

Expertise in filtration Innovation at core

Strength in every filter · Commitment in every detail



HUAHANG FILTER



METAL SINTERED SERIES

Stainless Steel Sintered Mesh | Sintered Powder Filter Element

High-temperature resistance · Corrosion resistance · Fine filtration



Website



YouTube



XINXIANG CITY HUAHANG FILTER CO.,LTD

Address: No.199 Shaohua Road, Advanced Manufacturing Development
Zone, Weibin District, Xinxiang City 453000, China.

Tel: +86-373-5471699

Website: <https://huahangfilters.com>

XINXIANG CITY HUAHANG FILTER CO.,LTD

COMPANY PROFILE

About Huahang Filter

Xinxiang City Huahang Filter Co., Ltd. is a professional manufacturer specializing in filtration industry. Based in Xinxiang, Henan, China, the company operates a modern facility covering 26,000m², with strong manufacturing and in-house R&D capabilities.



Our products include hydraulic oil filters, sintered metal filters, air dust collection filters, and water treatment solutions, widely used in energy and industrial applications. We serve over 7,000 customers worldwide, with exports to Europe, North America, the Middle East, Southeast Asia, and Africa.

Driven by technology and committed to quality, Huahang continuously enhances its manufacturing and service capabilities, aiming to build a globally competitive filtration brand.

20 years

Focus on filtration industry

26000 m²

Factory area 26,000m²

2000 kinds

2000 new products annually

Corporate Mission

To deliver efficient and reliable filtration solutions through integrity and innovation.

Corporate Goal

To be a trusted global brand in the filtration industry.

Corporate Vision

We strive to promote resource efficiency, environmental sustainability, and a harmonious balance between industry and nature.

Corporate Values

Responsibility, professionalism, innovation, dedication, integrity, win-win cooperation.



Machining Area



Welding Area



Pleating Area



Technical Team



Service Team



Wall of Honors



CATALOGUE

01 Sintered Metal Mesh

Five-Layer Sintered Mesh.....	01
Multi-Layer Sintered Metal Mesh	02
Perforated Plate Composite Sintered Mesh	03
Specialty Sintered Filter Media	03

02 Sintered Metal Fiber Felt

Unreinforced Sintered Fiber Felt.....	04
Reinforced Sintered Fiber Felt	05
FeCrAl Sintered Fiber Felt	06

03 Filter Selection Guide

End Cap & Connection Selection Table.....	07
Sintered Mesh Filter.....	08
Melt Filter Cartridge.....	09
Sintered Powder Filter.....	10
Sintered Filter Disc	11
Wedge Wire Filter Tube	12
Specially Designed Filter Elements.....	13

04 Customer Cases

Case 1	14
Case 2	14
Case 3	15
Case 4	15



Sintered Metal Mesh

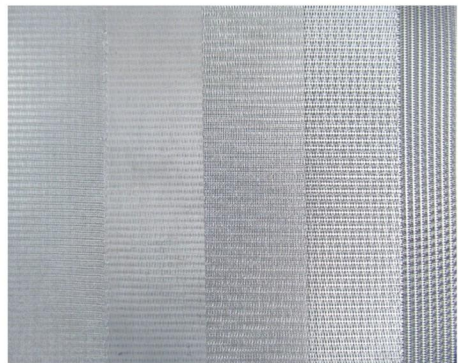
Five-Layer Sintered Mesh

Product Description

The standard five-layer sintered mesh filter combines protective, filtration, dispersing, and support layers through vacuum sintering. It is widely used across industries such as petroleum, chemicals, pharmaceuticals, metallurgy, power, water treatment, and machinery.

Key Features

- High mechanical strength and pressure resistance, with excellent weldability.
- Consistent filtration accuracy, maintaining mesh integrity during operation.
- Temperature range -200°C to 600°C, resistant to acids and alkalis.
- Efficient backwashable design, reusable with extended service life.

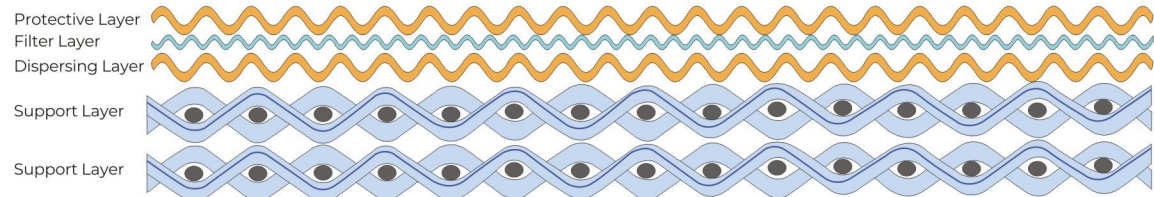


Specifications

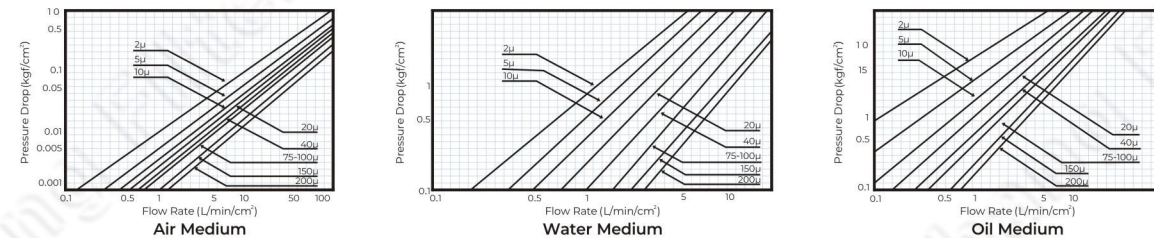
Model	Nominal Rating (μm)	Air Permeability (L/min/dm ² .1000Pa)	Bubble Point (pa)
HHSJ1	1	180	5300-6000
HHSJ2	2	240	4300-5000
HHSJ5	5	260	3000-3700
HHSJ10	10	310	2800-3300
HHSJ15	15	350	2000-2600
HHSJ20	20	450	1800-2300
HHSJ25	25	620	1500-1900
HHSJ30	30	690	1230-1700
HHSJ40	40	420	1020-1500
HHSJ50	50	850	860-1200
HHSJ70	70	900	690-1100
HHSJ100	100	1080	630-1000
HHSJ150	150	2600	550-800
HHSJ200	200	2800	450-600

Note: Sizes within the above range can be customized upon request.

Structural Diagram



Flow Characteristic



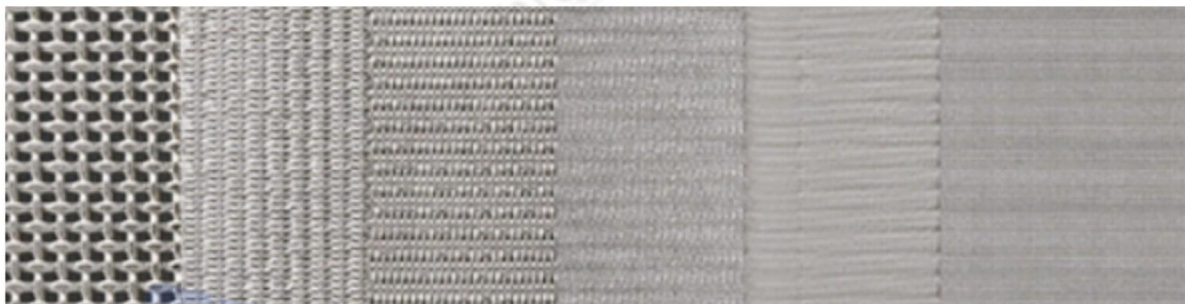
Multi-Layer Sintered Metal Mesh

Product Description

Multi-Layer stainless steel mesh is laminated and vacuum-sintered at high temperature to create a uniform filtration structure. Customizable pore size, permeability, and strength make it an ideal choice for natural gas filtration, outperforming conventional filter materials.

Key Features

- High mechanical strength and pressure resistance.
- High porosity with uniform airflow distribution.
- Prevents clogging and short-circuiting, providing long service life.
- Excellent mass and heat transfer, with efficient fluidization and low gas consumption.
- Supports powder flow under low-gradient or counter-gradient conditions.
- Easy to process and shape.
- Temperature range -200°C to 600°C, resistant to acids and alkalis, with consistent surface filtration.
- Surface filtration structure allows multiple cleaning methods and repeated use.

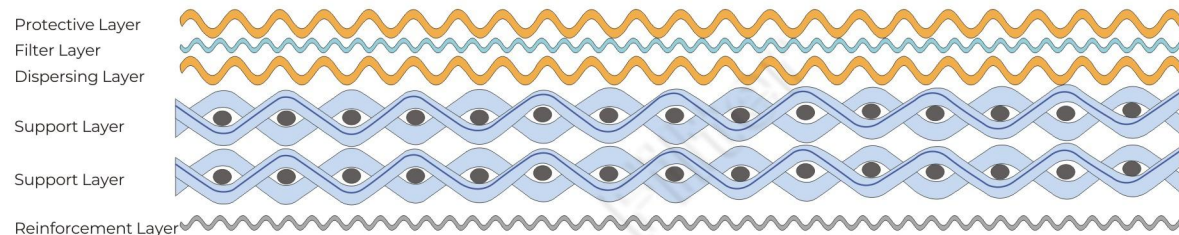


Specifications

Dimensions	Filter Media	Filtration Rating
1000mmx500mm	SUS304 SUS316L	1μm~300μm
1000mmx600mm		
1000mmx1000mm		
1200mmx1000mm		

Note: Sizes within the above range can be customized upon request.

Structural Diagram



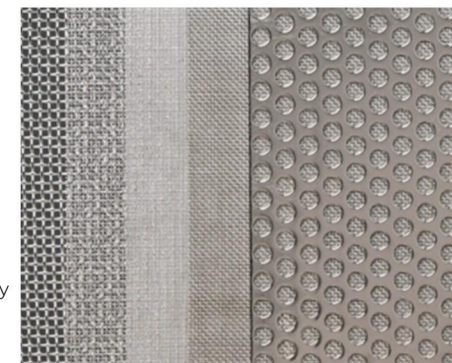
Perforated Plate Composite Sintered Mesh

Product Description

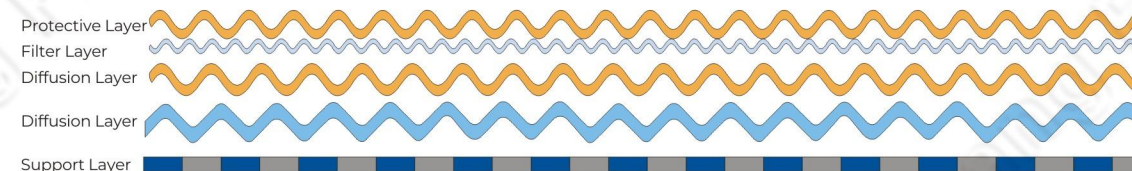
High-strength, precision filtration material featuring a rigid stainless steel perforated plate base with a multi-layer sintered metal mesh surface, integrated through high-temperature vacuum sintering. Ideal for solid-liquid separation and particle retention in petrochemical, water treatment, and metallurgical applications, especially under high-pressure conditions.

Key Features

- Perforated plate base delivers high compression and impact resistance (up to 4.0 Mpa), outperforming standard sintered mesh.
- Customizable filtration accuracy from 1-200μm with high dirt-holding capacity and stable efficiency.
- Constructed from 304/316L stainless steel; temperature-resistant (-200°C to 600°C) and corrosion-resistant.
- Integrated sintering ensures tight layer bonding with no gaps or secondary contamination; easy to clean and reuse.
- Optimized base open area balances filtration and flow, minimizing pressure drop and energy consumption.



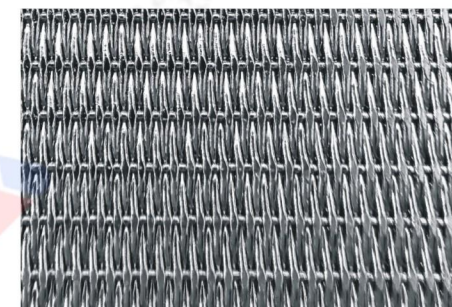
Structural Diagram



Specialty Sintered Filter Media

Product Description

Custom sintered filter media for extreme conditions, such as high corrosion, high temperature, and strong acids/alkalis. Made from duplex stainless steel, Monel, or 904L austenitic steel, retaining core sintered mesh filtration performance for demanding industrial applications.



Key Features

Filter Media	Structural Characteristics	Key Advantages	Applications
Duplex Stainless Steel	Composed of both austenitic and ferritic phases, with martensitic islands distributed within ferrite grains. Can be hardened through cold working.	Low yield strength, high elongation, good ductility and toughness; resistant to chloride and sulfide stress corrosion cracking.	Refining, Fertilizer, Pulp & Paper, Petrochemical, and Chlor-Alkali Industries; Equipment Resistant to Seawater and High-Temperature Concentrated Nitric Acid.
Monel	Multi-Layer Sintered Mesh Made of Nickel-Copper Alloy.	Excellent Corrosion and High-Temperature Resistance; Outstanding Stability in Hydrofluoric Acid, Alkalis, and Organic Acids.	For petrochemical, nuclear, and defense industries; filtration of power plant water/steam, seawater desalination, acids, crude oil, and nuclear energy processes.
904L Austenitic Stainless Steel	Austenitic Stainless Steel (Low Carbon, High Nickel & Molybdenum).	High Passivation Strength; Excellent Corrosion Resistance; Pitting, Crevice, and Stress Corrosion Resistant; Suitable for Dilute Sulfuric Acid.	Suitable for Sulfuric Acid (≤70°C, any concentration) and Acetic/Formic-Acetic Acid Mixtures (atmospheric pressure, any concentration or temperature)



Sintered Metal Fiber Felt

Unreinforced Sintered Fiber Felt

Product Description

Micron-grade stainless steel fibers are processed through non-woven laying, lamination, and high-temperature sintering to form a three-dimensional interconnected porous filtration material, making it an ideal filtration material with excellent high-temperature resistance, corrosion resistance, and precise filtration performance.

Key Features

- High dirt holding capacity, precise filtration rating, with slow pressure drop increase and extended service life.
- High porosity and permeability, resulting in low pressure loss and high flow capacity.
- Excellent resistance to acids, alkalis, organic solvents, and chemicals, with continuous operating temperature up to 480°C.
- Easy to process, form, and weld, suitable for various fabrication requirements.
- Customizable structures available, including reinforced and thickened types to meet specific application demands.



Specifications

Dimensions	Filter Media	Filtration Rating
1000mmx500mm	SUS316L	1μm~300μm
1000mmx600mm		
1000mmx1000mm		
1200mmx1000mm		
1480mmx1000mm		

Note: Sizes within the above range can be customized upon request.

Technical Parameters

Model	Filtration Rating (μm)	Bubble Point Pressure (Pa)	Air Permeability (L/min.dm ²)	Porosity (%)	Dirt Holding Capacity (mg/cm ²)	Thickness (mm)
SJZ5	5	6500	35	75	5	0.5
SJZ7	7	5000	55	75	6	0.5
SJZ10	10	3700	100	79	7	0.5
SJZ15	15	2450	140	78	9	0.5
SJZ20	20	1900	260	77	15	0.5
SJZ25	25	1500	320	76	21	0.5
SJZ30	30	1200	480	75	26	0.5
SJZ40	40	950	650	77	35	0.5
SJZ60	60	650	1100	77	38	0.5

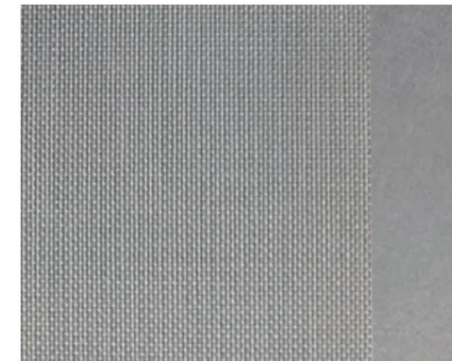
Note: Filtration rating and dirt holding capacity are determined in accordance with GB/T 18853-2002.
Bubble point pressure is determined in accordance with GB/T 5249.
Air permeability is determined in accordance with GB/T 5453, at a differential pressure of 200 Pa using air as the test medium.



Reinforced Sintered Fiber Felt

Product Description

Reinforced sintered fiber felt is a high-performance filtration material made by laminating ultra-fine stainless steel support mesh onto metal fiber felt, followed by high-temperature sintering and rolling. It is designed for demanding applications requiring high strength and durability.



Key Features

- Reinforced structure enhances mechanical strength and compressive resistance, preventing deformation under harsh conditions.
- Gradient pore structure ensures precise filtration, high dirt holding capacity, and long service life.
- 316L stainless steel, resistant to high temperatures (up to 480°C) and aggressive chemicals.
- High porosity (>80%) and excellent permeability, delivering low pressure drop and high flow efficiency.
- Regenerable and reusable, suitable for backwashing, acid cleaning, and high-temperature burn-off.
- Easy to fabricate—can be welded, bent, and stamped into customized shapes.

Specifications

Model	Filtration Rating (μm)	Bubble Point Pressure (Pa)		Air Permeability (L/min.dm ²)		Porosity (%)		Dirt Holding Capacity (mg/cm ²)		Thickness (mm)		Tensile Strength (Mpa)	
		Nominal Value	Tolerance	Nominal Value	Tolerance	Nominal Value	Tolerance	Nominal Value	Tolerance	Nominal Value	Tolerance	Nominal Value	Tolerance
SJZ5	5	7000	±10%	30	±20%	75	±10%	2	±20%	0.3	±10%	32	±20%
SJZ10	10	3500	±10%	100	±20%	75	±10%	4	±20%	0.3	±10%	36	±20%
SJZ15	15	2300	±10%	150	±20%	75	±10%	6	±20%	0.35	±10%	32	±20%
SJZ20	20	1700	±10%	250	±20%	75	±10%	10	±20%	0.45	±10%	23	±20%
SJZ25	25	1400	±10%	300	±20%	75	±10%	15	±20%	0.6	±10%	23	±20%
SJZ30	30	1100	±10%	400	±20%	75	±10%	15	±20%	0.6	±10%	20	±20%
SJZ40	40	900	±10%	600	±20%	75	±10%	20	±20%	0.6	±10%	23	±20%
SJZ60	60	800	±10%	1000	±20%	75	±10%	30	±20%	0.6	±10%	26	±20%
SJZ80	80	700	±10%	1300	±20%	75	±10%	40	±20%	0.6	±10%	28	±20%

Testing Standards: ①Manufacturing: GB/T20100-2016; ②Filtration Rating / Dirt Holding Capacity: GB/T18853-2002; ③Bubble Point Pressure: GB/T5249; ④Air Permeability: GB/T5453(ΔP=200 Pa, air medium); ⑤Tensile Strength: GB/T228.



FeCrAl Sintered Fiber Felt

Product Description

FeCrAl sintered fiber felt is a high-porosity specialty metallic filtration material with excellent dirt holding capacity. It features outstanding high-temperature resistance, deformation resistance, and anti-carbon deposition performance. With uniform pore size distribution, it is an environmentally friendly and energy-efficient material with a long service life. It is widely used in high-temperature filtration and heat exchange applications.

Key Features

- High temperature resistance up to 1200°C.
- Excellent resistance to thermal shock.
- Non-hygroscopic (does not absorb moisture).
- Extremely low thermal inertia.
- Efficient combustion with strong radiant performance.
- Long service life.



Chemical Composition(%)

Cr	C	Fe	Mn	Si	Al	S	P	Cu
19.0~22.0	≤0.04	Balance	≤0.04	≤0.60	5.0~6.2	≤0.025	≤0.025	≤0.12

Note: Standard materials: FeCrAl / 310S stainless steel; Standard sizes: 500×1000mm/1000×1000mm

Specifications

Model	Fiber Diameter	Weight (g/m ²)	Application
HHSJ222450	22μ	450	Automotive exhaust filtration, etc.
HHSJ222500	22μ	500	Automotive exhaust filtration, etc.
HHSJ2601800	60μ	1800	Parking heaters, air heaters, burners, furnace components, etc.
HHSJ2604500	60μ	4500	Parking heaters, air heaters, burners, furnace components, etc.

Note: Sizes within the above range can be customized upon request.

Filter Selection Guide

End Cap & Connection Selection Table

Threaded Type				
Quick-Connect Type				
Quick-Insert Type				
Flange Type				
Custom Type				

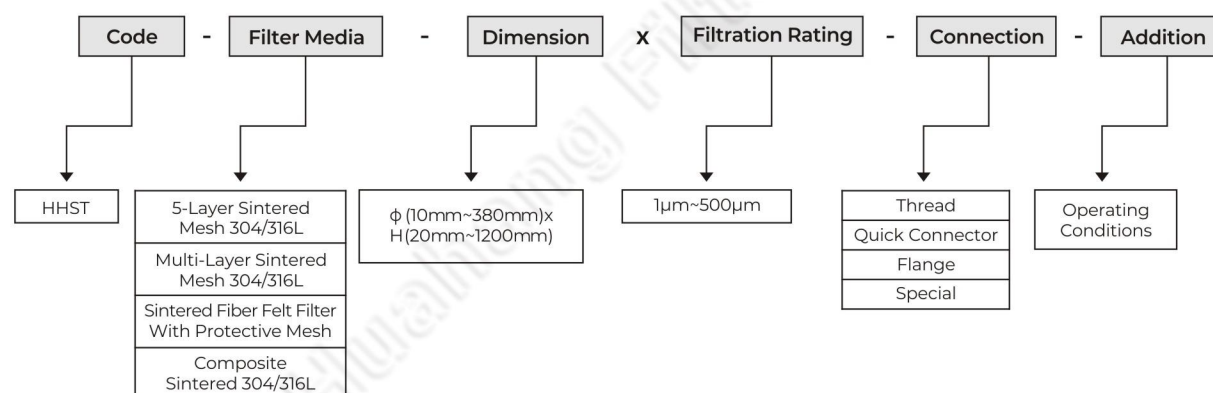
Sintered Mesh Filter

Product Description

Precisely fabricated from multi-layer sintered mesh, sintered felt, and similar filtration media, this product offers precise filtration accuracy and carries no risk of wire mesh shedding.



Selection Guide



Specifications

Filter Media	Dimensions	Filtration Rating	Connection	Addition
304 5-Layer Sintered Mesh	50mmx1000mm	1 μ m~500 μ m	38mm Quick Connector	
316L 5-Layer Sintered Mesh	80mmx300mm	1 μ m~500 μ m	51mm Quick Connector	
304 Sintered Fiber Felt Filter With Protective Mesh	50mmx500mm	1 μ m~50 μ m	M27*2 Thread	
316L Sintered Fiber Felt Filter With Protective Mesh	60mmx500mm	1 μ m~50 μ m	M30*2 Thread	
304 Composite Sintered	100mmx500mm	30 μ m~500 μ m	DN50 Flange	
316L Composite Sintered	100mmx500mm	30 μ m~500 μ m	DN100 Flange	

Note: Sizes within the above range can be customized upon request.

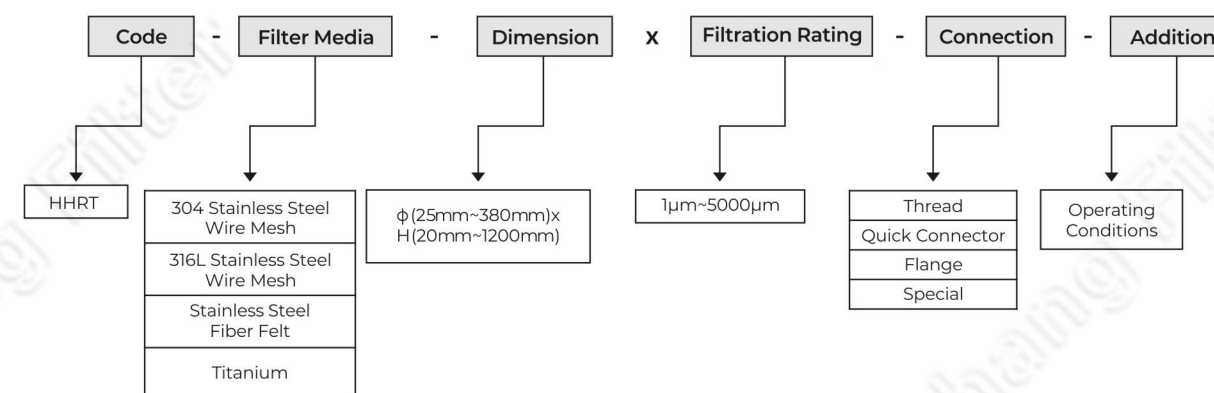
Melt Filter Cartridge

Product Description

Utilizing stainless steel woven mesh, sintered fiber felt, or titanium mesh, and featuring a pleated structural design, this filter is ideally suited for the filtration of high-viscosity melts; it features smooth flow channels, high dirt-holding capacity, and extended filtration cycles.



Selection Guide



Specifications

Filter Media	Dimensions	Filtration Rating	Connection	Addition
304 Stainless Steel Wire Mesh	50mmx1000mm	1 μ m~5000 μ m	M24*1.5 Thread	
316L Stainless Steel Wire Mesh	80mmx300mm	1 μ m~5000 μ m	51mm Quick Connector	
Stainless Steel Fiber Felt	50mmx500mm	1 μ m~50 μ m	M27*2 Thread	

Note: Sizes within the above range can be customized upon request.

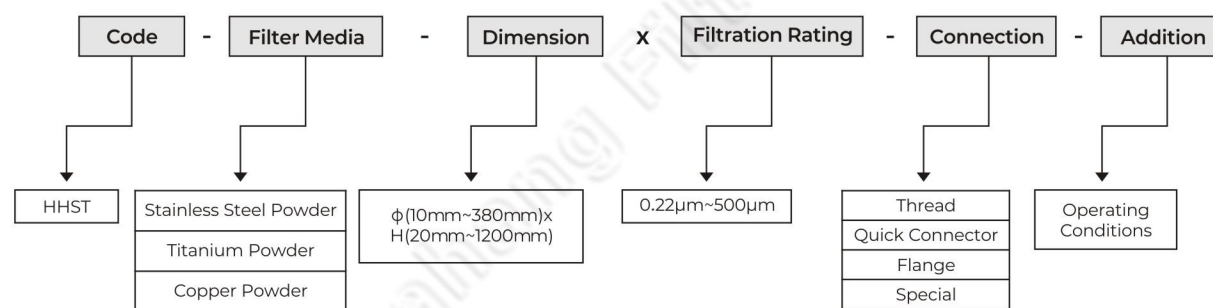
Sintered Powder Filter

Product Description

Metal powders (stainless steel, titanium, copper) in spherical and irregular shapes are formed through cold isostatic pressing, mold pressing, and high-temperature vacuum sintering. The internal channels are intricately interconnected with uniform and controllable pore sizes, creating a deep filtration structure. The filter elements made from different materials complement each other, offering precise filtration and the ability to be regenerated repeatedly.



Selection Guide



Selection Guide

Filter Media	Dimensions	Filtration Rating	Connection	Addition
316L Stainless Steel	50mmx1000mm	0.5 μ m~100 μ m	M24*1.5 Thread	
Titanium	80mmx300mm	0.3 μ m~100 μ m	M27*2 Thread	
Copper	30mmx60mm	1 μ m~50 μ m	M10 Thread	

Note: Sizes within the above range can be customized upon request.

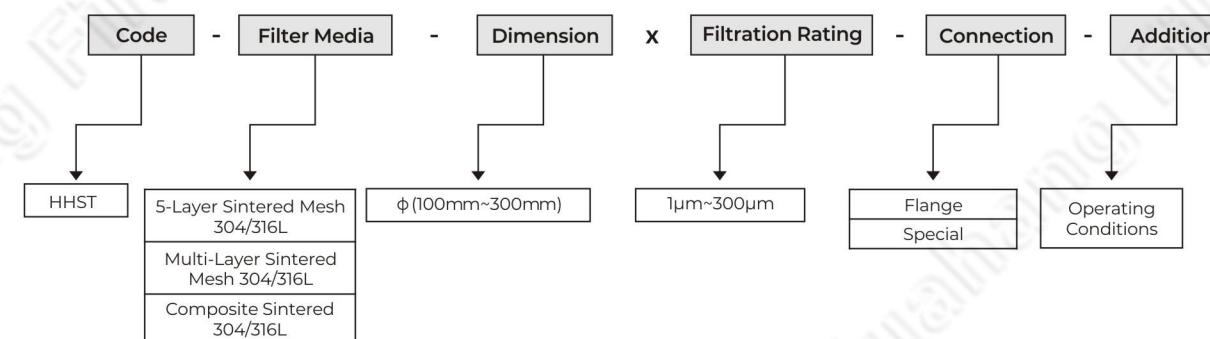
Sintered Filter Disc

Product Description

The sintered filter disc is a high-efficiency filtration element that integrates filtration, washing, and drying functions into a single unit. It is manufactured by welding multi-layer stainless steel sintered wire mesh with flanges into circular or conical structures, making it suitable for pharmaceutical industry, chemical industry, and food industry, replacing traditional filter cloth. The disc filter offers excellent rigidity, high mechanical strength, long service life, easy cleaning, and simple installation and replacement. Available filtration rating ranges from 1 to 300 μ m, diameters range from 100 mm to 3000 mm. And its structure can be designed as either an integral type or a split type according to application requirements.



Selection Guide



Specifications

Filter Media	Dimensions	Filtration Rating	Connection	Addition
316L Stainless Steel	ϕ 500mm	1 μ m~300 μ m	Flange	
304 Stainless Steel	ϕ 800mm	0.3 μ m~100 μ m	Flange	
304 Composite Sintered	ϕ 1500mm	1 μ m~50 μ m	Flange	

Note: Sizes within the above range can be customized upon request.

Wedge Wire Filter Tube

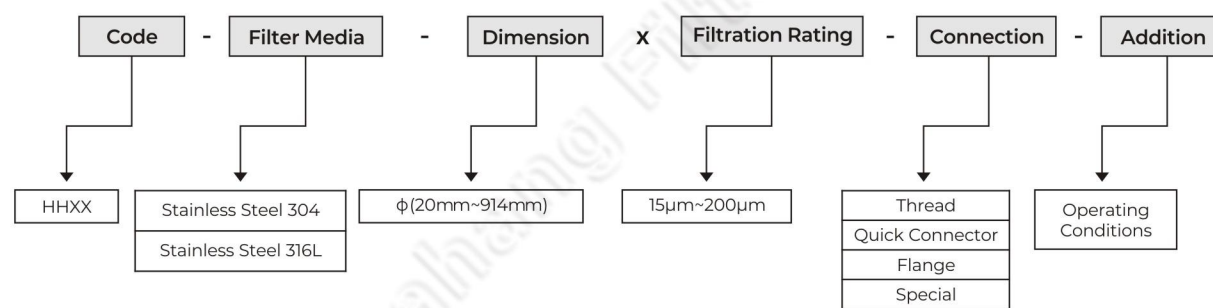
Product Description

Also known as slot tube, Johnson screen, full-wound wire filter tube, or T-profile wire filter tube. Constructed by spiraling high-precision wires onto support rods and securely welded, it delivers high filtration accuracy, uniform slot width, excellent roundness, and stable pressure resistance.

Filter Element Configuration : Standard winding, reverse winding, reversed coil, reinforced type, suitable for various filtration directions, pressure ratings, and operating conditions.



Selection Guide



Selection Guide

Filter Media	Dimensions	Filtration Rating	Connection	Addition
316L Stainless Steel	$\phi 45\text{mm} \times 1000\text{mm}$	$15\mu\text{m} \sim 200\mu\text{m}$	Thread	
304 Stainless Steel	$\phi 70\text{mm} \times 500\text{mm}$	$15\mu\text{m} \sim 200\mu\text{m}$	Quick Connector	
316L Stainless Steel	$\phi 110\text{mm} \times 300\text{mm}$	$15\mu\text{m} \sim 200\mu\text{m}$	Flange	

Note: Sizes within the above range can be customized upon request.

Specially Designed Filter Elements



Customer Cases

Case 1

Vacuum Drying Equipment Manufacturer, Jiangsu - Sintered Mesh Filter Cartridge Solution



Operating Challenge

Unstable breather airflow and fragile filter cartridges in vacuum drying equipment; dust backflow causing vacuum pump wear and downtime. Original filter media lacked sufficient temperature resistance and mechanical strength, and filtration accuracy was improperly selected.

Solution

Customized multi-layer metal sintered mesh filter cartridge precisely matched to the measured PSD of dust particles, achieving 5/10μm filtration accuracy using a surface filtration mechanism.

Benefits

- ① Filtration efficiency $\geq 99.9\%$, effectively capturing submicron dust and preventing penetration.
- ② Temperature resistance $>300^{\circ}\text{C}$, mechanical strength suitable for high vacuum differential pressures.
- ③ Excellent backwash regenerability; vacuum pump maintenance interval extended threefold; now incorporated into the company's new equipment design standards.

Case 2

Petrochemical Industry - Precision Separation with Sintered Fiber Felt Filter Elements

To address the challenges of high temperature, high pressure, and corrosive environments, customized solutions are provided using 316L multi-layer sintered metal fiber felt filter elements.



Crude Oil Pretreatment

Submicron filtration effectively removes emulsified water and mechanical impurities, reducing water content to $\leq 0.1\%$ (better than the industry standard of 0.2%). This ensures catalyst activity in hydrotreating and catalytic cracking processes, saving significant annual catalyst costs.

Polypropylene Powder Recovery

Captures 99.9% of catalyst fines, enabling material recycling and reducing ash content in final products. Meets high-end injection-grade PP standards and prevents downstream pipeline blockage.

High-Temperature Flue Gas Treatment in Catalytic Cracking

Enables continuous filtration at 500°C , with dust emissions significantly below environmental limits. Helps achieve near-zero emissions, protects gas turbines and waste heat boilers, and avoids unplanned shutdowns.

Case 3

New Energy Industry - Micro-Contamination Control & Media Purification



Lithium Battery Electrolyte Filtration

316L sintered fiber felt filters (1-5μm absolute rating) remove metal particles and dust. Compatible with carbonate electrolytes with no leaching or contamination. Vacuum drying ensures low moisture and cleanliness above NAS Class 6, reducing short-circuit risks and improving yield.

Photovoltaic Silicon Wafer Cutting Fluid Purification

Enables continuous purification of recycled cutting fluid, capturing sub-micron silicon and metal particles. High dirt-holding capacity extends filter life, reduces consumable costs by over 20%, and improves wafer yield by 2-5% with controlled TTV and surface roughness.

Case 4

Pharmaceutical & Food Industries – Sterile / Clean Filtration and Quality Enhancement



Sterile Filtration for Injectable Manufacturing

Terminal filtration with submicron retention (microbes & particles). All-metal, no shedding, SIP at $121^{\circ}\text{C}/30\text{min}$. GMP compliant; ensures low particulates & negative microbial tests.

Extraction and Purification of Food-Grade Gelatin

Under high-temperature conditions of $60\sim 80^{\circ}\text{C}$, the 5-10μm sintered felt filter element effectively filters enzyme-treated gel liquid, intercepting fat globules and calcium soap particles. The residual oil content is reduced by over 50%, and the gel liquid transparency and freezing strength are improved by 5%-10%, meeting pharmaceutical and food-grade standards. The filter slows evaporator fouling, reducing cleaning from monthly to quarterly and saving about 80000 RMB/year.