FILTER COMPONENTS

Stainless Steel Wire Mesh

Screening and filtration mesh woven from AISI 304 and 316 stainless steel wire. It offers 4–325 mesh in plain weave and apertures down to 5 µm with Dutch weave; used for making baskets, cartridges and screens, in liquid filtration and in dry screening.



STAINLESS GRADE	PLAIN WEAVE	FINE FILTRATION	ROLL WIDTH
AISI 304/316	**4–325 mesh**	**5 µm**	**Max. 1 m**
incl. 304L / 316L	5350–43 µm aperture	Dutch / Twilled Dutch	Length on request · m²

Technical specifications

Stainless grade	AISI 304 / 304L · AISI 316 / 316L
Composition	304: 18% Cr, 8% Ni · 316: 18% Cr, 10% Ni, 2% Mo
Weave type	Plain · Twill · Dutch · Twilled Dutch
Mesh range	4–325 mesh (plain square weave)
Aperture	5350–43 µm (plain weave) · Down to 5 µm with Dutch and Twilled Dutch
Wire diameter	0.035–1.5 mm (depending on mesh count)
Open area	28–71% (depending on mesh and wire diameter)
Special types	Welded · Crimped · Pressed wire mesh (project basis)
High temperature	Used in hot processes where polymer media such as polypropylene cannot be used
Surface	Inert metal surface that releases nothing into the process; can be washed and reused
Supply form	Roll · Width max. 1000 mm · Length cut on request
Sales unit	m²
Use	Liquid and gas filtration · Dry screening · Basket, cartridge and screen manufacture · Machine protection
Order information	Grade · Weave type · Mesh · Wire diameter · Aperture · Size · Fluid and temperature

Mesh and aperture

MESH	WIRE Ø (MM)	APERTURE (µM)	OPEN AREA %
4	1	5350	71
5	1	4080	65
6	1	3230	58
8	0.65	2530	63
10	0.57	1970	58
12	0.57	1547	53
14	0.47	1340	55
16	0.37	1220	59
18	0.37	1040	54
20	0.25	1020	58
20	0.45	820	42
25	0.3	716	52
30	0.3	545	42

Plain square weave, nominal values within production tolerances.

Mesh and aperture (continued)

MESH	WIRE Ø (MM)	APERTURE (µM)	OPEN AREA %
40	0.2	425	51
40	0.25	385	37
50	0.18	330	42
60	0.14	280	44
80	0.12	200	39
100	0.1	154	37
120	0.09	120	37
150	0.06	109	39
180	0.05	90	42
200	0.05	77	37
250	0.04	61	36
300	0.04	45	32
325	0.035	43	32

The same mesh gives a different aperture at a different wire diameter.

Weave types

Plain
Square apertures; the most common type in filtration. General screening, straining, machine protection.

Twill
Each wire passes over and under two; thicker wire at the same aperture, high pressure resistance.

Dutch · Twilled Dutch
Warp and weft of different diameters; micron-level filtration plain weave cannot reach.

Use and maintenance

- AISI 304 for general, dry and slightly humid conditions; AISI 316 / 316L for salt water, chloride, acids.
- For high temperatures, choose the grade and wire diameter with our technical team.
- State mesh, wire diameter and micron rating together when ordering; mesh alone is not enough.
- Higher open area means higher flow; thicker wire increases strength but reduces open area.
- Wire mesh can be cleaned, washed and reused.

Values in this data sheet are typical and for information only. Product selection should be made with our engineers based on process fluid, temperature, pressure and flow conditions. Proses T.İ.M. reserves the right to change product specifications without prior notice.

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