



品行 **创新** **责任** **学习** **激情**
BEHAVIOR INNOVATION RESPONSIBILITY LEARNING ENTHUSIASM

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TRANSPORTATION SERIES
交通运输系列

新材料 新领域 新高度 新贡献 新发展
NEW MATERIALS, NEW FIELDS, NEW HEIGHTS
NEW CONTRIBUTIONS AND NEW DEVELOPMENT



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企业简介

COMPANY PROFILE

浙江振石新材料股份有限公司(简称“振石股份”，股票代码：SH601112)，专业从事清洁能源领域高性能纤维增强复合材料研发、生产及销售的国家级高新技术企业。公司始于2000年，历经二十余年的创新发展，现已成为中国复合材料行业领军企业。公司深耕高性能纤维编织及热固、热塑性复合材料领域，产品广泛应用于新能源风电、太阳能光伏、新能源汽车等战略性新兴产业。

目前，公司拥有中国桐乡、埃及苏伊士、土耳其泰基尔达、西班牙加的斯等地9个生产基地，同时在美国洛杉矶和中国香港设有销售公司，可以快速响应全球客户的产品需求，产品远销50多个国家和地区。

Zhejiang Zhenshi New Materials Co., Ltd. (hereinafter referred to as “Zhenshi Co., Ltd.” ; Stock Code: SH601112) is a national high-tech enterprise specializing in the research and development, manufacturing and distribution of high-performance fiber-reinforced composite materials for the clean energy sector. Founded in 2000, the Company has emerged as a leading enterprise in China’s composite materials industry following more than two decades of innovation. Specializing in high-performance fiber fabrics, thermosetting and thermoplastic composites, the Company supplies products widely used in strategic emerging industries such as wind power, solar photovoltaics and new energy vehicles.

Currently, the company has 9 production bases located in Tongxiang China, Suez Egypt, Tekirdag Turkey, and Cádiz Spain and it also has sales companies in Los Angeles, USA, and Hong Kong, China, which can quickly respond to the product needs of global customers. Its products are exported to more than 50 countries and regions.

愿景 Vision

保持与实现新材料行业的创新者与引领者
KEEP AND REALIZE THE INNOVATOR AND LEADER OF NEW MATERIAL INDUSTRY

使命 Mission

新材料 新领域 新高度 新贡献 新发展
NEW MATERIALS, NEW FIELDS, NEW HEIGHTS
NEW CONTRIBUTIONS AND NEW DEVELOPMENT

9 ↑
生产基地
Production Bases



50 +
国家地区
Countries and regions
产品远销
Sales Area

300 +
项
专利和认证
Patents and Certifications





测试中心：成立于2004年，现拥有专业技术人员50余名，试验场地5000余平方米，各类仪器设备150余台套，进口设备占比40%以上。测试中心已通过中国合格评定国家认可委员会（CNAS）国家认可和全球风电行业权威认证机构 DNV-GL 认证。

The testing center was founded in 2004 and now has more than 50 professional and technical personnel, a test site of more than 5000 square meters, more than 150 sets of various instruments and equipments, and imported equipment accounts for more than 40%. The testing center has passed the national certification of China National Accreditation Service for Conformity Assessment (CNAS) and DNV-GL certification, an authoritative certification agency in the global wind power industry.

品质保证 QUALITY ASSURANCE

体系认证：公司先后通过了 ISO9001 质量管理体系、ISO14001 环境管理体系、ISO45001 职业健康安全管理体系、IATF16949 汽车质量管理体系、知识产权管理体系、ISO10012 测量管理体系认证以及 UL 产品认证、DNVGL 产品认证，为产品的品质提供了保障。

System Certification: The company has successfully obtained ISO9001 Quality Management System, ISO14001 Environmental Management System, ISO45001 Occupational Health and Safety Management System, IATF16949 Automotive Quality Management System, Intellectual Property System, ISO10012 Measurement Management System certifications, as well as UL product certification and DNVGL product certification, providing quality assurance for our products.



测试内容达 60 余项，满足碳纤维、玻璃纤维及织物、纤维增强材料、光伏产品、汽车部件等领域的物理性能测试、静态力学测试、疲劳力学测试、化学分析测试、微观结构分析等，测试方法采用国际 ISO 或 ASTM 标准。

The testing contents covers more than 60 items, meeting the physical performance testing, static mechanical testing, fatigue mechanical testing, chemical analysis testing, and microstructure analysis, etc., in the fields of carbon fiber, glass fiber and fabrics, fiber-reinforced materials, photovoltaic products, automotive components, etc. The testing methods adopt international ISO or ASTM standards.

THE FIELD OF TRANSPORTATION 交通运输

高性能复合材料在防水防潮性、耐腐蚀性、抗冲击性等方面，与传统材料相比具有明显的优势，且能满足运输工具对质轻、高强、保温等的要求，热塑性复合材料更是在环保和可回收性方面，具备更加明显优势，因此在交通运输领域的应用越来越广。

Compared with traditional materials, high performance composite materials have obvious advantages including water-proof, moisture resistance, corrosion resistance and impact resistance, which can meet the requirements of vehicles that need light weight, high strength, thermal insulation, etc.. Thermoplastic materials also behave better in environmentally friendly and recycling, therefore it's more and more widely used in the field of transportation.

产品系列

Product Series

汽车外观件和结构件（汽车机罩 / 面罩 / 货车厢体 / 房车保温板 / 卡车裙板 / 车顶板 / 后举门 / 侧门板 / 行李箱 / 车顶骨架 / 车顶外延板 / 油箱隔热板 / 侧板左右附件 / 底部导流板 / 翼子板 / 保险杠背衬等）、船体结构件（摩托艇 / 热塑导航船 / 热固养殖船）、高铁结构件（卡爪支座）、航空结构件（集装箱）、复合布等。

Automotive exterior and structural components (car hoods/ fascias/ cargo van bodies/ RV insulation panels/ truck skirts/ roof panels/ rear liftgates/ side door panels/ storage trunks/ roof frames/ roof overhang panels/ fuel tank insulation panels/ side panel attachments/ underbody deflectors/ fenders/ bumper backings, etc.), marine structural components (motorcades/ thermoplastic navigation boats/ thermosetting aquaculture boats), high-speed rail structural components (clamp supports), aviation structural components (containers), fabrics, and so on.



SURE-TAPE(CFRT) 连续玻璃纤维 增强热塑性带材

产品介绍/INTRODUCTION OF PRODUCTS

Sure-tape 又名 CFRT, 是一种连续的玻璃纤维增强热塑性材料, 以 E- 玻璃纤维和热塑性树脂与其他添加剂为基础。在生产过程中, 连续的玻璃纤维长丝被热塑性树脂浸渍得很好, 该生产工艺使带材具有良好的机械性能。

Sure-tape is continuous fiberglass reinforced thermoplastic material, based on E-fiberglass, thermoplastic resin and other additives. The continuous glass fibers in the production process are effectively impregnated with thermoplastic resin, resulting in the tape possessing excellent mechanical properties.



应用领域/APPLICATIONS

应用于层压片材、板材、缠绕管道及模压制品等。在交通运输领域, 用其制作的部件既能减轻车身重量, 又能提高燃油效率和车辆性能。

The Sure-tape is utilized in laminated panels, hybrid panel wound pipes, and molded products. In the field of transportation, components made from it not only contribute to vehicle weight reduction but also enhance fuel efficiency and overall vehicle performance.



技术参数/TECHNICAL PARAMETERS

| 产品型号 Item | 厚度 Thickness (mm) | 密度 Density (g/cm ³) | 拉伸强度 Tensile Strength of Tape (MPa) | 拉伸模量 Tensile Modulus of Tape (GPa) | 层压板弯 曲强度0° Flexural Strength of Laminates 0° (MPa) | 层合板的伊佐摆 冲击强度0° Izod Pendulum Impact Strength of Laminates 0° (KJ/m ²) | 剪切强度 Interlaminar Shear Strength (MPa) | 泊松比 Poisson Ratio |
|---------------------|-----------------------------|---------------------------------------|---|--|--|--|---|-------------------------|
| | 测试标准 Testing Standard | ISO 1183 | ASTM D3039 | ASTM D3039 | ASTM D790 | ASTM D256 | ASTM D2344 | ASTM D3039 |
| T-CFRT-PP-200-60 | 0.14 | 1.49 | > 700 | 27 | 350-400 | 300-350 | 19 | / |
| T-CFRT-PP-240-65 | 0.15 | 1.58 | > 800 | 28 | 300-350 | 300-350 | 19 | 0.11 |
| T-CFRT-PP-340-65 | 0.21 | 1.58 | > 800 | 28 | 300-350 | 300-350 | 19 | 0.106 |
| T-CFRT-PP-510-65 | 0.32 | 1.58 | > 700 | 28 | 250-300 | 350-400 | 19 | 0.098 |
| T-CFRT-PP-680-65 | 0.43 | 1.58 | > 650 | 28 | 250-300 | 350-400 | 19 | 0.089 |
| T-CFRT-PP-340-65(H) | 0.21 | 1.58 | > 900 | 32 | 300-350 | 300-350 | 19 | 0.106 |
| T-CFRT-HDPE-490-65 | 0.30 | 1.68 | 842 | 29 | 463 | 27 | 19 | / |
| T-CFRT-PA6-480-60 | 0.27 | 1.81 | 1014.3 | 32 | 915 | / | 42 | / |

备注:

以上均为典型数据, 如有特殊要求, 可按客户要求定制

Remark:

All of above are typical vaules, if you have special requirements, we can arrange customization.

产品规格/PRODUCT SPECIFICATION

| 带材幅宽 Tape Width | 树脂基体 Resin | 玻纤种类 Fiber Type | 最大收卷重量 Max Tape Roll Weight | 最大收卷长度 Max Roll Length |
|--|--------------------------|----------------------------------|--------------------------------|---------------------------|
| 标准尺寸: 635mm 其他尺寸可定制 Standard size: 635mm Other size: Customized | PP HDPE PETG PA | E6 GLASS E7 GLASS E8 GLASS | Up to 1540LBS (700kg) | Up to 16400FT |

裁切尺寸范围/SLITTING CAPABILITIES

| 物料 Material | 卷最大幅宽 Max Roll Width | 裁切后最小幅宽 Min Finished Roll Width | 裁切后最大卷径 Max Roll Length | 卷重范围 Max Roll Weight |
|----------------|-------------------------|---------------------------------------|----------------------------|--------------------------|
| 单向带 Tape | 25" (635mm) | 2" (50mm) | 47" 1200mm | Up to 1540LBS (700kg) |

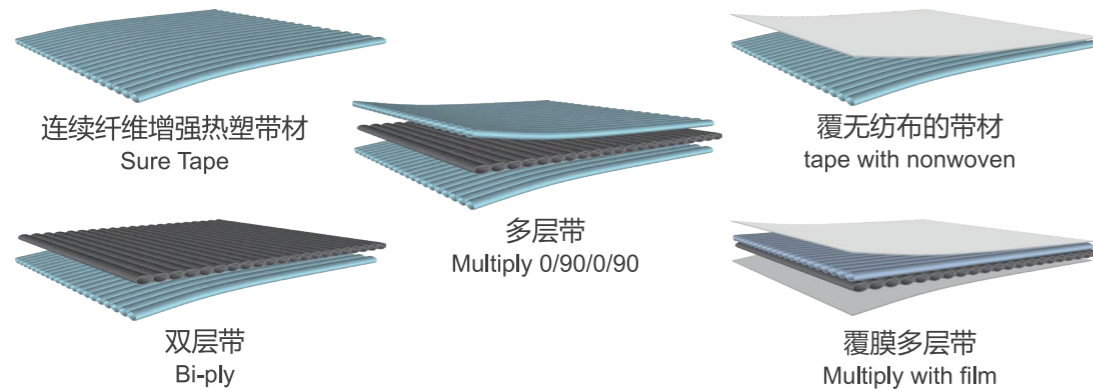
SURE-PLY 连续纤维 增强热塑板材

产品介绍/INTRODUCTION OF PRODUCTS

Sure-PLY 由 sure-tape(CFRT) 层压而成，层压板具有良好的力学性能。由于材料质量轻且具有优异的力学性能和优异的弹性形变能力，可用于汽车轻量化、特殊用途板材(如卡车裙板、新能源汽车电池包护板)等方面。

Sure-PLY is laminated by sure-tape (CFRT), which possess excellent mechanical properties such as light weight, excellent elastic deformation. It's suitable for light-weight automobile, special application like trailer skirt, new energy automobile battery bottom guard, etc.

主要结构/MAIN STRUCTURE



应用领域/APPLICATIONS



技术参数/TECHNICAL PARAMETERS

| 产品型号 Item | 测试标准 Testing Standard | 拉伸强度 Tensile Strength Of Tape (MPa) | 拉伸模量 Tensile Modulus Of Tape (GPa) | 弯曲强度 Flexural Strength (MPa) | 冲击强度 Impact Strength (KJ/m ²) | 克重 Gram Weight (gsm) | 厚度 Thickness (mm) | 泊松比 Poisson Ratio |
|--------------------|-----------------------------|---|--|------------------------------------|---|----------------------------|-------------------------|-------------------------|
| | ASTM D3039M | ASTM D790 | ASTM D256 | ASTM D3039 | | | | |
| T-BP-PP-480-65 | | 250-400 | 15 | 300-350 | 120-180 | 480±16 | 0.34±0.04 | 0.11 |
| T-BP-PP-680-65 | | 250-400 | 15 | 300-350 | 120-180 | 680±20 | 0.47±0.04 | 0.106 |
| T-BP-PP-1020-65 | | 250-400 | 14 | 300-350 | 120-180 | 1020±30 | 0.69±0.04 | 0.098 |
| T-MP-1.0-4-65 | | 200-400 | 15 | 200-300 | 120-180 | 1500±44 | 1.03±0.1 | 0.1 |
| T-MP-1.5-4-65(B/C) | | 180-400 | 13 | 200-300 | / | 1830±48 | 1.51±0.15 | / |

备注：

以上均为典型数据，如有特殊要求，可按客户要求定制

Remark:

All of above are typical values, if you have special requirements, we can arrange customization.

产品规格/PRODUCT SPECIFICATION

| 设备最大幅宽 MAX Width of Equipment | 板材最大幅宽 MAX Width of Panel | 最大卷重 MAX Weight of Roll | 最长卷长 (以 Bi-ply 为例) MAX Roll Length (bi-ply:100"(2540mm)Width) | 推荐幅宽 Recommended Width |
|-------------------------------------|------------------------------|----------------------------|--|---|
| Up to 124" (3150MM) | Up to 118" (3000MM) | Up to 3400LBS (1570kg) | Up to 3000FT (900M) | 50" (1270mm)/ 74" (1890mm)/ 100" (2540mm) |

可裁切范围/SLITTING CAPABILITIES

| 物料 Material | 最大幅宽 MAX Roll Width | 最小幅宽 Min Finished Slit Width | 最大分切宽度 MAX Finishe Slit Width | 最大收卷重量范围 Max Finished Roll Weight Range |
|----------------|------------------------|------------------------------------|-------------------------------------|---|
| Bi-ply双层带 | 118" (3000MM) | 2" (50MM) | 72" (1800MM) | Up to 2400LBS (1110kg) |

SURE PANEL

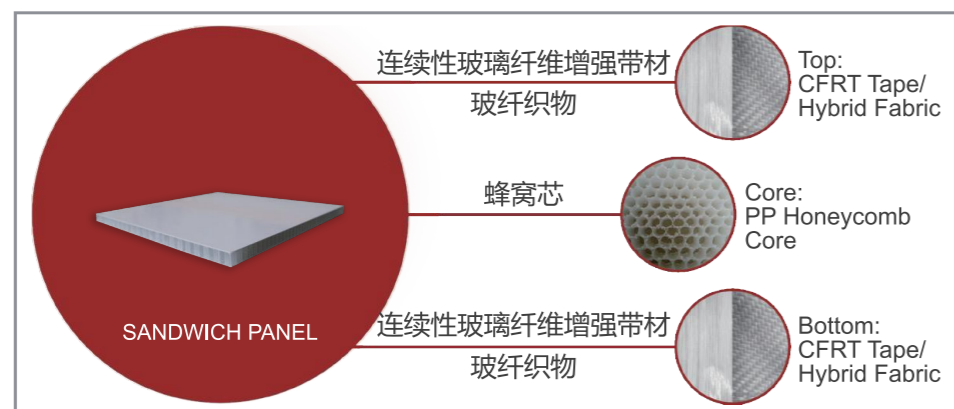
轻质高强热塑性蜂窝板

产品介绍/INTRODUCTION OF PRODUCTS

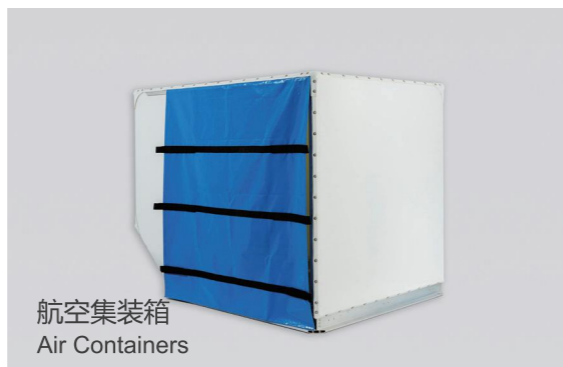
Sure panel(热塑性蜂窝板)是玻纤增强聚丙烯蜂窝板以连续纤维增强热塑性预浸带为面层,以聚丙烯蜂窝结构材料为芯材,通过加热复合而成。由于其质量轻、强度高及绿色环保的特点被广泛运用于箱体货车、建筑、户外家居、高端包装材料等领域。

Sure panel (thermoplastic honeycomb panel) is a composite material made by heat-combining a continuous fiber-reinforced thermoplastic prepreg layer on the surface with a polypropylene honeycomb core structure material. Due to its light weight, high strength and recycle, it is widely used in van panels, architecture, outdoor homes, high-end packing materials and other fields.

主要结构/MAIN STRUCTURE



典型案例/TYPICAL CASE



技术参数/TECHNICAL PARAMETERS

| 产品型号 Item | 重量 Weight (Kg/m ²) | 厚度 Thickness (mm) | 弯曲强度 Flexural Strength (MPa) | 滚筒剥离强度 Cylinder Peel Strength (N*mm/mm) | 压缩强度 Compress Strength (MPa) | 氧系数 Limit Oxygen Index (%) | 应用领域 Application Area |
|----------------------|--------------------------------------|-------------------------|------------------------------------|--|---------------------------------------|----------------------------------|-----------------------------|
| | / | / | GB/T 1456 | GB/T 1457 | GB/T 1453 | GB/T 8924 | / |
| T-HP-10-80-800(AB) | 3.41 | 15 | 12 | 120 | 1.1 | 18 | 箱车箱体板 Van Panel |
| T-HP-20-80-800(AB) | 3.73 | 20 | 9 | 120 | 1.1 | 18 | 箱车箱体板 Van Panel |
| T-HP-20-80-800 | 3.98 | 25 | 7 | 120 | 1.1 | 18 | 箱车底板 Van Baseboard |
| T-HP-15-80-680AF | 3.17 | 15 | 10 | 120 | 1.1 | 24.5 | 阻燃 Flame-Retarded |
| T-HP-20-120-680A | 4.1 | 20 | 9 | 120 | 2.5 | 25.4 | 阻燃 Flame-Retarded |
| T-HP-15-180-1360AF | 5.82 | 15 | 13 | 120 | 3.0 | 26.6 | 阻燃 Flame-Retarded |
| T-HP-10-80-1020(D/D) | 3.14 | 10 | 18 | 120 | 1.1 | 18 | 防滑纹理 Anti-slip Texture |

备注:

- 1、标准尺寸: 1220*2440mm; 其他尺寸可根据客户要求定做,幅宽不超 3000mm;
- 2、厚度 (mm): 10-50
- 3、以上均为典型数据,如有特殊要求,可按客户要求定制

Remark:

1. Standard dimension: 1220*2440mm, other dimension upon request, Max width is 3000mm;
2. Thickness(mm): 10-50
3. All of above are typical data vaules, if you have special requirements, we can arrange customization.

SURECORE 轻质高强热塑蜂窝芯

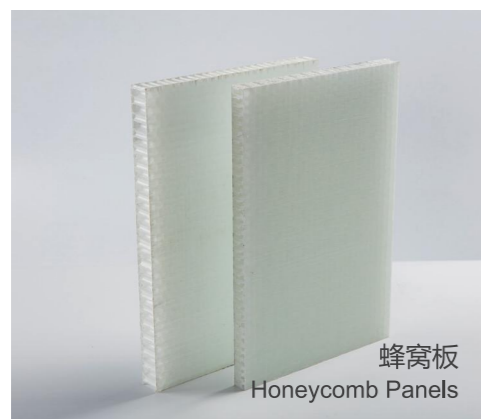
产品介绍/INTRODUCTION OF PRODUCTS

热塑性蜂窝芯材 (Surecore) 是由 PP 材质根据蜂巢的仿生原理加工而成的新型结构材料。具有轻质高强、绿色环保、防水防潮和耐腐蚀等特点,可以和不同的面材(如玻璃钢,木纹板,铝板,不锈钢板等)进行复合,可以大规模替代传统材料,广泛运用于厢式货车、高铁、航空航天、游艇、家居、移动建筑等领域。

Thermoplastic honeycomb core (Surecore) is a new structural material which is made of PP material according to the bionic principle of honeycomb. It has the characteristics of light weight, high strength, recycle, waterproof, moisture-proof and corrosion resistance, etc. It can be combined with different surface materials (such as fiberglass materials, wood grain panel, aluminum panel, stainless steel board, etc.). It is widely used in van trucks, high-speed rail, aerospace, yacht, home, mobile construction and other fields instead of traditional materials.



典型案例/TYPICAL CASE



技术参数/TECHNICAL PARAMETERS

| 产品型号 Item | 重量 Weight (Kg/m ³) | 压缩强度 Compress Strength (MPa) | 厚度 Thickness (mm) | 氧指数 Limit Oxygen Index (%) | 类别 Type |
|--------------------------|--------------------------------------|------------------------------------|-------------------------|----------------------------------|-------------------------------|
| 测试标准 Testing Standard | / | GB/T 1453 | / | GB/T 8924 | / |
| T-HC-20-80(HB) | 80 | 1.5 | 20 | 18 | 常规 Conventional Product |
| T-HC-20-100(HB) | 100 | 2 | 20 | 18 | 常规 Conventional Product |
| T-HC-20-120(HB) | 120 | 2.5 | 20 | 18 | 常规 Conventional Product |
| T-HC-20-120(AF) | 120 | 2.5 | 20 | 27 | 阻燃 Flame Retardant |
| T-HC-20-80(UV) | 80 | 1.5 | 20 | 18 | 抗紫外 UV Resistance |

备注:

以上均为典型数据,如有特殊要求,可按客户要求定制

Remark:


All of above are typical values, if you have special requirements, we can arrange customization.

产品规格/PRODUCT SPECIFICATION

| 标准尺寸 Panel Standard Dimension | 容重 (Kg/m ³) Unit Weight (Kg/m ³) | 最大幅宽 (mm) Max Width of Panel |
|-------------------------------------|--|---------------------------------|
| 1220*2440mm | 70g/m ³ , 80g/m ³ 100g/m ³ , 120g/m ³ | Up to 188" (3000mm) |

SMC FOR AUTOMOBILE EXTERIOR PARTS 汽车外观件

主要特点/CHARACTERISTICS

 表面平整度佳
Good Surface Flatness

 流动性好
Good Liquidity

 强度较好
High Strength

 表面附着力强
Strong Surface Adhesion

经典案例/TYPICAL CASES



应用领域/APPLICATION

汽车引擎盖、门板等对表面质量要求较高,且有后续喷漆要求的产品。

It can be used to make automobile hood, door panel and other products with high requirements of surface quality and painting.



技术参数/TECHNICAL PARAMETERS

| 物性指标 Properties | 测试标准 Test Standard | 单位 Unit | 典型数值 Typical Value |
|--------------------------------|-----------------------|-------------------|-----------------------|
| 玻纤含量 Fiberglass Content | GB/T 15568-2008 | wt% | ≥30 |
| 成型温度 Moulding Temperature | / | °C | 130-150 |
| 成型压力 Moulding Pressure | / | MPa | 7-10 |
| 收缩率 Shrinkage | / | % | ≤0.04 |
| 密度 Density | GB/T 1463-2005 | g/cm ³ | ≤1.90 |
| 拉伸强度 Tensile Strength | GB/T 1447-2005 | MPa | ≥80 |
| 弯曲强度 Flexural Strength | GB/T 1447-2005 | MPa | ≥180 |
| 弯曲模量 Flexural Modulus | GB/T 1447-2005 | GPa | ≥12 |
| 冲击强度 Impact Strength | GB/T 1451-2005 | KJ/m ² | ≥85 |
| 阻燃等级 Flame Retardant Rating | UL-94 | / | V0@3mm |

使用注意事项:

- 1、片料规格: 本片料标准宽度为1000mm, 折叠后存放于对挥发物具有屏蔽作用的包装袋中, 并置于纸板箱/木箱中运输。
- 2、存放条件: 建议于20°C以下避光保存。
- 3、试用期: 30天。

Note:

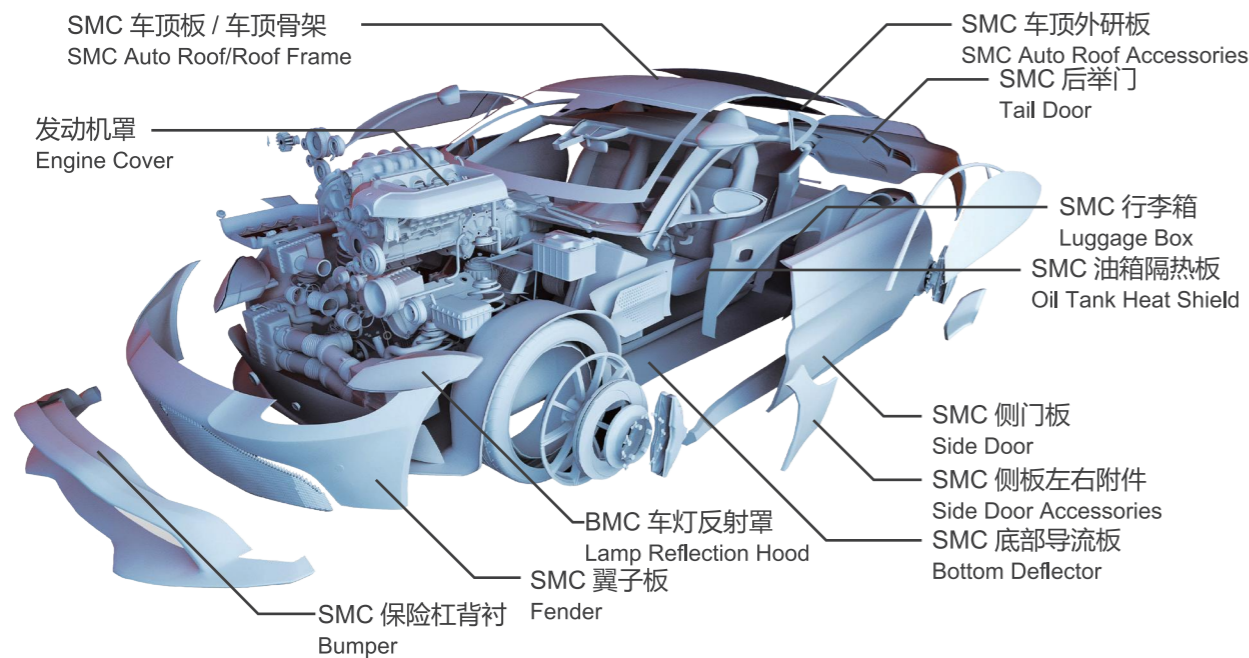
1. Specification: The standard width of the sheet is 1000 mm. After folding, it is stored in the packing bag with shielding effect on volatiles and transported in cardboard/wooden case.
2. Storage Condition: Under 20°C in dark.
3. Expiration Date: 30 days.

SMC FOR AUTOMOBILE STRUCTURAL PARTS 汽车结构件

主要特点/CHARACTERISTICS

-  强度高
High Strength
-  绝缘性好
Good Insulation
-  耐热性好
Good Heat Resistance
-  强度保留率高
High Strength Retention Rate

整车应用/VEHICLE APPLICATIONS



技术参数/TECHNICAL PARAMETERS

| 物性指标 Properties | 测试标准 Test Standard | 单位 Unit | 典型数值 Typical Value |
|--|-------------------------------------|-------------------|-----------------------|
| 玻纤含量 Fiberglass Content | GB/T 15568-2008 | wt% | 48±3 |
| 成型温度 Moulding Temperature | / | °C | 130-150 |
| 成型压力 Moulding Pressure | / | MPa | 7-10 |
| 收缩率 Shrinkage Ration | / | % | ≤0.04 |
| 密度 Density | GB/T 1463-2005 | g/cm ³ | ≤1.90 |
| 拉伸强度 Tensile Strength | GB/T 1447-2005 | MPa | ≥150 |
| 弯曲强度 Flexural Strength | GB/T 1449-2005 | MPa | ≥280 |
| 弯曲模量 Flexural Modulus | GB/T 1449-2005 | GPa | ≥13 |
| 冲击强度 Impact Strength | GB/T 1451-2005 | KJ/m ² | ≥100 |
| 180°C×1000H后 检测拉伸、弯曲强度 After 180 °C × 1000H Check the tensile and bending strength on the side | 强度保留率 Strength Retention Rate | % | ≥70 |
| 耐热变形温度 Heat-Resisting Detofamation Temperature | GB/T 1634-2004 | °C | ≥240 |
| 阻燃等级 Flame Retardant Rating | UL-94 | / | V0@3mm |

注：
典型数值受测试手法影响。

Note:
Typical value is affected by the test method.

E/PP FABRIC E/PP复合纱织物

产品介绍/INTRODUCTION

由 E/PP 复合纱按一定规律交织而成，通常为斜纹或平纹结构，E- 玻璃纤维和 PP- 聚丙烯化纤占比通常为 60/40，也可根据需求进行定制。根据纱线外观颜色可分为黑纱和白纱。

Made by interweaving E/PP roving according to certain rules, usually in a twill or plain weave structure. The proportion of E-glass fiber and PP-polypropylene fiber is usually 60/40, but can also be customized according to needs. Depending on the appearance color of the roving, it can be divided into black roving and white roving.

产品图片/PRODUCT PICTURES



主要特点/CHARACTERISTICS

-  结构稳定、贴膜性好、克重可选范围大
Structurally Stable, Good Film Adhesion, Wide Range of Selectable Grammage.
-  机械性能优、环保可回收、应用范围广
Excellent Mechanical Properties, Environmentally Friendly and Recyclable, With a Wide Range of Applications.

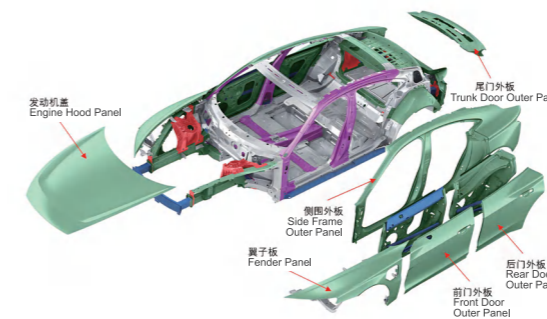
常用规格/COMMON SPECIFICATIONS

| 规格 Specifications | 总克重 Total Area Weight (g/m ²) | 经纱 Warp (g/m ²) | 纬纱 Weft (g/m ²) | 结构 structure | 纱线类型 Yarn type |
|----------------------|--|-----------------------------------|-----------------------------------|----------------------|---------------------------|
| E/PP-60/40-WR500 | 512 | 256 | 256 | 平纹/斜纹 Plain/twill | 黑纱/白纱 Black/white yarn |
| E/PP-60/40-WR750 | 748 | 374 | 374 | 平纹/斜纹 Plain/twill | 黑纱/白纱 Black/white yarn |
| E/PP-60/40-WR980 | 936 | 468 | 468 | 平纹/斜纹 Plain/twill | 黑纱/白纱 Black/white yarn |
| E/PP-60/40-WR1500 | 1496 | 748 | 748 | 平纹/斜纹 Plain/twill | 黑纱/白纱 Black/white yarn |

应用领域/APPLICATIONS

可应用于汽车结构件, 游艇, 管道, 容器, 型材等

It can be used in automotive structural parts, yachts, pipelines, containers, profiles, etc.



STRIP FABRICS

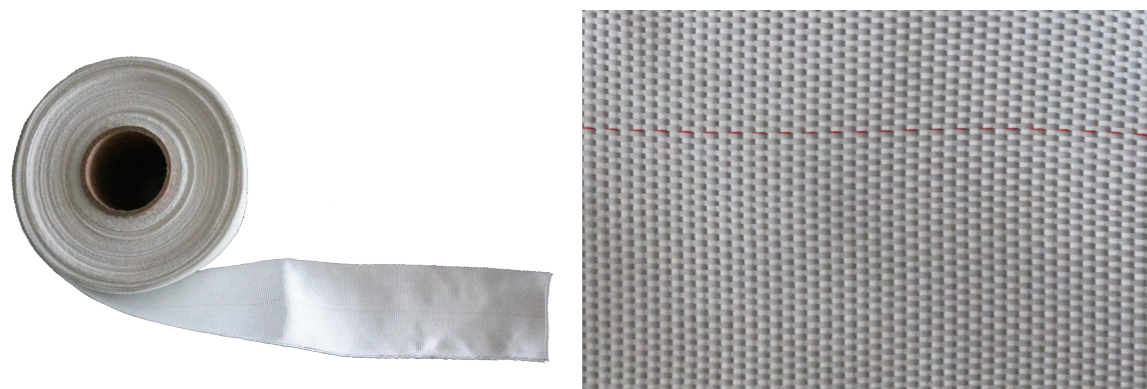
玻璃纤维条带织物

产品介绍/INTRODUCTION

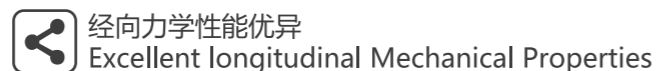
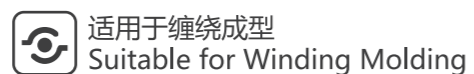
以无捻粗纱线通过条带织机使 0° 纱线和 90° 纱线以一定规律交织而成，多为平纹或斜纹结构，产品的克重范围在 200-500g/m² 范围内，门幅在 50-170mm 范围内。

The non-twisted roving is interlaced with the 0° and 90° yarns in a certain pattern through a strip loom, often resulting in a plain or twill structure. The weight range of the product is between 200-500g/m², and the width range is between 50-170mm.

产品图片/PRODUCT PICTURES



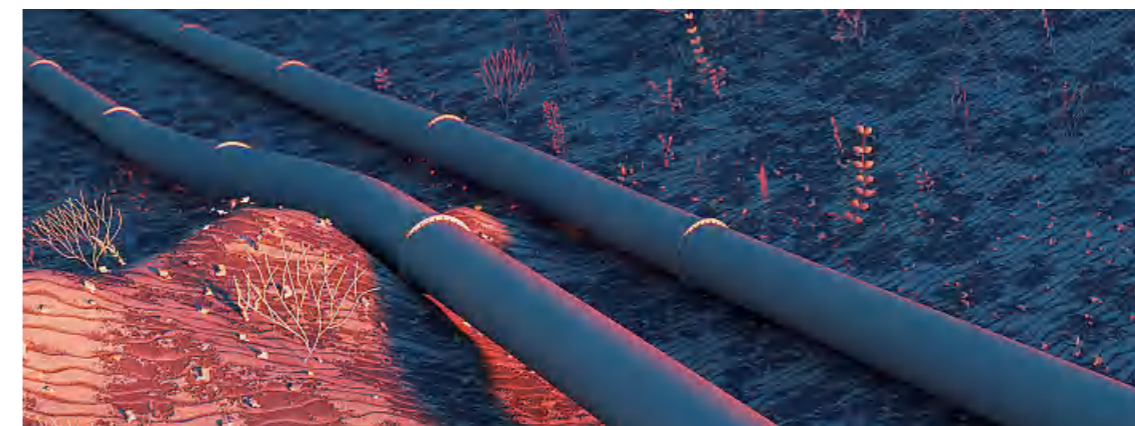
主要特点/CHARACTERISTICS



应用领域/APPLICATIONS

海底油气管道缠绕修复等

Applications such as winding repair of submarine oil and gas pipelines



STITCHED CHOPPED STRAND MAT 玻璃纤维缝编短切毡

产品介绍/INTRODUCTION

由单层玻璃纤维原丝短切成 50MM 后，随机无定向均匀平铺，用线圈结构缝编而成。短切原丝毡在手糊工艺中用量大，主要适用于不饱和聚酯树脂。

Made from single-layer glass fiber strands cut into 50MM lengths, they are randomly and uniformly laid flat and stitch together with a coil structure. Chopped strand mats are extensively used in hand lay-up processes, primarily suitable for unsaturated polyester resins.

产品图片/PRODUCT PICTURES



主要特点/CHARACTERISTICS

-  快速浸透
Fast Impregnation
-  良好韧性
Good Toughness
-  分布均匀
Uniform Distribution
-  耐腐蚀
Corrosion Resistance
-  高抗压强度
High Compressive Strength
-  阻燃性
Flame Retardant
-  绿色环保
Environmentally Friendly
-  易于裁剪
Easy to Cut
-  良好的工艺性能
Good Process Performance

常用规格/COMMON SPECIFICATIONS

| 规格 Specifications | 总克重 Total Area Weight (g/m ²) | 短切 Chopped Mat Weight (g/m ²) | 涤纶丝 Polyester Yarn (g/m ²) |
|----------------------|---|---|--|
| E-MK300 | 311 | 300 | 11 |
| E-MK380 | 391 | 380 | 11 |
| E-MK450 | 462 | 450 | 12 |
| E-MK600 | 611 | 600 | 11 |
| E-MK800 | 812 | 800 | 12 |
| E-MK900 | 912 | 900 | 12 |

应用领域/APPLICATIONS

游艇、缠绕管道和拉挤、手糊和 RTM 等工艺
Yacht, winding pipe and pultrusion, hand lay-up and RTM etc.



WOVEN ROVING WITH CHOPPED STRAND MAT 玻璃纤维方格布复合毡

产品介绍/INTRODUCTION

由无捻粗纱布复合一层均匀无定向平铺的短切原丝，然后用线圈结构缝合而成或者用粘结剂粘合成的玻璃纤维耗材。

Made from non-twisted woving roving with a layer of uniformly and randomly laid chopped strands, then stitch together with a coil structure or bonded with an adhesive into a glass fiber consumable.

产品图片/PRODUCT PICTURES



主要特点/CHARACTERISTICS

-  适合多种树脂体系
Suitable for Multiple Resin Systems
-  简化成型工艺
Simplifies Molding Processes
-  提高生产效率，降低成本
Increases Production Efficiency, Reduces Costs

常用规格/COMMON SPECIFICATIONS

| 规格 Specifications | 总克重 Total Area Weight (g/m ²) | 短切 Chopped Mat Weight (g/m ²) | 无捻粗纱 Woving Roving (g/m ²) | 涤纶丝 Polyester Yarn (g/m ²) |
|----------------------|---|---|--|--|
| E-WR600/M450-386H | 1082 | 458 | 612 | 12 |
| E-WR600/M600-386H | 1218 | 600 | 612 | 6 |
| E-WR800/M900-386H | 1746 | 900 | 840 | 6 |
| E-WR600/M300-386H | 923 | 305 | 612 | 6 |
| E-WR450/M450-386H | 906 | 450 | 450 | 6 |
| E-WR400/M450-386H | 840 | 450 | 384 | 6 |
| E-WR600/M400 | 1018 | 400 | 612 | 6 |
| E-WR500/M450 | 963 | 450 | 405 | 9 |
| E-WR500/M300 | 813 | 300 | 405 | 9 |

应用领域/APPLICATIONS

玻璃钢船体、汽车外壳、板材、车门和型材等
Fiberglass boat hulls, car exteriors, panels, doors, and profiles, etc.



QUADRAXIAL FABRICS

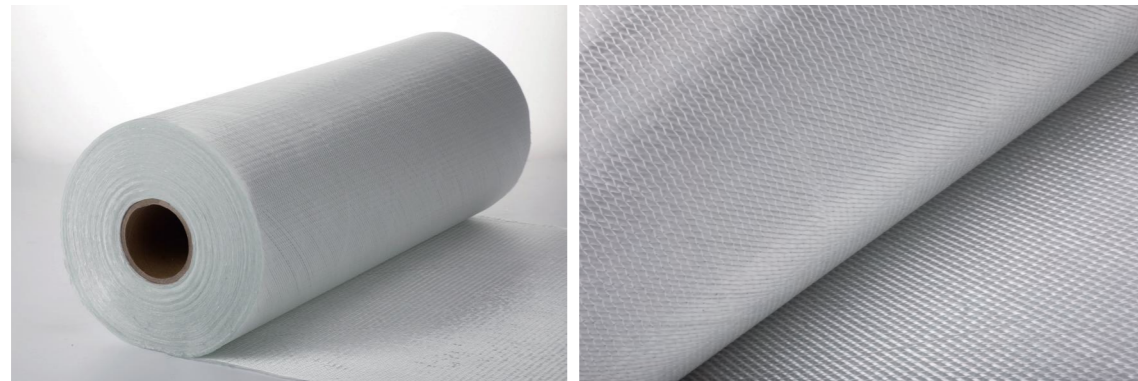
玻璃纤维四轴向缝编织物

产品介绍/INTRODUCTION






由无捻粗纱在 0°/+45°/90°/-45°方向排列后，线圈结构编织而成的，可根据用途选择带毡或不带毡。

Made by arranging non-twisted roving yarns in the 0°/+45°/90°/-45° directions and then stitch together with a coil structure, with the option to choose with or without mat depending on the application.

产品图片/PRODUCT PICTURES



主要特点/CHARACTERISTICS

-  低密度
Low Density
-  高强度
High Strength
-  高模量
High Modulus
-  寿命更长
Longer Life
-  效率更高
Higher Efficiency

常用规格/COMMON SPECIFICATIONS

| 规格 Specifications | 总克重 Total Area Weight (g/m ²) | 0°层 0°Layer (g/m ²) | +45°层 +45°Layer (g/m ²) | 90°层 90°Layer (g/m ²) | -45°层 -45°Layer (g/m ²) | 短切 Chopped Mat Weight (g/m ²) | 涤纶丝 Polyester Yarn (g/m ²) |
|----------------------|--|---------------------------------------|---|---|---|--|--|
| E-QX600 | 601 | 145 | 150 | 150 | 150 | / | 6 |
| E-QX800 | 815 | 203 | 200 | 201 | 200 | / | 11 |
| E-QX1000 | 1006 | 283 | 251 | 213 | 251 | / | 8 |
| E-QX1200 | 1210 | 301 | 301 | 300 | 301 | / | 7 |
| E-QX1500 | 1481 | 361 | 367 | 378 | 367 | / | 8 |
| QX1800/M225 | 2060 | 434 | 458 | 472 | 458 | 225 | 15 |

应用领域/APPLICATIONS

造船、管道等领域

Shipbuilding, pipeline and other application fields

