品行 BEHAVIOR　创新 INNOVATION　责任 RESPONSIBILITY　学习 LEARNING　激情 ENTHUSIASM

浙江振石新材料股份有限公司
ZHEJIANG ZHENSHI NEW MATERIALS CO.,LTD.

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Wechat Public Account

振石股份
ZHENSHI CO.,LTD

ELECTRIC VEHICLE PRODUCT SERIES

新能源汽车系列

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

目 录 CONTENTS

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.

9个
生产基地
Production Bases

振石股份
ZHENSHI CO.,LTD

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

300+项
专利和认证
Patents and Certifications

愿景 Vision

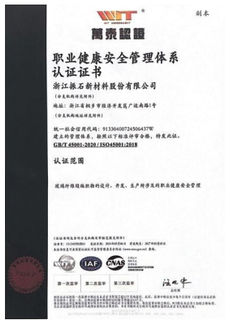
保持与实现新材料行业的创新者与引领者
KEEP AND REALIZE THE INNOVATOR AND
LEADER OF NEW MATERIAL INDUSTRY

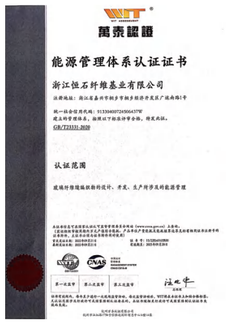
使命 Mission

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







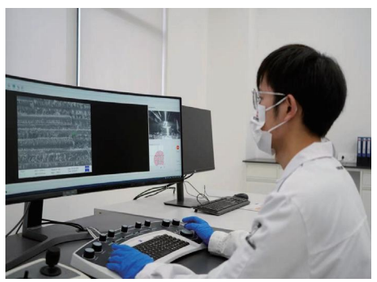
品质保证
QUALITY ASSURANCE

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 wel l as UL product certification and DNVGL product certification, providing quality assurance for our products.

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.




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 ELECTRIC VEHICLES
新能源汽车领域

高性能复合材料在新能源汽车上的应用主要体现在汽车车身、电池组以及关键零部件的设计和制造中。高性能复合材料，相比传统铝制品和钢制品等车用材料，具有重量轻、强度高、韧性好、耐腐蚀、耐冲击等综合性能优点，不仅有助于实现汽车的轻量化，还推动了新能源汽车行业的技术进步和可持续发展。

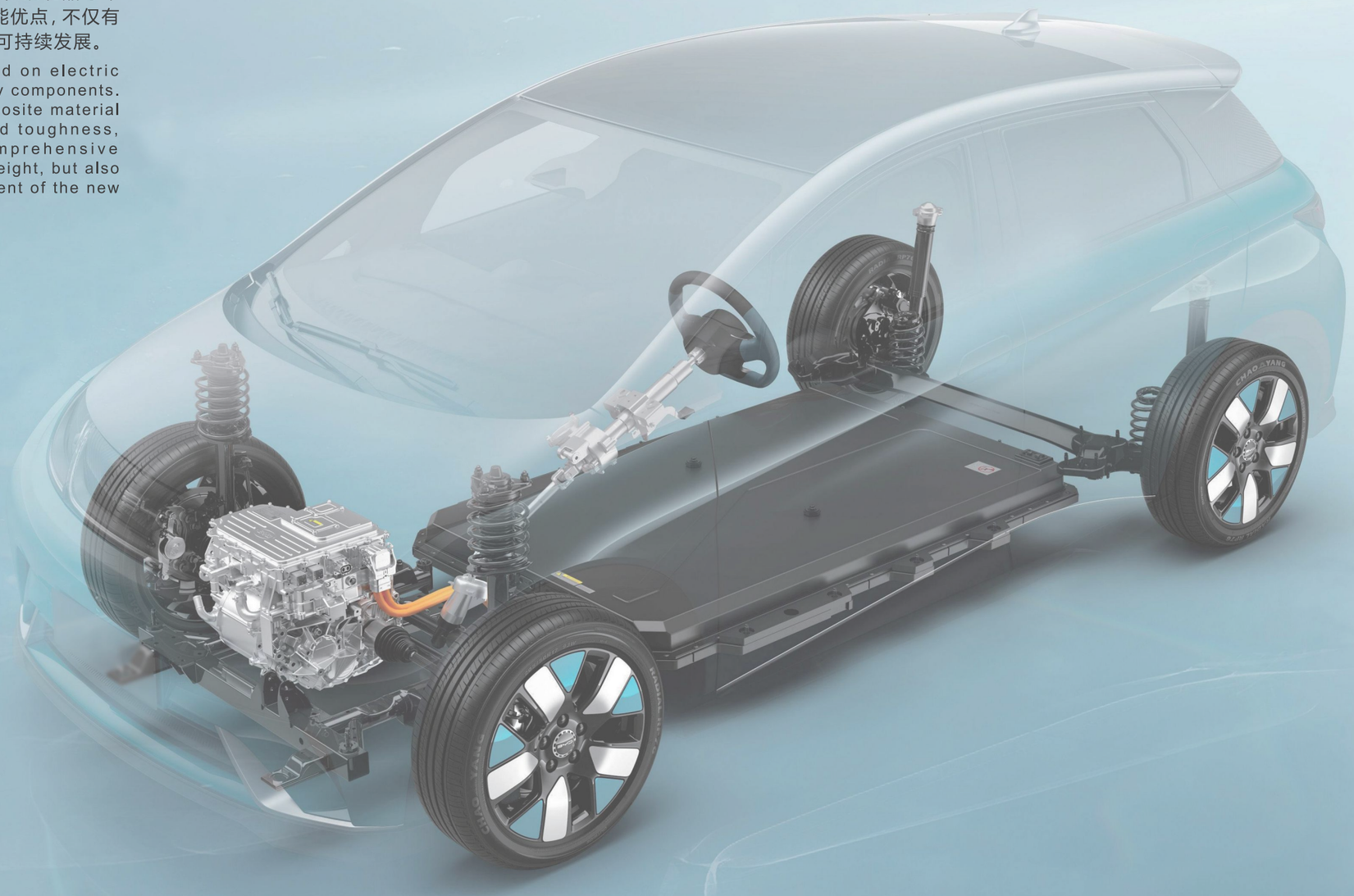
High-performance composite materials are widely used on electric vehicles including automobile body, battery pack and some key components. Comparing with traditional aluminum and steel products, composite material has advantages including light weight, high strength, good toughness, corrosion resistance, impact resistance and other comprehensive performance, which not only help to achieve the goal of lightweight, but also promote the technological progress and sustainable development of the new energy vehicle industry.

产品系列
Product Series

新能源汽车电池盒盖、电池包底护板、电芯隔板、电池盒盖返修口、汽车结构件 / 外观件及关键性零部件

The products include battery cover, battery pack bottom guard, battery seperator, battery cover repair entrance, automotive structural parts, appearance parts and key components.

新能源汽车结构
ELECTRIC VEHICLE STRUCTURE

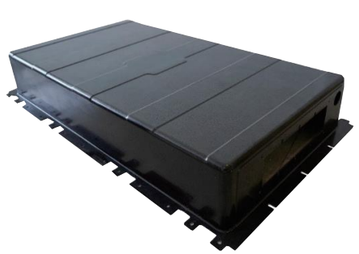


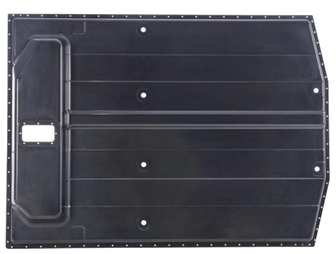
PCM
BATTERY COVER
PCM电池盒盖

主要特点/CHARACTERISTICS

- 高强度 Hight Strength
- 轻量化 Light Weight
- 绝缘 Excellent Insulation
- 阻燃 Flame Retardant
- 低导热系数 Low Thermal Conductivity

经典案例/TYPICAL CASES





应用领域/APPLICATION

新能源汽车动力电池包上盖
Electric Vehicle Battery Cover

技术参数/TECHNICAL PARAMETERS

物性指标 Properties	测试标准 Test Standard	典型数值 Typical Value
密度 Density	GB/T 1003.1	≤1.95g/cm³
玻纤含量 Fiberglass Content	HB 7736.5-2004	60±3%
阻燃 Flame Retardant Rating	UL94	V0
绝缘阻值 Insulation Resistance	GB/T 31838.3-2019	≥500MΩ
绝缘耐压 Insulation Voltage Resistance	GB/T 1408.2-2016	≤1mA
拉伸强度 Tensile Strength	GB/T 1447-2005	≥400MPa
拉伸模量 Tensile Modulus	GB/T 1447-2005	≥22GPa
断裂延伸率 Breaking Elongation	GB/T 1447-2005	≥1.3%
弯曲强度 Flexural Strength	GB/T 1447-2005	≥400MPa
弯曲模量 Flexural Modulus	GB/T 1447-2005	≥22GPa
层间剪切强度 Interlaminar Shear Strength	ASTM D2344	≥30MPa
冲击韧性 Impact Toughness	GB/T 1451-2005	≥100KJ/m²
TG	GB/T 19466.2-2004	≥100℃

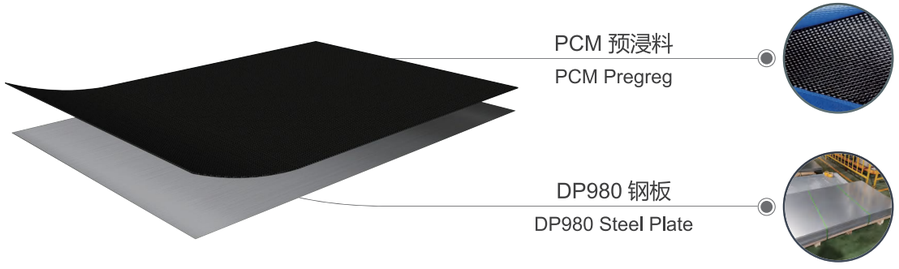
注：
典型数值受测试手法影响。
Note:
Typical value is affected by the test method.

HIGH STRENGTH PCM BATTERY COVER
高强钢PCM电池盒盖

主要特点/CHARACTERISTICS

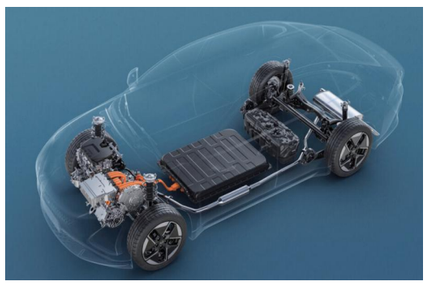
- 高强度 Hight Strength
- 抗热失控 Thermal Runaway Resistance
- 绝缘 Excellent Insulation
- 低导热系数 Low thermal Conductivity

主要结构/MAIN STRUCTURE



应用领域/APPLICATION

新能源汽车动力电池包 CTP、CTB、CTC 结构上盖
EV Battery Cover, Suitable For CTP, CTB, CTC Structure



技术参数/TECHNICAL PARAMETERS

物性指标 Properties	测试标准 Test Standard	典型数值 Typical Value
密度 Density	GB/T 1464-2005	≤4.5±0.2g/cm³
热变形温度 Heat Deflection Temperature	GBT 1634.2-2004	≥ 120℃
拉伸强度 Tensile Strength	GB/T 1447-2005	≥480MPa
弯曲强度 Flexural Strength	GB/T 1449-2005	≥400MPa
弯曲挠度 Bending Deflection	GBT1449-2005	< 3.0mm
阻燃要求 Flame Retardant Rating	UL94	满足V0等级 Meet V0 level
吸水性 Water Absorption	JCT 289-2010	≤0.15%
导热系数 Thermal Conductivity	GBT3399-1982	25(±2)℃时，导热系数≤0.08 W(m·K) Under 25(±2)℃, Thermal Conductivity≤0.08 W(m·K)
绝缘阻值 Insulation Resistance	GB/T 31838.3-2019	1000V DC,60s,≥50GΩ
热失控后绝缘 Insulation After Thermal Runaway	GB/T 1408.2-2016	1000℃30min后，2700V DC，60s，漏电流≤3mA After 1000℃30min, 2700V DC，60s, leak current≤3mA

注：
典型数值受测试手法影响。
Note:
Typical value is affected by the test method.

FIRE-RETARDANT PCM BATTERY COVER
防火PCM电池盒盖

主要特点/CHARACTERISTICS

- 高强度 Hight Strength
- 轻量化 Light Weight
- 形成陶瓷层 Form a Ceramic Layer
- 阻燃 Flame Retardant

经典案例/TYPICAL CASES

应用领域/APPLICATION

新能源汽车动力电池包上盖
EV Battery Cover

技术参数/TECHNICAL PARAMETERS

物性指标 Properties	测试标准 Test Standard	典型数值 Typical Value
密度 Density	GB/T 1033.1-2008	1.92g/cm³
树脂含量 Resin Content	HB7736.5	（41±3）%
玻璃化转变温度 Glass Transition Temperature	GB/T 19466.2-2004	125℃
拉伸强度 Ultimate Tensile Strength	GB/T 1447-2005	457MPa
弯曲强度 Flexural Strength	GB/T 1449-2005	694MPa
剪切强度 Shear Strength	GB/T 3355-2014	219MPa
防水性能 Waterproof Performance	GB/T 4208-2008	IP68
阻燃 Flame Retardant	GB/T 2408-2008	水平HB级，垂直V-0级 Horizontal HB Grade Vertical V-0 Grade
火焰冲击 Fire Shock	1300℃单点火焰上，燃烧30分钟 1300 ° C single Point Flame Burning For 30 Minutes	产品无烧穿、无塌陷现象 The Product Does Not Burn Through, No Collapse Phenomenon
外部火烧 External Fire	GB 38031-2020中8.2.7.1	产品无烧穿、无塌陷现象 The Product Does Not Burn Through, No Collapse Phenomenon
热失控 Thermal Runaway	GB 38031-2020中8.2.7.2	产品无烧穿、无塌陷现象 The Product Does Not Burn Through, No Collapse Phenomenon
环境老化 Environmental Aging	GB/T 2423.1-2008	无软化、开裂、变形等不良现象；耐压测试漏电电流 < 10mA No Softening, Cracking, Deformation and Other Adverse Phenomena; Withstand Voltage Test Leakage Current < 10mA

注：
典型数值受测试手法影响。
Note:
Typical value is affected by the test method.

SMC
BATTERY COVER
SMC电池盒盖

主要特点/CHARACTERISTICS

- 轻量化 Light weight
- 阻燃 Flame Retardant
- 绝缘 Excellent Insulation
- 易成型 Easy to Shape
- 低导热系数 Low Thermal Conductivity
- 低成本 Lowcost

经典案例/TYPICAL CASES

应用领域/APPLICATION

新能源汽车动力电池包上盖
EV Battery Cover

技术参数/TECHNICAL PARAMETERS

物性指标 Properties	测试标准 Test Standard	典型数值 Typical Value
单重 Grammage	/	4±0.1kg/m²
玻纤含量 Fiberglass Content	GB/T 15568-2008	30-35%
密度 Density	GB/T1463-2005	≤1.85g/cm³
收缩率 Shrinkage	GB/T15568-2008	≤0.05%
拉伸强度 Tensile Strength	GB/T1447-2005	≥100MPa
拉伸模量 Tensile Modulus	GB/T1447-2005	≥10GPa
断裂伸长率 Elongation At Break	GB/T1447-2005	≥1.5%
弯曲强度 Flexural Strength	GB/T1449-2005	≥200MPa
弯曲模量 Flexural Modulus	GB/T1449-2005	≥10GPa
无缺口冲击强度 Charpy Non-Notch Impact	GB/T1451-2005	≥100kJ/m²
表面电阻 Surface Resistance	GB/T 1410-2006	≥$1.0*10^{12}$ Ω
体积电阻 Volume Resistance	GB/T 1410-2006	≥$1.0*10^{14}$ Ω·m
阻燃等级 Flame Retardant Rating	UL94	V0@2.5mm

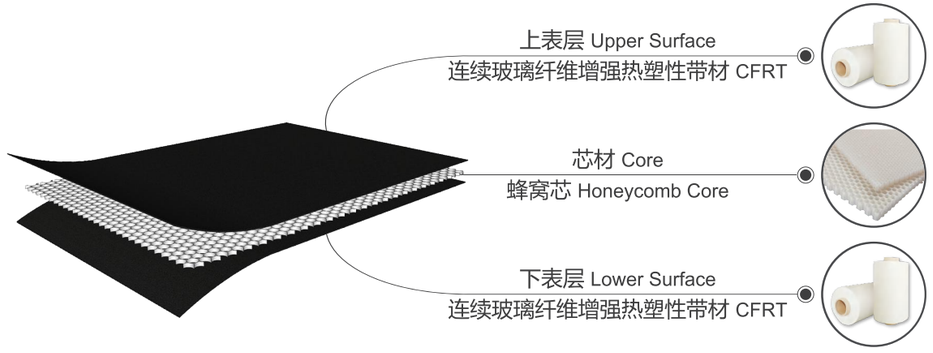
注：
典型数值受测试手法影响。
Note:
Typical value is affected by the test method.

HONEYCOMB BOTTOM GUARD
蜂窝护板

主要特点/CHARACTERISTICS

- 轻量化 Light weight
- 阻燃 Flame Retardant
- 高强度 Hight Strength
- 耐候性强 Strong Weather Resistance
- 低导热系数 Low Thermal Conductivity

主要结构/MAIN STRUCTURE



应用领域/APPLICATION

新能源汽车动力电池包底部护板
EV Battery Pack Bottom Guard

技术参数/TECHNICAL PARAMETERS

物性指标 Properties	测试标准 Test Standard	典型数值 Typical Value
密度 Density	GB/T 1464-2005	0.45-0.5g/cm³
平压强度 Plane Compressive Strength	GB/T 1453	≥2MPa
面板弯曲强度 Flexural Strength	GB/T1456-2005	≥100MPa
弯曲刚度 Bending Stiffness	GB/T1456-2005	≥3.9*10 N·mm²
导热系数 Thermal Conductivity	GB/T3399-1982/ASTM C518-17 Normal Temperature常温	0.08W/(m•K)
燃烧速率 Burning Rate	GB/T 8410-2016	10^7mm/min
热变形温度 Heat Deflection Temperature	GB/T 1634.2-2004	≥110℃
耐石子冲击 Rock Impact Resistance	SAEJ400-2002 低温-20℃ Low Temperature -20℃	10级 Level 10
简支梁缺口冲击 Charpy Notched Impact Strength	GB/T 1451-2005	≥45kJ/m²
落锤冲击 Drop Hammer Impact Deformation	ASTM D7136	120J冲击下，变形量≤8mm Under 120J Impact, Deformation ≤6mm
拉伸强度 Tensile Strength	GB/T 1447-2005	≥50MPa
吸水性 Water Absorption	JC/T 289-2010	≤0.3%
滚筒剥离强度 Climbing Drum Peel Strength	GB/T 1457-2005	≥ 120N•mm/mm

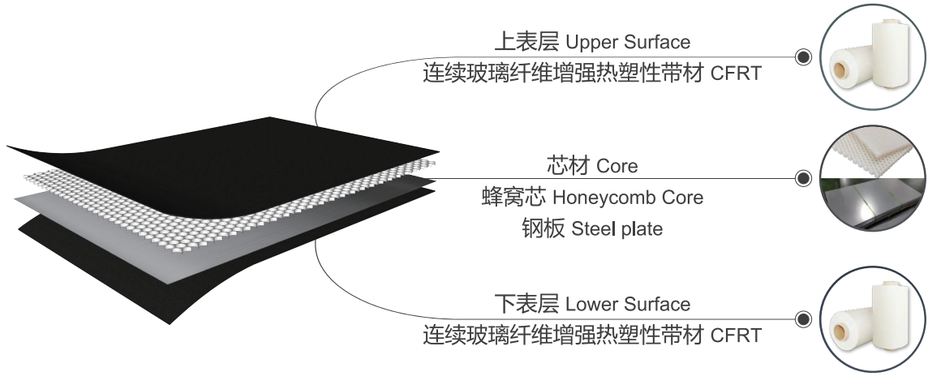
注：
典型数值受测试手法影响。
Note:
Typical value is affected by the test method.

HIGH STRENGTH HONEYCOMB BOTTOM GUARD
高强钢蜂窝护板

主要特点/CHARACTERISTICS

- 刚度高 High Stiffness
- 高抗冲 High Impact
- 低导热系数 Low Thermal Conductivity
- 阻燃 Flame Retardant

主要结构/MAIN STRUCTURE



应用领域/APPLICATION

新能源汽车动力电池包底部护板
EV Battery Pack Bottom Guard

技术参数/TECHNICAL PARAMETERS

物性指标 Properties	测试标准 Test Standard	典型数值 Typical Value
密度 Density	GB/T 1464-2005	0.95-1.05g/cm³
平压强度 Plane Compressive Strength	GB/T 1453	≥2MPa
面板弯曲强度 Flexural Strength	GB/T1456-2005	≥90MPa
弯曲刚度 Bending Stiffness	GB/T1456-2005	≥3.9*10 N·mm²
导热系数 Thermal Conductivity	GB/T3399-1982/ASTM C518-17 Normal Temperature常温	0.09W/(m•K)
燃烧速率 Burning Rate	GB/T 8410-2016	10^7mm/min
热变形温度 Heat Deflection Temperature	GB/T 1634.2-2004	≥120℃
耐石子冲击 Rock Impact Resistance	SAEJ400-2002 低温-20℃ Low temperature -20℃	10级 Level 10
落锤冲击 Drop Hammer Impact Deformation	ASTM D7136	300J冲击，变形量≤6mm Under 300J impact, deformation ≤6mm
拉伸强度 Tensile Strength	GB/T 1447-2005	≥90MPa
吸水性 Water Absorption	JC/T 289-2010	≤0.3%
滚筒剥离强度 Climbing Drum Peel Strength	GB/T 1457-2005 夹层结构滚筒剥离强度试验方法 Test Method for Sandwich structure climbing drum peel strength	钢与蜂窝层的复合结构的平均剥离强度≥120N·mm/mm Average Peel Strength Of Steel And Honeycomb Composite Structures

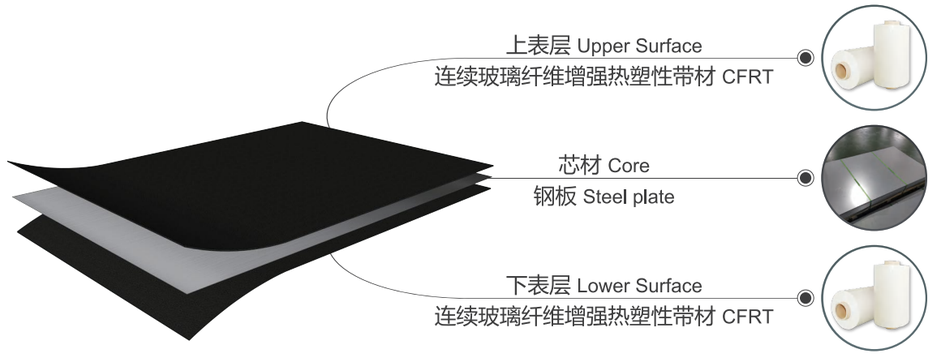
注：
典型数值受测试手法影响。
Note:
Typical value is affected by the test method.

HIGH STRENGTH COMPOSITE BOTTOM GUARD
高强钢复材护板

主要特点/CHARACTERISTICS

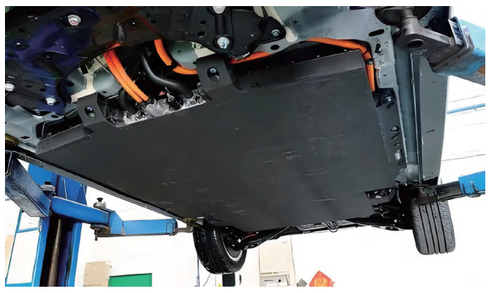
- 高强度 High Strength
- 轻量化 Light weight
- 低导热系数 Low Thermal Conductivity
- 厚度薄 Thin Thickness

主要结构/MAIN STRUCTURE



应用领域/APPLICATION

新能源汽车动力电池包底部护板
EV Battery Pack Bottom Guard



技术参数/TECHNICAL PARAMETERS

物性指标 Properties	测试标准 Test Standard	典型数值 Typical Value
厚度 Thickness	/	2-3mm
拉伸强度 Tensile Strength	GB/T 1447-2005	≥480MPa
弯曲强度 Flexural Strength	GB/T 1456-2005	≥300MPa
弯曲挠度 Bending Deflection	GB/T 1456-2005	< 3mm
导热系数 Thermal Conductivity	GB/T3399-1982/ASTM C518-17 Normal Temperature 常温	0.07W/(m•K)
燃烧速率 Burning Rate	GB 8410-2016	A-0mm/min
热变形温度 Heat Deflection Temperature	GB/T 1634.2-2004	≥150℃
耐石子冲击 Rock Impact Resistance	SAEJ400-2002 低温-20℃ Low temperature -20℃	10级 Level 10
落锤冲击 Drop Hammer Impact Deformation	ASTM D7136	300J冲击，变形量≤6mm Under 300J Impact, Deformation ≤6mm
密度 Density	GB/T 1464-2005	3.3±0.2g/cm³
吸水性 Water Absorption	JC/T 289-2010	≤0.15%
滚筒剥离强度 Climbing Drum Peel Strength	GB/T 1457-2005	≥100N·mm/mm

注：
典型数值受测试手法影响。
Note:
Typical value is affected by the test method.

BATTERY SEPERATOR
电芯隔板

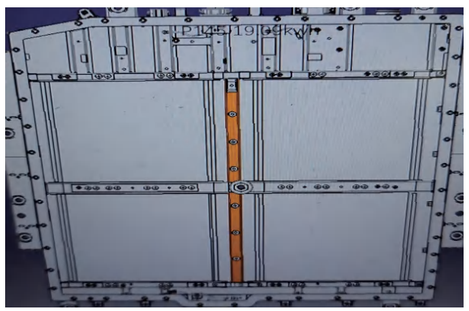
主要特点/CHARACTERISTICS

- 高强度 High Strength
- 轻量化 Light Weight
- 绝缘 Excellent Insulation
- 隔热 Flame Retardant

经典案例/TYPICAL CASES

应用领域/APPLICATION

新能源车电芯隔板
EV Battery Seperator



技术参数/TECHNICAL PARAMETERS

物性指标 Properties	典型数值 Typical Value
玻纤含量 Fiberglass Content	75%
密度 Density	2.03g/cm³

物性指标 Properties	测试标准 Test Standard	典型数值 Typical Value
0° 拉伸模量（平均值） 0° Tensile Modulus (GPa)(Average)	GB/T 1447-2005	35
0°拉伸强度 0°Tensile Strength (MPa)(Average)	GB/T 1447-2005	700
阻燃 Flame retardant	UL94-2017	V0
热变形温度(℃) Heat Distortion Temperature(℃)	GB/T 1634.3-2004	250
耐电压 Voltage Resistance(MA)	GB/T 1408.1-2016 AC 3000V，60S	0.033
绝缘电阻 Insulation Resistance(GΩ)	GB/T 31838.4-2019 DC 1000V，60S	≥ 20
90°拉伸模量(平均值) 90°Tensile Modulus (GPa)(Average)	GB/T 1447-2005	14
90°拉伸强度(平均值) 90°Tensile Strength(MPa)(Average)	GB/T 1447-2005	70
0° 冲击强度(平均值) 0°Impact Strength (kJ/m²)(Average)	GB/T 1451-2005	340
90° 冲击强度(平均值) 90°Impact Strength (kJ/m²)(Average)	GB/T 1451-2005	80

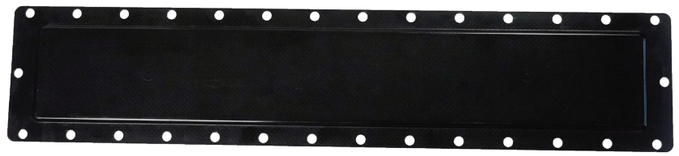
注：
典型数值受测试手法影响。
Note:
Typical value is affected by the test method.

REPAIR ENTRANCE OF PCM BATTERY COVER
PCM电池盒盖返修口

主要特点/CHARACTERISTICS

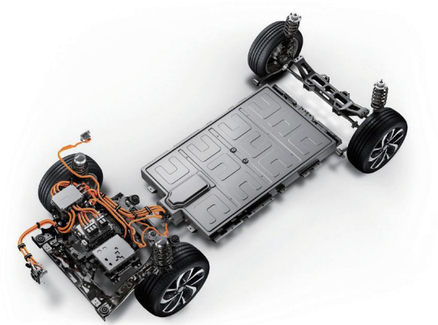
- 高强度 Hight Strength
- 阻燃 Flame Retardant
- 维修便捷，无需整体拆包 Easy Maintenance, No Need to Unpack the Whole Package
- 绝缘 Excellent Insulation

经典案例/TYPICAL CASES



应用领域/APPLICATION

新能源汽车动力电池包上盖检修
New Energy Vehicle Battery Cover Repair Entrance



技术参数/TECHNICAL PARAMETERS

物性指标 Properties	测试标准 Test Standard	典型数值 Typical Value
密度 Density	GB/T 1033.1-2008	1.92g/cm³
树脂含量 Resin Content	HB7736.5	(41±3) %
吸水性 Water Absorption	GB/T 1462	≤0.5%
透湿性 Moisture Permeability	GB 1037-88	≤5.0E-14 (g·cm/cm²·s·Pa)
阻燃 Flame Retardant	UL94	V-0
拉伸强度 Tensile Strength	ASTM D3039	模量≥ 20 GPa；强度≥ 300 Mpa Modulus ≥20gpa, Strength ≥300mpa
压缩强度 Compression Strength	ASTM D6641	模量≥ 20 GPa；强度≥ 300 Mpa Modulus ≥20gpa, Strength ≥300mpa
弯曲强度 Flexural Strength	ASTM D790	模量≥ 20 GPa；强度≥ 300 Mpa Modulus ≥20gpa, Strength ≥300mpa
绝缘电阻 Insulation Resistance	GB/T 31838.4-2019	> 500MΩ
耐电压 Voltage Resistance	GB/T 1408.1-2016	无击穿，无跳火，漏电电流 < 3mA No Breakdown, No Fire Jumping Leakage Current < 3MA
介电常数 Dielectric Constant	GB/T 1409-2006	介电常数≤5 The Dielectric Constant is ≤5
耐火耐高温性能 Fire Resistance And High Temperature Resistance	1000℃及以上 持续60min 1000℃ Or Above For 60 Min	玻纤网格结构完整，无散开、无脱落，背面无火焰；AC1000V 持续60s测试后，无击穿、无跳火，漏电电流小于10mA The fiberglass grid structure is complete, no spreading, no falling off, no flame on the back; After continuous 60s test under AC1000V, there is no breakdown and no spark, and the leakage current is less than 10mA

注：
典型数值受测试手法影响。
Note:
Typical value is affected by the test method

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	/	℃	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/cm³	≤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/m²	≥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℃以下避光保存。

3、保质期：30天。

Note:

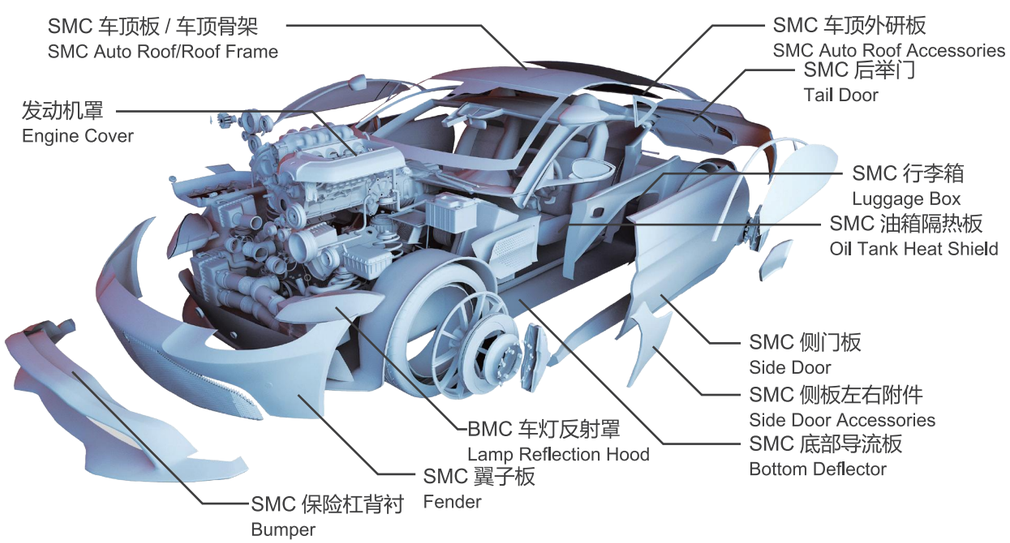
1. Specification: The standard width of the sheet is 1000 mm. After folding, it is stored in the packing bag with shielding effect on volatiles and transported in cardboard/wooden case.
2. Storage Condition: Under 20℃ in dark.
3. Expiration Date: 30days.

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	/	℃	130-150
成型压力 Moulding Pressure	/	MPa	7-10
收缩率 Shrinkage	/	%	≤0.05
密度 Density	GB/T 1463-2005	g/cm³	≤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	≥12
冲击强度 Impact Strength	GB/T 1451-2005	KJ/m²	≥100
180℃×1000H后 检侧拉伸、弯曲强度 After 180 ℃ × 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 Detofmation Temperature	GB/T 1634-2004	℃	≥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.