

SCREEN GASKETS HIGH PERFORMANCE FILTRATION SOLUTION

SCREEN GASKETS INTEGRATE HIGH-QUALITY MESH SCREENS FOR FINE AND EFFICIENT PARTICLE FILTRATION, GUARANTEEING THE PROTECTION OF YOUR EQUIPMENT AND THE PURITY OF YOUR PRODUCTS.



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Screen Gaskets

Aseptconn offers Screen Gaskets, high-quality filter gaskets designed to provide effective filtration and protect your equipment. Available in various sizes and materials, these products are perfect for the pharmaceutical, food and chemical industries.

1. Using screen gaskets

Screen Gaskets are much more than a simple gasket: they incorporate high-quality mesh for fine and efficient particle filtration, guaranteeing the protection of your equipment and the purity of your products. Designed for demanding environments, these gaskets offer a reliable and durable filtration solution suitable for a wide range of industrial applications.

The screen gaskets are defined by mesh sizes, expressed in mesh (for example mesh 20, 40, 100). The higher the mesh number, the smaller the size of the openings. The retention sizes of these meshes range from 10 microns to 11'000 microns.

Key benefits



Equipment protection:

Preserve the life of your pumps, filling needles and other critical equipment with fine filtration that blocks harmful particles before they cause damage.



Efficient filtration :

Our mesh efficiently captures particles of all shapes and sizes, protecting your products from potential contamination.



Simplified cleaning :

Screen Gaskets are easy to remove and clean, allowing quick maintenance and minimizing downtime.



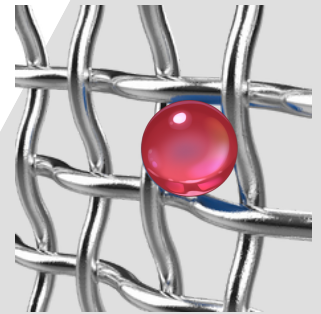
Robustness and durability :

Made from premium materials, including sintered versions for increased strength, our mesh withstands pressure conditions and is ideal for backwash cycles.

3. Composition and mesh types

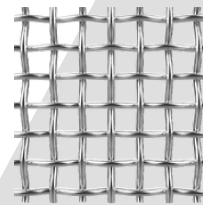
Nominal retention :

Mesh retention is calculated for spherical particles. However, in practice, particle shapes can vary, which can affect actual retention capacity. It is therefore important to consider the physical shape of the particles expected in your system when selecting mesh sizes.

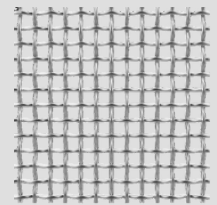


Mesh :

The mesh count describes the number of wires per inch in the length (warp) and width (weft) directions. The opening area is determined by the distance between these wires.



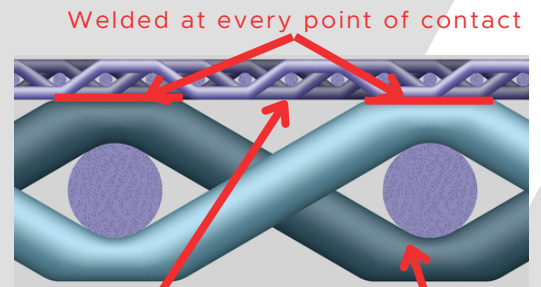
20 Mesh



60 Mesh

Double mesh :

Two layers of mesh can be used together to improve pressure resistance and are suitable for backwash cycles. In these configurations, the meshes are either superimposed or sintered together for better durability. Double-mesh sintered screens are recommended from 100 mesh upwards.



Fine mesh screens

Support screens

3.1. Screen reference chart

Approx. Retention in Microns	Opening in mm	Mesh (wire/inch) Plain WeaveØ	Open Area %	Filter Cloth Twilled Weave	Double Mesh Sintered + 24 Mesh @ PTFE seal
11000µ	11,00	2x2	66	Laser cut holes in 316L plates 1,00 mm thick.	
5156µ	5,16	4x4	65,9		
3340µ	3,34	6x6	62,4		
2464µ	2,46	8x8	60,2		
1905µ	1,91	10x10	56,3		
1617µ	1,62	12x12	52,4		
1414µ	1,41	14x14	51,8		
1218µ	1,22	16x16	50,7		
1061µ	1,06	18x18	48,2		
870µ	0,87	20x20	46,2		
703µ	0,70	24x24	44,1		
527µ	0,53	30x30	37,2		
415µ	0,42	40x40	43		
308µ	0,31	50x50	30,3		
233µ	0,23	60x60	30,3		
180µ	0,18	80x80	31,4		
140µ	0,14	100x100	30,3		x
118µ	0,12	120x120	30,9		
103µ	0,10	150x150	37,2		x
80µ	0,08	200x200	33,6		x
61µ	0,06	250x250	36		x
50µ	0,05	300x300	34		x
43µ	0,04	325x325	30	-	x
30µ	0,03		-	165x800	x
21µ	0,02		-	165x1400	x
14µ	0,01		-	200x1400	x
10µ	0,01		-	325x2300	x

4. Materials

Standard screen gaskets are made of 316 stainless steel, while sintered versions are made of 316L, offering better weldability. The materials used for the gaskets include:

- ✓ EPDM (CDM-1004)
- ✓ FKM (CDM-1010)
- ✓ Platinum Silicone (CDM-1012)
- ✓ Steam-Flon® (CDM-1019)
- ✓ Virgin PTFE (CMD-1028)

5. Main Applications



Pump protection:

Prevents debris from damaging pumps, especially when starting up new piping systems.

Filling needles:

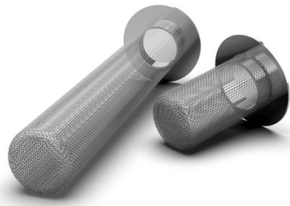
Used as a fine filter upstream of the needles to prevent particles from contaminating vials or bags.



Water for injection systems (WFI):

Used at the point of use with relatively low pressure loss (90 mbar at 6m³/h for a 1.5" mesh of 100 mesh).

6. Different mesh configurations



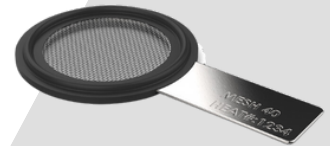
Sock Screens

For high particle retention, these screens can accumulate 8 to 10 times more dirt than flat screens. Available in several lengths (25, 50, 150 mm) and mesh sizes (10 to 100 mesh).



Perforated screens:

Stainless steel plates with holes of various sizes, used to capture large debris.



Screens with tabs:

Allows easy identification of the installed screen size without disassembling the system, with the possibility of laser engraving for visible information on the outside.

7. Available options and standards

Screen Gaskets comply with numerous international standards:

- FDA CFR 177.2600
- USP 30, 35, 42, 44 for cytotoxicity tests and physicochemical testing
- EC1935/2004 for food contact materials (only for water and acids)

Available in various sizes and compliance with DIN32676, ISO1127 and SMS3017 standards.

Why choose them?

Aseptconn offers a wide range of Screen Gaskets, available in different sizes and materials, meeting the strictest standards for pharmaceutical, food, and chemical industries. Optimize your processes with our reliable and durable solutions!

Contact us today for more information!