

E-Catalog

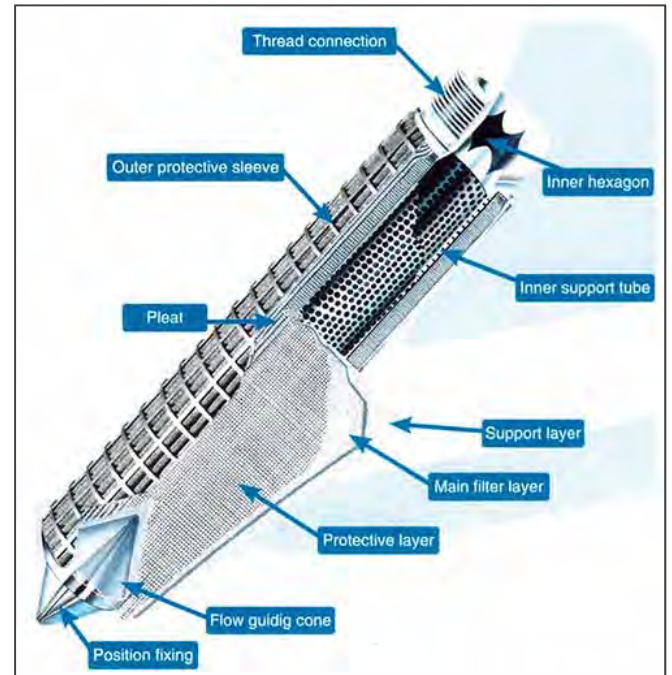


Pleated mesh filter elements

Pleated mesh filter element is made of pleated wire mesh filter media. Different layers of wire mesh and sintered metal fiber fleece or even sintered mesh can be joined as a whole by the processing of pleating and then end welding.

Comparing to ordinary wire mesh filter elements, pleated ones can achieve:

- larger effective filtration area
- excellent dirty holding capacity
- robust structure for better life span



Pleated mesh filter elements- pleats

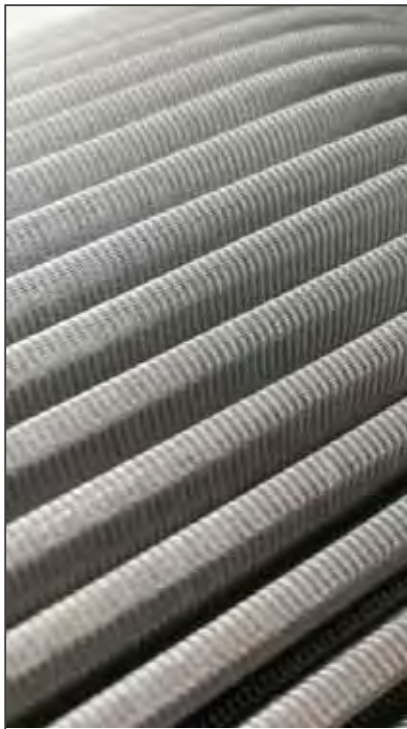
Square weave mesh and Dutch weave mesh are widely used as filter media in various structure and micron rating.

Sintered wire mesh can also be pleated to form filter elements, as it can provide robust structure while eliminating the free space between different pleat layers to obtain better cleanability.

Twilled Dutch weave mesh

Nominal filter rating micron	Absolute filter rating micron	Warp count	Weft count	Porosity %
2	8-9	325	2300	34
5	12-14	200	1400	33
10	16-18	165	1400	37
20	24-26	165	800	47

Square weave mesh



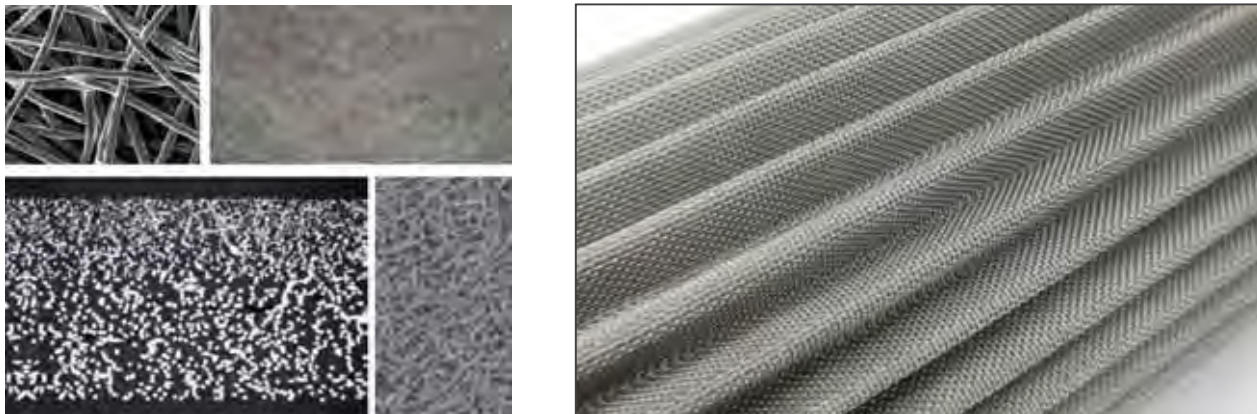
Aperture micron	Wire diameter mm	Mesh count	Open Area %	Thickness mm
20	0.020	635	25	0.04
25	0.025	500	25	0.05
32	0.025	445	32	0.05
42	0.036	325	29	0.08
50	0.040	280	31	0.09
63	0.040	245	37	0.09
71	0.050	210	34	0.11
80	0.050	195	38	0.11
100	0.065	150	37	0.14
150	0.100	100	36	0.20
200	0.120	80	39	0.24
250	0.180	60	34	0.37
300	0.200	50	36	0.40
400	0.230	40	40	0.45



Pleated mesh filter elements- pleats

Sintered metal fiber fleece is felt like metal fiber media. Different metal fibers are laid and diffusion bonded by a process similar with synthetic fiber nonwoven.

Its outstanding feature is high porosity with multi layers structure. Thus it allows high flow rates while keeping high dirty holding capacity. Thanks to its porous structure, it is easy to clean by backwashing or backpulsing.



Absolute Rating μm	Bubble Point Pressure Pa	Average Air Permeability $\text{l/dm}^2/\text{min}$	Thickness mm	Weight g/m^2	Porosity %	Dirt Holding Capacity mg/cm^2
3	12300	9	0.35	975	65	6.40
5	7600	34	0.34	600	78	5.47
7	5045	57	0.27	600	72	6.47
10	3700	100	0.32	600	77	7.56
15	2470	175	0.37	600	80	7.92
20	1850	255	0.49	750	81	12.44
25	1480	320	0.61	1050	79	19.38
30	1235	455	0.63	1050	79	23.07
40	925	580	0.66	1200	77	25.96
60	630	1000	0.70	750	87	33.97

*Data based on Bekaert Bekipor AL3 sintered metal fiber fleece

Cylindrical metal filter elements / filter tube

Main filter media of cylindrical metal filter elements include wire mesh, sintered wire mesh and sintered porous metal powder.

Sintered wire mesh filter offers precision pore size, high permeability, high resistance to temperature and pressure. It can be easily cleaned by backwashing due to cylindrical shape.



Sintered metal powder filter is with low permeability, robust construction and high resistance to corrosion. It is suitable for depth filtration thanks to the porous structure.

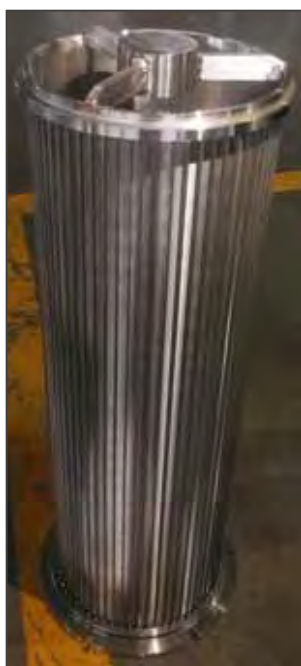


Wire mesh filter is an economical alternative to sintered mesh or powder filter for applications with mild condition and larger filtration rating.

Filter screen for automatic filter

Self cleaning automatic filters usually use screen as the filter element. The filters utilize system pressure to clean the screen with assistance of brush, ultrasonic, vacuum, etc. The filter screen strains and traps the particles and impurities from the liquid source. This buildup causes differential pressure across the inlet and outlet, which then activates the auto backwash procedure. The backflush stream wash the buildup to the drain without pausing or stopping the main filtration stream.

Filter screens can be in form of wedge wire screen, perforated metal, sintered wire mesh with perforated metal, etc. The filter rating ranges from 1 micron to several millimeters.



Wedge wire filter elements / slotted tube

Wedge wire is the filter media which are made from shaped wire. The profile wires are accurately aligned and then welded to the support rods mostly by automatic resistance welding. Both the profile and the support wires can be with certain wedge shape or other section shape such as water drop , circle, or keystone. Wedge wire mainly shows in two forms: slotted tubes (cylindrical filter element) and flat screen (sieve). Filter rating ranges from 25 to 3000 microns.



Advantages of wedge wire:

- Strong construction, high strength
- Excellent media retention
- Superb backwash ability
- Less possibility of clogging
- Long service life
- Low Maintenance costs

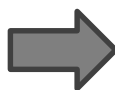


Filter disc



Filter disc is the metal filter disc plate made of sintered wire mesh and support plate / frame. Disc structure can be disc plate assembly or monoblock. The sintered wire mesh can be welded with the frame plate sections, sections then 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 wire mesh filter disc is designed to be compatible with backwash / backflush and can be in service for long time while regularly cleaned. Disc diameter is up to 3000 millimeter as customer needs. Micron rating can reach 1 micron for most demanding application.



Basket strainer

A **basket strainer screen** is generally used for coarse filtration or with low contamination. The dirt/ impurity strained in the basket screen insert can be easily removed during maintenance. The major advantage of a basket strainer is that it is cleanable and reusable. As for piping system, strainers are of great importance to protect equipment, such as pumps, meters, valves, other mechanical parts etc. from potential damage due to impurity and other foreign particles carried by the process fluid (oil, water, etc).

As a filter element, basket strainer screen is usually made of perforated metal or screen mesh to remove larger particles. When fine mesh is used to filter the particles, perforated metal or screen mesh may also be used to support the fine mesh for better strength and life time.



What you need is what we make.

What you need is what we make:

Filter tube for drilling well sand control



Filter elements for sugar industry up to 3.0m long



Filter candle assembly



High capacity pleated filter element 1.0 m long



Cone shape filter



Heavy duty pleated filter element



More possibility happens with the expected cooperation with you!

Facility

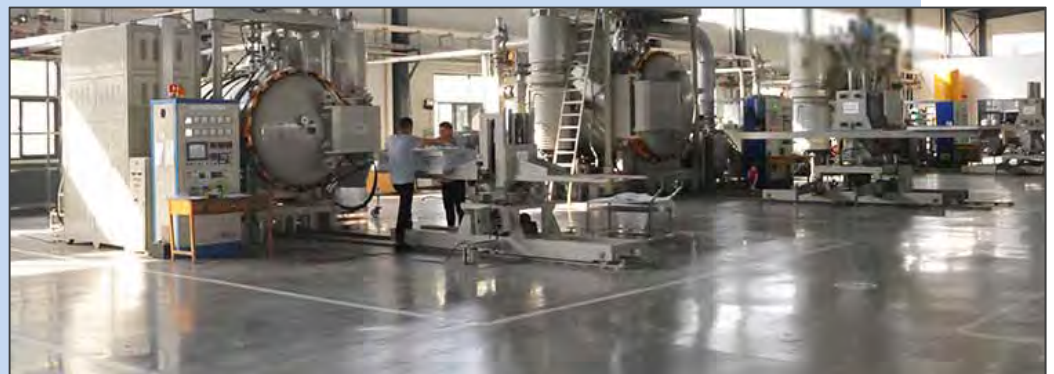
Design & CAD



Lab & Testing



Sintering furnace



Welding & Fabrication



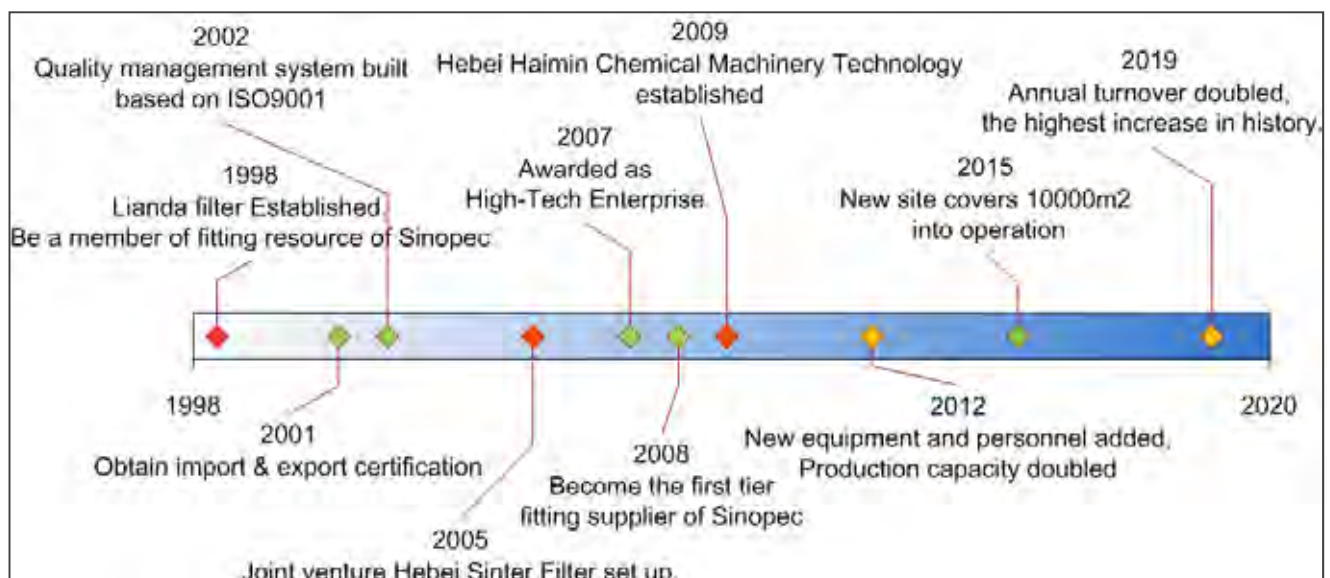
Who we are



[Hebei Lianda Filter Equipment Co., Ltd.](#) was founded in 1998. The company introduces foreign advanced production and testing equipment, production technology and technology, and adopts world-class quality filter materials as the main filter material, specializing in the production of porous metal sintered materials and filter elements. (Melt filter, sintered mesh filter, filter disc, filter and other industrial filters such as air filter, water filter, oil filter), filter and filter system assembly.

Products are widely used in petroleum, chemical, chemical fiber, aviation, aerospace, nuclear industry, pharmaceutical, metallurgy, electric power, water treatment, food and beverage, coal chemical and other industries.

The company relies on Beijing Aerospace Power Research Institute, Sinopec Engineering Design Institute, Beijing Iron and Steel Research Institute and other research institutes to initially form a production situation from raw materials, finished products to filtration system assemblies. He has participated in supporting projects of national key projects such as aviation, aerospace, nuclear industry and petrochemical industry. In recent years, the company has continuously improved its internal management and established a sound quality management system to enable the company to maintain its leading position in product quality and service quality competition.





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