiber
Prepreg Fabric

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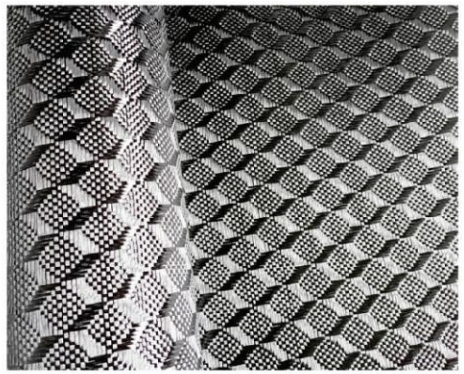
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### 预浸料贮存期 | Shelf Life

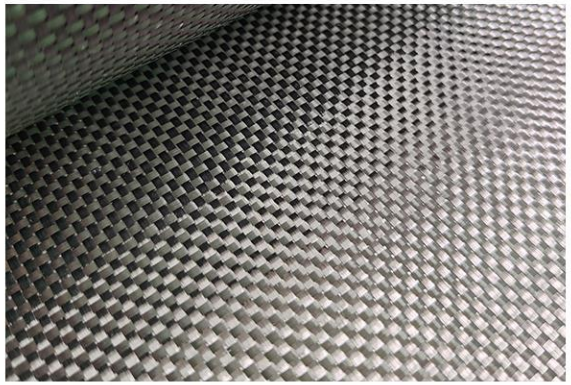
在 22℃( 常温 ) 条件下，贮存期为 1 个月；
在 0℃条件下，贮存期为 3 个月；
在 -18℃条件下，贮存期为 6 个月。

Prepreg storage period
1month at 22°C
3months at 0°C
6months at-18°C









### 主要参数 | Main Parameter

| 型号 Type | 纤维种类 Yarm | | 织物结构 Weave | 纤维重量 Dry weight (g/m²) | 预浸润总重量 Total weight (g/m²) | 树脂含量 Resin content (%) | 幅宽 Width (mm) | 厚度 Thickness (mm) |
|---|---|---|---|---|---|---|---|---|
| | 经向 Warp | 纬向 Weft | | | | | | |
| XQ-1011 | 1K | 1K | 平纹 (Plain) | 120 | 205 | 40 | 1000 | 0.16 |
| XQ-1021 | 1K | 1K | 斜纹 (Twill) | 120 | 205 | 40 | 1000 | 0.16 |
| XQ-3011 | 3K | 3K | 平纹 (Plain) | 200 | 330 | 40 | 1000 | 0.28 |
| XQ-3021 | 3K | 3K | 斜纹 (Twill) | 200 | 330 | 40 | 1000 | 0.28 |
| XQ-3031 | 3K | 3K | 足球纹 (Football stripes) | 240 | 405 | 40 | 1000 | 0.30 |
| XQ-6011 | 6K | 6K | 平纹 (Plain) | 320 | 530 | 40 | 1000 | 0.40 |
| XQ-6021 | 6K | 6K | 斜纹 (Twill) | 320 | 530 | 40 | 1000 | 0.40 |
| XQ-6031 | 6K | 6K | 缎纹 (Satin) | 400 | 665 | 40 | 1000 | 0.40 |
| XQ-7011 | 12K | 12K | 平纹 (Plain) | 400 | 670 | 40 | 1000 | 0.50 |
| XQ-7021 | 12K | 12K | 斜纹 (Twill) | 480 | 800 | 40 | 1000 | 0.55 |

# HYBRID FABRIC

混编布

## 金银丝布

Glitter
Carbon Fabric

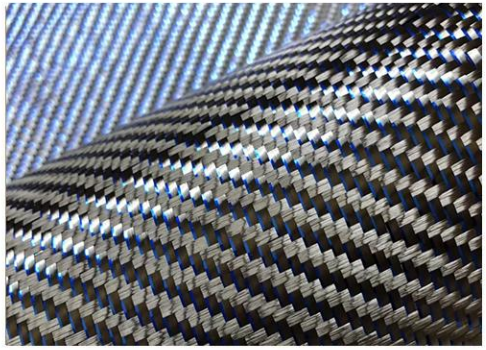
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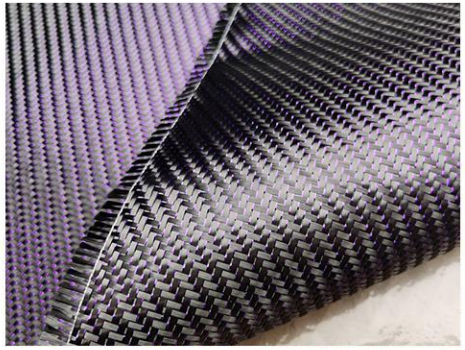
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### 产品介绍 | Product Description

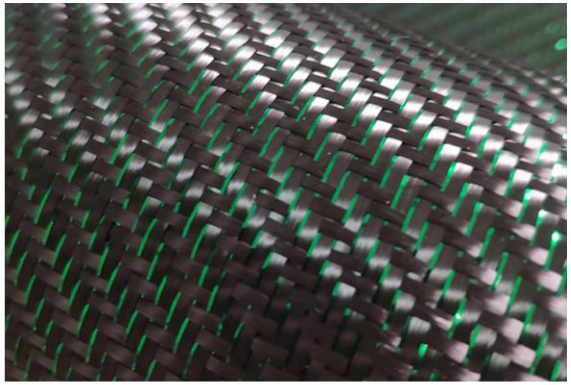
在碳布编织过程中加入彩色金属丝，运用其特性的同时，增加其外观件的可造性及美观性，让碳纤维不再表面只有黑色。

Adding colored filament in the carbon cloth weaving process. Using ofits characteristics on performance atthe same time, increase its appearance variety and aesthetics so that carbon fiber no longer only black.





金丝布





### 主要参数 | Main Parameter

| 型号 Type | 纤维种类 Yarm | | 织物结构 Weave | 经纬密度 Fiber count (10mm) | | 幅宽 Width (mm) | 厚度 Thickness (mm) | 重量 Weight (g/m²) |
|---|---|---|---|---|---|---|---|---|
| | 经向 Warp | 纬向 Weft | | 经向 Warp | 纬向 Weft | | | |
| XQ-CMP240-1 | 3K+ 细红 Thin red | 3K+ 细金 Thin gold | 平纹 / 斜纹 Plain/Twill | 10 | 10 | 1000 | 0.30 | 240 |
| XQ-CMP250-2 | 3K+ 粗红 Thick red | 3K+ 细金 Thin gold | | 10 | 10 | 1000 | 0.30 | 250 |
| XQ-CMP240-3 | 3K+ 细银 Thin silver | 3K+ 细银 Thin silver | | 10 | 10 | 1000 | 0.30 | 240 |
| XQ-CMP250-4 | 3K+ 粗银 Thick silver | 3K+ 细银 Thin silver | | 10 | 10 | 1000 | 0.30 | 250 |
| XQ-CMP240-5 | 3K+ 细银 Thin silver | 3K+ 细金 Thin gold | | 10 | 10 | 1000 | 0.30 | 240 |
| XQ-CMP250-6 | 3K+ 粗金 Thick gold | 3K+ 细银 Thin silver | | 10 | 10 | 1000 | 0.30 | 250 |

# MULTI-AXIAL FABRIC

多轴向布

## 产品介绍 | Product Description

碳纤维多轴向布的应用场景非常广泛，包括但不限于飞机、航天器、汽车、舰艇、装甲车、风能发电、轨道车辆、高压容器和运动装备等。碳纤维多轴向布作为一种高性能材料，具有轻质、高强度、抗撕裂性能好、层间剪切力强等优点，因此在多个领域都有应用。

The application scenarios of carbon fiber multi-axial fabric are very wide, including but not limited to aircraft, spacecraft, automobiles, warships, armored vehicles, wind power generation, rail vehicles, high pressure vessels and sports equipment. As a kind of high performance material, carbon fiber multi-axial fabric has the advantages of light weight, high strength, good tear resistance and strong interlayer shear force, so it has been applied in many fields.

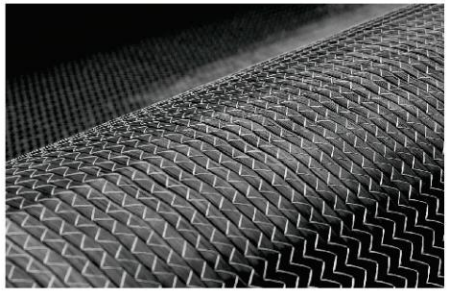


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## 主要参数 | Main Parameter

| 型号 Product No. | 纤维类型 Fibre Type | 轴向 Stitching type & fiber orientation | 总克重 Fabric Weight (g/m²) | 0° 克重 0°Layer (g/m²) | +45° 克重 +45°Layer (g/m²) | +90° 克重 +90°Layer (g/m²) | −45° 克重 -45°Layer (g/m²) | 幅宽 Standard Width (m) |
|---|---|---|---|---|---|---|---|---|
| XQUD200 | Carbon 12K/24K | Unidirectional | 334 | 300 | / | 16 | / | 1.27 |
| XQUD400 | Carbon 12K/24K | Unidirectional | 426 | 410 | / | 8 | / | 1.27 |
| XQUD600 | Carbon 12K/24K | Unidirectional | 625 | 589 | 9 | / | 9 | 1.27 |
| XQBX100 | Carbon 12K/24K | Biaxial +45° / −45° | 103 | / | 50 | / | 50 | 1.27 |
| XQBX150 | Carbon 12K/24K | Biaxial +45° / −45° | 154 | / | 75 | / | 75 | 1.27 |
| XQBX200 | Carbon 12K/24K | Biaxial +45° / −45° | 204 | / | 100 | / | 100 | 1.27 |
| XQBX300 | Carbon 12K/24K | Biaxial +45° / −45° | 304 | / | 150 | / | 150 | 1.27 |
| XQBX400 | Carbon 12K/24K | Biaxial +45° / −45° | 404 | / | 200 | / | 200 | 1.27 |
| XQBX600 | Carbon 12K/24K | Biaxial +45° / −45° | 605 | / | 300 | / | 300 | 1.27 |
| XQBX800 | Carbon 12K/24K | Biaxial +45° / −45° | 805 | / | 400 | / | 400 | 1.27 |
| XQLT200 | Carbon 12K/24K | LT Biaxial 0° / 90° | 204 | 100 | / | 100 | / | 1.27 |
| XQLT300 | Carbon 12K/24K | LT Biaxial 0° / 90° | 304 | 150 | / | 150 | / | 1.27 |
| XQLT400 | Carbon 12K/24K | LT Biaxial 0° / 90° | 404 | 200 | / | 200 | / | 1.27 |
| XQLT600 | Carbon 12K/24K | LT Biaxial 0° / 90° | 606 | 300 | / | 300 | / | 1.27 |
| XQLT800 | Carbon 12K/24K | LT Biaxial 0° / 90° | 806 | 400 | / | 400 | / | 1.27 |
| XQTX600 | Carbon 12K/24K | Triaxial | 606 | 200 | 200 | / | 200 | 1.27 |
| XQTX800 | Carbon 12K/24K | Triaxial | 806 | 400 | 200 | / | 200 | 1.27 |
| XQQX600 | Carbon 12K/24K | Quadriaxial | 606 | 150 | 150 | 150 | 150 | 1.27 |
| XQQX800 | Carbon 12K/24K | Quadriaxial | 806 | 200 | 200 | 200 | 200 | 1.27 |

备注: 所有产品克重公差为±3%，或以双方协商为准。

Note: The weight tolerance of all products is ±3%，or subject to mutual agreement.

# MULTI-AXIAL FABRIC APPLICATIONS

## 多轴向布应用领域

以点滴做起，从细节做起，从标准做起，构筑和谐产品、销售、服务链。XIAOQUE碳纤维产品广泛的应用于各行各业。公司更有各种碳纤维制品成品销售，主要有音响配件，汽车部件，手机数码，运动器材等。

*Start with bits and pieces, start with details, start with standards, and build a harmonious-product, sales, and service chain, XIAOQUE carbon fiber products are widely used in all walks oflife. The company also sells a variety of finished carbon fiber products, mainly audio accessoriesauto parts, mobile digital, sports equipment and so on.*



船舶应用
Marine Application



冲浪板应用
Surfboard Application



滑雪板应用
Snowboard Application



轨道车辆应用
Rail Vehicle Application

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# CHOPPED CARBON FIBER

碳纤维短切

## 产品介绍 | Product Description

短切碳纤维是由碳纤维长丝经纤维切断机短切而成，其基本性能主要取决于其原料 -- 碳纤维长丝的性能。短纤维具有分散均匀、喂料方式多样、工艺简单等的优点可以应用于碳纤维长丝所不适合的特殊领域。

Chopped carbon fiber is made of carbon fiber filament chopped by fiber cutting machine, its basic performance depends mainly on its raw material carbon fiber filament. Staple fiber has the advantages of uniform dispersion, variety of feeding methods simple process etc.,can be applied tospecial areas not suitable for carbon fiber filaments.

## 主要参数 | Main Parameter

| | | |
|---|---|---|
| 碳含量 | Carbon Content | 95% |
| 拉伸强度 | Tensile Strength | 3500mpa |
| 拉伸模量 | Tensile Moduous | 228gpa |
| 密度 | Density | 1.75g/cm³ |
| 电阻率 | Electrical Resistivity | 1.0-1.62cm |
| 纤维直径 | Diameter Offiber | 7um |
| 截面形状 | Sectional Shape | 圆形 round |
| 堆积密度 | Bulk Density | 0.4g/cm³ |
| 标准长度 | Standard Length | 1mm-100mm |
| 含树脂型 / 不含树脂型 | With Resin/withoutresin | |

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可根据客户定制相应规格

The corresponding specifications can be customized according to customers.





# CARBON FIBER APPLICATIONS

碳纤维应用领域

碳纤维复合材料具有耐高温、耐腐蚀、耐摩擦、重量轻、强度高、韧性好等优点。由于其突出的性能优势，它已应用于许多领域，但主要应用领域有：航空航天、汽车制造、工业应用、体育用品等。碳纤维应用非常广泛，许多设备关键部位将使用碳纤维材料取代传统材料。

Carbon fiber composite materials have the advantages of high temperature resistance, corrosion resistance, friction resistance, light weight, high strength and good toughness. Due to its outstanding performance advantages, it has been used in many fields, but its main application fields are: aerospace, automobile manufacturing, industrial applications, sporting goods, etc. Carbon fiber is widely used, and carbon fiber materials will be used to replace traditional materials in key parts of many equipment.

## 无人机应用

Drone
Applications



# BUILDING REINFORCEMENT CARBON FIBER

建筑加固碳纤维

## 产品介绍 | Product Description

建筑加固类碳纤维产品主要包括碳纤维布和碳纤维板两大类，其核心优势源于碳纤维材料本身的独特性能。这类材料以聚丙烯腈基碳纤维为核心，通过特殊编织或拉挤工艺成型，配合专用环氧树脂胶粘剂，实现与原结构的完美协同受力。

BUILDING REINFORCEMENT CARBON FIBER PRODUCTS MAINLY INCLUDE TWO MAIN CATEGORIES: CARBON FIBER CLOTH AND CARBON FIBER PLATES. THEIR CORE ADVANTAGES STEM FROM THE UNIQUE PROPERTIES OF CARBON FIBER MATERIALS THEMSELVES. WITH POLYACRYLONITRILE-BASED CARBON FIBER AS THE CORE, THESE MATERIALS ARE FORMED THROUGH SPECIAL WEAVING OR PULTRUSION PROCESSES. WHEN COMBINED WITH SPECIAL EPOXY RESIN ADHESIVES, THEY ACHIEVE PERFECT SYNERGISTIC STRESS WITH THE ORIGINAL STRUCTURE.

## 碳纤维布主要参数 | Main Parameter

| | | |
|---|---|---|
| 抗拉强度 | Tensile strength, MPa | 3444 |
| 受拉弹性模量 | Tensile modulus elastieity, MPa | 2.4 X $10^5$ |
| 伸长率 | Elongation, % | 1.61 |
| 弯曲强度 | TFlexural strength, MPa | 751.6 |
| 层间剪切强度 | Interlaminar shear strength, MPa | 49.6 |
| 单位面积质量 | Mass per unit area, g/$m^2$ | 300 |

判定依据：
Judgment Basis:

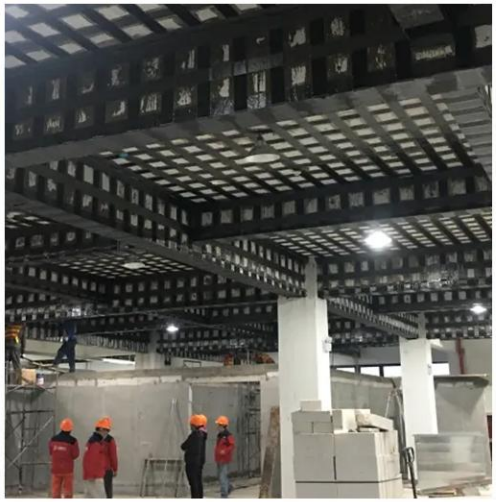
GB/T 3356-2014　GB 50728-2011Appendix D
GB 50728-2011Appendix G　GB/T 9914.3-2013

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**可根据客户需求定制相应规格**
Corresponding specifications can be customized according to customer needs.





# APPLICATION FIELDS OF CARBON FIBER CLOTH

碳纤维布应用领域

碳纤维布以其超薄轻质、可弯曲裁剪、贴合性强的特性，成为曲面结构、复杂节点及对外观有严格要求场景的首选，尤其擅长“隐形加固”与“精细补强”。手工铺贴无需吊装设备，工期比粘钢方案缩短 60%，适配室内狭窄空间。广泛应用于桥梁结构加固、老旧建筑与文物修复、特殊环境结构补强。碳纤维布（常用 200G/$M^2$ 高强 I 级产品）凭借 0.111MM 左右的超薄厚度，实现“隐形加固”。重量仅为传统粘钢方案的 5%，避免拼接受力不均与荷载过载。

WITH ULTRA-THIN, LIGHTWEIGHT, FLEXIBLE, CUTTABLE, AND HIGHLY CONFORMABLE PROPERTIES, CARBON FIBER CLOTH IS THE FIRST CHOICE FOR CURVED STRUCTURES, COMPLEX JOINTS, AND SCENARIOS WITH STRICT APPEARANCE REQUIREMENTS—ESPECIALLY FOR "INVISIBLE REINFORCEMENT" AND "PRECISION STRENGTHENING". IT ENABLES MANUAL INSTALLATION WITHOUT HOISTING EQUIPMENT, WITH A CONSTRUCTION PERIOD 60% SHORTER THAN THE STEEL BONDING SCHEME, SUITABLE FOR NARROW INDOOR SPACES. WIDELY USED IN BRIDGE STRUCTURE REINFORCEMENT, OLD BUILDING/CULTURAL RELIC REINFORCEMENT, AND SPECIAL-ENVIRONMENT STRUCTURAL STRENGTHENING, CARBON FIBER CLOTH (TYPICALLY 200G/$M^2$ HIGH-STRENGTH GRADE I) ACHIEVES "INVISIBLE REINFORCEMENT" VIA ITS ~0.111MM ULTRA-THIN THICKNESS. WEIGHING ONLY 5% OF THE TRADITIONAL STEEL BONDING SCHEME, IT AVOIDS SPLICING-INDUCED UNEVEN STRESS AND LOAD OVERLOAD.

## 配合碳胶使用施工现场

For the carbon adhesive construction site.



# BUILDING REINFORCEMENT CARBON FIBER

建筑加固碳纤维

## 碳纤维板

CARBON FIBER PLATE

XIAOQUE®

HIGH END COMPOSITE MATERIAL

高端复合材料制造专家

MANUFACTURING EXPERT

### 产品介绍 | Product Description

碳纤维板是建筑结构加固领域的刚性解决方案，以聚丙烯腈基碳纤维为核心基材， 通过连续拉挤工艺成型， 配合专用碳纤维胶粘剂（碳胶）实现与混凝土、钢结构的协同受力，主打＂高强度、高刚度、高稳定性＂，适配直线型构件及高承载力需求场景，是桥梁、大跨度建筑、重型构件加固的优选材料。

AS A RIGID SOLUTION IN THE FIELD OF BUILDING STRUCTURE REINFORCEMENT, CARBON FIBER PLATES USE POLYACRYLONITRILE-BASED CARBON FIBER AS THE CORE BASE MATERIAL, FORMED VIA CONTINUOUS PULTRUSION PROCESS. WHEN MATCHED WITH SPECIAL CARBON FIBER ADHESIVE (CARBON ADHESIVE), THEY ACHIEVE SYNERGISTIC STRESS WITH CONCRETE AND STEEL STRUCTURES. FOCUSING ON "HIGH STRENGTH, HIGH RIGIDITY, HIGH STABILITY", THEY ARE SUITABLE FOR LINEAR COMPONENTS AND SCENARIOS REQUIRING HIGH LOAD-BEARING CAPACITY, AND SERVE AS THE PREFERRED MATERIAL FOR REINFORCEMENT OF BRIDGES, LONG-SPAN BUILDINGS, AND HEAVY-DUTY COMPONENTS.









### 主要参数 | Main Parameter

| 性能项目 Performance Item | 材料等级 Material Grade | 性能指标 Performance Index |
|---|---|---|
| 抗拉强度 Tensile strength, MPa | Grade I | ≥2400MPA |
| | Grade II | ≥2000MPA |
| 受拉弹性模量 Tensile Elastic Modulus | Grade I | ≥160GPA |
| | Grade II | ≥140GPA |
| 伸长率 Elongation | Grade I | ≥1.6% |
| | Grade II | ≥1.4% |
| 纤维体积含量 Fiber Volume Content | Grade I | ≥65% |
| | Grade II | ≥55% |
| 层间剪接强度 Interlaminar Shear Strength | Grade I | ≥50MPA |
| | Grade II | ≥40MPA |