

Companies of Trust and Creation

JIRISAN HANJI

Jirisan Hanji (a limited company) is trying to become a company that develops high value-added products and new products that take advantage of traditional Hanji and exports them to the world.



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On the improvement and dissemination of traditional Korean paper leading **jirisan hanji**

I am forever grateful to you for your generosity.

Jirisan Hanji (Yu) is always striving to develop innovative functional products that connect tradition and the future by thinking about economy, society and environment for sustainable future and utilizing traditional technology and advanced materials.

Jirisan Hanji (Yu), which has been engaged in production activities by building machinery that can mass-produce Hanji in Namwon Gwangchi Industrial Complex 2 in December 1997, has been growing through continuous technology development and innovation to secure competitiveness based on transparent management, ethical management, and environmental management since its foundation.

We will continue to grow as a competitive company that produces and supplies products with the highest quality and competitiveness to meet the needs of our customers.

In addition, we are constantly participating in various public policies and support activities that can grow with the local community in the spirit of fulfilling our responsibilities as a corporate citizen who is a member of the local community, and all employees of Jirisan Hanji will work together for the continued development of the company in the future.

Thank you.

CEO Dong-Hoon Kim

Jirisan hanji walking for over 20 years

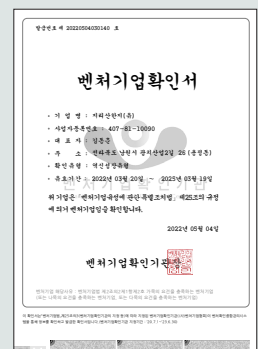
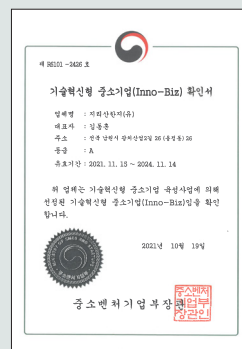
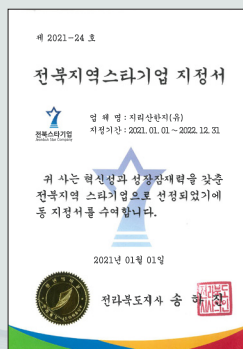
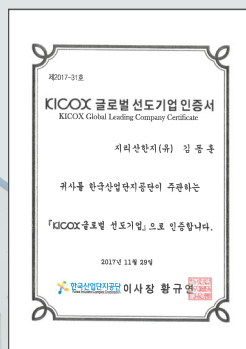
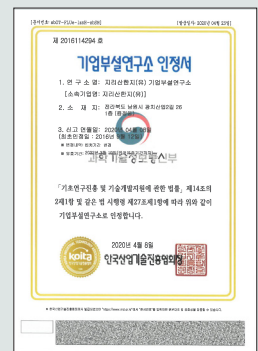
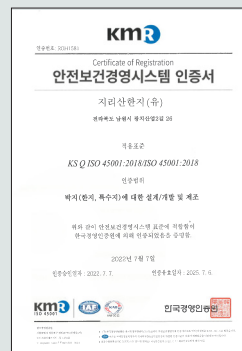
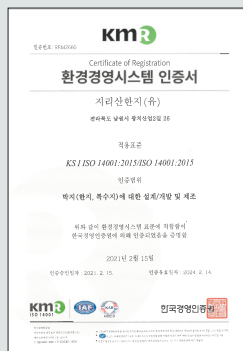
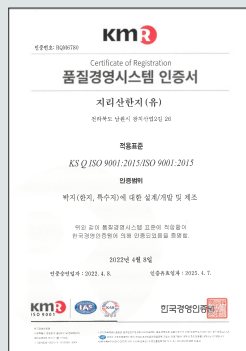
Established in 1997, Jirisan Hanji is leading the improvement and dissemination of Korean traditional Hanji and is constantly striving for the globalization of Hanji.

company history

Company name	Jirisan Hanji (Yu)
Date of establishment	December 20, 1997
capital of	700 million won
CEO	Kim Dong-hoon
Homepage	www.jrspaper.com
telephone number	063) 626 - 9977
Address	26 Gwangchi Industrial Road, Namwon-si, Jeollabuk-do
employees	30

- Jirisan Hanji (Yu), which has been striving to supply and improve traditional Hanji, produces a variety of items such as ultra-light Hanji that maximizes the characteristics of traditional Hanji, sebum that removes women's sebum, Hanji window paper, folk art paper, Hanji wrapping paper, and dripping paper., Hanji, which was developed for the second time in the world, is an eco-friendly new textile fashion material that makes the most of Hanji's advantages. It is widely used for various purposes such as home textile (bedding, wallpaper), wedding dress, underwear, shoes and interior.
- Jirisan Hanji (Yu) has obtained ISO9001, ISO14001, and ISO45001 certifications, and its management policy puts quality, environment, and safety and health of workers first, so that the best products can always be produced in a safe and pleasant environment.

Certificate



major history

- 1997. Established Jirisan Hanji
- 1998. Acquired Patent No. 0177023 (Products using traditional Korean paper and manufacturing methods thereof)
- 2002. Acquired Patent No. 0363063 (paper and its manufacturing method)
- 2003. Acquired Patent No. 0403174 (Functional Paper Products and Manufacturing Methods Using Traditional Korean Paper)
- 2004. Promising SME Certification (Jeollabuk-do) - Certification period : 04. 8. 2 ~ 08.12.13
ISO9001 certification, certification number (RQM6780)
- 2005. Trade Business Registered Trade Business Unique Number "27105898"
Designation of Export Promising Small and Medium Enterprises (Jeonbuk Small and Medium Enterprise Export Support Center)
ISO 14001 Certification Number (REM2660)
- 2006. Acquired Patent No. 0555690 (Manufacturing method of branch office)
Acquired Patent No. 0636297 (double stop and manufacturing method thereof)
Innovative Small and Medium Business (INNO-BIZ) Selection and Certification Period : 06.11.15 ~ 09.11.14
Selection of export promising small and medium enterprises
- 2007. Acquired patent No. 0705487 (functional branch and manufacturing method thereof)
Acquired patent No. 0763405 (origin slitter device)
Acquired patent No. 0733411 (original paper tape winding device)
- 2010. Acquired Patent No. 0967940 (Manufacture and Manufacture Method of Paper for Use)
- 2011. Acquired Patent No. 1013300 (Carbon fiber paper with excellent dyeability and manufacturing method thereof)
- 2012. Acquired Patent No. 1142642 (Non-woven fabric with improved tensile properties and manufacturing method thereof)
- 2013. Acquired patent No. 10-1325967 (raw paper for activated carbon filters)
- 2014. Venture Business Confirmation Selection Certification 14.3.20 ~ Present
Acquired Patent No. 10-1420982 (Manufacturing method of numbered threads)
Patent No. 10-1476597 (spinning device for conjugate yarn manufacturing)
- 2015. Innovative Small and Medium Enterprises (INNO-BIZ) Selection, Certification Period: 2015.11.15 ~ Present
- 2016. Jeollabuk-do Leading Company Designation (No. 2016-09)
Establishment of a company-affiliated research institute (No. 2016114294)
- 2017. KICOX Global Leading Company Certification (No. 2017-31)
- 2018. Choose a Star Company in Jeollabuk-do (No. 2018-014)
Patent No. 10-1902463 (Activated Carbon Fiber Paper and Manufacturing Method thereof)
- 2020. Acquisition of Patent No. 0-2137896 (a laminated floor covering in which a carbon heating element and Korean paper are combined)
- 2021. Choose a Star Company in Jeollabuk-do (No. 2021-24)
Acquired patent No. 10-2215615 (raw paper for filter containing activated carbon and manufacturing method thereof)
Patent No. 2200241 (A confessional composition for fibrosis of Korean paper and a method for manufacturing Korean paper using the same)
- 2022. Acquired patent No. 10-2369829 (filter material for bendable automotive filters)
Patent No. 10-2376836 (a three-layered filter using a wet method and a manufacturing method thereof)
Patent No. 10-2392341 (Combi filter media for air purification and Combi filter for air purification)
ISO45001 Certification Number (ROH1581)
- 2023. Acquired patent No. 10-2485081 (filter using mulberry bast fiber and manufacturing method)

The Jirisan Vision

Customer
satisfaction

Functional
paper
activation

Brand by
product

■ Cost reduction

- Achieving economies of scale: Expanding production facilities to an appropriate size;
- Improving the production process through learning effects: Proficiency and training of production staff;
- Control of direct and overhead costs
- Strengthen supplier bargaining power
- Development of new technologies

■ differentiation

- Increase brand loyalty and firm positioning: Reliable products with strong affinity and environmental friendliness
- Achieve superiority of products based on technology
- Providing excellent customer service: Producing customized products tailored to customer needs

■ specialisation

- Strategies to focus on specific products, specific customers, and areas in the early stages of market entry
- A Study on Products Linked to Industry–University Cooperation and Related Institutions
- Promoting active products through overseas exhibitions and finding new buyers

■ Continuous feedback

- Increase production capacity and efficiency.
- Development of new products
- Discover new customers and markets
- Reorganization of business concepts: Establishing leading business concepts in accordance with changing times

Taking advantage of traditional Korean paper, high value-added **jirisan hanji**



Machine source paper



Original support group



Slitting



Windings



Orator branch



Retention equipment

Retention equipment



Machine (No. 1, No. 2)



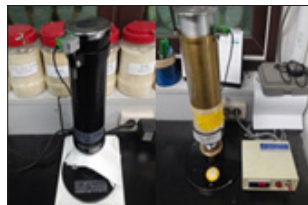
Rewinder (No. 1, No. 2)



Tensile strength



Elongation Dryers (small/large)



Air permeability meter



Thicknessmeter



Weighing machine



Ceramic paper machine



Hanji yarn splitter



High-altitude counter

Paper manufacture production process



Raw material warehouse



Dissociation processes (palpa)



First-order anti-corrosion processes (defrica)



Secondary Dissolution Process (DDR)



Raw material transfer(chests)



Primary treaty process



Second treaty process



Paper-pencil processes



Dehydration process



Primary drying process



Second drying process



Winding process



Rewinder process



Finished product

Product introduction

J-TEX paper(underlay)

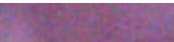
'J-TEX paper' is a paper for space uploading. It is used for all stages of wallpaper construction such as residence and office before spreading various kinds of wallpaper. It reinforces the smoothness of the wall, It is a special paper that has been developed to maximize aesthetic expression.

J-TEX	averaging weight(g/m ²)	ground width(m/m)
	60, 65, 70	1100,1140,1200

Advantages of J-Tex paper used to construct wallpaper

- ❶ Since it is an eco-friendly pulp product, it reduces the generation of smoke in case of fire.
- ❷ It is hydrophilic and shows excellent adhesion with wallpaper paste.
- ❸ Even if you do not use a strong bond product of chemicals, the adhesive strength is good.
- ❹ Because the texture is dense and uniform, the transition of the wallpaper paste does not appear on the concrete wall
- ❺ It has high elasticity and tear strength required to support tension after papering.
- ❻ The wallpaper is smooth and the aesthetic expression is maximized.
- ❼ It has been developed as a wallpaper-only wallpaper, so there are no line marks on the top and bottom.
- ❽ The construction period is shortened because the process is reduced compared to the existing underlay.
- ❾ The cost of raw materials, of course, will also be reduced.
- ❿ The overall construction is very good.



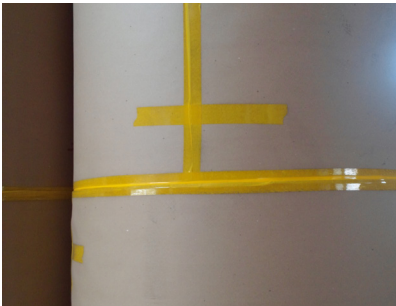
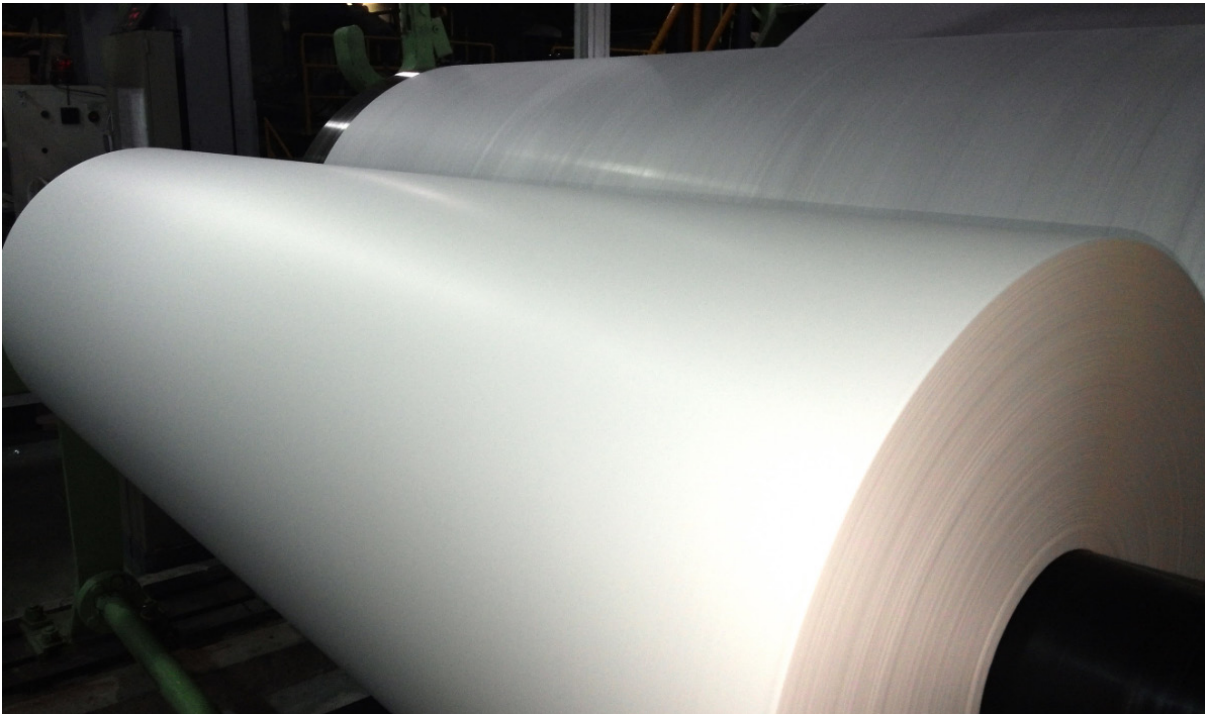


Product introduction

Battery substrate paper

It is a paper used to deliver powder lead, the substrate material for ships and vehicle batteries, and is currently being delivered to Sebang batteries and multinational company Delco due to its high technology. It is a product that contributes to productivity and quality improvement by producing expensive German imported products and domestic companies at less than 10g/m² in Jirisan Hanji (Yu) and maturing after forming the substrate.

battery substrate paper	averaging weight (g/m ²)	ground width (m/m)
	10/12/16	1645, 1900, 1840



Product introduction

Transcription paper

It is a product made of uniform acupressure that gives one-sided gloss to increase printability with cloth printing paper.

You can choose two types of transfer paper, A transfer paper and B transfer paper.



Transcription paper	averaging weight (g/m ²)	ground width (m/m)
A Transcription paper	30, 35, 40, 50, 60, 90	1590,1670
B Transcription paper	30, 35, 40, 50	1590,1670

Transfer printing cloth sample



Status of facilities for making transfer paper



Product introduction

A piece of textile machinery

Hanji Temple, which was developed for the second time in the world, is an eco-friendly new textile fashion material that takes full advantage of Hanji, and can be used for various purposes such as home-textile (bedding, wallpaper), wedding dress, underwear, shoes, and interior design, and has a lot of growth potential as a high value-added product.

It is an eco-friendly high value-added natural fiber material with a unique texture while maintaining the advantages of lightweight, biodegradable, refreshing, dehumidifying, and deodorizing functions.

Since it has the intermediate characteristics of cotton and hemp, it is said to be the most suitable natural material for global warming conditions, and it is a product with excellent durability, dyeability, and excellent topoturbability.

piece of textile machinery	averaging weight (g/m ²)	ground width (m/m)
	13	1.0 / 1.5 / 2 / 3 / 4 / 5



Machine Hanji products



socks



bedding



shirt

antibacterial

Antimicrobial fibers with a 99.9% bacteriostatic reduction rate against Staphylococcus aureus and pneumococcus which cause infectious diseases.

deodorizing property

Hygienic fiber material with a very high deodorization rate for ammonia, one of the three offensive odors.

quick drying

It absorbs and emits sweat and moisture of the human body quickly and maintains a pleasant state at all times.

far-infrared radiation

The far-infrared radiation of the loess level with the light of 4-1000 μm m wavelength area which activates the physiological action of the human body and promotes waste removal, thrombosis and blood circulation in the human body

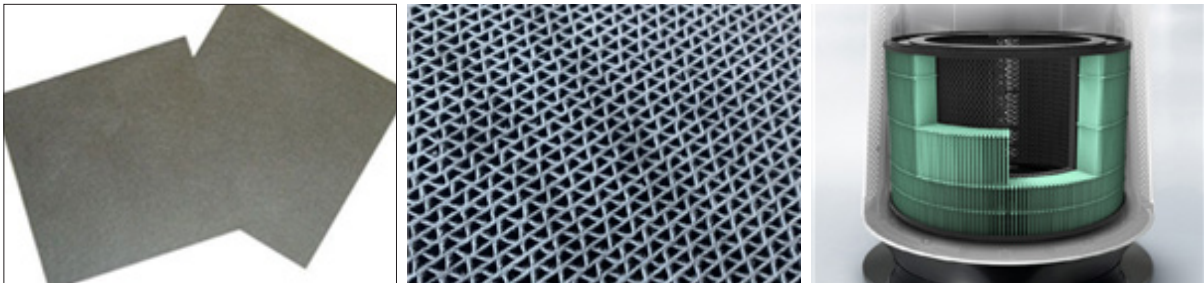
Product introduction

Activated carbon paper

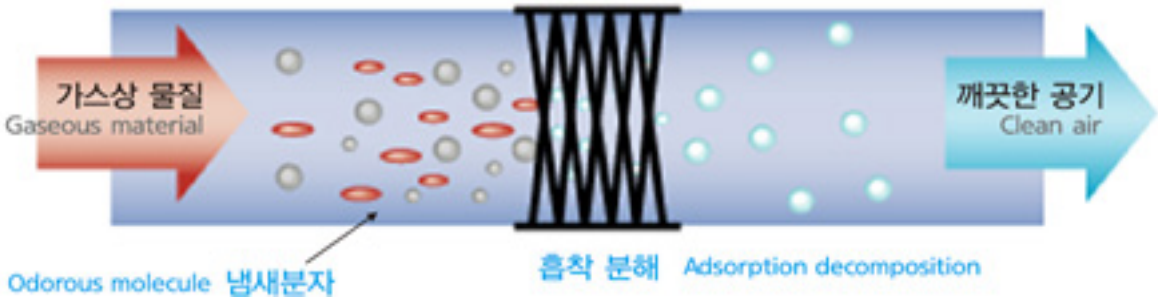
It is a high-performance activated carbon paper using the WET-LAID (wet) process. It is a functional paper with excellent deodorization and antibacterial properties against volatile organic compounds (VOCs) and five major gases (ammonia, acetic acid, formaldehyde, acetaldehyde, toluene). It replaces high-performance activated carbon paper and activated carbon coated nonwoven fabric, which were mostly dependent on imports, and is a high-performance filter paper with an activated carbon content of 60% or more. It can be used as an air purifier, a deodorizing filter for ventilation, an air conditioner composite filter, an industrial air conditioning filter, It is possible.

activated carbon paper	averaging weight (g/m ²)	ground width (m/m)
	85, 120, 170, 175	600, 1100

Examples of a collator filter and mounting of activated carbon paper



Activated carbon deodorization filter basic principle



| Company introduction |

Korea carbon paper KOREA CA

Korea Carbon Paper was established in 2015 as a subsidiary of Jirisan Hanji, Carbon paper and ceramic paper are the only functional papers in Korea and abroad. We plan to grow into a manufacturing company.

To this end, we have secured related technologies through joint research and development and technology transfer with the Korea Institute of Energy Research. Through the 10-ton carbon fiber web production facility, we have the ability to strategically produce functional paper such as activated carbon fiber paper, activated carbon paper, ceramic paper, and zeolite paper as well as carbon fiber web.

In addition, we will open these production facilities so that they can be used for basic production experiments according to the demand of other organizations in the future. We will continue to provide better quality products through continuous research and development.

Kim Dong-hoon, CEO of Carbon Paper Korea



RBON PAPER COMPANY

| Retention technology | technology transfer of korea energy technology institute

Know-how on the construction of carbon fiber web production facilities and optimization of production technology (2015)

Patents and Know-how on Continuous Manufacturing Technology of Carbon Fiber Web Using Carbon Short Fiber (2014)

Patents and know-how on the development of hybrid process for VOC adsorption and catalytic combustion function (2012)

Ceramic paper and zeolite paper manufacturing technology patents and know-how (2012)

Know-how (2004) on photocatalytic paper with excellent high-resistance and photodegradation properties at the same time

What is carbon fiber?

Cellulose, acrylic fibers, vinylon, and pitch are used as raw materials, and molecular arrangements and crystals change depending on the raw material or treatment temperature. In general, a hexagonal ring of carbon is a structure that forms a layered lattice in succession, with metallic luster and black or gray.

The strength 10~20g / d, and the specific gravity 1.5~2.1. The heat resistance, and the shock resistance excel. It strong against the chemicals and the resistance to pest bigs. During the heating process, molecules such as oxygen, hydrogen, and nitrogen escape and the weight is reduced, so it is lighter than metal (aluminum), while it is more elastic and stronger than metal (iron). Due to these characteristics, sports equipment (fishing rod, golf club, tennis racket), aerospace industry (heat-resistant material, aircraft fuselage), automobile, civil engineering (lightweight material, interior material), electrical and electronic communication (antenna), environmental industry (air purifier, water purifier) It is widely used as a high-performance industrial material in various fields.

[Naver Knowledge Encyclopedia] Carbon fiber [carbon fiber] (Doosan encyclopedia, Dusan encyclopedia)

Ceramic paper?

Ceramic is easily described as pottery made by baking clay. The advantages of ceramics are heat resistance to heat, hard surface hardness and abrasion resistance, and corrosion resistance to chemical erosion. For ceramic types, cement, ceramics, and glass are called classical ceramics. Functional ceramics are magnetic ceramics As we know as magnets, ceramics themselves have certain functional characteristics, and structural ceramics use ceramic properties such as strength.

There are many kinds of new material ceramics called new materials, and there are a wide range of them. There are bowls made of common paper, glass, ceramics, etc., and plastic bowls. Ceramics cope with metal nowadays. Among them, ceramic paper means paper that does not burn well.

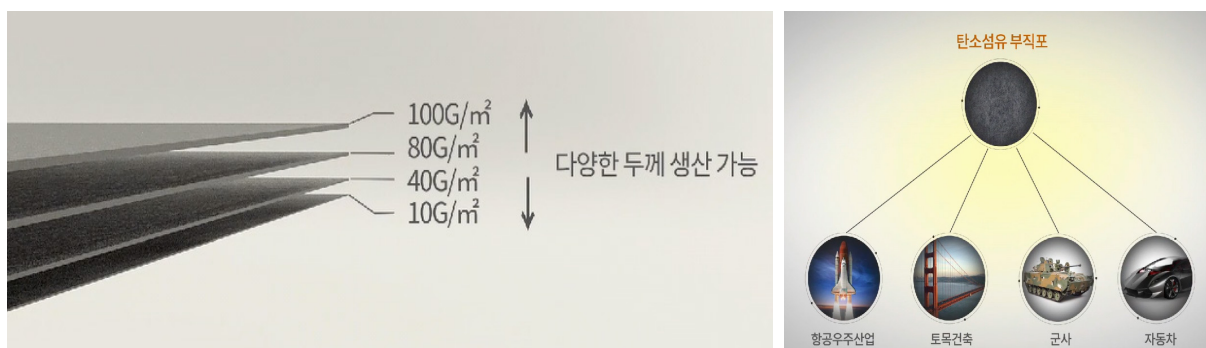
[Naver Knowledge Encyclopedia]

KOREA CARBON

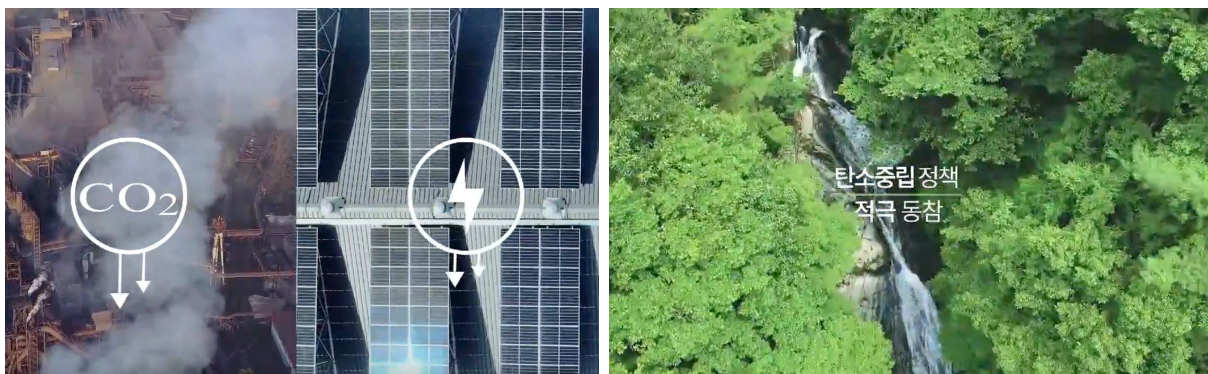
The advantage of the carbon fiber non-woven fabric

Carbon fiber paper produced by Jirisan Hanji (Yu) is a high-strength, lightweight product that can be produced in a variety of applications from low weight (10g / m²) to high weight (100g / m²).

Carbon fiber paper is a functional paper that boasts excellent conductivity, flame retardancy, heat-generating properties and excellent strength and can be used in various fields such as automobile, agriculture, transportation, aerospace industry, military industry and construction industry.



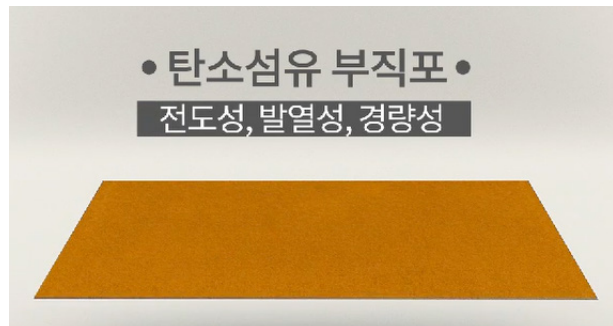
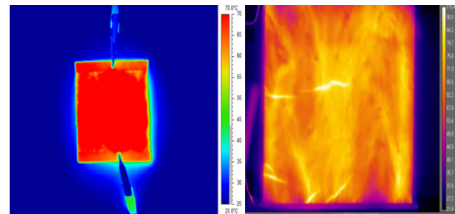
Jirisan Hanji (Yu) is developing functional carbon fiber paper using recycled carbon fiber (rCF) that regenerates carbon fiber that has reached the end of its life in line with the carbon zero policy implemented in various countries around the world. We are actively participating in carbon neutral practice.



PAPER COMPANY

Carbon fiber paper face upper heating body

Carbon fiber paper can be manufactured with various heating elements due to its fast heating speed and stable heating performance. In particular, it has excellent flexibility, no risk of disconnection due to bending, boasts excellent far-infrared emissivity, and is lightweight, making it easy to carry, safe, and can be used in various types of products with low energy consumption.

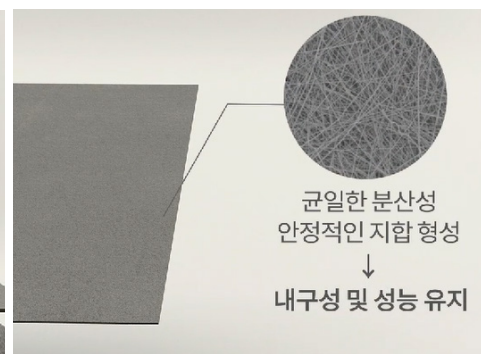
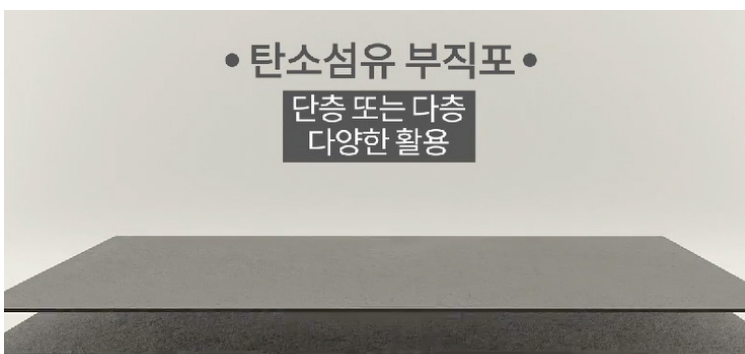


Carbon fiber paper composite

Carbon fiber paper has excellent strength, flexibility, and flame retardancy, so it can be laminated in a single layer or multilayer structure and used as various composites.

These carbon fiber composites have similar strength to materials (iron) of the same area, but have excellent light weight and can be used as transportation and aerospace materials.

In particular, in a situation where fossil fuels are rapidly changing into electric energy fuels, flame retardant carbon fiber paper composites can be used as materials with both strength, light weight and safety.



| Product introduction |

Carbon fiber web

It is made of paper with excellent dispersibility and uniformity of carbon fiber by using 3 ~ 25mm chop of carbon fiber. The content of carbon fiber is 97% or more and it is produced in the range of 50~500μm thickness

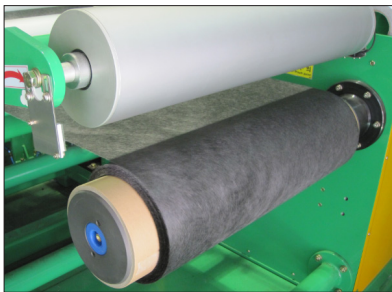
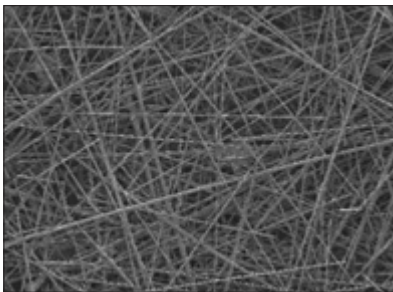
Properties

Cat.No	Thickness (μm)	Width (mm, max.)	Basis weight (g/m ²)	Porosity (%)	CFs chop
CFW-50	50±2	600	8~10	> 95	PAN, Pitch
CFW-100	100±2	600	15~20	> 93	PAN, Pitch
CFW-200	200±2	600	25~30	> 92	PAN, Pitch
CFW-500	500±5	600	40~45	> 90	PAN, Pitch

Application

- GDL, Fuel-cell Gas diffusion layer
- Plane heater
- CFRC, Carbon fiber reinforced composite materials
- Graphite block
- Radio shielding materials

Pictures



| Product introduction |

Activated carbon fiber web

It is made of paper with excellent dispersibility and uniformity of carbon fiber by using 3 ~ 25mm chop of carbon fiber. The content of carbon fiber is 97% or more and it is produced in the range of 50~500μm thickness

Properties

Cat.No	Thickness (μm)	Width (mm, max.)	BET surface area (m2/g, N2)	Porosity (%)	ACF content, %
ACFW-20	0.2 ~ 3.0	600	300	> 40	20~25
ACFW-50	0.2 ~ 3.0	600	700	> 60	50~60
ACFW-80	0.2 ~ 3.0	600	1,000	> 75	70~80
ACFW-90	0.2 ~ 3.0	600	1,100	> 85	90~95

Application

- Smell, odor filter(Deodorant)
- Honeycomb filter(Car & indoor etc.)
- VOC filter

Pictures



Product introduction

Active Carbon Paper

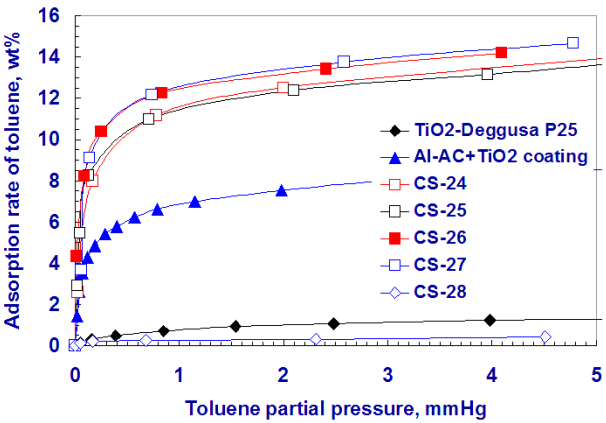
It is made of paper with excellent dispersibility and uniformity of activated carbon through the combination of activated carbon powder, ceramic fiber, photocatalyst, organic and inorganic binder. The content of activated carbon varies up to 60% and is produced in the range of 100 ~ 500 μ m thickness

Properties

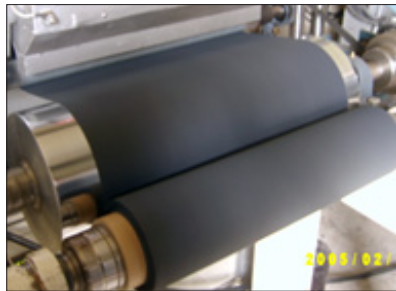
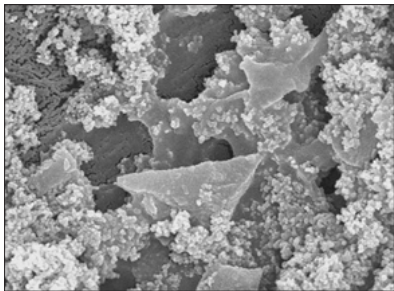
Cat.No	Thickness (μm)	Width (mm, max.)	BET surface area (m2/g, N2)	Porosity (%)	ACF content, %
ACP-10	0.2~1.0	600	> 100	30	10±2
ACP-25	0.2~1.0	600	> 220	35	25±2
ACP-40	0.2~1.0	600	> 350	40	40±2
ACP-55	0.2~1.0	600	> 500	45	55±2

Application

- Smell, odor filter(Deodorant)
- Honeycomb filter
(Car & indoor etc.)
- VOC filter
- Photo-catalytic honeycomb



Pictures



| Product introduction |

Ceramic Paper

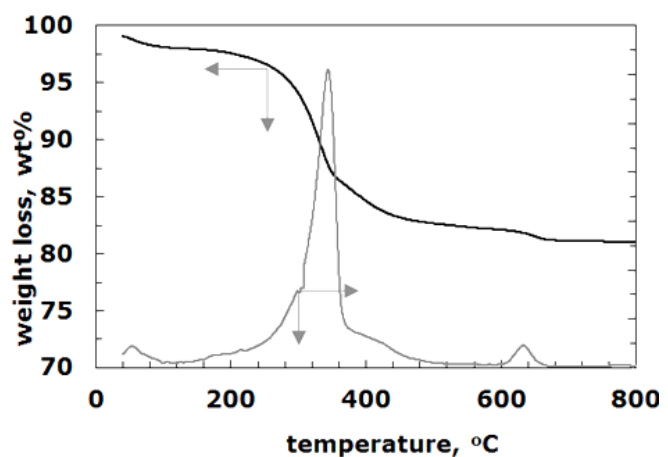
Ceramic fiber (Al₂O₃-SiO₂ bulk fiber) is dispersed in water to remove impurities (shot) and is made of paper with excellent dispersion and uniformity of ceramic fiber. It is used as a heat resistant gas filter material, heat resistant material, insulation material and flame resistant material

Properties

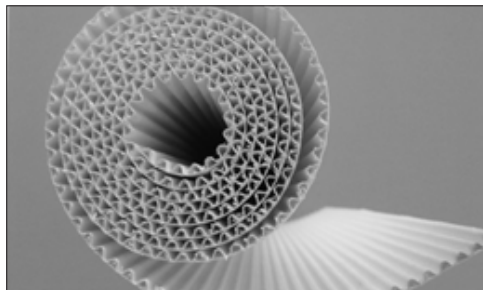
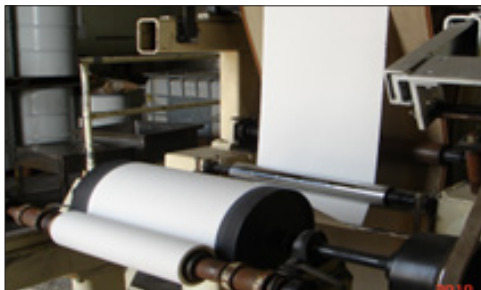
Cat.No	Thickness (μm)	Width (mm, max.)	Heat-resistant, oC	shot content, %	Inorganic content, %
CP-85	0.2 ~ 1.0	600	400	> 1	> 85
CP-90	0.2 ~ 1.0	600	700	> 2	> 90
CP-95	0.2 ~ 1.0	600	1,000	> 2	> 95
CP-98	0.2 ~ 1.0	600	1,200	> 3	> 98

Application

- Honeycomb gas filter
- Catalytic substrate
- Insulation
- Heat-resistant
- Flame-resistant Polymer-Ceramic paper hybrid composite



Pictures



Product introduction

Zeolite Paper

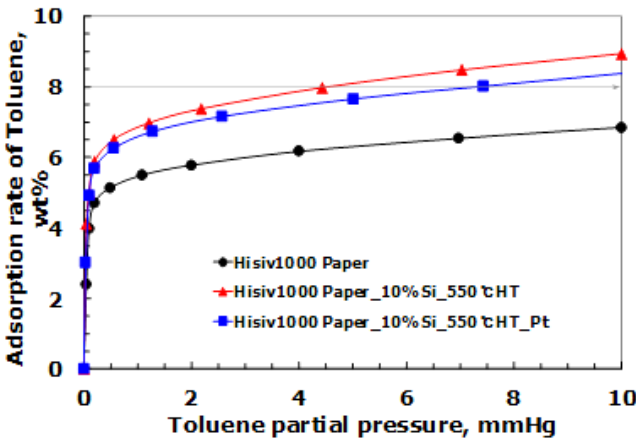
It is made of zeolite powder and ceramic fiber (Al₂O₃-SiO₂ bulk fiber), and is made of paper with excellent dispersion and uniformity of zeolite by dispersing it in water.

Properties

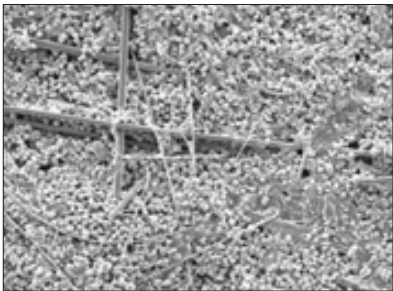
Cat.No	Thickness (μm)	Width (mm, max.)	Workable temp.max (oC)	BET surface area (m2/g, N2)	zeolite content, %
ZP-A	0.2~1.0	600	200	> 220	> 25
ZP-X	0.2~1.0	600	200	> 240	> 25
ZP-Y	0.2~1.0	600	200	> 250	> 30
ZP-ZSM5	0.2~1.0	600	200	> 250	> 30
ZP-SG	0.2~1.0	600	150	> 150	> 30

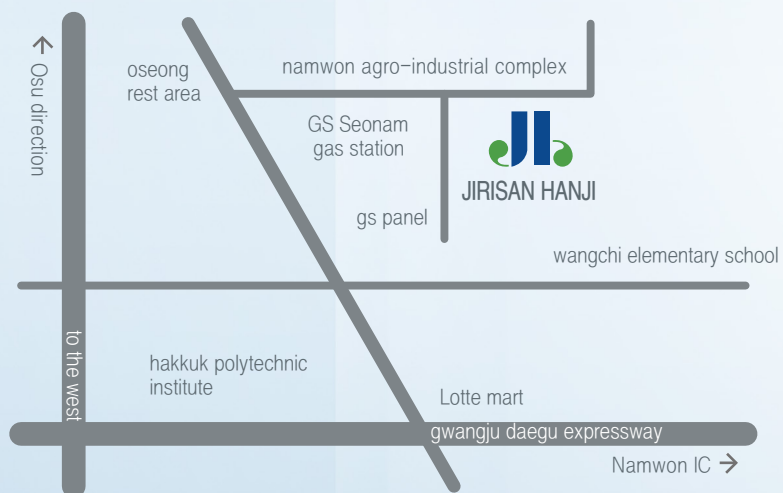
Application

- Honeycomb gas filter
- VOC adsorbent
- CO₂ adsorbent
- H₂O adsorbent



Pictures





Jeonbuk Namwon City Gwangchi Industrial 2 Road 26
(Yongjeong-dong)
Tel. 063) 626-9977 Fax. 063) 626-4600