

INNOVATING & DEVELOPING

COOPERATING & WIN TOGETHER

Hunan Huitong Advanced Materials Co.,Ltd

----The Leading Solutions Provider in Metal Fiber

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Metal Fiber Sintered Felt

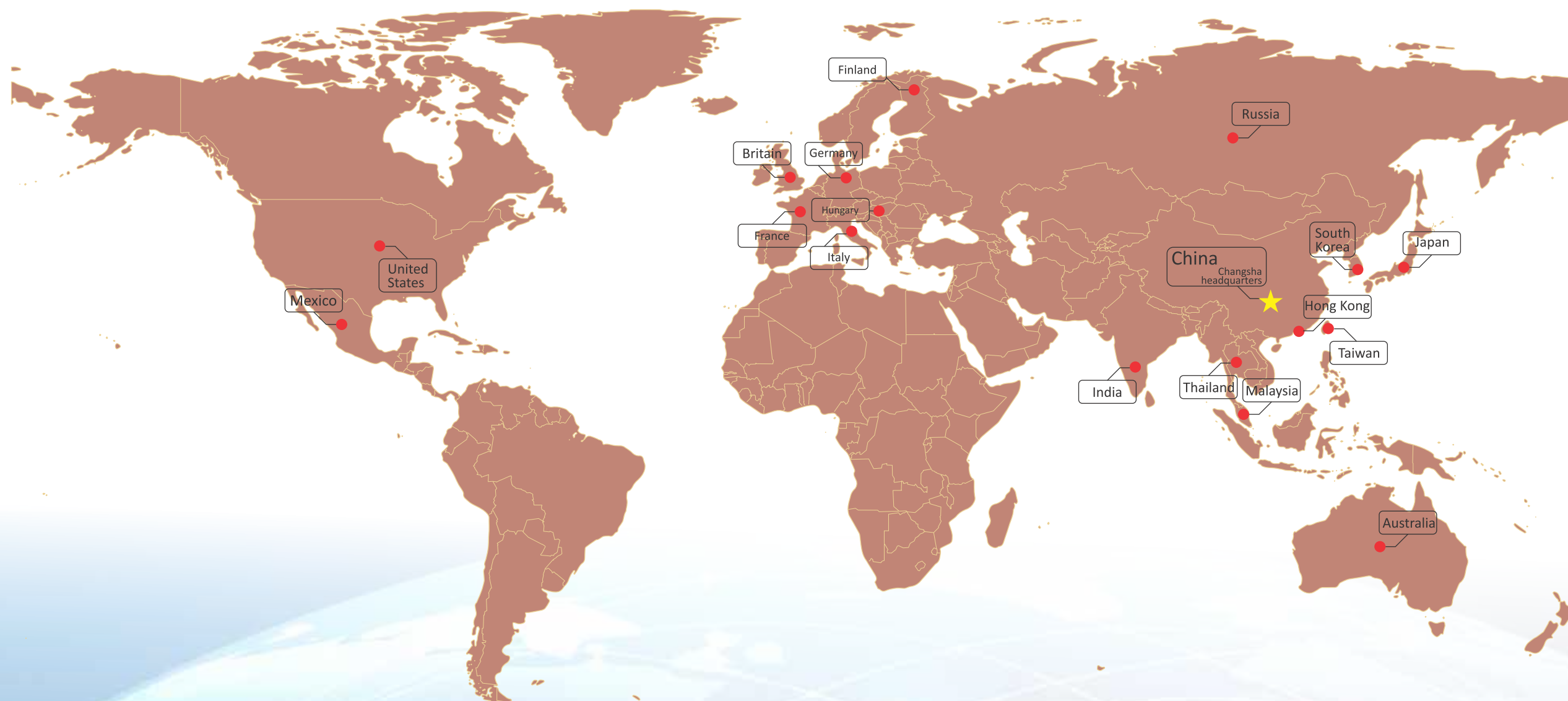
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More than 30 covered countries and regions
More than 300 Satisfied customers

Continental

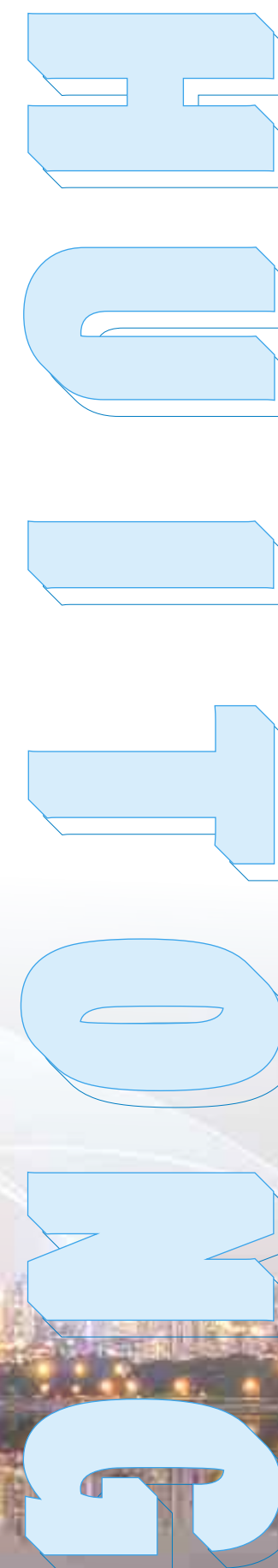
GENTHERM

KING'S
METAL PIPE
MANUFACTURING

Parker

BWF Group

MANN+
HUMMEL



Who we are

Hunan Huitong is a world leading manufacture of metal fiber and related products. We have the largest and the most complete product line in China. Since its foundation in 2002, we have always devoted ourselves to the development of new products and expansion of their use. In 2015, we became a listed company and stock number is 833751. We pursue to be the preferred supplier for metal fiber products, services and solutions by continuously delivering superior value to our customers worldwide.



Our Factory

- Unique advanced production technology
Surface treatment
- The largest metal fiber production line in China
800 tons/year
- Comprehensive product line
1-100um metal fiber and related products
- Total Quality Management
ISO9001:2015
- 400+ workers
- 67000 square manufacturing area



Our R&D and Innovation

- Independent research and development of advanced wire transformation technology and testing Equipments.
- Various independent research and development patents
- More than 30 years of experience in this field
- Invest a lot in R&D every year
- Professional R & D technical experts with rich experience
- Offer more than 200+ products and solutions



Stainless Steel Fiber

【Component】 316L、304、302、430、434 and other stainless steel materials.

【Description】 Made of stainless steel wire by bundle drawing process, the diameter is as fine as $1\mu\text{m} \sim 40\mu\text{m}$. Since the diameter of stainless steel fiber reaches the ultra-fine-micron level, it not only maintains the properties of stainless steel such as electrical conductivity, thermal conductivity, corrosion resistance, high elastic modulus and tensile strength, but also has softness and high specific surface area similar to other textile fibers, so It is the perfect base materials for the production of various stainless steel fiber products. It can be widely used in textile, filtration, metallurgy and environmental protection and other fields which covering the fields of industry, civil and military.



【Technical Parameter】

Diameter(μm)	Filaments(f)	Strength(cN)	Elongation(%)	Weight/meter(g/m)
4.5	12000	≥ 2.0	≥ 0.7	1.40 ~ 1.64
6.5	6000	≥ 4.5	≥ 1.0	1.56 ~ 1.70
7.3	6000	≥ 5.5	≥ 1.0	1.98 ~ 2.14
		≥ 4.0	≥ 0.8	1.92 ~ 2.20
8	6000	≥ 7	≥ 1.05	2.34 ~ 2.57
		≥ 4.0	≥ 0.85	2.26 ~ 2.62
12	2000	≥ 18	≥ 1.1	1.82 ~ 1.98
		≥ 13.5	≥ 0.9	1.76 ~ 2.04
22	1000	≥ 50	≥ 1.25	3.06 ~ 3.3

Annotate:

- 1 The diameter of the fiber can be produced between 1 and 100 micron according to the customer's request.
- 2 The fiber's filaments and breaking strength of single fiber can be controlled by the customer's request.
- 3 The fiber's room temperature resistance will change along with the stainless steel state.

Application:

- 1 Pure stainless steel fiber fabric
- 2 Blended spun stainless steel fiber Fabrics
- 3 Metal fiber sintered felt
- 4 Conductive plastics for electromagnetic shielding and anti-static,anti-counterfeit and anti-static paper
- 5 Fiber reinforced materials
- 6 Anti-static brush,anti-static wrist band etc
- 7 High Temperature heating body
- 8 High temperature cushion mould,high temperature conveyor belt

Package:

- 1 Cardboard conical tube
- 2 Cylindrical tube
- 3 Spool



Fecralloy Fiber

- 【Component】** Iron-Chromium-Aluminum Alloys
- 【Description】** Iron-chromium-aluminum fiber has high resistivity, small temperature coefficient, long service life, high surface load, and good oxidation resistance performance; compared with stainless steel fiber, it can be used in much higher temperature environments.
- 【Application】** Iron-chromium-aluminum fibers are mainly used as raw materials for the manufacture of automobile exhaust purifiers, high-temperature filter felts, burners, Low nitrogen combustion medium etc.

【Technical Parameter】

Diameter(μm)	Filaments(f)	Strength(cN)	Elongation(%)
13	1800	≥13	≥1.1
17	1800	≥25	≥1.1
22	500	≥30	≥1.1
35	500	≥50	≥1.2

Titanium Fiber

- 【Component】** Titanium fiber is a fibrous material with a certain aspect ratio made by drawing titanium wire, it is a kind of metal fiber material. Titanium fiber has a series of advantages such as high and low temperature resistance, corrosion resistance, light weight and good ability to absorb impact energy. It is widely used in aerospace, biomedical materials, high-efficiency combustion, filtration analysis, electromagnetic shielding and other fields.
- 【Application】** Hydrogen production from stacks (Hydrogen energy utilization field) - anode diffusion layer materials, high-performance titanium-based metal oxide electrodes, golf club reinforcement (weight reduction) materials, aerospace equipment materials.
- 【Package】** Cylindrical tube,Customized package

【Technical Parameter】

Diameter(μm)	Filaments (f)	Wave	Weight/meter (g/m)	Fiber bundle fineness (Tex)
8	3000	No	0.60 ~ 0.72	600 ~ 720
25	500	QH	1.03 ~ 1.18	1030 ~ 1180
40	500	QH	2.63 ~ 3.02	2630 ~ 3020
50	500	QH	4.11 ~ 4.73	4110 ~ 4730

Staple Fiber

【Description】 The strips are made from metal fibers through the company's unique drawing and cutting process, and with vacuum packaged. The length of the fiber body can be controlled at 38mm-110mm, the gram weight of the strips can be controlled at 2g/m-15g/m, it has very good bulkiness and liftability.

【Technical Parameter】

Materials	Diameter (μm)	Fiber length (mm)	Weight/meter (g/m)
Stainless steel fiber	2-22	38-110	2-12
FeCrAl fiber	13-35	38-110	2-15

【Product Application】 Products are widely used in textile, filtration, industrial combustion and other industries such as making pure spinning yarn, blended yarn with other fiber materials, anti-static dust bag, metal sintered felt, metal fiber burner and other related products.

Chopped Short Fiber

【Description】 The short fibers are made by cutting bundled long fibers of different fineness according to a certain fiber length. Short fibers maintain good dispersibility; fiber aspect ratio can be better controlled.

【Application】 Short fibers can be widely used in anti-static paint coatings, anti-static plastics and other industries.

【Package】 Packed in air-tight shrunk plastic bags with cardboard box
Customized package according to customer request

【Technical Parameter】

Fiber Type	Diameter (μm)	Fiber Length (mm)
Stainless Steel fiber	2~40	0.3-100
Other Metal Fiber	8~40	0.3-100

Metal Fiber Mixing Strip

【Description】 With stable electrical conductivity, only adding 10% blended broken sliver as raw materials into non-woven fabric can achieve permanent anti-static effect; the gram weight is uniform and the dispersion is good.

【Technical Parameter】

Type	Weight/meter g/m	Percentage
Polyester with metal fiber mixed strip	2-10	50/50
Aramid with metal fiber mixing strip	2-10	50/50
PPS with metal fiber mixed strip	2-10	50/50

Annotate : The fiber content ratio of metal fiber and other materials can be customized according to customer.

【 Application】

Fiber Additive Materials for Anti-static Dust Filter Bags

【Package】

Packed in air-tight shrunk plastic bags with cardboard box finally





Ultra-fine Metal Composite Wire

【Description】 With excellent electrical conductivity, high strength, high elasticity, abrasion resistance, corrosion resistance and excellent thermal stability in oxidative atmosphere; good durability, easy to weave into textiles, wide resistance range, customizable heating resistance ;The intelligent heating element made by ultra-fine metal fiber wire has the characteristics of softness, folding resistance, uniform heating and long service life.

【 Application】 Be used in intelligent heating clothing (heating gloves, belts, insoles, socks, vests, jackets, sleeping bags, etc.), heating pads, car seats and steering wheel heating, it also widely used in anti-static brushes, high temperature sewing thread, RFID and so on.

【Package】

- 1 Cardboard conical tube
- 2 Cylindrical tube
- 3 Spool

【Technical Parameter】

Type	Weight/meter (g)	Breaking load(N)	Elongation	Average Resistance
14μm×90×1	0.12	25	≥1.10%	61
12μm×90×2	0.17	44	≥1.10%	42
12μm×100×1	0.095	24	≥1.10%	59
12μm×100×2	0.19	41	≥1.10%	38
12μm×100×3	0.28	69	>1.10%	22
12μm×275×1	0.25	59	>1.10%	27
12μm×275×2	0.50	75	>1.10%	14
12μm×275×3	0.75	125	>1.10%	9
12μm×275×4	1.01	130	>1.10%	7
12μm×275×5	1.25	160	>1.10%	5.5
12μm×275×6	1.5	180	>1.10%	4.7
12μm×275×8	2	180	>1.10%	3.6
8μm×1000×1	0.42	69	>1.10%	16
8μm×1000×2	0.85	108	>1.10%	8
12μm×1000×1	0.95	100	>1.10%	7
12μm×1000×2	1.9	340	>1.10%	3.6
13.3μm×100×3	0.33	80	≥1.10%	22

High temperature resistant metal fibre alloy fabric

Knitted long fiber fabric



F-ULT type: Huitong Patent Fabric, Excellent high-temperature oxidation resistance, tempering resistance and thermal shock resistance, stable and uniform structure, wide range of application.

Knitted staple fabric



K-ULT type: knitted short fiber type, general-purpose fabric good high temperature oxidation resistance type, anti-resonance, unique short fiber feather, good infrared radiation ability can adapt to most working conditions.

Woven staple fabric

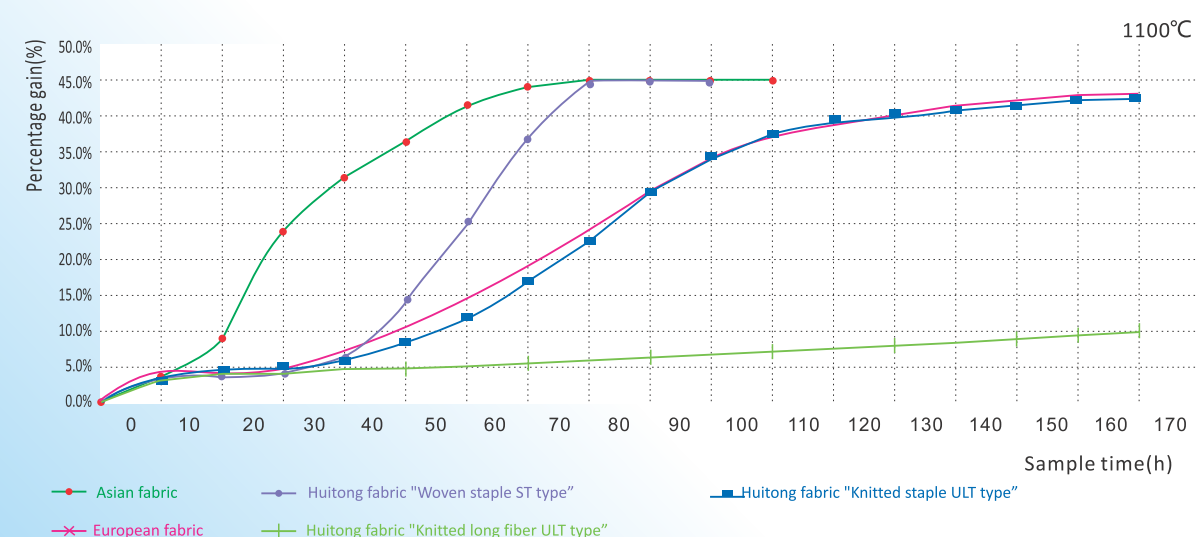


W-ST type: Economy, high processing efficiency.

Projects	Brand name	F1400/290-ULT	K1400/290-ULT	W1500/240-S _T	
Material Quality		FeCrAl LT	FeCrAl LT	FeCrAl LT	
Weight(kg/m ²)		1.4	1.4	1.5	
Mean permeability(L/m ² *S)		2900±300	2900±300	2400±350	May Adjust according to the customer demand
Width of width(mm)		1000±5	1000±5	1200±5	The maximum width shall not exceed 1200 mm
Fabric thickness(mm)		1.9±0.15	1.9±0.15	1.9±0.15	YG (B)141D digital fabric thickness gauge
Service temperature (°C)		≤1100, limiting temperature 1250			

The above data is only for type selection reference, the actual product data is agreed with technical documents

Life comparison of metal fiber fabrics



Characteristic

- ※ Low pollutant emission
- ※ Low combustion noise
- ※ Strong adaptability to shape
- ※ Thermal shock
- ※ Good security
- ※ Wide adjustment
- ※ Long service life
- ※ Anti clogging

Main Application

- ※ Hot-water/Steam boiler
- ※ Wall mounted heater / water heater
- ※ Drying equipment
- ※ Industrial furnace
- ※ Engineering heating equipment
- ※ Industrial thermal equipment





Conductive Plastic Masterbatch

【Description】 It is made of high-strength ultra-fine stainless steel fiber with resin and resin glue through a special process . It has little impact on the body material and only need one-time injection molding. Easy to process, no need electroplating & brushing conductive coating,light weight and can be dyed, free design and can reduce consumption.

【Technical Parameter】

Diameter (μm)	6.5μm、 8 μm、 11 μm	± 10 %
Masterbatch Length (mm)	4-10 mm	± 10 %
Masterbatch Diameter (mm)	2	±5 %
Masterbatch External Appearance	Smooth Surface without Broken	

【Application】 Anti-static turnover boxes, shells and structural parts of explosion-proof products in the production process of precision electronic components in the field of electronics and electrical appliances.
EMI shielding shells for electrical products in the fields of telecommunications, computers, automotive electronic products.
Anti-static casters, PVC anti-static floor.

Model	Metal Fiber Proportion	Usage	Applicable Resin
HT-CH60-T20	60%	ESD/EMI	PEI , PPO , PET/PETG , PBT , PC , PSU , PC/ABS
HT-CH60-T16	60%	ESD/EMI	PET/PETG , PBT , PA
HT-CH60-T14	60%	ESD/EMI	AS/ABS/SAN/ASA
HT-CH60-T12	60%	ESD/EMI	TPE , TPU , PE , PVC , POM , PP , PS
HT-CH75-T20	75%	ESD/EMI	PEI , PPO , PET/PETG , PBT , PC , PSU , PC/ABS
HT-CH75-T16	75%	ESD/EMI	PET/PETG , PBT , PA
HT-CH75-T14	75%	ESD/EMI	AS/ABS/SAN/ASA
HT-CH75-T12	75%	ESD/EMI	TPE , TPU , PE , PVC , POM , PP , PS

【Package】

By Plastic bag, one bag with 25kg, outer package with carton box
Customized package according to customer request

Stainless Steel Fiber Sintered Felt

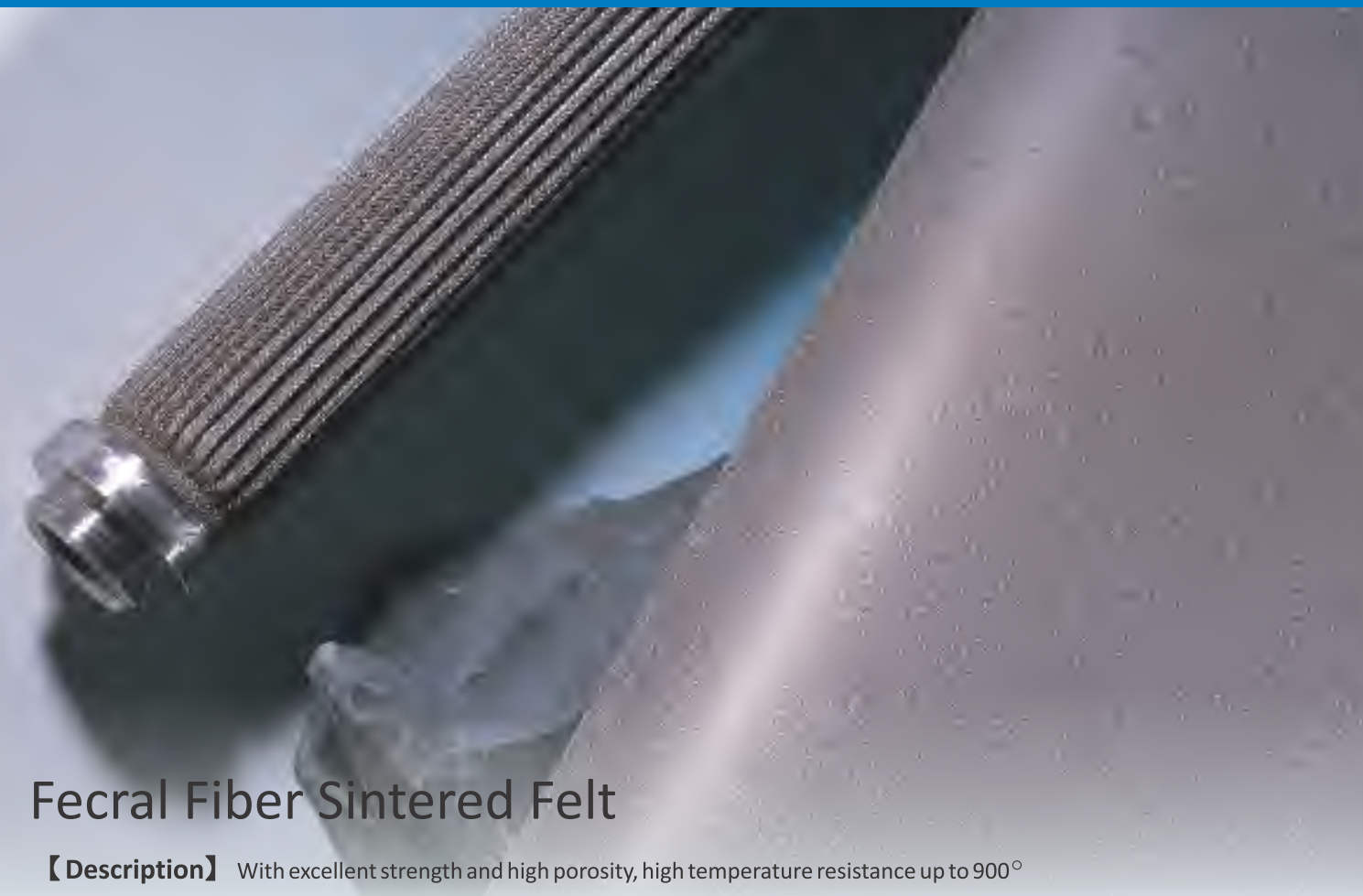
【Description】 It has excellent strength, multi-layer structure increases the dirt holding capacity of the filter material, uniform mesh structure and pore size make it has excellent porosity. High pressure resistance, high temperature resistance, corrosion resistance. Can be washed and reused multiple times, small pressure loss and large flow.

【Application】 Widely used in chemical fiber, film, viscose and other industries for filter impurities. High temperature flue gas dust removal. Filtration for petroleum and petrochemical, fuel, hydraulic oil and others.

【Package】 Wooden pallet
Customized package according to customer request

【Technical Parameter】

Diameter (um)	Thickness (mm)	Porosity (%)	Bubble Point(Pa)	Air Permeability L/dm ² .min
3	0.37	67	13000	13
5	0.43	80	7600	35
7	0.36	74	5050	60
10	0.34	78	3700	85
15	0.38	80	2470	170
20	0.51	82	1850	265
25	0.62	79	1480	325
30	0.62	79	1235	450
40	0.63	76	900	620
60	0.57	83	600	1350
86	1.00	84	480	1470
80	1.00	85	450	1510
90	1.20	88	410	1740
100	1.30	89	360	2000



Fecral Fiber Sintered Felt

【Description】 With excellent strength and high porosity, high temperature resistance up to 900°

【Application】 Widely used in diesel/gasoline vehicle particulate filter, burner medium

【Package】 Wooden pallet
Customized package according to customer request

【Technical Parameter】

Diameter (um)	Weight/Gram(g/m2)	Porosity(%)
17	1500	85
22	450	80
35	1500	88

Titanium Sintered Felt

【Description】 Compared with titanium mesh, titanium powder sintered plate, titanium fiber felt has an excellent three-dimensional network porous structure, high porosity, much larger surface area, uniform pore size distribution, strong corrosion resistance, good water permeability, high porosity, and perfect heat dissipation performance, high current density, low voltage, stable performance, long life and so on. It is widely used in various industries such as fuel cell, military industry, aerospace, civil, medical care and so on. Our company can customize and produce titanium fiber felt with various specifications and properties according to customer requirements.

【Application】 Used for fuel cell diffusion medium.
Ti felt used for anode gas diffusion layer (GDL) in proton exchange membrane (PEM) water electrolysis.
Ti felt anode GDL is featured with great conductivity, mechanical strength, chemical stability and anti-corrosion ability.

【Package】 Wooden pallet
Customized package according to customer request

【Technical Parameter】

Color	Light gray
Dimension	Customized as request Max:1600mm*600mm
Thickness	0.2mm-5mm Often made thickness (0.2,0.4,0.6,0.8mm,1.0)
Porosity	30-90% Customized as request

Sintered Felt Web

【Description】 It has a highly uniform structure and ultra-high porosity, it can be produced by a wide range of fiber weights and diameters and it has consistent fiber diameters.

【Application】 Widely used in gas-liquid separation, gas-solid separation and other industries.

【Package】 Wooden pallet
Customized package according to customer request

【Technical Parameter】

Diameter (um)	Weight/Gram (g/m2)			
2	150	300	450	600
4	150	300	450	600
6	150	300	450	600
8	150	300	450	600
12	150	300	450	600
22	150	300	450	600

Conductive Blended Spun Yarn

【Description】 Its a conductive and metallic yarn with excellent blend uniformity,Including blended yarns for electromagnetic shielding, blended yarns for anti-static purposes and blended yarns for conductive purposes.

The electromagnetic shielding blended yarn usually within the electromagnetic wave frequency of 30MHZ-3GHZ range, this helps it achieve a shielding efficiency 20 ~ 70 decibels;

Anti-static blended yarn has high strength,the surface resistivity of the fabric is less than 10⁷.After being washed many times, this fabric clothing still be anti-static and electromagnetic shielding performance is basically unchanged, it has excellent acid and alkali corrosion resistance; light, thin and soft, breathable and wearable, easy to dye and sew.

Conductive Blended yarn has stable conductivity permanently, good resistance to perspiration and oxidation, so it is suitable for smart clothing transmission lines and fabrics.By knitting, it has a fluffy and warm feel and sensitive touch screen performance.In military industry, it can effectively prevent radar reconnaissance.

【 Application】 Used for civilian electromagnetic shielding clothing, making electromagnetic wave shielding covers such as precision electronic components and high-frequency welding machines, house walls and ceiling wall coverings with electromagnetic wave shielding requirements, electromagnetic shielding curtains and tents. Work clothes for live working, anti-static fire-fighting clothing, non-woven fabrics, carpets, electrostatic protection of human body and equipment in flammable and explosive environments, touch screen gloves,anti-radar camouflage nets and smart clothings.

【Technical Parameter】

Metal Fiber Proportion	The Common Used Blended Fibers	Count Ne	Application
20%-30%	Polyester, Cotton, Viscose, Bamboo Fiber, etc.	21-60	Electromagnetic shielding clothing for civilian use
20%	Polyester, cotton, viscose, pressed silk, etc.	21-36 21/2-36/2	Electromagnetic shielding curtain cloth, wall cloth tent, high voltage patrol clothing, work clothes for live working, etc.
1%-30%	Polyester, Cotton, Viscose, Bamboo Fiber, etc.	21-36 21/2-36/2	Anti-static work clothes
2%-8%	Aramid, flame retardant viscose, acrylic vinyl, flame retardant polyester, etc.	21-36 21/2-36/2	Flame retardant antistatic work clothes
20%-30%	Polyester, aramid, PPS, polypropylene, etc.	10/2-32/2	Anti-static filter bag base fabric
10%-20%	Polyester, acrylic, etc.	18-32 18/2-32/2	Touch Screen Gloves
10%-30%	Polyester, vinylon, cotton, viscose, bamboo fiber	21-36 21/2-36/2	Anti-radar Camouflage Net, Smart Clothing

Annotate:

- 1 The composition ratio of various fibers can be adjusted according to customer.
- 2 Yarn twist can be made for knitting or weaving upon request

【Package】

Axis of a cone
Customized package according to customer request