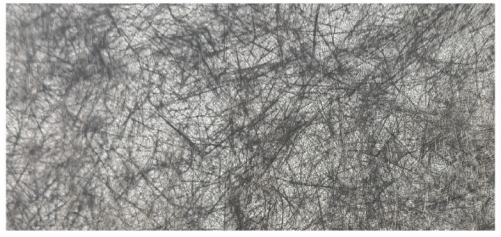


01 | 高均匀分散的碳纤维原纸技术
High uniformity dispersion of carbon fiber base paper technology

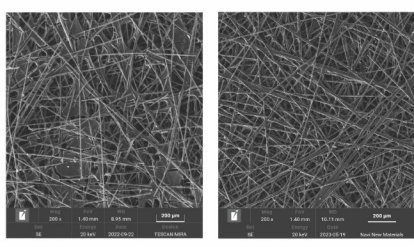


- ❓ 碳纤维絮聚现象明显
Carbon fiber flocculation is obvious
- ❓ 抄纸后均匀性差
Poor uniformity after papermaking
- ❓ 有气泡缺陷产生
Bubble defects are generated



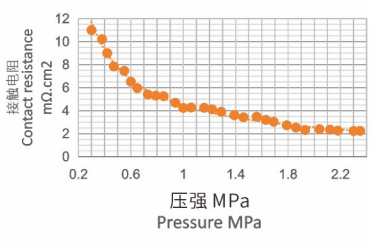
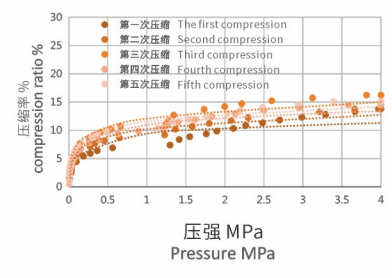
- ★ 碳纤维絮聚消失
Carbon fiber flocculation is disappeared
- ★ 抄纸后透光均匀
Uniform light transmission after papermaking
- ★ 面密度分布一致
Consistent surface density distribution

02 | 高导电的纳米碳材料与碳纤维的三维交联技术
Three dimensional crosslinking technology of highly conductive nano carbon materials and carbon fibers

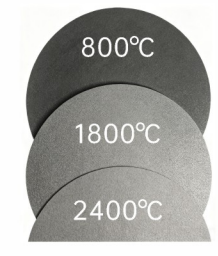
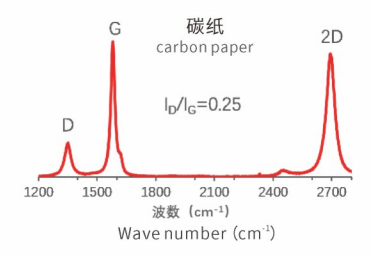
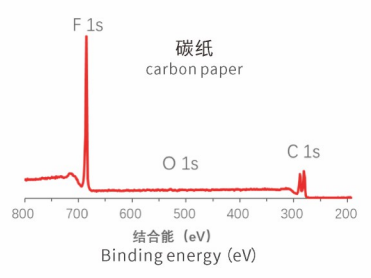
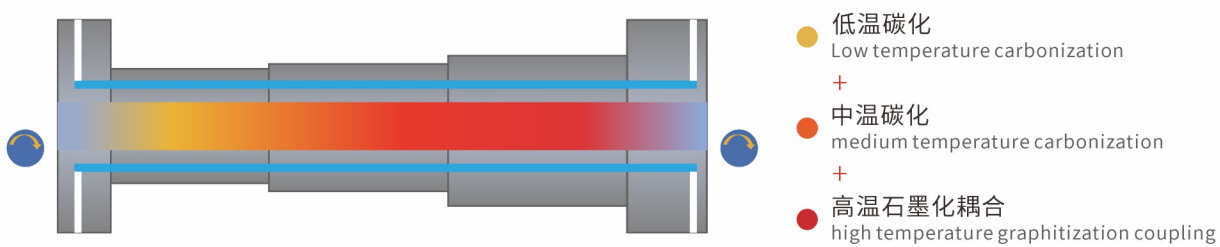


树脂改性前
Before resin modification

树脂改性后
After resin modification



03 | 连续碳化和石墨化的热场耦合技术
Thermal field coupling technology for continuous carbonization and graphitization



金博股份公众号



金博股份官网

湖南金博碳素股份有限公司
KBC CORPORATION,LTD.

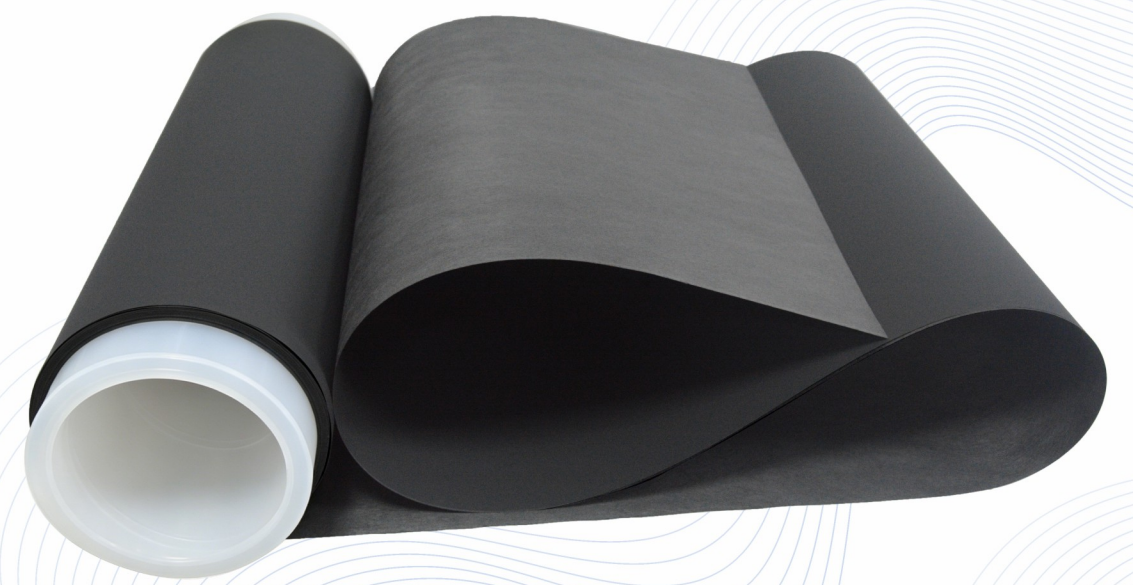
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連絡先: 080-3251-5565

碳纸/气体扩散层

Carbon Paper / Gas Diffusion Layer

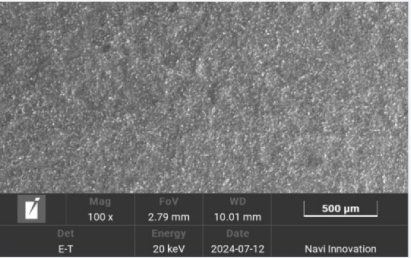


气体扩散层
Gas diffusion layer

碳纸
Carbon paper

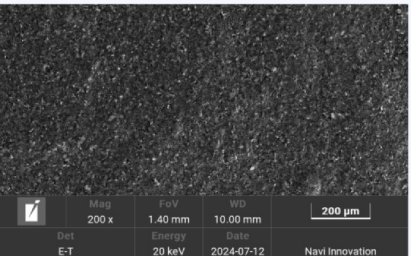
金博氢能的MPL特点

The MPL characteristics of KBC Hydrogen Energy



01
性能问题
Performance issues

碳粉多级级配孔优化技术
Optimization technology for
multi-level graded pores



03
结合力问题
Adhesion issues

微孔层与碳纸基材交联技术
Crosslinking between microporous
layer and carbon paper substrate

02
耐久性问题
Durability issues

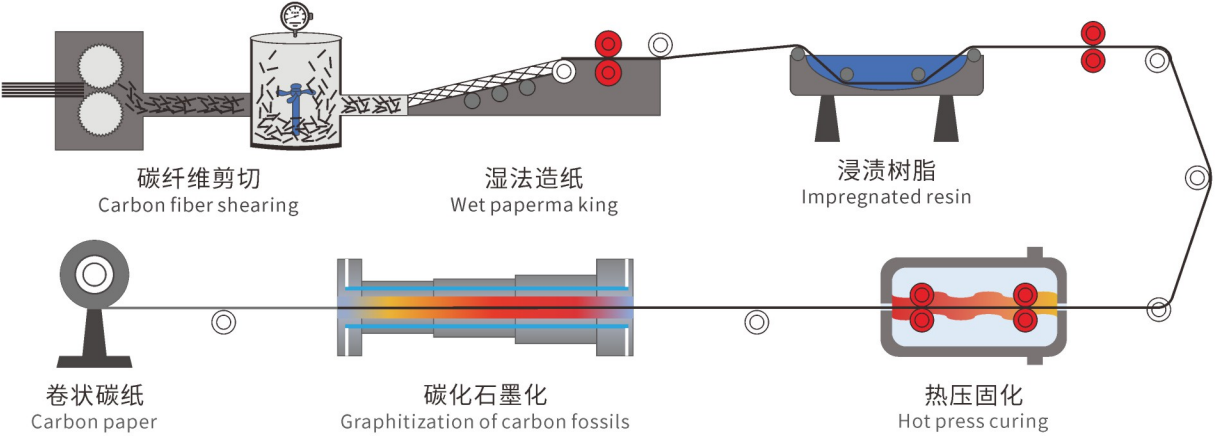
高性能兼顾高耐久性技术
High performance and
durability technology

04
一致性问题
Consistency issues

多组分快速分散技术
Multi component rapid
dispersion technology

金博碳纸生产工艺

CP/GDL production process



项目 ITEM	卷对卷碳纸 ROLL TO ROLL CARBON PAPER			片状碳纸 FLAKE CARBON PAPER	
	KBC-R-70	KBC-R-100	KBC-R-140	KBC-C-180	KBC-C-300
克重 (g/m ²) Weight in grams (g/m ²)	44±4	60±5	88±6	120±10	350±30
厚度 (μm@0.025MPa) Thickness (μm@0.025MPa)	140±15	195±15	260±20	350±40	400±50
透气率 (m ³ /(m ² .min)@50Pa) Permeability (m ³ /(m ² .min)@50Pa)	≥15	≥10	≥8	≥6.0	≥0.5
孔隙率 Porosity	≥80%	≥80%	≥80%	≥80%	≥50%
拉伸强度 (N/cm) Tensile Strength (N/cm)	≥40	≥40	≥60	≥80	≥100
IP方向导热 (W/mK) Thermal conductivity in the IP direction (W/mK)	≥14	≥14	≥14	≥14	≥14
接触电阻 (mΩ.cm ² @1.0MPa) Contact Resistance (mΩ.cm ² @1.0MPa)	≤5.0	≤5.0	≤5.0	≤5.0	≤8.0
电阻率 (mΩ.cm) Resistivity (mΩ.cm)	≤10.0	≤10.0	≤10.0	≤10.0	≤5.0

注：可定制0.1mm~3mm厚度碳纸
Note: Carbon paper with a thickness ranging from 0.1 mm to 3 mm can be customized.

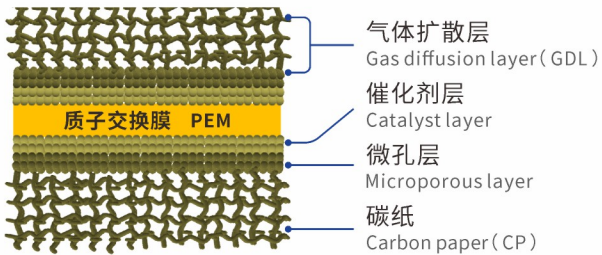
申请碳纸相关专利24项
Apply for 24 patents related to CP/GDL



碳纸的作用

The functions of carbon paper

支撑催化层、收集电流、传导气体、排出反应产物水
Support the catalyst layer, collect electric current, conduct
gases, and discharge the reaction product water.



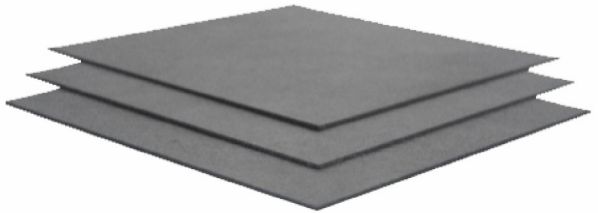
片状碳纸

Sheet carbon paper



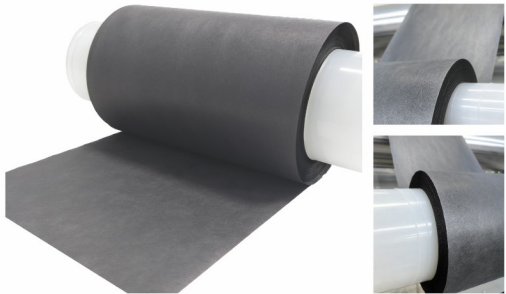
完成第一代片状碳纸样品开发，碳纸透气性、电导率、强度等性能尚优，整体性能与进口碳纸相当，部分性能优于进口产品。
Completed the development of the first generation of sheet carbon paper, with excellent properties such as breathability, conductivity, and strength.

产能10万平米/年。
Production capacity of 100 000 m²/a.



卷对卷碳纸

Roll to roll carbon paper



第二代连续式成卷碳纸研发也已完成配方和技术研发。
The second generation roll-to-roll carbon paper has also been completed.

自主树脂浸渍设备、连续固化和连续碳化石墨化炉设备等核心设备。
Core equipment such as resin impregnation equipment, continuous curing and continuous carbonization graphite furnace equipment.

单条线产能30万平米/年。
Production capacity of 300 000 m²/a.