

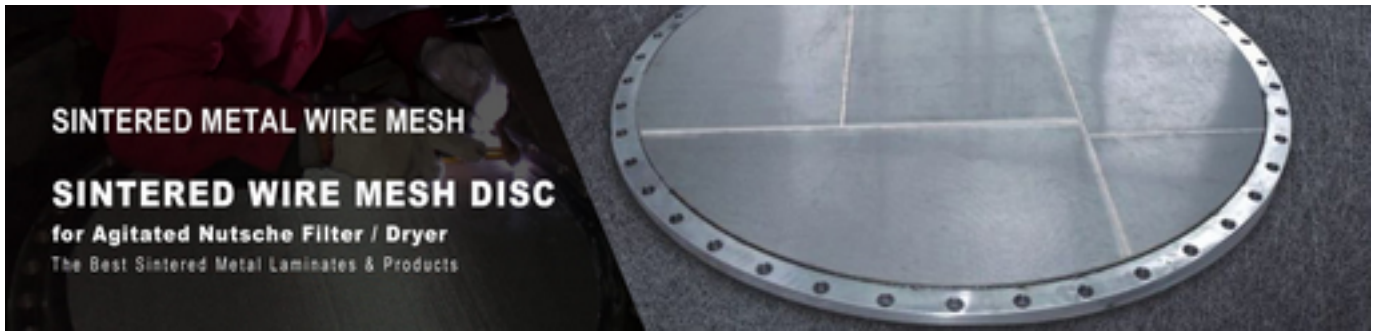
По вопросам продаж и поддержки обращайтесь:

Алматы (7273)495-231
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Россия (495)268-04-70

Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Липецк (4742)52-20-81
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Киргизия (996)312-96-26-47

Новокузнецк (3843)20-46-81
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Казахстан (7172)727-132

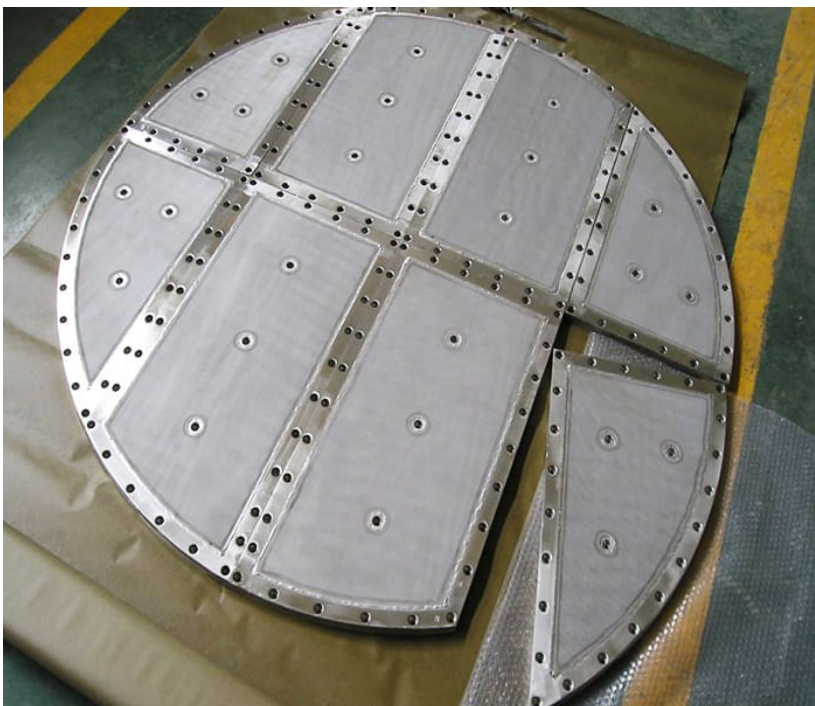
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Тверь (4822)63-31-35
Томск (3822)98-41-53
Тула (4872)74-02-29
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Ярославль (4852)69-52-93



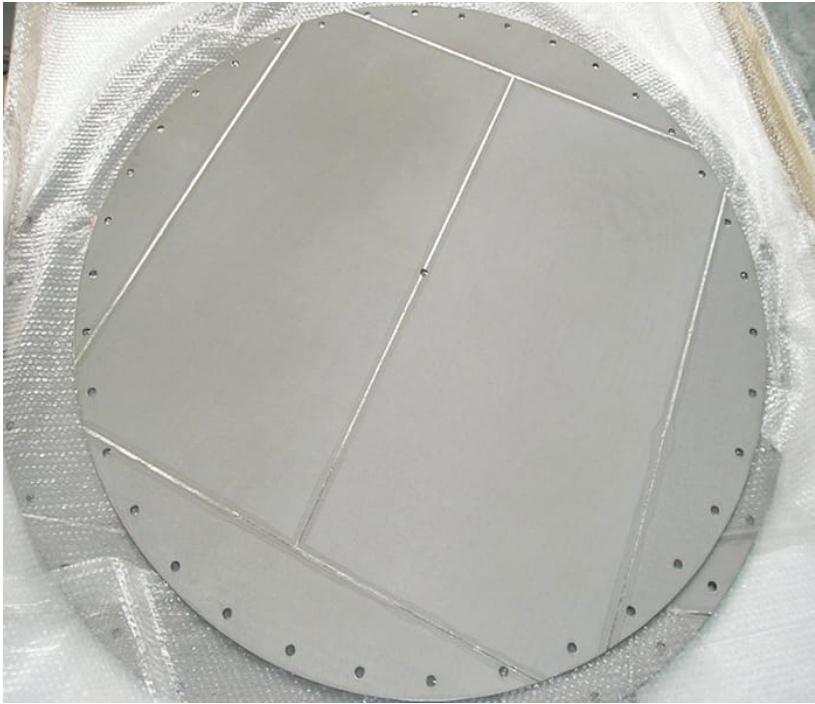
Sintered Wire Mesh Disc / plate are the disc shape filter elements made of sintered wire mesh screen and support plate or frame. Sintered mesh filter disc can be disc plate assembly or monoblock. The sintered wire mesh can be welded with the frame plate sections. Then sections are assembled with bolts as a disc plate assembly. While in monoblock, the sintered wire mesh is whether welded or sintered with the whole disc support plate frame then welded with flange as disc assembly.

Sintered Mesh Filter Disc For Agitated Nutsche Filter / Dryer (Anf Or Anfd)

Sintered metal mesh filter disc plate is most used in agitated nutsche filter / dryer, as the bottom filter screen. The disc plate catch the solids and form the filter cake, while the liquid is passed through and flow out. In other applications, the filter disc may used as air diffuser. The air flow through the sintered mesh and dry or motivate the solids on the disc.



Assembly type of sintered metal mesh filter disc plate for nutsche filter



Monoblock type of sintered metal mesh filter disc plate for nutsche filter

Customization of The Sintered Metal Mesh Filter Disc

Our micron rating options: 0.5 1 2 5 10 15 20 25 30 40 50 100 150 200 μm . Others on request.

Disc diameter is up to 1150 mm for monoblock without welding seam, and 3000 mm for disc assembly.

316L (1.4404) stainless steel is the mostly chosen material for the filter disc. Hastelloy C276, Hastelloy C22 are among the best choice for most challenging corrosive working conditions. Other exotic materials are also available as request, such as 310S, 904L, Monel 400, Inconel 625, etc.

Sintered metal mesh filter disc for chromatography column

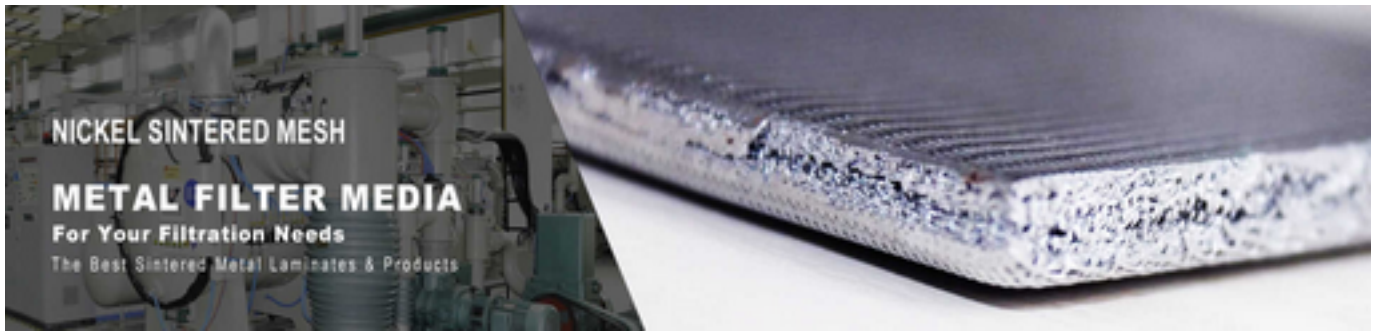
->



Sintered Wire Mesh Cone Filter



->



Nickel Sintered Mesh is fundamentally a metal woven mesh produced by pressing and elevated temperature diffusion sintering procedures. It offers high strength, firm structure, good and uniform permeability and high thermal and corrosion resistance properties. Due to this, Nickel sintered metal porous products have been extensively utilized in the several industrial fields including petrochemical, chemical, metallurgy, electrical and electric, environmental, pharmaceutical industry, aeronautical and space industries.

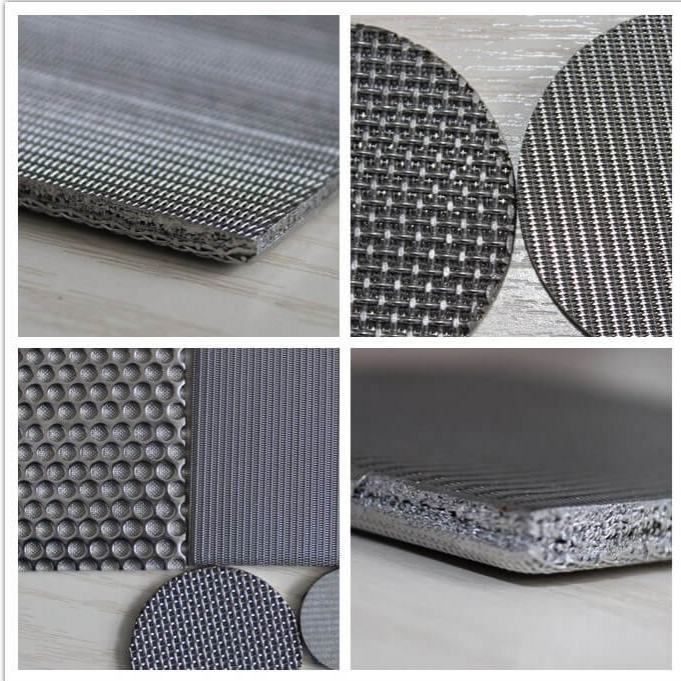
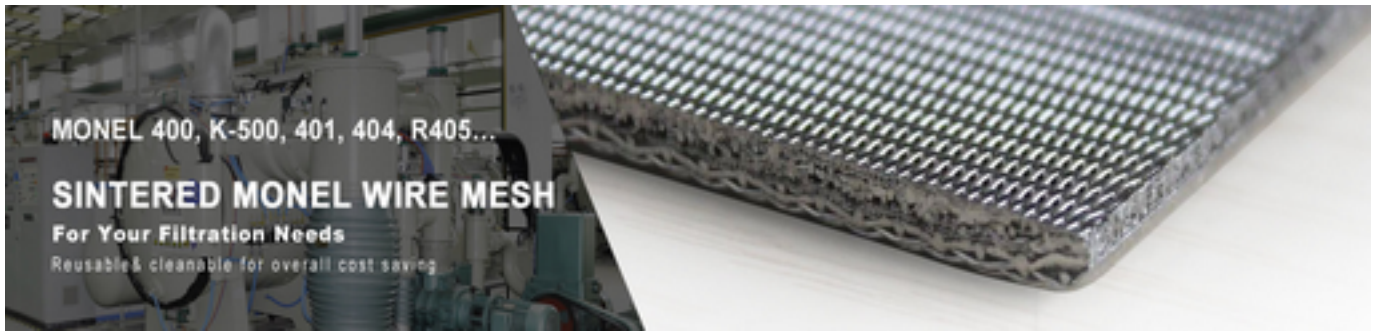
Nickel Sintered Mesh Properties:

1. Produced by combining multi-layer mesh, rolling and elevated temperature sintering
2. High permeability with good pore structure and uniform distribution
3. Great mechanical strength
4. Excellent thermal and corrosion resistance
5. Easy processing
6. Good regeneration ability with simple and smooth opening
7. Backflushable filter cartridges in solid-liquid and warm gas filtration

Size	500*1000mm, 600*1200mm, 1000*1000mm, 1200*1200mm
Material	Nickel N2, N4, N6, N8, N9
Thickness	0.5~8mm

Nickel Sintered Mesh is fundamentally a metal woven mesh produced by pressing and elevated temperature diffusion sintering procedures. **Stanford Advanced Materials (SAM)** is a global manufacturer of Sintered Mesh products.

->



SINFT sintered monel wire mesh has high air permeability with 1-100 micron filtration rating. Since the adequate flow resistance and outstanding mechanical strength, it can perfectly handle higher pressure loading.

Raw material: Monel 400, Monel K-500, Monel 401, Monel 404, Monel R405...

Filtration rating: 1-100 micron

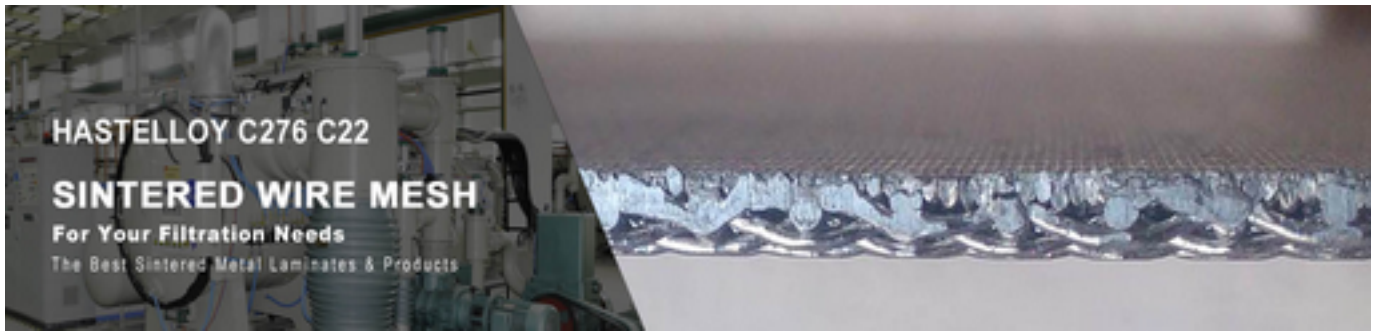
Operating temperature: 800 to 1200°C

Structure: 5 layers as standard or on request

Standard size: 480×480, 480×980, 500×1000, 600×1200, 610×1219, 610×125, 1000×1000, 1200×1200 mm

Note: dimensions and layers can be customized depending on your needs

->



Hastelloy Nickel Based Alloy Sintered Wire Mesh

Hastelloy	EN w.nr.	Ni	Fe	Cr	C	Mo	Other
C276	2.4819	Balance	4.0-7.0	14.0-16.0	<0.02	15.0-17.0	W 3.0-4.5
C22	2.4602	Balance	2.0-6.0	20.0-22.5	<0.02	12.0-14.5	W 2.0-3.5

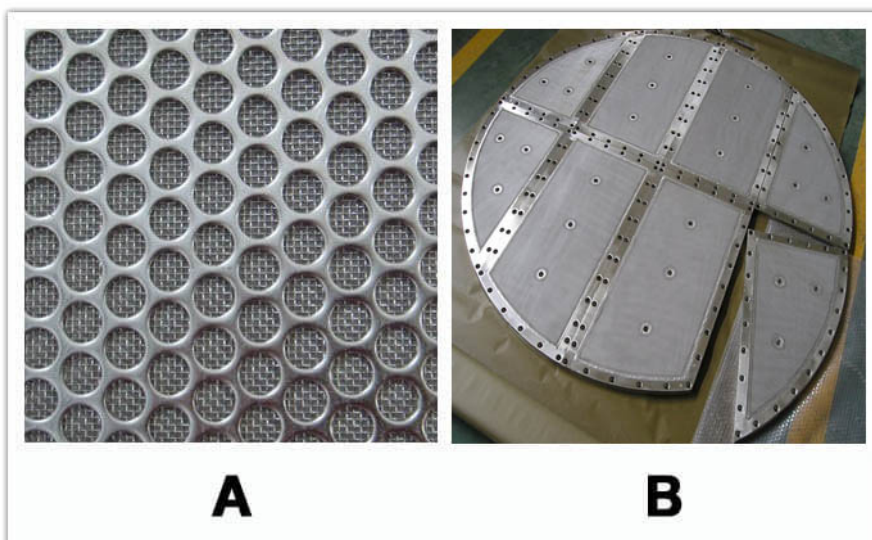
Mostly used Hastelloy C276 C22 Sintered Wire Mesh is the Hastelloy C series. It is a nickel-molybdenum-chromium alloy with tungsten addition which brings outstanding corrosion resistance in various of harsh environment including hypochlorite, wet chlorine gas and chlorine dioxide solutions.

Hastelloy C-276 (UNS N10276) is especially resistant to pitting and crevice corrosion, even in the environment of sulphuric, acetic, phosphoric and nitric acids. Hastelloy C-276 also has good resistance to formation of grain-boundary carbide precipitates during welding.

C-22 (UNS N06022) has better overall corrosion resistance under high temperature, and even more pitting resistance.

Hastelloy C has great resistance to solutions of oxidizing chloride salts including iron and copper ion. It also outperforms in seawater, especially under crevice conditions where other frequently used alloys fails, such as 316L 904L stainless steel, Monel 400, Inconel 625.

Hastelloy C276 C22 sintered wire mesh



- . **A** Hastelloy sintered wire mesh with round hole perforated metal
- . **B** Hastelloy sintered wire mesh split perforated metal disc

Hastelloy C276 C22 Sintered Wire Mesh have micron rating range of 5-200 microns.

Hastelloy perforated metal is also available, thus sintered wire mesh with perforated metal can be made of full Hastelloy materials.

Applications of the Hastelloy sintered

The main applications of the Hastelloy sintered wire mesh include:

- . chemical processing
- . pharmaceutical production
- . pulp & paper bleaching
- . oil & gas production
- . petrochemical process
- . fuel gas desulfurization
- . seawater related filtration

. Good choice of Hastelloy sintered wire mesh manufacturer in China

SINFT FILTER is among the best choice of Hastelloy C276 C22 sintered wire mesh and corresponding filter elements worldwide. We have supplied Hastelloy sintered wire mesh and filter elements for years to chemical processing, pharmaceutical and other industries handling with severely corrosive media.

Notice : Hastelloy is a registered trademark of Haynes International, Inc.

->



Sintered Metal Mesh Filter Disc Data :

SINFT sintered woven wire mesh filter disc is usually used for various filtration applications such as the petrochemical, chemical industry, and water conditioning.

Raw material: SS 304, SS 316L, bronze, nickel, Monel alloys, etc.

Common layers: 3-8layers

Filtrationrating: 1,2,5,10,15,20,30,40 or 75 micron

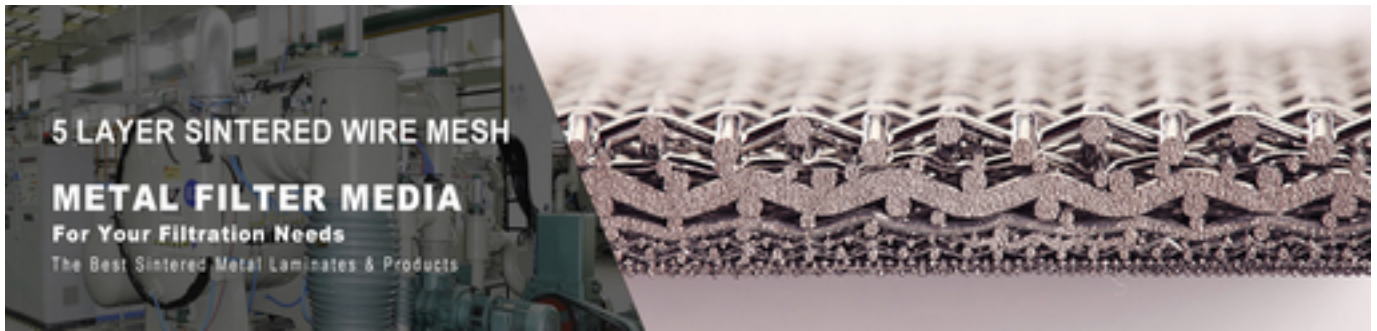
Diameter: 600-1200 mm

Mesh weaving type: dutch weave, square weave, plain weave, twill weave

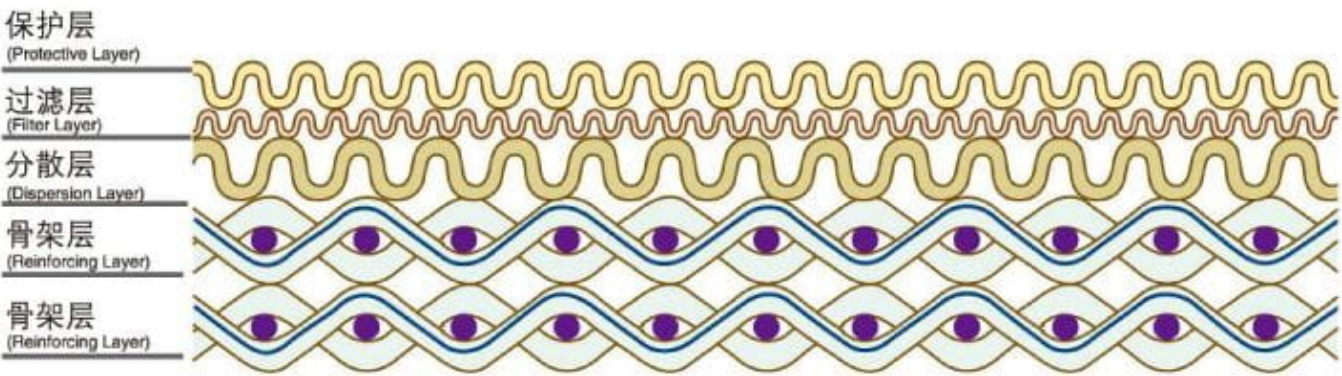
Operating temperature: -200°Cto 600°C



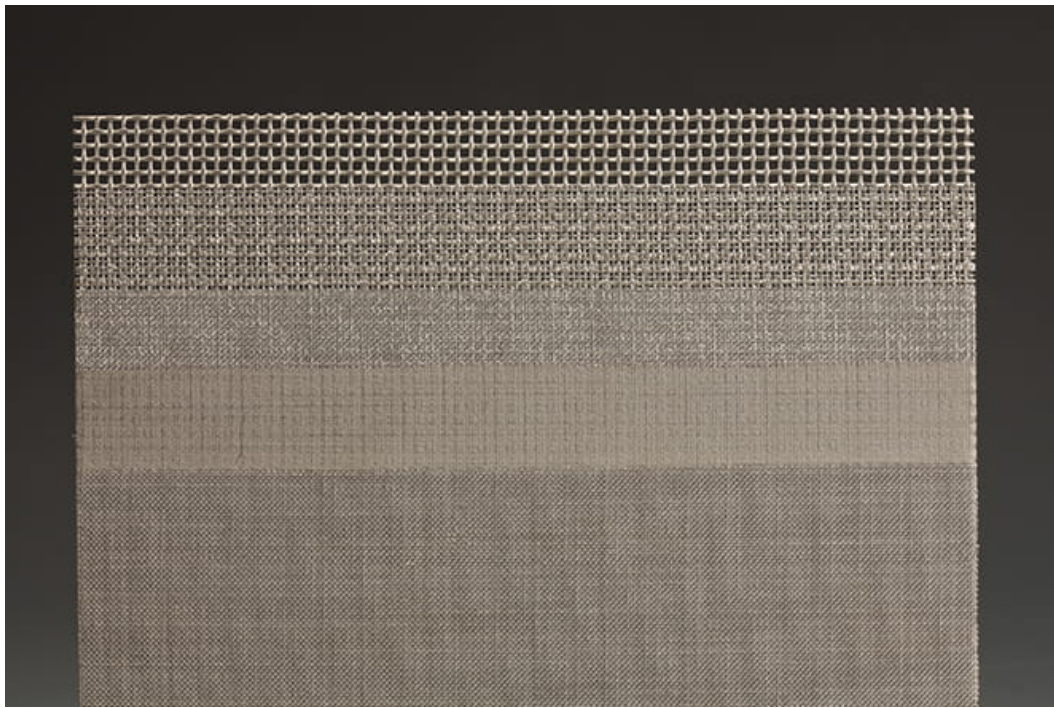
->



SINFT 5-layer laminate is a standard and widely used type of sintered wire mesh . A single layer of fine woven wire mesh is placed between two layers of coarser square woven meshes, which is then added to two layers of a strong Dutch woven wire mesh and sintered together to form a strong plate. The single layer of fine woven wire mesh acts as the filtration layer, and can be customized to meet a particular filtration rating, ranging from 1 micron to 200 microns.



These layers generally consist of 316L stainless steel wire mesh , but special alloys such as Hastelloy®, Monel®, Inconel®, Alloy 20 etc. can be incorporated as well.



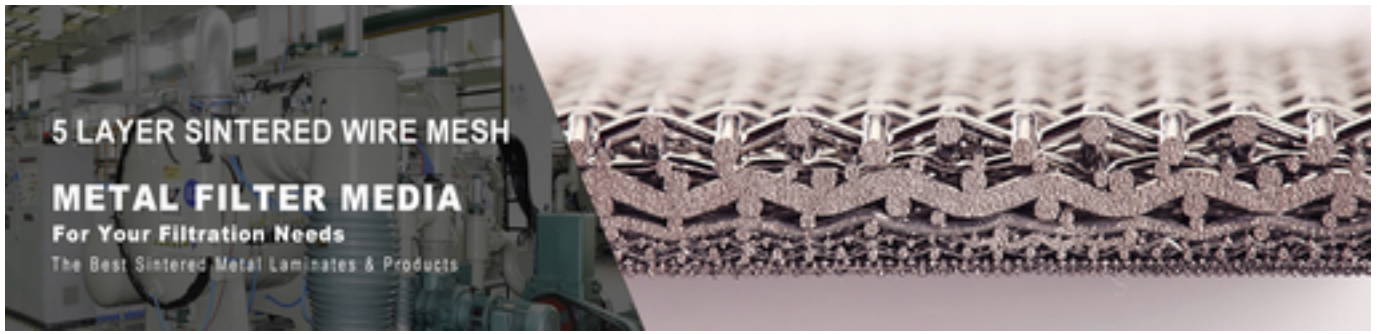
Our standard size is a 2'x4' or 4'x4' sheet, but different size discs, tubes, larger sheets and cones can be fabricated.

This type of sintered wire mesh laminate has uses in many industries including pharmaceuticals, chemical processing, food and beverage, and transportation. Applications include gas sparging, fluidized beds, liquid and gas filtration, Nutsche filters, pharmaceutical processing, centrifuges, and a variety of others including some that have yet to be developed and put into use.

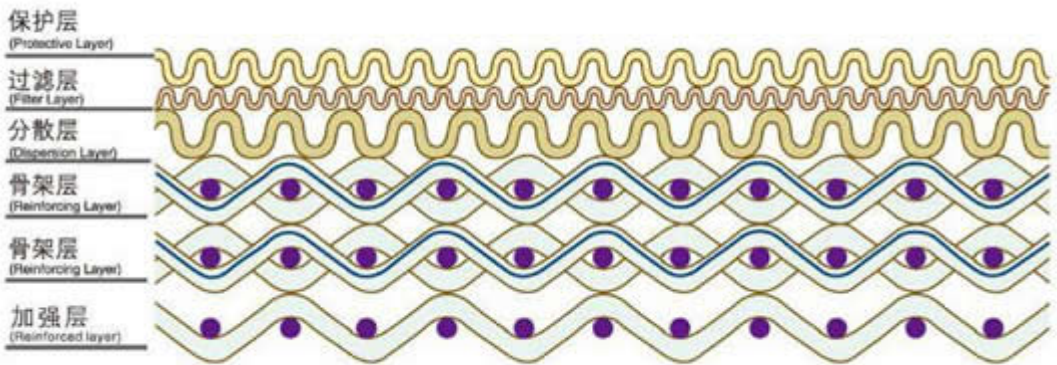
Technical Information

5-Layer Sintered Mesh	Nominal Micron Filter Rating	Thickness (Inches)	Air Flow (cfm/in2)	Weight (lbs/ft2)	Porosity
5LA-1	1	0.067	0.41	1.72	37%
5LA-2	2	0.067	0.54	1.72	37%
5LA-5	5	0.067	0.55	1.72	37%
5LA-10	10	0.067	0.68	1.72	37%
5LA-15	15	0.067	0.78	1.72	37%
5LA-20	20	0.067	1.03	1.72	37%
5LA-25	25	0.067	1.39	1.72	37%
5LA-30	30	0.067	1.48	1.72	37%
5LA-40	40	0.067	1.56	1.72	37%
5LA-50	50	0.067	1.92	1.72	37%
5LA-75	75	0.067	1.98	1.72	37%
5LA-100	100	0.067	2.07	1.72	37%

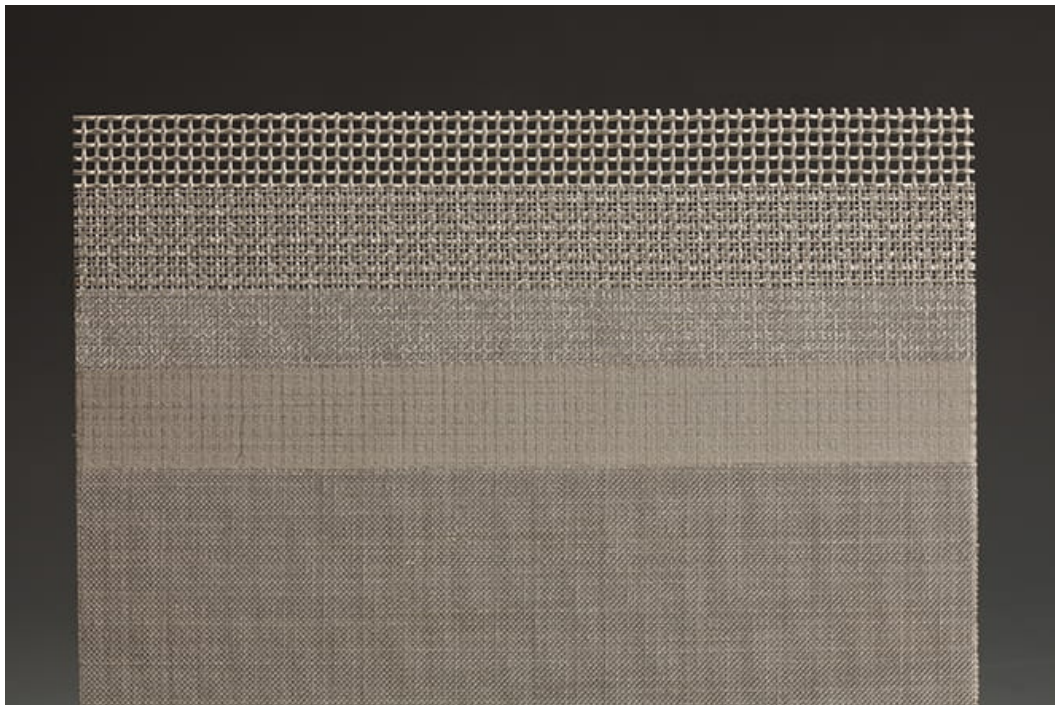
->



SINFT 6-layer laminate is a standard and widely used type of sintered wire mesh . A single layer of fine woven wire mesh is placed between two layers of coarser square woven meshes, which is then added to two layers of a strong Dutch woven wire mesh and sintered together to form a strong plate. The single layer of fine woven wire mesh acts as the filtration layer, and can be customized to meet a particular filtration rating, ranging from 1 micron to 200 microns.



These layers generally consist of 316L stainless steel wire mesh , but special alloys such as Hastelloy®, Monel®, Inconel®, Alloy 20 etc. can be incorporated as well.



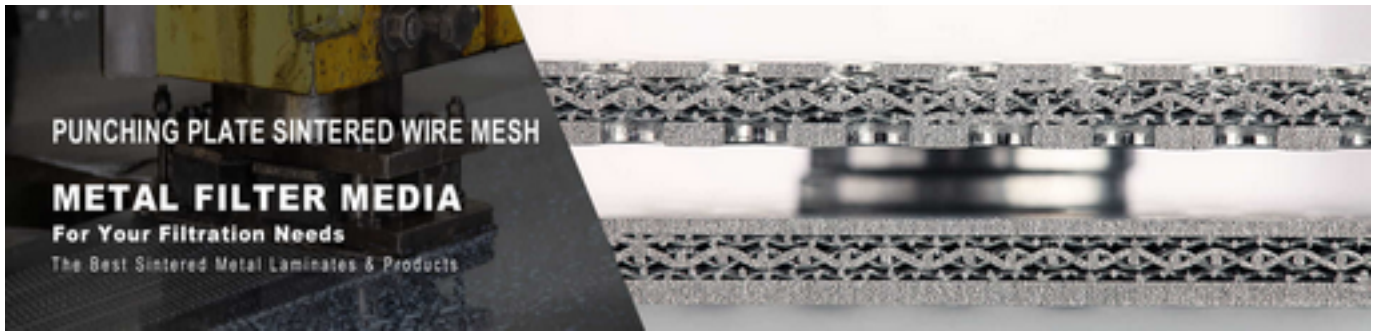
Our standard size is a 2'x4' or 4'x4' sheet, but different size discs, tubes, larger sheets and cones can be fabricated.

This type of sintered wire mesh laminate has uses in many industries including pharmaceuticals, chemical processing, food and beverage, and transportation. Applications include gas sparging, fluidized beds, liquid and gas filtration, Nutsche filters, pharmaceutical processing, centrifuges, and a variety of others including some that have yet to be developed and put into use.

SINFT 6-Layer Sintered Wire Mesh Technical Information

Part number	Nominal Filter Rating(u)	Structure	Air Permeability(L/miin/cm2)	Bubble pressure(mm H2O)
SFT-S6-1	1	100+400x2800+100+12x64+64x12+12	1.81	360-600
SFT-S6-2	2	100+325x2300+100+12x64+64x12+12	2.35	300-590
SFT-S6-5	5	100+200x1400+100+12x64+64x12+12	2.42	260-550
SFT-S6-10	10	100+165x1400+100+12x64+64x12+12	3	220-500
SFT-S6-15	15	100+165x1200+100+12x64+64x12+12	3.41	200-480
SFT-S6-20	20	100+165x800+100+12x64+64x12+12	4.5	170-450
SFT-S6-25	25	100+165x600+100+12x64+64x12+12	6.12	150-410
SFT-S6-30	30	100+450+100+12x64+64x12+12	6.7	120-390
SFT-S6-40	40	100+325+100+12x64+64x12+12	6.86	100-350
SFT-S6-50	50	100+250+100+12x64+64x12+12	8.41	90-300
SFT-S6-75	75	100+200+100+12x64+64x12+12	8.7	80-250
SFT-S6-100	100	100+150+100+12x64+64x12+12	9.1	70-190

->



SINFT sintered filter mesh screen is sintered by punching plate and multi layer stainless steel wire mesh. Due to the support of punching plate, it has the higher compressed and mechanical strength. It is mainly used in food, beverage, water treatment, dust removing, pharmaceutical, polymer, etc. it can be processed into various filters: filter tube, filter disc, filter sheet. The thickness of the punching plate and the structure of the wire mesh can be customized according to the user's requirements. We can choose the filter layer by the customer's need within the filter rating. Other special structure can be made as the customer's need. The porosity is based on 20 um filter layer.



Material And Size of Sintered Wire Mesh Screen

Normal Material Stainless steel 304, stainless steel 304L, stainless steel 316, stainless steel 316L, Special steel hast alloy, monel, Inconel, stainless steel 904L, Duplex steel 2205.

Standard Dimensions

500mm×1000mm, 600mm×1200mm, 1000mm×1000mm, 1200mm×1200mm, 1200×1500

Features Of Sintered Wire Mesh Screen

Sintered wire mesh screen which also named sintered laminated sheet structure has higher mechanical strength and compressive strength;
Sintered porous structure has higher stability;
Good corrosion resistance, good heat resistance;
Repeated use, longer service life

Types of 316L Stainless steel sintered wire mesh screen :

SFT-Tyl-1 -- 5 - Layer Sintered Wire Mesh Screen Packs;

SFT-Tyl-2 -- Square Woven Sintered Wire Mesh Pack Filters;

SFT-Tyl-3 -- Perforated Plate Plus Woven Mesh Sintered Wire Mesh Pack Screens;

SFT-Tyl-4 -- Dutch Woven Sintered Wire Mesh Micron Filter Discs.

Quality Control of Sintered Wire Mesh Screen

Raw Material test platform

Alloy analyzer

High frequency infrared carbon and sulfur analyzer

Magnifier

Microscope

Air Flow meter

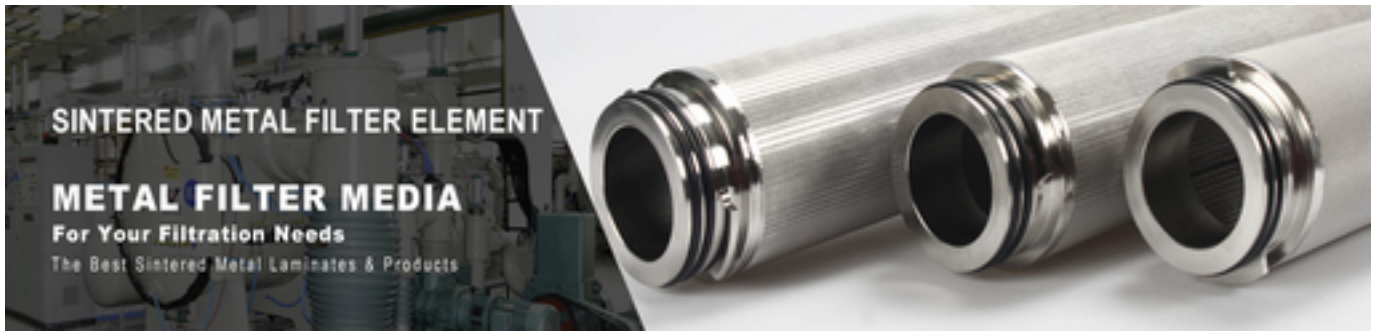
7.Aperture analyzer

Tensile testing machine

Quality Target for sintered wire mesh screen

Customer satisfaction degree can reach more than 95%. And the qualified rate of sintered wire mesh screen can reach 100% before being sent out of SINFT.

->



SINFT sintered wire mesh, also called sintered wire screen, sintered mesh, is a kind of filtration material made by pressurizing and sintering process.

It has excellent mechanical strength, high corrosion resistance, high-temperature resistance, and easy to clean.



SINFT can manufacture your sintered wire mesh with different kinds of materials, such as stainless steel 304, stainless steel 316L, stainless steel 904L, nickel, Monel, even Hastelloy for

high-temperature environments below 676°C.

In addition, SINFT can design and fabricate many types of sintered woven wire mesh, including dutch weave sintered mesh, plain weave sintered mesh, twill weave sintered mesh and perforated metal sintered mesh.

Different weaving options can satisfy a wide range of desired filtration specifications.

Compare to traditional wire cloth, SINFT sintered wire mesh has superior and comprehensive filtration performance.

What is a Sintered Wire Mesh?

A sintered wire mesh is a filtering material constructed through pressing and sintering single or several layers of woven wire mesh panels.

The process forms strong, permanent bonds through heat and pressure, giving it superior and comprehensive filtration properties compared to standard woven wire mesh filter.

A sintered wire mesh can have between 2 and 7 layers or even more dependent on the customer's needs and specifications.

Initially, you uniformly roller flattened a single layer of wire mesh to create a wire cross to ensure efficient contact.

If you want to create a multilayered mesh, then proceed and pile the components appropriately, ensuring that you laminate the fine filtering mesh with coarser protective layers.

Using a unique fixture, laminate the single or multiple mesh layers through subjecting it to high temperature and mechanical pressure.

Press in chambers filled with proprietary inert gas and raise the temperature to reach the sintering (diffusion bonding) levels.

Cool the sintered wire mesh under controlled conditions to achieve the desired level of rigidity. After that, you can follow and work the material as expected: weld, cut, pleat, roll into diverse shapes, etc.

What is the Importance of Sintering a Wire Mesh?

Pressing and sintering metal wire mesh creates a filtration material with superior filtration properties compared to standard woven wire mesh.

Sintering creates a secure and stable wire mesh that is suitable for use under high-pressure conditions.

You can use a sintered wire mesh to construct diverse kinds of filter elements such as cartridges, cylinders, discs, and candles because they have excellent mechanical strength, very stable, and durable.

What is the Difference Between Sheet Sintering and Coil Sintering?

Both sheet sintering and coil sintering are done to permanently bond the wire mesh intersections through heat, pressure, time, and atmosphere.

However, you can construct either single or the multilayered sintered sheet while you can only build a single layer of the sintered coil.

Whereas sheet sinters are ideal for filtration in high-pressure applications, coil sinters are suitable for applications that cannot tolerate loose wires and deep drawing.

What Types of Applications use a Sintered Wire Mesh?

Sintered wire mesh is usually used in the construction of filtration and purification devices.

You can use sintered wire mesh filters in diverse industries to filter fluids.

Some of the common industries that employ the use of sintered wire mesh include:

- Production of oil and gas filtration: You can use sintered mesh to construct sand control screens, flame retardant filters, and backwash filters
- Nuclear and energy: You can use it to manufacture coolant process filters, fluid bed filters, and discharge filters.
- Pharmaceutical industry: You can use it in the manufacture of scrubbing and drying units, drug purification, and medical filter plates.
- Petrochemical and refining industries: Sintered wire mesh are useful in the filtration of hot gases and corrosive liquids as well as recovery of catalysts
- Aerospace: You can use the material to construct hydraulic filters, Precise lubricating oil filters, and noise abatements
- Polymer filtration: It is fundamental in the manufacture of synthetic fibers, spin packs, and processing films.
- Food and beverage: You can use sintered wire mesh filters for filtration of flour, milk powder, impurities, water, and disposal sewage.

You can also use sintered wire mesh for powder fluidization, steam filtration, filtration of slurry oil, chromatography frits, centrifuges, and manufacture of nutsche filters.

What Weave Options are there for Sintered Wire Mesh?

You can have your product constructed from diverse types of weaving options.

They include:

- Plain Sintered Square Weave

You can use filter elements constructed from plain sintered square weave mesh in almost all air and fluid filtration types, including polymer production.

You can construct this kind of weave mesh by sintering together multiple layers of plain square weave mesh.

It has excellent permeability and low flow owing to its large opening area percentage.

To achieve the desired filtration features, you can combine multiple layers of sintered wave wire mesh using appropriate design.

You can construct very thick components by sintering several squares woven wire mesh for use as the bomb and frame preventer.

Despite the thickness, the combined meshes will still deliver high flow characteristics.

- Sintered Dutch Weave Mesh

You can construct a sintered Dutch weave mesh through sintering together 2 or 3 layers of standard Dutch weave meshes.

The resulting product possesses excellent mechanical strength, low permeability, and evenly spaced open mouth.

- Perforated Metal Sintered Wire Mesh

Similarly, you can construct this product by combining and sintering a perforated plate layer and several layers of woven wire mesh.

The woven wire mesh layer comprises the filtration and protective layer and a buffer sandwiched between the perforated plate and the fine grid.

You should include the perforated plate as the base layer to manufacture a firm and easy to handle slab during sintering.

The perforated plate significantly enhances the mechanical strength and resistance of the sintered wire mesh products.

You can also design any product of the desired filtration specification using perforated metal sintered wire mesh by combining several layers of gridding weave.

What are the Features of a Quality Sintered Wire Mesh?

A high quality sintered wire mesh should possess the following qualities.

- Excellent resistance to high temperatures and pressure
- Outstanding resistance to corrosion, abrasion, and oxidation
- Great mechanical strength
- Ease of cleaning and reusing
- Easy to mechanize that is, punch, weld, shear, and fabricate into diverse forms
- Can be developed into a broad range of filtration rating.
- Robust support structures

- Economical
- Easy to customize for special operations

What are the Benefits of Sintered Wire Mesh?

Sintered wire mesh filters have numerous advantages compared to ordinary woven mesh filters. When you choose sintered wire mesh filters, be sure to reap the following benefits.

Sintered wire mesh

- Longlasting
- Excellent mechanical strength
- Resistance to corrosion
- Can withstand up to 480 °C.
- Available over a wide range of filtration needs, that is, 1 to 100 microns
- Provides sufficiently uniform filtration in high viscosity and high temperature and pressure applications
- Easy to work on, that is, cutting, welding, bending, stretching, etc.
- You can fabricate it into multiple layers that possess superior filtration properties under harsh operating conditions.
- Possess excellent stability, thus suitable for applications requiring mesh with a higher percentage of open filtration area.
- Sintering wire mesh is easy and provides quality products for the construction of high throughput filters ideal for applications needing controlled permeability.
- Easy to clean and reuse for numerous applications
- It has a stable structure that locks all mesh wires, making it possible for unique equipment fabrication into diverse and durable shapes.

How does Sintered Wire Mesh compare to Traditional Wire Cloth?

Sintered wire mesh has a superior and comprehensive filtration advantages compared to traditional non sintered wire mesh.

They include:

- Hardiness and Rigidity

The sintering process makes sintered wire mesh very hard and rigid and protects it against deformation and damages.

On the other hand, traditional, non-sintered wire mesh has a loose structure making it easy to deform and break.

- Permeability

Sintered wire mesh has better fluid permeability compared to traditional wire cloth.

- Filtration Rating

Sintered wire mesh has uniform pore sizes and can remove particles down to a specified micron rating.

Contrastingly, traditional wire cloth has unstable pore sizes and cannot guarantee particles' entrapment down to the set micron rating.

- Durability

Sintered wire mesh rigidity makes it easy and capable of withstanding multiple backwashes hence increasing its service life.

Traditional wire cloth is less rigid and can easily breakdown when subject to multiple backwash operations under intense pressure, which lowers its useful life.

- Multi-layering

Unlike traditional wire cloth, you can fabricate sintered wire mesh elements constituting multiple layers that enhance its mechanical strength.

It makes it suitable for use in applications operating under harsher environmental conditions that would otherwise breakdown standard wire cloth

- Locking of Loose Wires

Traditional wire cloth has loose wires and can quickly lose shape and become ineffective overtime.

In contrast, Sintered wire mesh has increased stability and can be formed into various shapes because the diffusion bonding process has stabilized the wires.

What Materials can you use to Construct a Sintered Wire Mesh?

You can use different types of materials to construct your sintered wire mesh.

However, various stainless steel grades are the most widely used construction material compared to other kinds of materials.

Below are the available options from which you can select your most preferred material.

·Stainless steel 304 SS: Excellent resistance to high temperature and corrosion. Also, the most used alloy.

·Stainless steel 304L: Has a lower percentage of carbon compared to 304SS for good weldability though other properties are similar

·Stainless steel 316 SS: Has enhanced resistance to corrosive chemicals due to the addition of Molybdenum

·Stainless steel 316L: Resemble 316SS properties though has a lower percentage of carbon for enhanced weldability

·Stainless steel 904L: The material is highly reliable for seawater application due to very high resistance to rust and corrosion

·Nickel: Suitable for applications working under severe corrosive environments. You can use the material where you are dealing with organic acids, chemicals, and caustics.

·Monel®: It is a very reliable alloy for applications operating under high corrosive environments due to its strong anticorrosive properties.

·You can also consider Inconel® and Hastelloy® for aggressively corrosive conditions environments.

Why is Stainless Steel the most Preferred Material for Constructing a Sintered Wire Mesh?

Stainless steel is the most widely used material to construct sintered wire mesh despite other materials' availability.

The bias towards stainless steel can be linked to the fact that you can construct versatile and robust equipment using it.

Under standard operating conditions, you can fabricate diverse types of filtration equipment and parts capable of maintaining a steady filtration rating.

Specifically, stainless steel wire has excellent resistance to high temperatures, oxidation, heavy mechanical and hydraulic pressure, corrosion, and abrasion.

Furthermore, you will not need additional fillers, alloys, or bonding agents when your subject stainless steel through diffusion bonding.

What are the Best Series or Grades of Sintered Wire Mesh?

There are different grades of sintered wire mesh fabricated into various products of different series.

You can select the most appropriate ready-made product series from our catalog or request custom-made products that suit your unique needs.

Some standard product series include:

·Single-layer mesh series

·Filter plate series

·High flow series

·Perforated plate and mesh series

·Custom layer laminates

What is Sintered Mesh Laminate?

Sintered mesh laminate is a fine woven wire mesh that has been laminated with a coarser mesh to increase its thickness and strength.

Why is Laminating Wire Mesh necessary?

Wire mesh lamination is necessary because the fine wire mesh is usually too thin and susceptible to damage even though it has the rated micron pore size.

The majority of wire laminates range in the 5 to 6 layers and provides sufficient support, strength, and protection from damages.

What Structural Components comprise a Sintered Wire Mesh?

The structural inclusions of a sintered wire mesh widely vary from one manufacturer to the other. Some standard arrangements of a five-layer sintered wire mesh in descending order include:

·Reinforced mesh; Reinforced mesh; Protection mesh; Filter mesh; Protection mesh

·Protection mesh; Filtration mesh; Dispersion mesh; Dispersion mesh; Reinforcing mesh
The reinforcing mesh provides excellent resistance to pressure.

What Qualities should you Test for your Sintered Wire Mesh Filters?

When you purchase a sintered wire mesh, you will get the product description and performance and quality tests conducted.

You can conduct a separate test to determine whether the wire mesh meets the specified standards. Some of the test you can conduct include:

- Filtration efficiency through Multi-pass or DOP test
- Product porosity
- Air permeability
- Bubble point pressure

Can you Clean a Sintered Wire Mesh?

Yes, you can clean sintered wire mesh filters using diverse cleaning methods.

The most commonly used methods are physical and chemical.

Physical methods involve using an ultrasonic cleaning machine, backflushing with cleaning gas or cleaning liquid recoil.

You can also clean your sintered wire mesh by chemical means, which involve diluting acid or alkali, surfactants, oxidizers, and any other suitable agent.

The choice of a particular cleaning technique depends on the status of contamination, physiochemical properties of the construction material, and the contaminants' chemical properties.

Furthermore, you can use a combination of these methods interchangeably to achieve the desired level of product regeneration.

Why should you choose a Sintered Wire Mesh over Non-woven Fibers?

The main difference between sintered woven wire mesh and sintered non-woven fiber mesh comes in the products' construction phase before sintering.

Sintered Woven Mesh

You can manufacture this product through sintering together layers of woven mesh.

It has the following key advantages.

- You can fabricate them using a diverse array of construction materials, given that you will not need to weld the parts together.
- They are a perfect choice for devices with irregular shapes since you don't have to weld them together.
- Producing sintered woven wire mesh is cheaper, easier, and faster.
- You can achieve filtration of the required sharp cut-point since it can provide the precise pore sizes needed.
- The end products will contain particles of a specific size.
- Produces lower pressure drop compared to sintered non-woven mesh
- More flexible and affordable.

Sintered Non-woven Mesh

These products are less flexible but more robust than woven mesh because the raw material is built through welding metal strands together.

- They are slightly expensive and only suitable for the construction of components with rigid designs.
- Very difficult to fabricate and consumes more time compared to woven mesh
- Need precise fabrication
- You can easily compromise the ability of the sintered non-woven mesh to filter contaminants when handled excessively.
- Possess inconsistent pore sizes because the knitting process lacks a specific defined position.
- It is more difficult to clean than sintered woven wire mesh because strand welding may produce variable pore sizes that capture particulate contaminants.

Can you Construct Multiple Layers of Sintered Wire Mesh?

Yes, you can construct multilayered sintered wire mesh.

The majority of the applications are better suited using multilayered sintered wire mesh instead of a single layer sintered wire mesh.

A multilayered sintered wire mesh can achieve the desired micron rated filtration while still maintaining superior mechanical strength required of demanding applications.

Besides, a multilayered wire mesh is easier to clean since it can withstand the high backwash pressure.

It also has superior structural integrity and easily maintains the appropriate filter rating under intense filtration pressure.

What are the Properties of Sintered Wire Mesh with Different Layers?

Sintered wire mesh can have either a single or multiple layers.

In the case of multilayered sintered wire mesh, the number of layers can significantly influence its properties.

Below are some of the characteristics of different types of layered sintered wire mesh.

Sintered wire mesh filters

- Single Layered Sintered Wire Mesh

This product has a permanent filter rating, pore size, and geometry due to diffusion bonding effectiveness.

You can consider the single-layered wire mesh for constructing low-cost filters fabricated either as cylinders, discs, rings, etc.

The construction of the product does not require any sealing technique.

- Double and Triple-layered Sintered Wire Mesh

The double-layer has a filtration layer enclosed between protection layers either on the outside, inside, or both sides.

It is suitable for constructing sintered discs, candle filters, or pleated cylinder filters.

- Five Layered Sintered Wire Mesh

The fine filtration wire mesh layer is sandwiched between two coarser protective layers and then sintered together with two support layers for enhanced stability.

The two protective layers protecting the fine mesh filtration layer is enclosed between the two supportive layers.

This type of sintered wire mesh has excellent mechanical strength and resistance to pressure.

It finds usefulness in different industries and applications with demanding operating conditions.

- Six Layered Sintered Wire Mesh

This product resembles a five-layered sintered wire mesh with an additional drainage layer.

It is preferred for enhancing filtration capacity quantities.

What Factors should you Consider when Constructing a Filter Element using a Sintered Wire Mesh?

The design specifications of your filter element must meet the desired level filtration and withstand your system's operating conditions.

The following are some of the basic parameters you should consider while designing your sintered wire mesh filter elements.

- Pore Sizing

Your filter's pore size rating dictates the size of particles your filter will be able to retain.

A filter element rated 5 microns' absolute' will retain all particles with a diameter of 5 microns and below.

In contrast, when the same filter is rated 'nominal,' then your filter will allow a high percentage bypass of the particles measuring 5 microns.

- Pressure Drop

Pressure drop is the loss of pressure on the filter outlet due to slowing down the process fluid as it goes through the filter.

Determine the allowance of your system pressure drop during the filter designing so as not to slow down your production process.

- Operating Temperature

You should determine the minimum and maximum allowable temperatures that your process application operates on.

It ensures that the metal alloys you choose can tolerate the temperature extremes on both ends to avoid element disintegration.

- Strength

Though all sintered woven wire mesh filters possess excellent tensile and mechanical strength, you still need to determine your system requirements.

Fabricating sintered wire mesh filter elements that meet the system specifications goes a long way to ensure your filter elements' effectiveness and durability.

- Others

In addition to the above considerations, you also need to have a more profound mastery of your process application to ensure that you fabricate the most suitable elements.

Accompanying your order alongside the following information will deliver you a product that is accustomed to your system's unique needs.

- The type of your system application
- The nature, kind, and characteristics of the process fluid
- The features of the contaminants
- Any corrosive problems in your operating environment
- The element size, design, and shape required
- The working flow rate, pressure, and temperatures
- The mounting, installation methods

How long can a Sintered Wire Mesh Filter last?

A sintered wire mesh's service life significantly varies to grade, operating conditions, quality, the material of construction, among other factors.

When you schedule your filter regeneration right, then you can use a sintered wire mesh filter element for up to five or more years before the need for replacement.

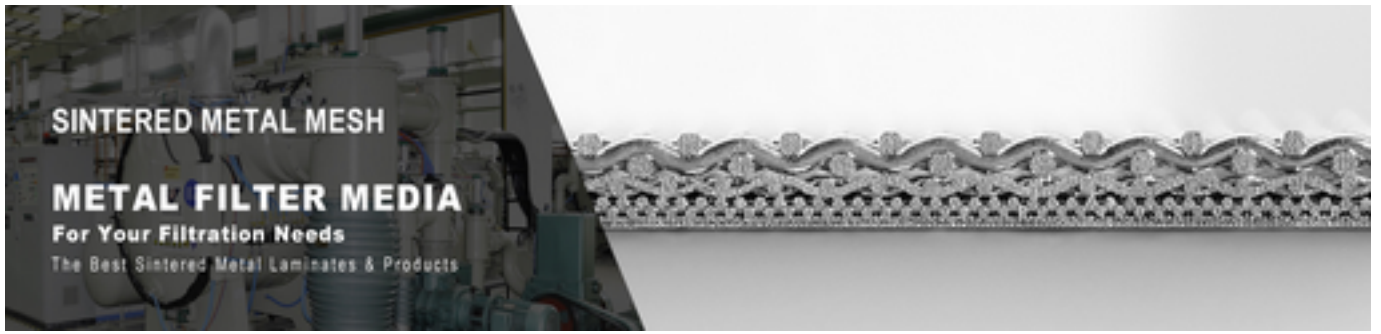
However, the service life of your sintered wire mesh layer can significantly reduce to only a few months.

The reduction is faster when you fail to select an appropriate material for constructing your wire mesh under extremely corrosive conditions.

Depending on your unique specifications, SINFT Filters offer the perfect solution for all sintered wire mesh.

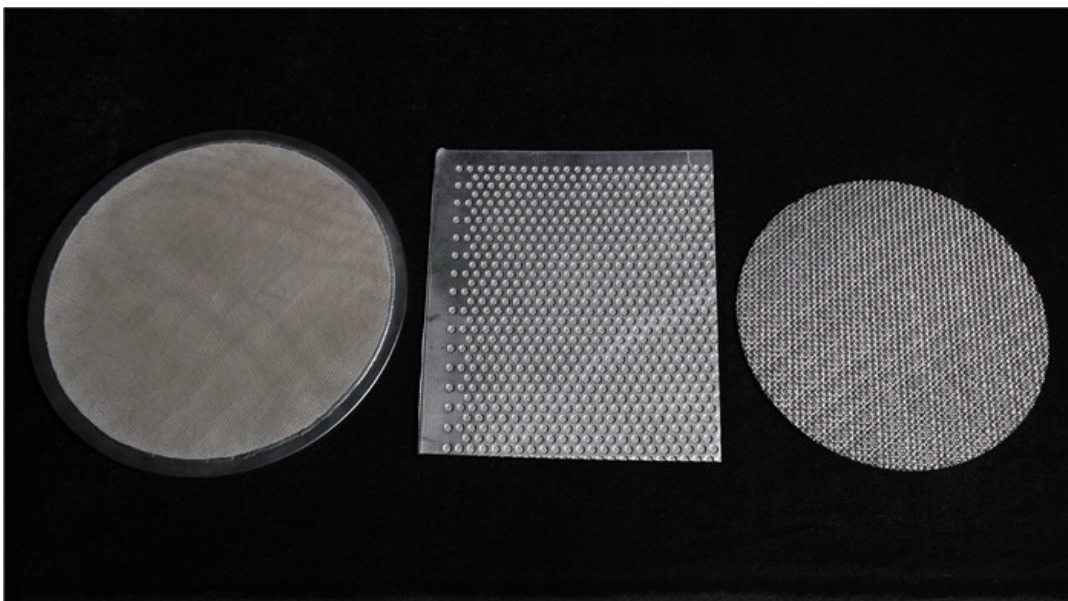
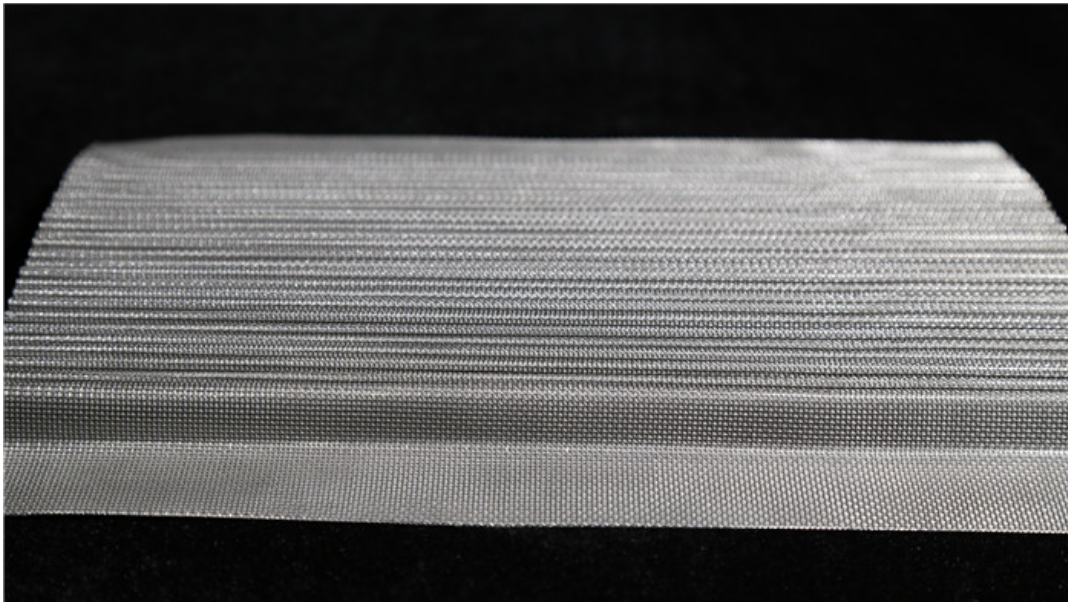
Contact us now for the best prices on sintered wire mesh.

->



Overview

This is the most widely used standard structure sintered mesh. It is a porous sintered material made by stacking five layers of stainless steel wire mesh according to different structures, and then through sintering, pressing, rolling and other processes.



Features

- . Large filtering accuracy range. From 1 μ to 100 μ , it has reliable filtration performance;
- . Stable filtration accuracy. Because there are two layers of wire mesh for protection, the mesh of the filter layer is not easy to deform;
- . Good strength. Due to the support of the fourth and fifth layers, it has high pressure resistance and mechanical strength;
- . Easy to clean. Since the surface filter material is used, it has the characteristics of easy cleaning and is especially suitable for backwashing;
- . High temperature resistance. Can withstand a high temperature of 480°C;
- . Corrosion resistance. Since SUS316L material is used, it has high corrosion resistance;
- . Easy to process. Suitable for cutting, bending, stamping, stretching, welding and other processing conditions.

Material

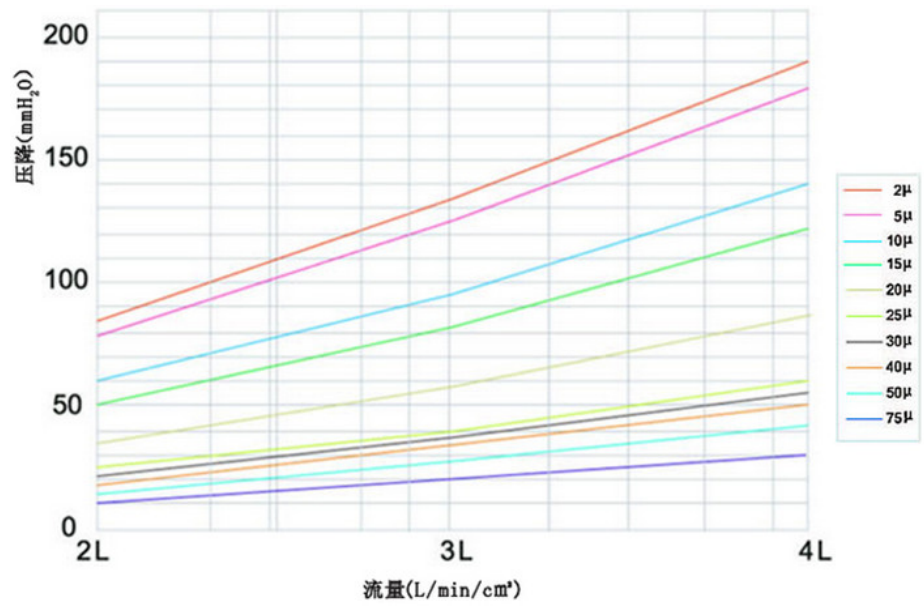
In addition to the standard materials of SUS304 (AISI304), SUS316 (AISI316), SUS316L (AISI316L), special alloys such as Hastelloy, Monel and Inconel can also be customized for customers.

size

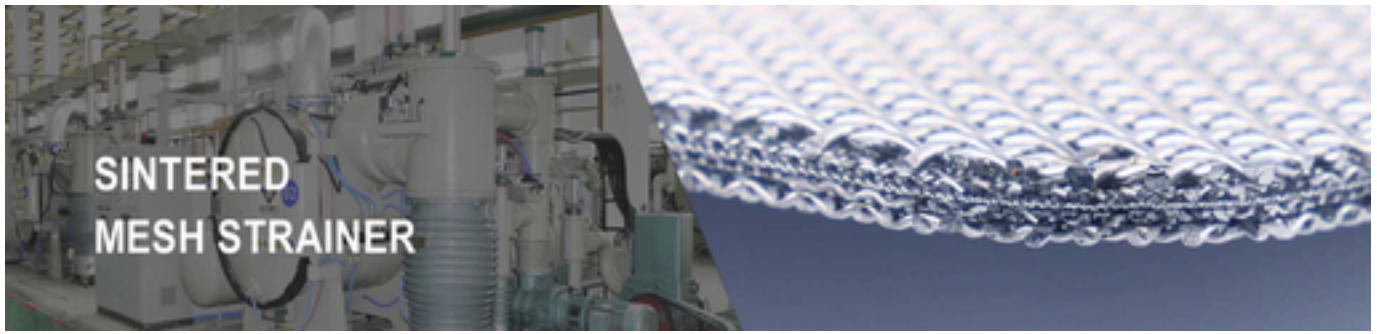
The standard size is 500×1000mm, 600×1200mm, 1000×1000mm, 1200×1200mm. The sizes within the above range can be customized according to user requirements.

Model	Precision (u)	Structure	T/mm	PerL/min/cm2	BP/mmH2O	w kg/m ²	P %
SFT-SW-A1	1	100+400×2800+100+12×64+64×12	1.7	1.81	360 - 600	5 Layer(8.4) 6 Layer(14.4)	37%
SFT-SW-A2	2	100+325×2300+100+12×64+64×12	1.7	2.35	300 - 590		
SFT-SW-A3	5	100+200×1400+100+12×64+64×12	1.7	2.42	260 - 550		
SFT-SW-A4	10	100+165×1400+100+12×64+64×12	1.7	3.00	220 - 500		
SFT-SW-A5	15	100+165×1200+100+12×64+64×12	1.7	3.41	200 - 480		
SFT-SW-A6	20	100+165×800+100+12×64+64×12	1.7	4.50	170 - 450		
SFT-SW-A7	25	100+165×600+100+12×64+64×12	1.7	6.12	150 - 410		
SFT-SW-A8	30	100+450+100+12×64+64×12	1.7	6.7	120 - 390		
SFT-SW-A9	40	100+325+100+12×64+64×12	1.7	6.86	100 - 350		
SFT-SW-A10	50	100+250+100+12×64+64×12	1.7	8.41	90 - 300		
SFT-SW-A11	75	100+200+100+12×64+64×12	1.7	8.7	80 - 250		
SFT-SW-A12	100	100+150 +100+12×64+64×12	1.7	9.1	70 - 190		

Air flow curve



-v



Custom Sintered Mesh Strainers Based On Your Need

SINFT designs and manufactures high-performance Sintered Mesh Strainers and filtration material products for all industries such as sintered metal fiber felt, multi-layers sintered wire mesh, ss sintered filter cartridges, porous metal filters, and material-specific filters like sintered nickel filters.

SINFT products have been widely used in the industries such as petrochemical, fine chemical, water treatment, pulp and paper, auto industry, food and beverage, metalworking, etc. by many leading industrial companies. SINFT's independence, experience, and specialized knowledge enable us to provide you with objective advice and customized sintering solutions.

Please send us your medium kinds, flow rate, filtration accuracy, material request, or even ideal Sintered Mesh Strainer elements with other brands, Like Mott filter, GKN sinter metals filters, Norman Sintered Mesh Strainer elements, then we will quote for you immediately.

Sintered Mesh Strainer



Sintered Mesh Strainer Advantages

Compare to other types of filter materials, such as stainless steel wire mesh, ceramics, glass fibers, filter paper, SINFT Sintered Mesh Strainers have higher mechanical and compressive strength. No matter in extremely high and low temperature experience, SINFTsintered filter elements will provide you excellent filtration performance.

- . Easy forming, machining, welding and cleaning
- . Available in filtration accuracy from 0.2 to 1000 micron
- . High strength for cleaning and use multiple times
- . Custom service for wide range of material and dimensions
- . Commonly used in -200°C ~ 650°C and acid, alkali corrosion environment

All Sintered Mesh Strainer





Sintered Stainless Steel Filter

SINFT Sintered Stainless Steel Filters mainly include stainless steel sintered filter cartridge, sintered stainless steel plate, sintered stainless steel sheet, sintered stainless steel tube, sintered stainless steel filter disc. It is made of stainless steel 304 and 316.

SINFT Sintered Stainless Steel Filters offer high filtering efficiency and long service life, widely applied in the filtration of liquid and gas. The filtering accuracy of ss sintered filter cartridges is available from 0.5 μm to 300 μm , with working temperatures from $-200\text{ }^{\circ}\text{C}$ to $1000\text{ }^{\circ}\text{C}$.



Production Processing of Sintered Wire Mesh

SINFT Sintered Wire Mesh is produced by a series of technical processes, including rolling,

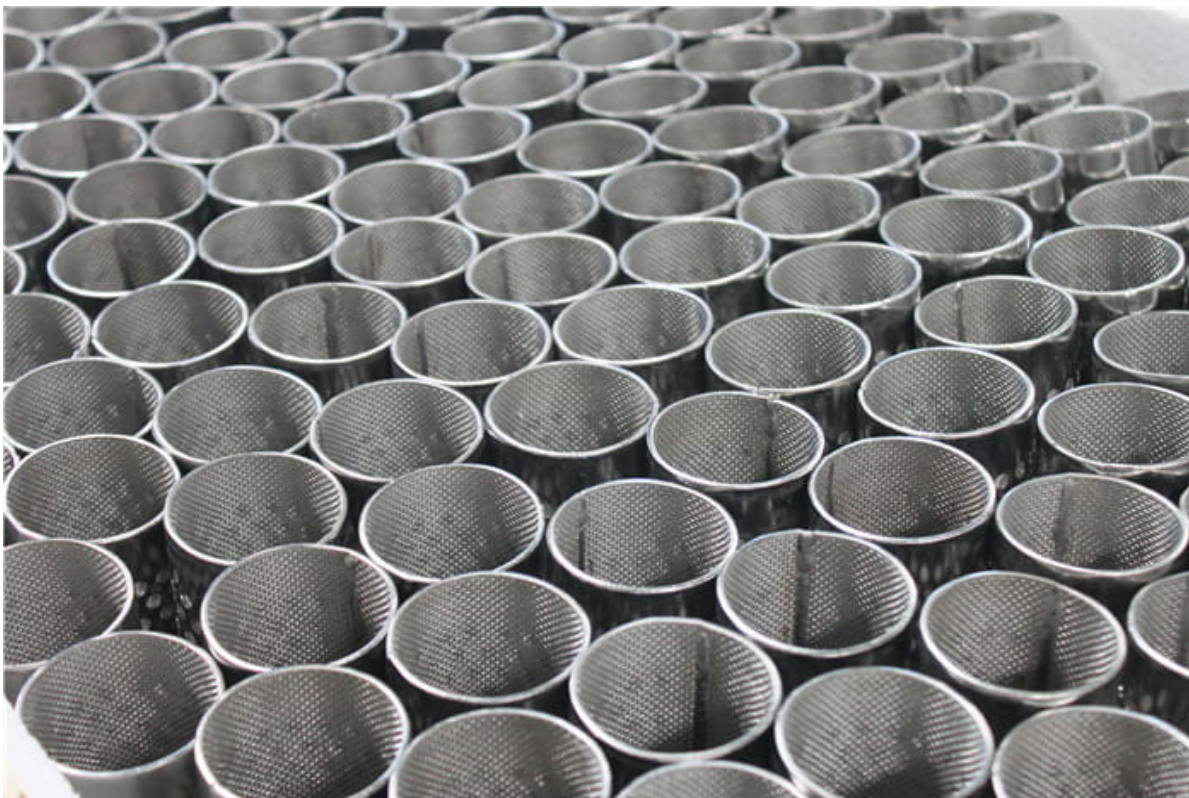
pressurizing, and vacuum sintering. It has the average pore size and steady air permeability.

Firstly, woven wire mesh is uniformly rolled to make every layer in good contact, especially at the wire mesh cross points.

Then put one or more layers of rolled wire mesh inside a high-temperature furnace under mechanical pressure. This furnace is filled with specific inert gases. When the temperature reaches a point, “sintering” occurs and sintered wire mesh is formed.

Finally, we control cooling, the mesh now has good rigidity while wires and layers bonding together. Some layers work as fine filtration, while others work for protecting and reinforcing.

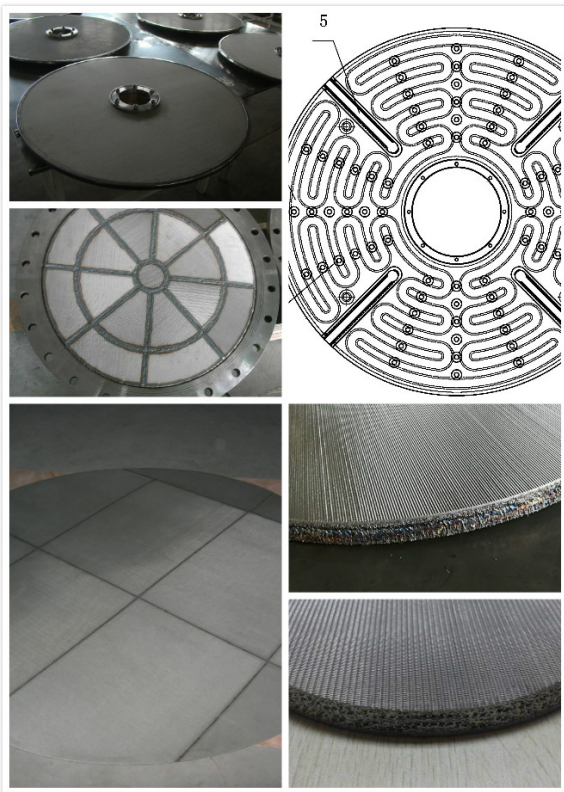
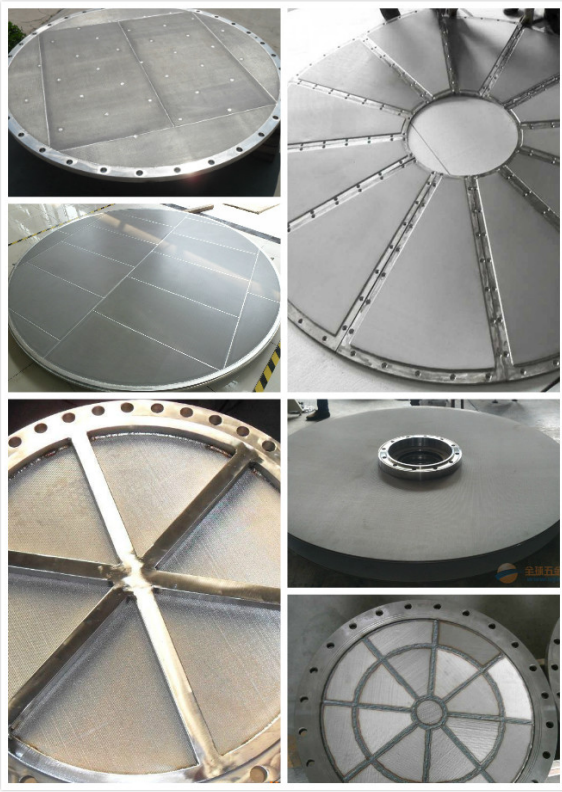
By sintering multiple layers of different wire mesh, it is possible to custom your Sintered Mesh Strainers with specific thickness, diameter, pore size, accuracy, and mechanical strength.



SINFT Sintered Mesh Filters Classification

- .Standard 5-layer Sintered Wire Mesh
- .Sintered by Multiple Layers of Plain-woven Square Mesh.
- .Sintered by Multiple Layers of Dutch-woven Square Mesh
- .Sintered by Perforated Plate with Multi-Layer Stainless Steel Wire Mesh

SS Sintered Metal Porous Fluidized Plate



Perforated Plate With Multi-Layer Stainless Steel Wire Mesh

This Sintered Mesh Strainer is sintered by a standard SUS304 perforated plate together with multi-layers square woven wire mesh or Dutch woven wire mesh.

Strong and rigid perforated metal plate is for support while the woven wire mesh layers used as the filtering layer. Due to the support of perforated plate, this sintered stainless steel filter has strong structure and mechanical strength.

SINFT stainless steel wire mesh can be produced into various shaped, including sintered metal tubes, sintered stainless steel disc and sintered stainless steel sheet. It is mainly reusable in food&beverage, water treatment, dust removing, pharmaceutical, chemical processing, etc.

SINFT is proud to be among the top 10 factories to produce perforated plate with multi-layer stainless steel wire mesh with standards or custom dimension.

->

По вопросам продаж и поддержки обращайтесь:

Алматы (7273)495-231	Казань (843)206-01-48	Новокузнецк (3843)20-46-81	Смоленск (4812)29-41-54
Архангельск (8182)63-90-72	Калининград (4012)72-03-81	Новосибирск (383)227-86-73	Сочи (862)225-72-31
Астрахань (8512)99-46-04	Калуга (4842)92-23-67	Омск (3812)21-46-40	Ставрополь (8652)20-65-13
Барнаул (3852)73-04-60	Кемерово (3842)65-04-62	Орел (4862)44-53-42	Сургут (3462)77-98-35
Белгород (4722)40-23-64	Киров (8332)68-02-04	Оренбург (3532)37-68-04	Тверь (4822)63-31-35
Брянск (4832)59-03-52	Краснодар (861)203-40-90	Пенза (8412)22-31-16	Томск (3822)98-41-53
Владивосток (423)249-28-31	Красноярск (391)204-63-61	Пермь (342)205-81-47	Тула (4872)74-02-29
Волгоград (844)278-03-48	Курск (4712)77-13-04	Ростов-на-Дону (863)308-18-15	Тюмень (3452)66-21-18
Вологда (8172)26-41-59	Липецк (4742)52-20-81	Рязань (4912)46-61-64	Ульяновск (8422)24-23-59
Воронеж (473)204-51-73	Магнитогорск (3519)55-03-13	Самара (846)206-03-16	Уфа (347)229-48-12
Екатеринбург (343)384-55-89	Москва (495)268-04-70	Санкт-Петербург (812)309-46-40	Хабаровск (4212)92-98-04
Иваново (4932)77-34-06	Мурманск (8152)59-64-93	Саратов (845)249-38-78	Челябинск (351)202-03-61
Ижевск (3412)26-03-58	Набережные Челны (8552)20-53-41	Севастополь (8692)22-31-93	Череповец (8202)49-02-64
Иркутск (395)279-98-46	Нижний Новгород (831)429-08-12	Симферополь (3652)67-13-56	Ярославль (4852)69-52-93
Россия (495)268-04-70	Киргизия (996)312-96-26-47	Казахстан (7172)727-132	