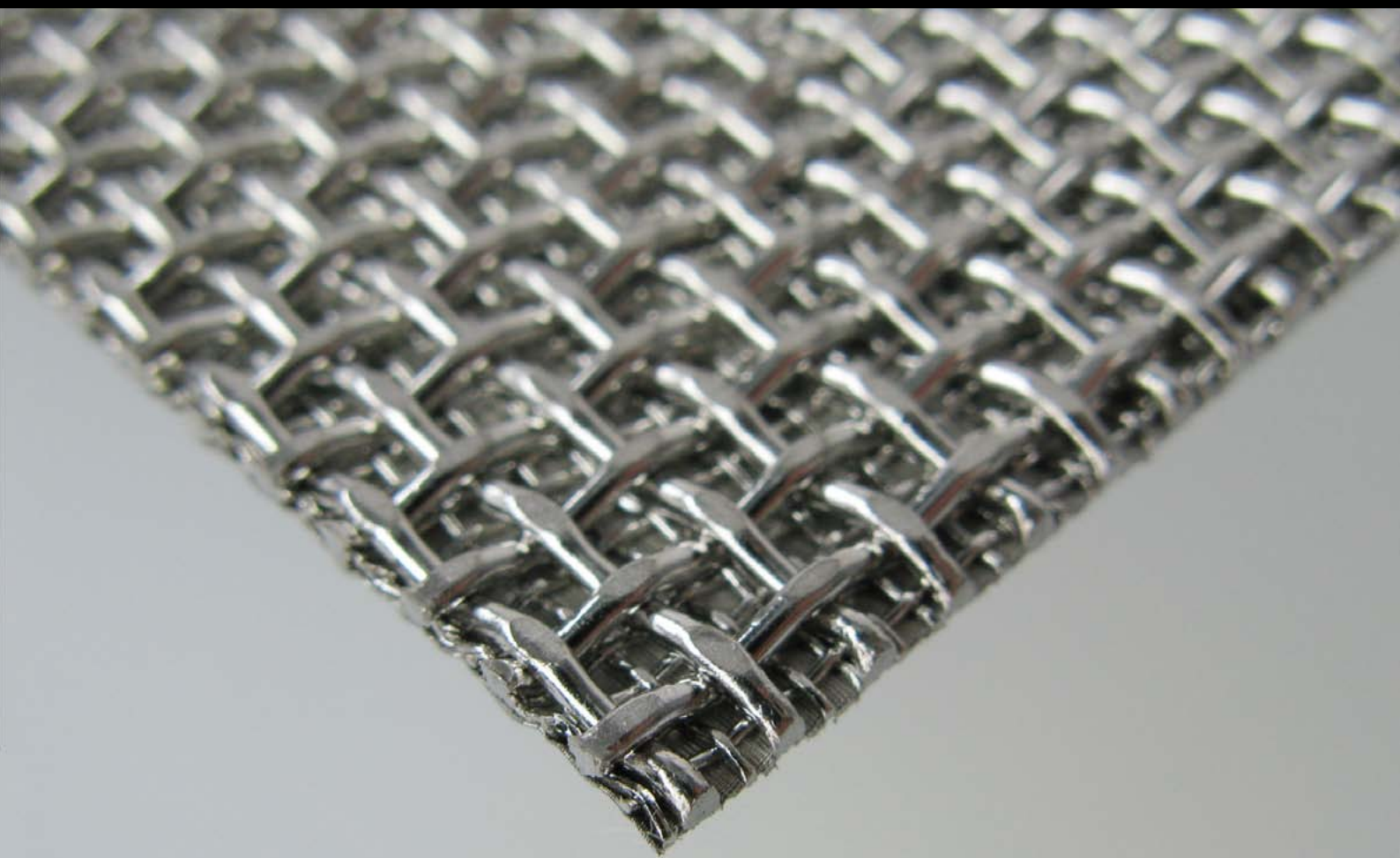


SINTERED WIRE MESH



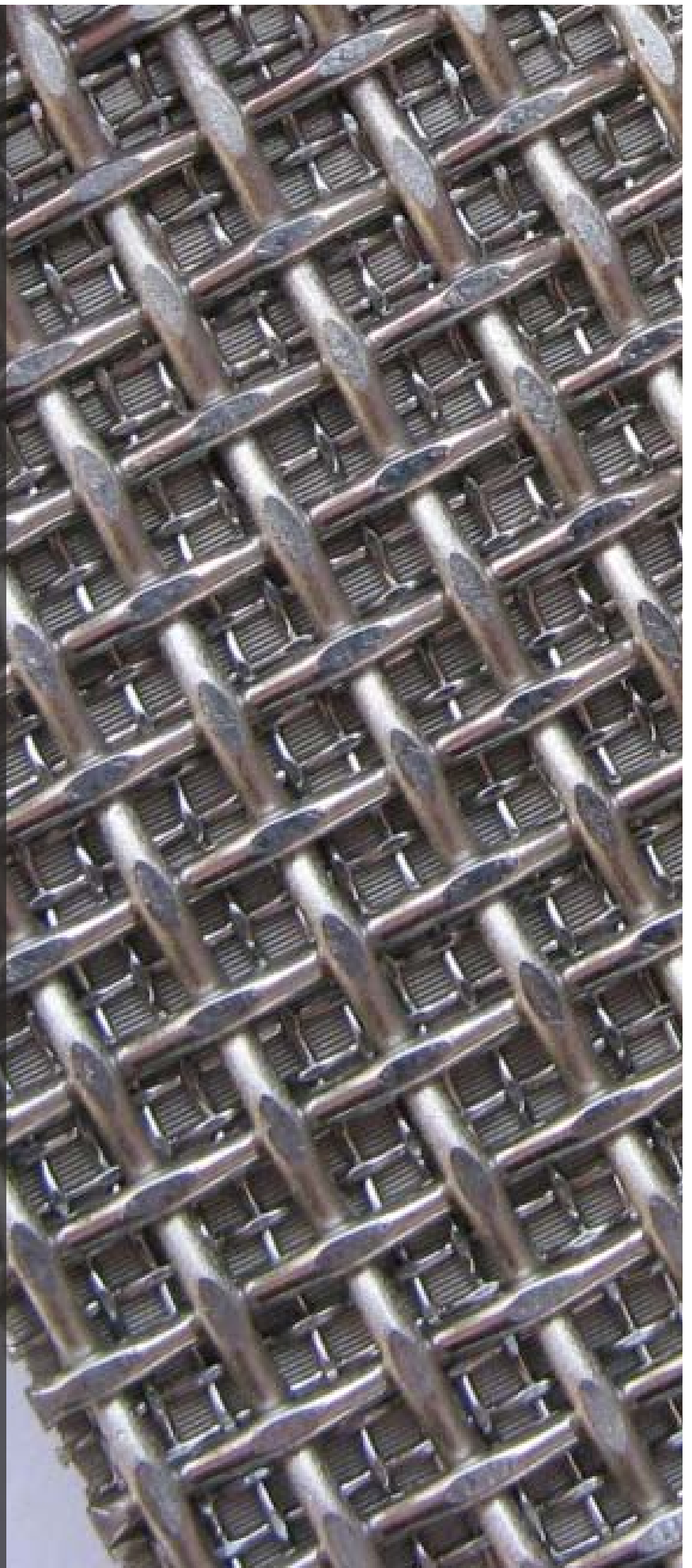
"Total filtration solution provider"

For over 15 years, Boedon has been providing filtration solutions to a wide range of filtering industries where air, liquid and solid filtration are of vital importance. Our major products include standard five layer sintered mesh, plain weave sintered mesh, dutch weave sintered mesh, perforated metal sintered mesh, sintered filter, sintered fiber, powder sintered filter, etc.

To meet different filtration requirements, we deal with a variety of raw materials, steel, stainless steel, non-ferrous metals and special materials. For special using, we also handle custom fabricated needs.

Our well-trained staff have an extensive knowledge of the filtering industry and are always willing to assist with our customer's needs.

When quality at the right price counts, make it Boedon!

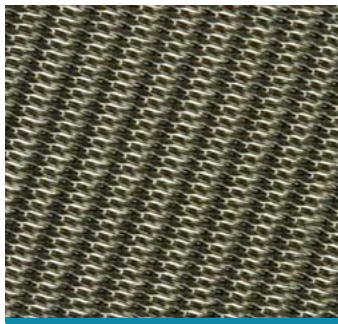


Contents

Plain weave sintered mesh
P. 05



Dutch weave sintered mesh
P. 06



Perforated metal sintered mesh
P. 07



Sintered mesh filter
P. 08



stainless steel sintered fiber felt
P. 09



FeCrAl sintered fiber
P. 10



Membrane sintered fiber
P. 11



Stainless steel powder sintered filter
P. 12



Titanium powder sintered filter
P. 13



Copper powder sintered filter
P. 14

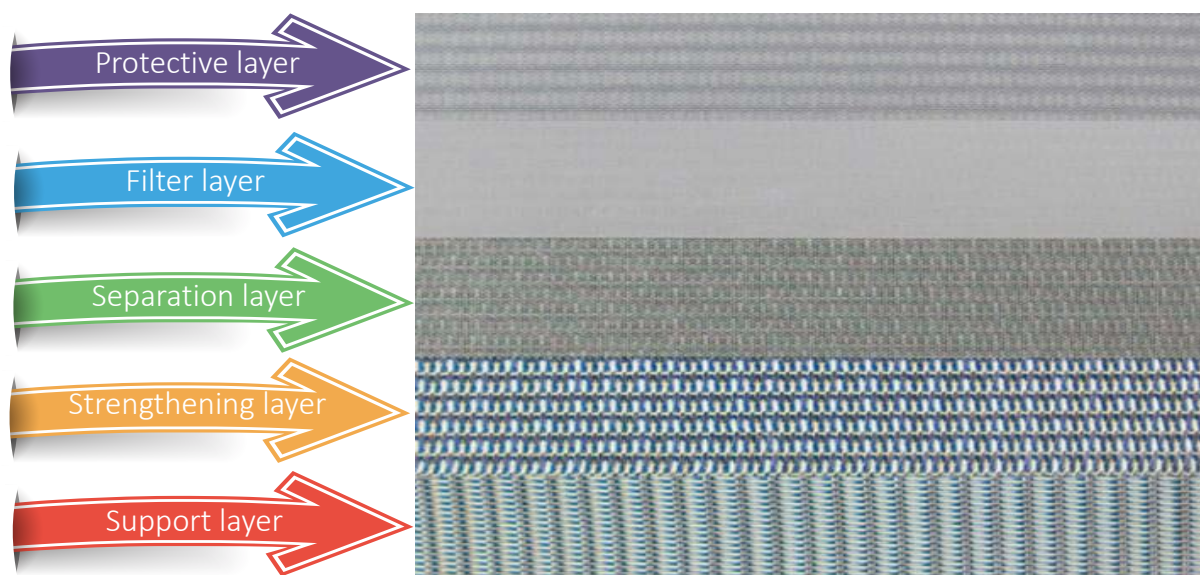


Testing
P. 15



Packing
P. 15





Material

AISI 304, AISI 304L, AISI 316, AISI 316L, alloy steel Hastelloy, Monel, Inconel, etc.

Specification

Filter rating: 1–200 μm .

Standard sizes (mm): 300 × 1000, 300 × 1500, 500 × 1000, 600 × 1200, 1000 × 1000, 1200 × 1200, 1000 × 1500, 1200 × 1500.

Mesh layers: 2, 3, 4, 5, 6, 7.

Type: disc, tube, filter cartridge, flat panel, cone.

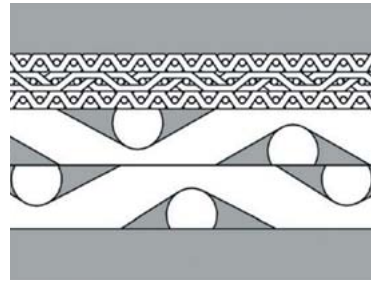
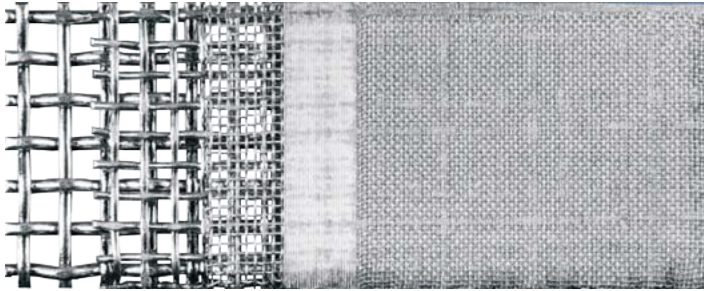
Feature

- ⦿ High strength and durability.
- ⦿ Filter mesh is not easy to deform because of two protective layers.
- ⦿ Can be used for uniform filtration in high pressure or high viscosity environment.
- ⦿ Resistant to corrosion and high temperature.
- ⦿ Wide filter rating ranges.

Application

- Filter polyester, oil, pharmacy, food, beverage, chemical fiber products.
- Water treatment and gas filtration.
- Purification and filtration of liquid and gas.
- Separation and recovery of solid particle.
- Transpiration cooling under extremity high temperature.
- Control air flow distribution, enhancement of heat and mass transfer, noise reduction, current limitation.
- Filtration of highly viscous liquids; Nutsche filters, centrifuges, fluidised beds, silo aeration, applications in biotechnology.

Plain weave sintered mesh



Material

AISI 304, AISI 304L, AISI 316, AISI 316L, alloy steel Hastelloy, Monel, Inconel, etc.

Specification

Filter rating: 1–200 μm .

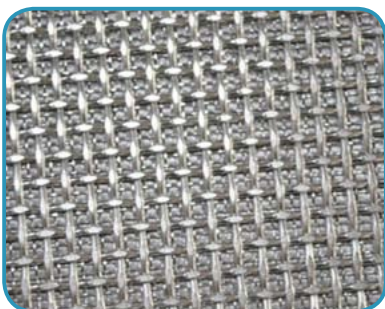
Standard size (mm): 300 × 1000, 300 × 1500, 500 × 1000, 600 × 1200, 1000 × 1000, 1200 × 1200, 1000 × 1500, 1200 × 1500.

Thickness: 0.5–2 mm.

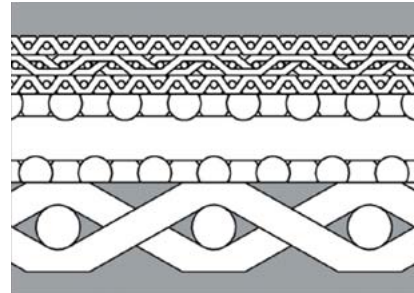
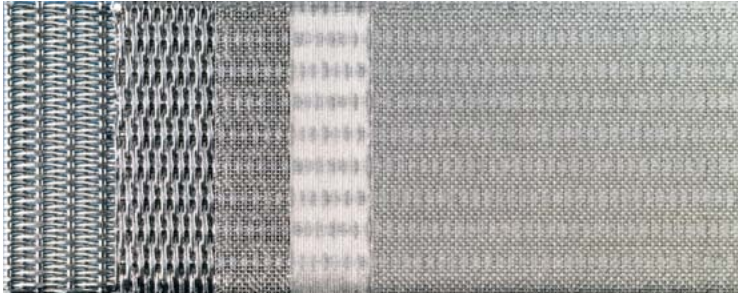
Application

Liquid/solid filtration, surface filtration for dust removal, sieve plates, deaerator filters, backwashing filters (also automated), cleaning baskets for small components.

| Model | Structure | Filter rating (μm) | Thickness (mm) | Weight (kg/m^2) | Porosity (%) |
|----------|--|---------------------------------|----------------|-----------------------------------|--------------|
| PS2-0.5T | Filter layer + 60 | 2 – 100 | 0.5 | 1.6 | 60 |
| PS3-0.7T | 60 + Filter layer + 60 | 2 – 100 | 0.7 | 2.4 | 56 |
| PS3-1.0T | 50 + Filter layer + 20 | 20 – 200 | 1.0 | 3.3 | 58 |
| PS3-2.0T | Filter layer + 20 + 8.5 | 20 – 250 | 2.0 | 6.5 | 58 |
| PS4-1.0T | 60 + Filter layer + 40 + 20 | 2 – 200 | 1.0 | 4.4 | 44 |
| PS4-1.7T | 40 + Filter layer + 20 + 16 | 2 – 200 | 1.7 | 6.2 | 54 |
| PS5-1.9T | 30 + Filter layer + 60 + 20 + 16 | 2 – 200 | 1.9 | 5.3 | 52 |
| PS5-2.5T | 80 + Filter layer + 30 + 10 + 8.5 | 2 – 200 | 2.5 | 8.8 | 55 |
| PS7-2.0T | 50 + Filter layer + 40 + 20 + 40 + Filter layer + 50 | 2 – 150 | 2.0 | 7.4 | 58 |



Dutch weave sintered mesh



Material

AISI 304, AISI 304L, AISI 316, AISI 316L, alloy steel Hastelloy, Monel, Inconel, etc.

Specification

Filter rating: 1–200 μm .

Standard size (mm): 300 × 1000, 300 × 1500, 500 × 1000, 600 × 1200, 1000 × 1000, 1200 × 1200, 1000 × 1500, 1200 × 1500.

Dutch weave mesh: 12 × 64.



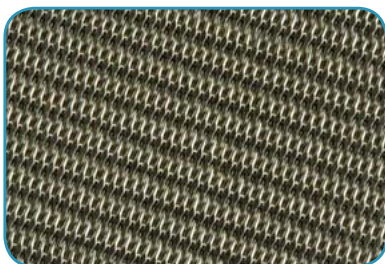
Two-layer structure



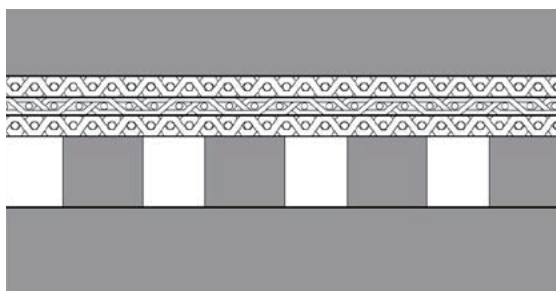
Three-layer structure

Application

Powder transport, laboratory fluid bed, driers, coolers and other dry solid materials.



Perforated metal sintered mesh



Material

AISI 304, AISI 304L, AISI 316, AISI 316L, alloy steel Hastelloy, Monel, Inconel, etc.

Specification

Filter rating: 1–200 μm .

Standard size (mm): 300 × 1000, 300 × 1500, 500 × 1000, 600 × 1200, 1000 × 1000, 1200 × 1200, 1000 × 1500, 1200 × 1500.

Perforated sintered mesh thickness: 2–5.3 mm.

Perforated metal sheet thickness: 1-4 mm.

Application

Stable deaeration filters, Nutsche filter plates, spray dryers, drying plant, baskets for cleaning equipment and filter drums for cooling lubricant equipment.

| Model | Filter Rating (μm) | Structure | Thickness (mm) | Weight (kg/m^2) | Porosity (%) |
|-----------|---------------------------------|---|----------------|-----------------------------------|--------------|
| PES4-2.0T | 2 – 200 | 30+Filter layer+30+ $\phi 4 \times 5\text{P} \times 1.0\text{T}$ | 2.0 | 6.7 | 57 |
| PES4-2.5T | 2 – 200 | 30+Filter layer+30+ $\phi 5 \times 7\text{P} \times 1.5\text{T}$ | 2.5 | 9.8 | 50 |
| PES5-3.0T | 2 – 200 | 60+Filter layer+60+20+ $\phi 6 \times 8\text{P} \times 2.0\text{T}$ | 3.0 | 11.8 | 50 |
| PES5-3.5T | 2 – 200 | 20+Filter layer+20+10+ $\phi 8 \times 10\text{P} \times 2.0\text{T}$ | 3.5 | 12.6 | 54 |
| PES5-4.0T | 2 – 200 | 20+Filter layer+20+10+ $\phi 8 \times 10\text{P} \times 2.5\text{T}$ | 4.0 | 14.2 | 55 |
| PES5-4.3T | 5 – 200 | 20+Filter layer+20+10+ $\phi 10 \times 13\text{P} \times 3.0\text{T}$ | 4.3 | 16.9 | 50 |
| PES5-5.3T | 5 – 200 | 20+Filter layer+20+10+ $\phi 10 \times 13\text{P} \times 4.0\text{T}$ | 5.3 | 20.6 | 51 |



Sintered mesh filter

Material

AISI 304, AISI 304L, AISI 316, AISI 316L, alloy steel Hastelloy, Monel, Inconel, etc.

Specification

Filter rating: 1–200 μm .

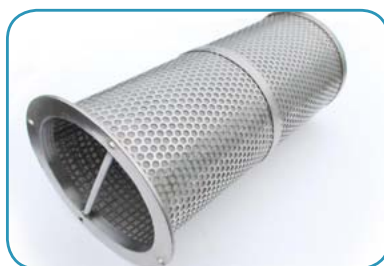
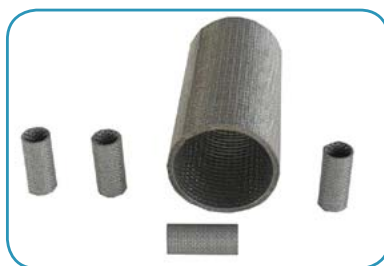
Type: tube, cartridge, cone, etc.

Regular outer diameter: 38 mm, 60 mm, 65 mm, etc.

Regular length: 250 mm, 500 mm, 1000 mm, etc.

Application

Fluidisation components, fluidised beds, aeration components, pneumatic conveyors.



Stainless steel sintered fiber felt

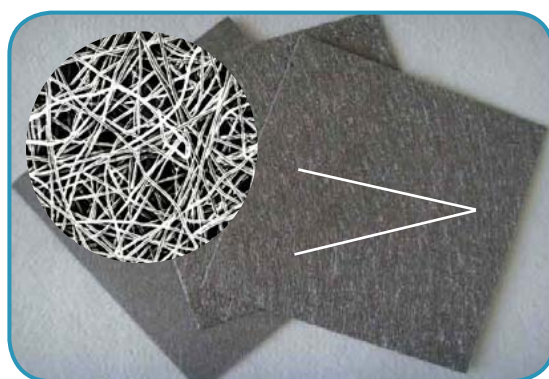
Specification

Categories: sintered fiber with protective mesh (one or two layers of protective meshes); sintered fiber without protective mesh.

Material: SS 316L for sintered metal fiber; SS304, SS304L, SS316, SS316L for protective mesh.

Sheet size (mm): 500 × 500, 500 × 1000, 600 × 1000, 1000 × 1000, 1200 × 1000, 1480 × 1000.

Processed appearance: plate, candle, wave, etc.

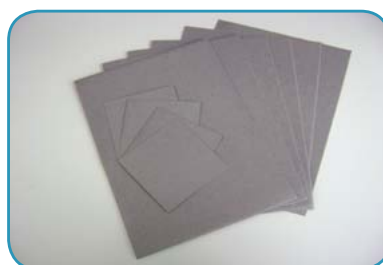


Feature

- ⦿ Three-dimensional mesh.
- ⦿ High porosity.
- ⦿ Large surface area, uniform distribution.
- ⦿ High pollutant carrying capacity.
- ⦿ Working at 600 °C for a long time.
- ⦿ Resistant to acid, alkali, organic solvent and drug corrosion.
- ⦿ Easily remove trapped particulates by dusting or blowing air.

Application

- Polymer filtration, petrochemical industry, high temperature gas dedusting.
- Filtration of oil refining process, viscose filtration, prefilter for ultrafiltration device.
- Vacuum pump protection filter, membrane support.
- Catalyst carrier, airbag, fuel filter and hydraulic system filter in plane and warship.



FeCrAl sintered fiber

Types

Burning series FeCrAl sintered fiber.

Purify series FeCrAl sintered fiber.

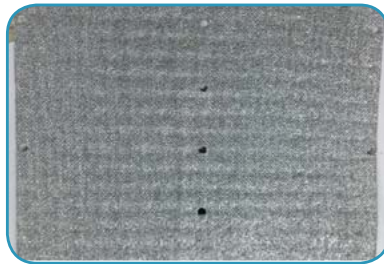
High temperature dust removal FeCrAl sintered fiber.

Application

- High temperature dust removal environment which could be 900 °C, such as steel, electricity, waste incineration.
- Automobile exhaust treatment, burner, boiler reform, gas air conditioning, glass annealing, food baking, oven, heater, coating paper industry, drying industry.

Comparison

Compared with 600 °C working temperature for stainless steel sintered fiber felt, FeCrAl sintered fiber felt can work in 900 °C high temperature.



Membrane sintered fiber

Structure

One hydrophobic layer on the stainless steel sintered fiber.

Feature

- ⦿ Excellent air permeability.
- ⦿ Resistant to high temperature and corrosion.
- ⦿ High porosity.
- ⦿ Large surface area for filtration.

Application

- Prevent engine housing freezing in low temperatures.
- Mechanics, electromechanical, chemical industry, cement, metallurgy, oil field.



Stainless steel powder sintered filter

Material: SS304, SS304L, SS316, SS316L, etc.

Specification

Porosity: 28% – 50%.

Filter rating: 1–250 μm .

Diameter: 2–250 mm.

Length: 2–1500 mm.

Thickness: more than 2 mm.

Feature

- ⦿ Stable shape, excellent impact resistance ability.
- ⦿ Good air permeability, good separation ability.
- ⦿ Suitable for high temperature gas filter below 500 °C.
- ⦿ It could connect various flanges via welding.
- ⦿ Resistant to acid, alkali and extreme temperatures.
- ⦿ Can be reused after washing.

Application

- Recovery catalyzer.
- Gas-liquid separation in chemical industry, medicine, drinks, food, metallurgy, petroleum, environmental fermentation.
- Remove dust, bacteria, oil mist in various gas, steam.
- Silencer, flame resistance, gas buffer.

Cleaning methods

- Pharmaceutical, food and beverage industries: hot water flush; steam clean; water backwash; brush clean; compress air blow.
- Chemical industries: chemical solvent clean; ultrasonic cleaning; high pressure water spray rinsing; acid dipping.



Asymmetric metal membrane BDP-AS element

Alloy materials

- Stainless steels (304L, 316L)
- Titanium and its alloys
- Nickel
- Monel® (Ni-Cu alloy)
- Inconel® (Ni-Cr-Fe alloy)
- Iron and aluminum alloy
- Hastelloy® B, C and X

Application

- Catalyst filtration
- Hot gas filtration
- Mother liquor recovery in PTA process
- Filtration in food and beverage industry
- Fluidization
- Sparging
- Fine particle filtration in new energy industry

Specification

BDP-AS can be produced as tube shape. Fittings can be bonded to the porous parts by welding or directly during sintering process. Common specifications of outer diameter have ϕ 20, 25, 30, 40, 50, 60, 70, 80, 90, 100, 140 mm, length from 100 mm to 1500 mm, more than 1500 mm can be welded, special specifications can be customized.

Feature

- ⦿ Shape stability, components with high strength (sufficient pressure strength up to 50 bar)
- ⦿ Good filtration precision (0.1 μ m)
- ⦿ High permeability because of asymmetric design
- ⦿ Surface filter
- ⦿ Longer service life in process
- ⦿ The metal membrane layer is not to fall off
- ⦿ Good mechanical properties
- ⦿ Sufficient thermal strength up to 900 °C
- ⦿ Good back flushing performance

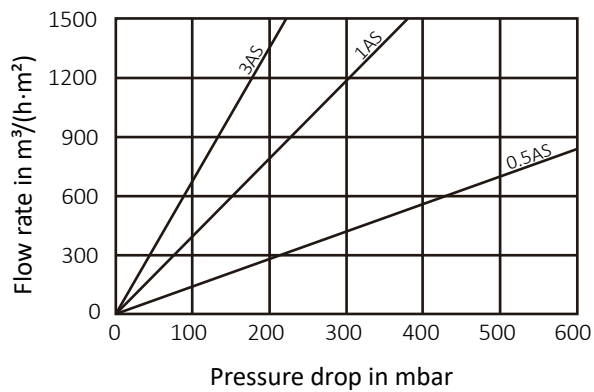
Technical parameter

| Filter Grade | Porosity (%) | Bubble-point Pressure (Pa) | 98% Efficiency @ X (μ m) | Permeability Coefficients $\text{m}^3/(\text{m}^2 \cdot \text{h} \cdot \text{kPa})$ | Compressive Strength (MPa) |
|------------------|----------------|----------------------------|-------------------------------|---|----------------------------|
| BDP-0.1AS | 37 | 45000 | 1 | 10 | 4.5 |
| BDP-0.5AS | 37 | 12800 | 2 | 60 | 4.5 |
| BDP-1AS | 37 | 10500 | 3.2 | 75 | 4.5 |
| BDP-3AS | 37 | 6000 | 8.3 | 120 | 4.5 |
| Applied Standard | GB/T 6886-2008 | ISO4003 | ISO/TR13353: 2002 | GB/T 6886-2008 | GB/T 6886-2008 |

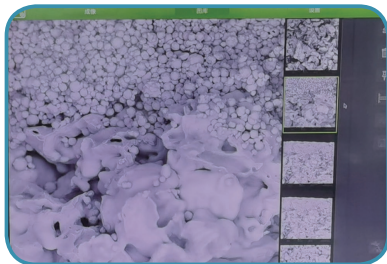
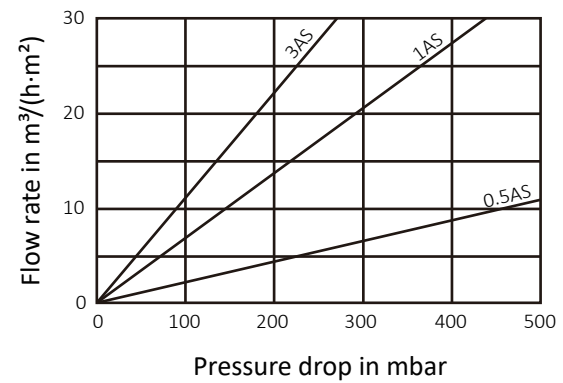
Asymmetric metal membrane BDP-AS element

Technical parameter

Air permeability



Water permeability



Titanium powder sintered filter

Specification

Filter rating: 0.5–50 μm .

Porosity: 20% – 50%.

Compressive strength: 2–3 MPa.

Diameter: 20–200 mm.

Length: 100–1200 mm.

Thickness: more than 1 mm.

Feature

- ⦿ Working temperature range reaches 500–600 °C.
- ⦿ Suitable for corrosive medium filter, such as hydrochloric acid, sulphuric acid, hydroxide, seawater, aqua, chloride.
- ⦿ Uniform pore size distribution, high pollutant carrying capacity, can be used repeatedly after washing.

Application

Pharmaceutical industry, water treatment industry, food industry, bio-engineering, chemical industry, petrochemical industry, metallurgical industry, gas purification field.



Copper powder sintered filter

Specification

Filter rating: 5–50 μm .

Type: bushing, silencer, cover, cap, plate, tube, bar, etc.

Feature

- Highly effective utilization rate of raw material, saving material in great degree.
- Stable structure, small pressure loss, the aperture will not change with the change of pressure.
- Remove suspended solids and particulates effectively.
- Easy to blowback, can be reused, working under high temperature and heat shock.
- Resistant to oxidation, corrosion.

Application

- Medium purification and flow limitation for pneumatic components, lubricating oil, fuel, hydraulic pressure system.
- Compressed air purification, crude oil sand filter, nitrogen (no sulfur) filtration.
- Pure oxygen filter, bubble generator, float bed gas distribution.



Testing

Boedon has a series of testing equipment to make sure that all sintered filters can meet the highest standard. Bubble test equipment can test the largest pore of the filter and verify the fabrication integrity of the filter element. C.S analyzer analyzes the elements of carbon and sulfur. Salt spray tester examines anti-corrosion ability of the filter in salt spray device. And mesh aperture inspection device ensures the accuracy of the mesh aperture and wire diameter.



▲ Bubble Test Equipment



▲ C.S Analyzer



▼ Salt Spray Tester



▼ Mesh Aperture Inspection Device

Packing

Boedon sintered filter packing is solid and effective. Small quantity of filters are packed in carbon cases with plastic film. Large quantity of filters are packed in wooden cases. All packages protect products structure and shape effectively.



ADD: East Industrial Zone, Anping, Hebei Province, China

TEL: +86-318-7685557

FAX: +86-318-7685559

WEB: www.boegger.com

E-mail: sales@boegger.com