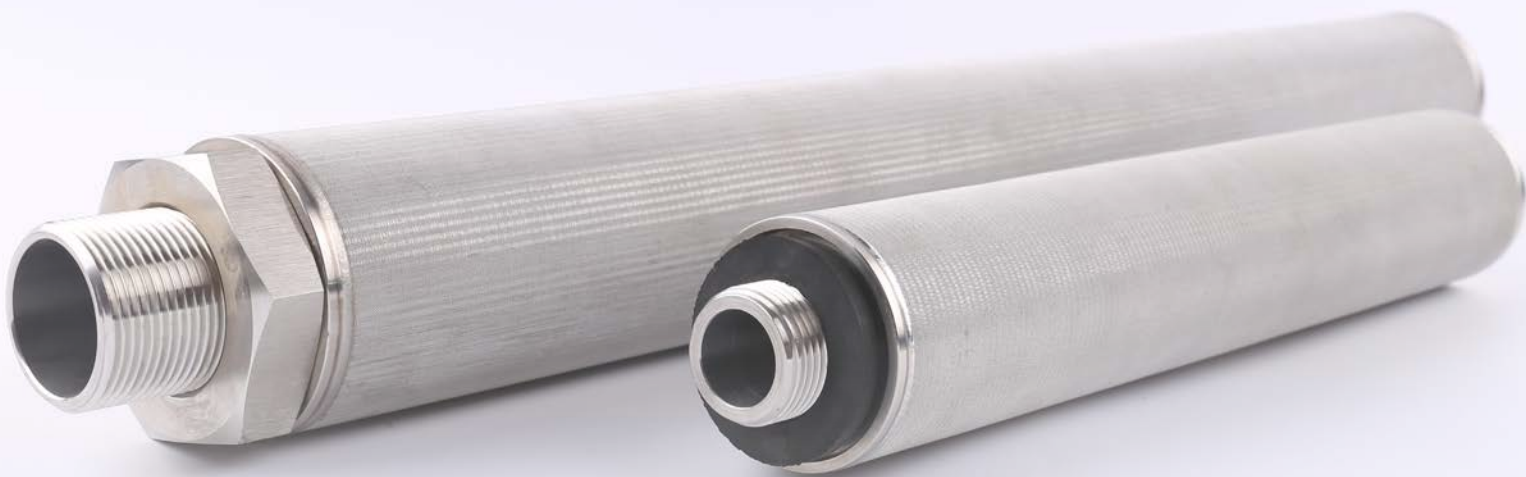




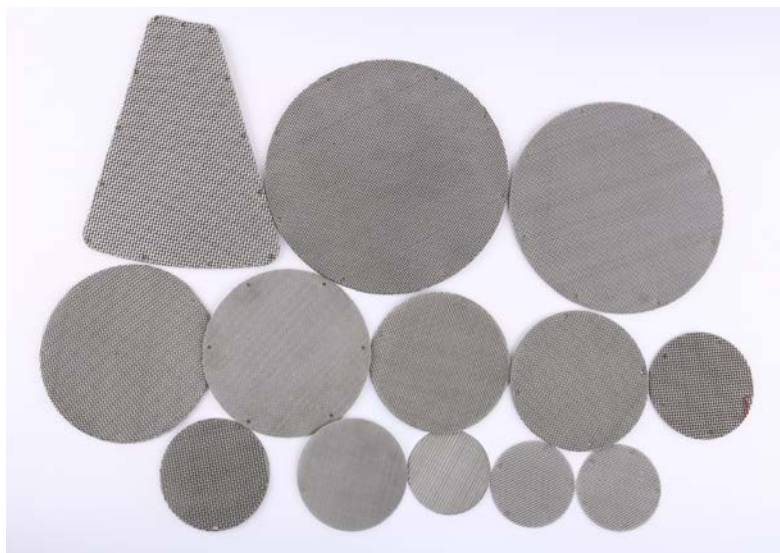
Walcoom Corporation



# SINTERED MESH

[www.walcoom.com](http://www.walcoom.com)  
E-mail: [sales@walcoom.com](mailto:sales@walcoom.com)

## "A good solution for water treatment and gas filtration"



Walcoom Corporation has been offering the strong and durable sintered mesh products for 20 years. We are specialized in sintered mesh producing and exporting. Advanced production equipment, skilled workers, professional sale representatives and considerate after sale service contribute our high quality products and long term cooperation with our customers.

**Sintered mesh** products is mainly made of stainless steel, including sintered plain weave mesh, sintered dutch weave mesh, sintered perforated mesh, sintered mesh filter cartridges, sintered fiber felt and sintered powder filter. And there are one-layer, two-layer, three-layer, five-layer, six-layer and seven-layer sintered meshes for choice. Featured by high mechanical strength and accurate filtering precision, sintered wire meshes are widely used for water treatment, gas purification and solid particle separation.

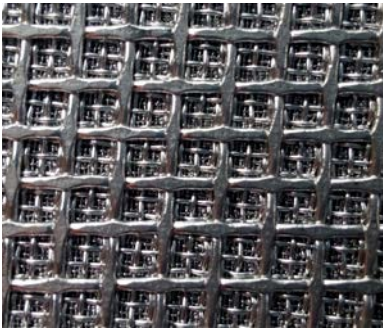
### Feature

- High strength and accurate precision.
- Wide filter rating ranges for choice.
- Easy to be welded, sheared into various shapes.
- Corrosion and rust resistance.
- Durable and long service life.

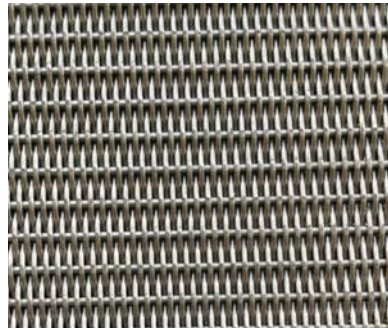
### Specification

- **Material:** stainless steel, alloy steel hastelloy, monel, inconel.
- **Mesh layer number:** 1 to 7.
- **Type:** plain woven sintered mesh, dutch woven sintered mesh, perforated sintered mesh.

# SINTERED MESH



Sintered plain woven mesh



Sintered dutch woven mesh



Sintered perforated mesh

- **Shape:** disc, oval, ring, square, tube, pleated, cone, special shape, etc.



Sintered disc shape mesh



Sintered oval shape mesh



Sintered ring shape mesh



Sintered square shape mesh



Sintered mesh cartridge



Sintered pleated mesh filter



Sintered cone shape mesh



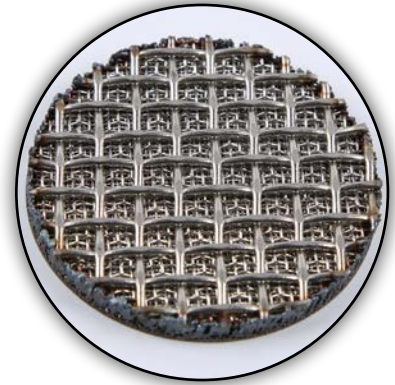
Sintered special shape mesh

## Application

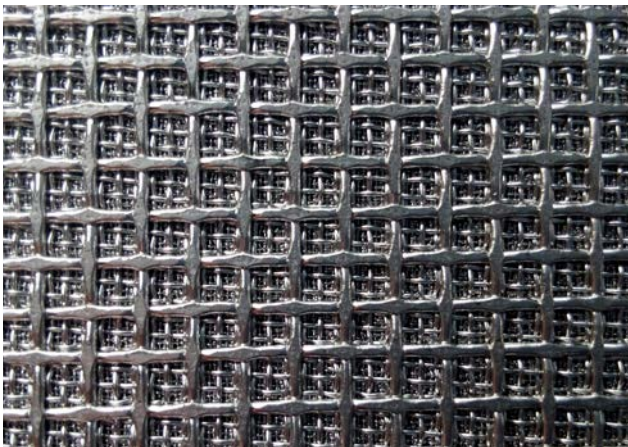
- Water treatment and gas filtration.
- Filtration of highly viscous liquids.
- Air flow distribution control.



- Separation and recovery of solid particle.
- Transpiration cooling under high temperature.
- Noise reduction and current limitation.



## Sintered woven wire mesh



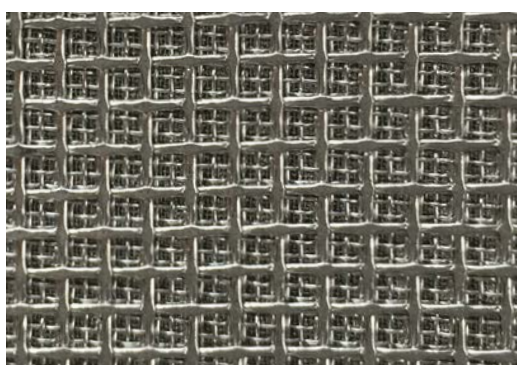
Sintered woven wire mesh is mainly made of high quality stainless steel wire, including plain weave type and dutch weave type. According to different filtration needs, it can be manufactured to single layer and multiple layers. It is corrosion and rust resistant and easy to clean. Featured by the high strength and accurate filter rating, sintered woven wire mesh is widely used for purification and filtration of liquid and gas. Besides, it's also can be used for separation and recovery of solid particle.

## Advantage of sintered woven wire mesh

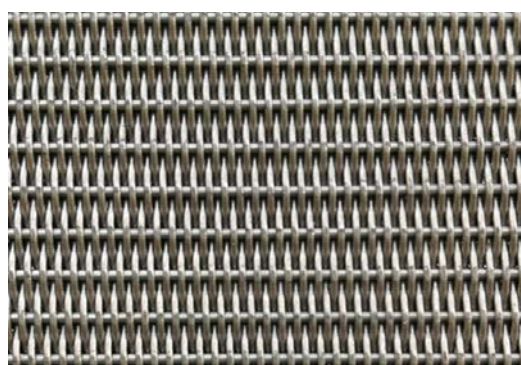
- High strength and durability.
- Uniform structure without deforming.
- High permeability and accurate filter rating.
- Corrosion and rust resistance.
- Easy to clean and can be used for many times.

## Specification of sintered woven wire mesh

- **Material:** stainless steel 304, 316, 316L or alloy steel hastelloy, monel, inconel.
- **Standard size (mm):** 300 × 1000, 300 × 1500, 500 × 1000, 600 × 1200, 1000 × 1000, 1000 × 1500, 1200 × 1200, 1200 × 1500.
- **Weave type:** plain weave, dutch weave.



Sintered plain weave mesh



Sintered dutch weave mesh

- **Mesh layer number:** 1 to 7.
- **Heat resistance:** up to 600 °C.

Table 1: Specification of 1 Ply Sintered Mesh

Item	Filter Rating (μm)	Size (mesh)	Wire Diameter (mm)	Thickness (mm)	Weight (kg/m <sup>2</sup> )
SLSM-01	5	200	0.07	0.1	0.011
SLSM-02	178	80	0.14	0.2	0.0772
SLSM-03	234	60	0.19	0.3	0.010
SLSM-04	279	50	0.23	0.4	0.012
SLSM-05	380	40	0.25	0.4	0.012
SLSM-06	540	30	0.30	0.4	0.013
SLSM-07	860	20	0.41	0.6	0.015
SLSM-08	2460	8	0.71	1.0	0.018

**Table 2: Common Specification of Multi- Layer Sintered Mesh**

Item	Structure	Filter Rating (μm)	Thickness (mm)	Weight (kg/m <sup>2</sup> )	Porosity (%)
MLSM-01	filter layer + 60	2-100	0.5	1.6	60
MLSM-02	60 + filter layer + 60	2-100	0.7	2.4	56
MLSM-03	50 + filter layer + 20	20-200	1.0	3.3	58
MLSM-04	filter layer + 20 + 8.5	20-250	2.0	6.5	58
MLSM-05	60 + filter layer + 40 + 20	2-200	1.0	4.4	44
MLSM-06	40 + filter layer + 20 + 16	2-200	1.7	6.2	54
MLSM-07	30 + filter layer + 60 + 20 + 16	2-200	1.9	5.3	52
MLSM-08	80 + filter layer + 30 + 10 + 8.5	2-200	2.5	8.8	55
MLSM-09	50 + filter layer + 40 + 20 + 40 + filter layer + 50	2-150	2.0	7.4	58

**Note:** The porosity takes that of 20 mesh as criteria, and other special structures can be manufactured.

## Sintered perforated mesh

Sintered perforated mesh, also called sintered mesh from perforated metal, is made of several layers of stainless steel wire meshes and one perforated metal layer. Typical sintered perforated



mesh includes five layers: perforated layer, buffer layer, fine mesh layer, protective layer and filter layer, and perforated metal as reinforcement layer supports the filter structure.

Featured by high mechanical strength and filtration precision, sintered perforated mesh is widely used in various industries where the particles need to be filtered under extremely high pressure environment.

## Advantage of sintered perforated mesh

- High strength and stability.
- High filtration precision.
- Corrosion and rust resistance.
- High temperature resistance.
- Easy to fabricate and clean.

## Specification of sintered perforated mesh

- **Material:** stainless steel 304, 316, 316L or alloy steel hastelloy, monel, inconel.
- **Standard size (mm):** 300 × 1000, 300 × 1500, 500 × 1000, 600 × 1200, 1000 × 1000, 1000 × 1500, 1200 × 1200, 1200 × 1500.
- **Perforated sintered mesh thickness:** 2.0–5.3 mm.
- **Operating temperature:** -20 °C to 600 °C.
- **Common type:** sintered perforated mesh plate, sintered perforated mesh tube.
- **Perforated layer mesh opening shape:** round, square, rectangular.

Table 3: Specification of Sintered Perforated Metal Wire Mesh

Item	Filter Rating (μm)	Structure	Thickness (mm)	Weight (kg/m <sup>2</sup> )	Porosity (%)
PMSM-01	2 - 200	30+filter layer+30+φ4 × 5P × 1.0T	2.0	6.7	57
PMSM-02	2 - 200	30+filter layer+30+φ5 × 7P × 1.5T	2.5	9.8	50
PMSM-03	2 - 200	60+filter layer+60+20+φ6 × 8P × 2.0T	3.0	11.8	50
PMSM-04	2 - 200	20+filter layer+20+10+φ8 × 10P × 2.0T	3.5	12.6	54
PMSM-05	2 - 200	20+filter layer+20+10+φ8 × 10P × 2.5T	4.0	14.2	55
PMSM-06	5 - 200	20+filter layer+20+10+φ10 × 13P × 3.0T	4.3	16.9	50
PMSM-07	5 - 200	20+filter layer+20+10+φ10 × 13P × 4.0T	5.3	20.6	51

## Sintered mesh filter cartridges

Sintered mesh filter cartridge is mainly made of high quality stainless steel, including common type and pleated type. They both have high mechanical strength and pressure tolerance,



and the pleated type sintered mesh filter cartridge has larger filtering surface than the common type. They are corrosion resistant and easy to clean. Featured by high durability and long service life, sintered mesh filter cartridges are widely used for liquid and gas filtration, chemical fiber filtration, polyester and water treatment industries.

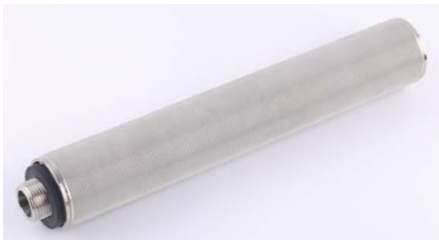


## Advantage of sintered mesh filter cartridges

- High mechanical strength, pressure tolerance.
- Stable pore shapes for perfect permeability.
- High durability and dirt holding capacity.
- Corrosion and rust resistance.
- Easy to clean and long service life.

## Specification of sintered mesh filter cartridges

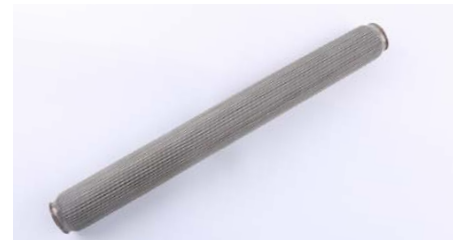
- **Material:** stainless steel 304, 316, 316L, 317L, 321, 904L, titanium, or alloy steel.
- **Filter rating:** 0.2–300 micros.
- **Outer diameter:** 30, 40, 50, 60, 64, 70, 80, 350 mm.
- **Standard inner diameter:** 28 mm.
- **Length:** 254, 508, 762, 1016, 1524 mm.
- **Service temperature:** -200 °C to 1000 °C.
- **Type**



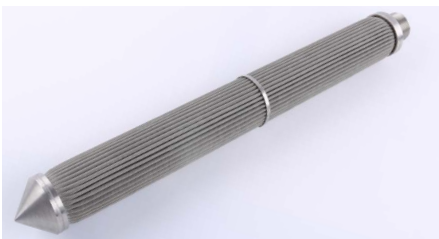
Grommet type seal  
sintered cartridge



NPT connection  
sintered cartridge



Double open  
pleated cartridge



One support wire  
pleated cartridge



Two support wires  
pleated cartridge



Spiral support wire  
pleated cartridge



## Sintered fiber felt

Sintered fiber felt, mainly made of stainless steel, is produced by lapping, laminating and high temperature sintering. Compared with woven wire cloth, sintered fiber felt has better filtration function, because it has high porosity, excellent permeability, dirt holding capacity and filtering accuracy. With high strength and long service life, it is widely added into various sintered wire mesh products for a filtering layer, it also can be sintered with multiple fiber felts to form filter media.



### Advantage of sintered fiber felt

- High dirt holding capacity, filtering accuracy.
- High porosity and excellent permeability.
- Low pressure loss and large flow.
- High heat and corrosion resistance.
- Easy cleaning and long service life.

### Specification of sintered fiber felt

- **Material:** stainless steel, iron chrome aluminum, nickle.
- **Thickness:** 0.2–10 mm or customized.
- **Standard size (mm):** 500 × 1000, 600 × 1000, 600 × 1200, 1000 × 1000, 1000 × 1200, 1000 × 1480, 1180 × 1450, 1180 × 1500, 1500 × 1800.
- **Working temperature:** ≤ 600 °C.

Table 4: Specification of Standard Metal Fiber Felt

Item	Filter Rating (μm)	Bubble Point Pressure (Pa) ±8%	Air Permeability (L/min·dm <sup>2</sup> ) ±10%	Porosity (%) ±5%	Dirt Holding Capacity (mg/cm <sup>2</sup> ) ±10%	Thickness (mm) ±10%	Breaking Strength (MPa) ±10%
SMFF-01	5	6800	47	75	5.0	0.30	32
SMFF-02	7	5200	63	76	6.5	0.30	36
SMFF-03	10	3700	105	77	7.6	0.37	32
SMFF-04	15	2600	205	80	8.0	0.40	23
SMFF-05	20	1950	280	81	15.5	0.48	23
SMFF-06	25	1560	355	80	18.4	0.62	20
SMFF-07	30	1300	520	80	25.0	0.63	23
SMFF-08	40	975	670	78	25.9	0.68	26
SMFF-09	60	650	1300	87	35.7	0.62	28

Table 5: Specification of High Pressure Metal Fiber Felt

Item	Filter Rating (μm)	Bubble Point Pressure (Pa)	Air Permeability (L/min·dm <sup>2</sup> )	Porosity (%)	Dirt Holding Capacity (mg/cm <sup>2</sup> )	Thickness (mm)	Breaking Strength (MPa)
PMFF-01	20	2050	280	82	18	0.68	33
PMFF-02	25	1500	350	80	20	0.66	30
PMFF-03	30	1240	500	78	27	0.61	32
PMFF-04	40	960	650	78	35	0.61	36

## Sintered powder filter

Sintered powder filter can be made of stainless steel, titanium, copper, brass or bronze. It has perfect filtration efficiency because of the uniform pores distribution. Featured by the high strength and accurate filtering precision, sintered powder filter is widely used in the field of medical industry, chemical industry, metallurgical industry for liquid or gas purification and dust, bacteria or oil fog removal.



## Advantage of sintered powder filter

- High mechanical strength.
- High permeability and porosity.
- Uniform pores distribution.
- Anti high and low temperature.
- Corrosion and rust resistance.
- Easy cleaning and long service life.

## Specification of sintered powder filter

- **Material:** stainless steel, titanium, copper, brass, bronze.
- **Working temperature:** -200 °C to 1000 °C.
- **Copper powder sintered filter porosity:** 1–100 μm.
- **Copper powder sintered filter filtration rating:** 5–250 micron.

**Table 6: Specifications of Sintered Stainless Steel Powder Filter**

Item	Filtering Level	Filtering Precision (μm)	Maximum Aperture (μm)	Permeability (m <sup>3</sup> /h·m <sup>2</sup> ·kPa)	Thickness (mm)	Length (mm)	Compressive Strength (MPa/cm <sup>2</sup> )
SPSF-01	T9	0.2	2.5	1.5	0.6 – 10	254 508 762 1016	3
SPSF-02	T8	0.5	4	3			3
SPSF-03	T7	1	6	5			3
SPSF-04	T6	2	10	15			3
SPSF-05	T5	5	15	40			2.5
SPSF-06	T4	10	30	120			2.5
SPSF-07	T3	20	60	250			2.5
SPSF-08	T2	30	100	500			2.5
SPSF-09	T1	50	160	800			2.5

**Table 7: Specifications of Sintered Titanium Powder Filter**

Item	Filtering Level	Filtration Precision (μm)	Minimum Thickness (mm)	Maximum Thickness (mm)	Minimum Width (mm)	Maximum Width (mm)	Maximum Length (mm)
TPSF-01	T9	0.2	0.6	1.2	5	340	1000
TPSF-02	T8	0.5	0.6	1.5	5	340	1000
TPSF-03	T7	1	0.6	2.0	5	340	1000
TPSF-04	T6	2	0.6	2.5	5	340	1000
TPSF-05	T5	5	0.6	2.8	5	340	1000
TPSF-06	T4	10	0.6	2.8	5	340	1000
TPSF-07	T3	20	0.6	3.0	5	340	1000
TPSF-08	T2	30	0.6	3.0	5	340	1000
TPSF-09	T1	50	0.8	3.0	5	340	1000

## Hot products

- Five-layer sintered mesh disc.
- Sintered perforated dutch mesh.
- Sintered mesh cone filter.
- Sintered pleated filter cartridge.
- Sintered stainless steel powder filter.
- Sintered copper powder filter element.

## Our services

- Free consultation service.
- Strict inspections during production and before delivery.
- Choose the most suitable shipping company.
- After sale service.

## Information supplied by the purchaser

The following information shall be supplied by the purchaser at the time of inquiry or order:

- Type.
- Size.
- Quantity.

# SINTERED MESH

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