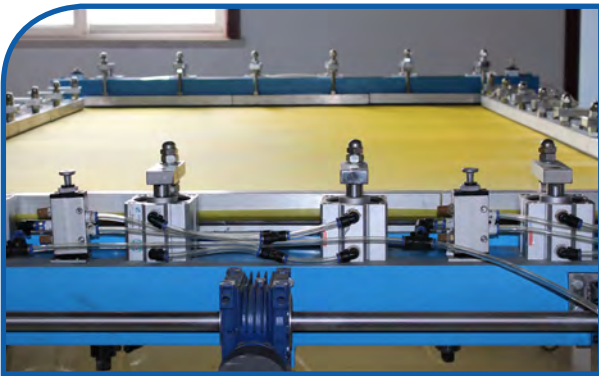


SCREEN PRINTING MESH

Wide Ranges of Materials and Sizes for Printers and Stencil Makers

- *Polyester (PET) Monofilament*
- *Nylon (PA) Monofilament*
- *Stainless Steel Woven Mesh*





EASTAR Filter Industry Co., Ltd, established in 2014, is fast developing and seeking win-win cooperation with all our valued customers. We can supply a broad range of polyester and nylon monofilament mesh as well as stainless steel wire mesh.

- **Developing.** Established in 2014, which is fast developing and innovating.
- **Advanced.** Advanced equipment are brought to guarantee qualified products and low production loss.
- **Strict.** Strict quality control system ensure all products are qualified for our customers.
- **Professional.** Professional sales representatives suggest ideal specifications and answer your doubts.
- **Technical Support.** Technical data, product catalog and drawings can be supplied if you need.
- **Discount.** Special and surprise discount is ready for your large orders and distributors.

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SCREEN PRINTING MESH

Cost effective & Reproducible for Stencil and printing industries.

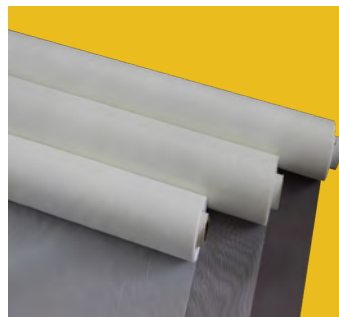
Screen printing, also known as silk screen printing, occupying important position in an almost infinite number of objects that are printed and produced, which touch our lives every day: textiles, garments, glass, printed circuit board and electronics, car, packaging, ceramics and plastics, solar cells and many more.

EASTAR can supply you many different printing and manufacturing industries with different materials and wide ranges of mesh counts options.



Nylon Monofilament

It is the best performing range of screen printing mesh to be used almost all screen printing applications.



Nylon Monofilament

It has high abrasive resistance performance and high elasticity for Abrasive Inks and Shaped Substrates.



Stainless Steel Woven Mesh

It is the most reproducible and durable to achieve highest level of accuracy in electronics and solar cell industries.

Definition of Screen Printing Meshes

■ Warp/Weft

The longitudinal direction of the mesh weave is known as the warp and the lateral direction is known as the weft. We work exclusively with polyester, nylon and stainless steel wires, which meet the highest specifications in terms of thickness tolerances, flexural strength and wire surface quality.

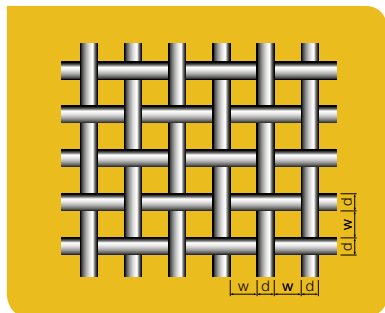


■ Mesh Opening w Wire Diameter d

The two most important variables of BOPPSD meshes are the mesh opening (w) and the wire diameter (d).

Example: PSMP-816-200

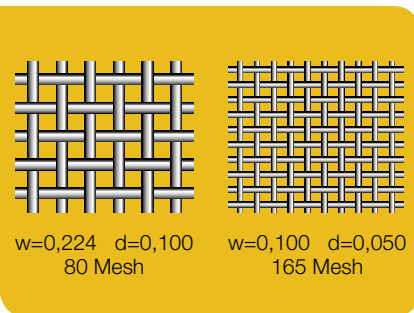
816 = Mesh opening w in micron
200 = Wire diameter d in microns



■ Mesh Fineness

The mesh fineness identifies the number of wires per imperial inch (mesh count):

$$\text{Mesh} = \frac{25.4 \text{ mm}}{(w/\text{mm} + d/\text{mm})}$$

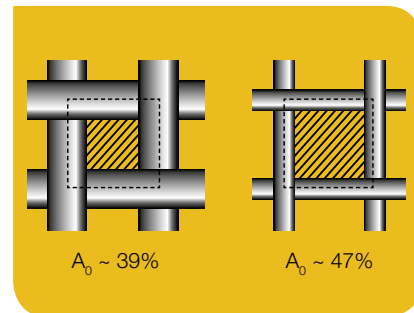


■ Open Area A₀

The open area describes the total open area in terms of mesh apertures across the entire surface of the mesh. The bigger the open area, the greater the colour throughput.

$$\text{Open area } A_0 = \left(\frac{w}{w + d} \right)^2 \times 100\%$$

Example: PSMP-816-200: 65%



■ Mesh Thickness D

The mesh thickness is determined by the wire diameter and the weaving technique. The thickness measurement is taken with the mesh untensioned, using a gauge (measuring pressure 1.8N) on a rigid base. The tolerance values for unrolled mesh lie between +/- 2 to +/- 5 microns, dependent upon mesh type. Inside the roll, the tolerances are significantly higher.

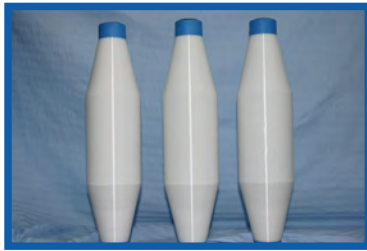
■ Theoretical ink deposit V_{th}

The theoretical ink deposit describes the volume of the open mesh calculated on the area of the substrate. In the event of insufficient colour lay down, a mesh with a high V_{th} should be used.

$$V_{th} \left(\text{cm}^3/\text{m}^2 \right) = \left(\frac{w}{w + d} \right)^2 \times D \text{ or } A_0 \times D$$

■ Tensioning

Correct tensioning values depend upon the application. The values given in our specifications are only recommendations.



Yarn



**Yarn
Inspection**



Wrapping



**Drawing on
Heddle and Reed**



Weaving



Initial Inspection





Polyester (PET) Screen Printing Mesh

Polyester monofilament mesh is the most widely used screen printing mesh for textile, glass, ceramic, electronics and solar industries.

It provides excellent reproducible printing results and exceptional and accurate image quality and durability. Additional, the wide ranges of mesh counts for different printing substrates can satisfy your most of printing requirements.

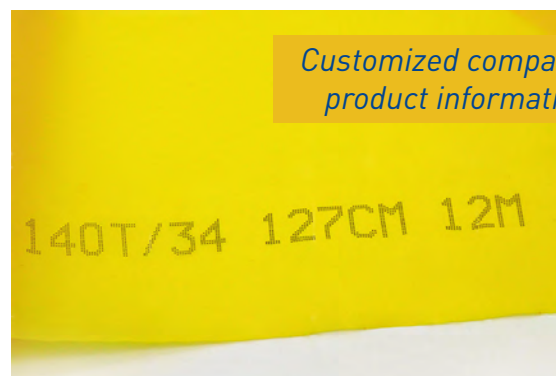


Advantages

- Low elongation.
- High tensile strength.
- Wide ranges of mesh counts for choice.
- Ideal for stencil maker and screen printers.
- Custom service can be supplied for different requirements.
- Special discount for large orders.
- Large stocks for urgent orders.
- ISO certificated factory guarantee printing screen mesh qualities.



Different widths options



Customized company & product information

Dimensions

- **Material:** 100% polyester monofilament fiber.
- **Color:** white or yellow.
- **Mesh counts:** 10T to 165 T (25 mesh to 420 mesh).
- **Width:** 0.6–3.68 m.
- **Weave method:** plain weave.
- **Length:** 30/50/100 m and customized lengths.

Technical Data of Polyester Monofilament Screen Printing Mesh

Specification	Mesh Count	Thread Diameter	Aperture	Opening	Thickness	Ink Through Volume Theoretical	Tensile Strength
	mesh/inch	micron	micron	%	micron	cm ³ /m ²	n/cm
10-200	25	200	816	65	440	276	42
10-250	25	250	740	53	465	246	60
12-200	30	200	522	47	485	228	62
16-200	40	200	435	47	420	189	48
20-140	50	140	340	46	280	129	52
20-180	50	180	320	41	350	152	56
24-100	60	100	316	58	190	109	48
24-120	60	120	300	51	210	105	42
32-100	80	100	200	43	160	69	42
36-100	90	100	178	41	175	72	42
39-55	100	55	201	62	100	62	30
39-80	100	80	172	46	142	65	42
43-80	110	80	150	41	130	55	35
48-70	120	70	135	41	115	46	32
53-55	135	55	134	50	105	53	34
54-64	137	64	115	39	102	40	30
59-55	150	55	100	40	93	39	32
64-55	160	55	101	42	105	44	30
64-64	160	64	90	32	106	34	35
72-48	180	48	94	46	80	37	32
72-55	180	55	75	29	92	27	32
77-55	195	55	70	25	88	24	29
80*48	200	48	78	30	84	24	29
80-55	200	55	70	25	88	24	29
90-48	230	48	55	25	78	20	33
100-40	250	40	58	32	65	21	29
110-40	280	40	48	27	65	17	30
120-34	300	34	45	30	55	16	30
120-40	300	40	40	20	55	16	29
140-31	350	31	35	26	48	13	27
140-34	350	34	30	20	55	10	30
150-31	380	31	32	23	47	10	28
150-34	380	34	30	20	69	10	30
165-31	420	31	25	17	49	8	28

Nylon Screen Printing Mesh

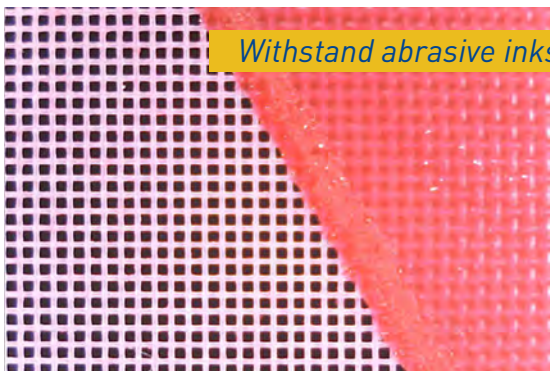
Nylon screen printing mesh, also called PA screen printing mesh, is made of polyamide yarn. It is an alternative to polyester screen printing mesh for various substrates printing, especially in ceramic, plastic and glass industries.

Nylon screen printing mesh has excellent abrasive resistance performance to be used with high abrasive inks and the high elasticity performance make it easy to printing hollow ware glass or ceramics.

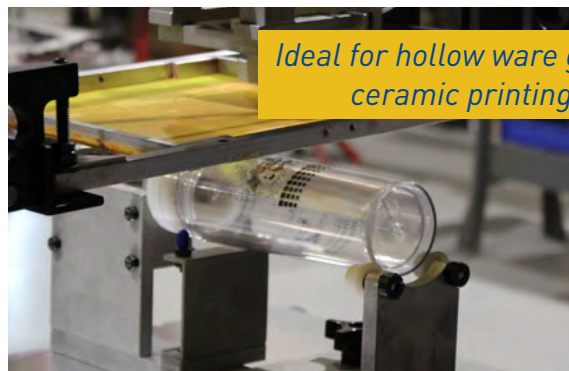


Advantages

- Abrasive resistance.
- High elasticity.
- Excellent adhesion properties.
- Wide ranges of mesh counts for choice.
- Ideal for shaped substrates.
- Custom service can be supplied for different requirements.
- Special discount for large orders.
- Large stocks for urgent orders.
- ISO certificated factory guarantee printing screen mesh qualities.



Withstand abrasive inks



Ideal for hollow ware glass/ ceramic printing

Dimensions

- **Material:** 100% polyester monofilament fiber.
- **Mesh counts:** 10T to 165 T (25 mesh to 420 mesh).
- **Weave method:** plain weave.
- **Color:** white or yellow.
- **Width:** 0.6–3.68 m.
- **Length:** 30/50/100 m and customized lengths.

Specifications of Nylon Screen Printing Mesh

Item	Mesh Opening	Mesh Count	Thread Diameter	Open Area	Thickness
	μm	(mesh/inch)	(μm)	(%)	(μm)
PSMN-4-600	1900	10	600	60	1200
PSMN-5-500	1500	13	500	55	1000
PSMN-6-400	1267	15	400	57	800
PSMN-7-350	1079	18	350	56	700
PSMN-8-350	900	20	350	51	700
PSMN-9-300	811	23	300	58	570
PSMN-9-250	861	23	250	59	500
PSMN-10-250	750	25	250	55	500
PSMN-10-300	700	25	300	48	600
PSMN-12-300	533	30	300	40	600
PSMN-12-250	583	30	250	48	500
PSMN-14-300	414	36	200	33	510
PSMN-16-200	425	41	200	45	340
PSMN-16-220	405	41	220	40	385
PSMN-16-250	375	41	250	35	425
PSMN-20-150	350	51	150	46	255
PSMN-20-200	300	51	200	35	340
PSMN-24-120	297	61	120	51	235
PSMN-24-150	267	61	150	40	255
PSMN-28-120	237	71	120	44	210
PSMN-30-120	213	76	120	40	204
PSMN-32-100	213	81	100	45	170
PSMN-32-120	193	81	120	41	205
PSMN-34-100	194	86	100	44	180
PSMN-36-100	178	91	100	40	170
PSMN-40-100	150	102	100	35	170
PSMN-56-60	119	142	60	43	102
PSMN-64-60	96	163	60	37	102
PSMN-72-50	89	183	50	40	85
PSMN-80-50	75	203	50	35	85
PSMN-90-43	68	229	43	37	85
PSMN-100-43	57	254	43	31	80
PSMN-110-43	48	279	43	25	76
PSMN-120-43	40	305	43	21	80
PSMN-120-38	45	305	38	25	65
PSMN-130-35	42	330	35	25	60

Stainless Steel Screen Printing Mesh

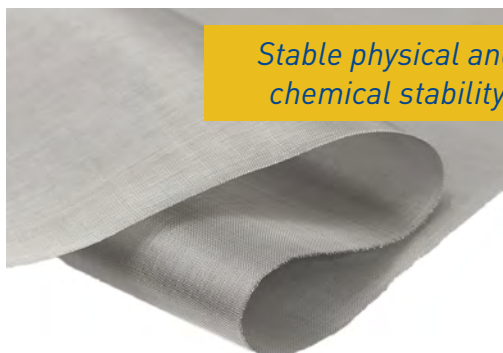
Stainless steel screen printing mesh is made of plain weave stainless steel wire threads with high tensile strength and yield stress properties.

It has excellent chemical and physical properties, uniform opening and high accuracy performance to be used in various screen printing industries and applications. Especially, it performs good in solar panel screen printing and PCB screen printing applications.



Advantages

- High corrosive resistance.
- Good heat-melting resistance.
- Good solvent resistance.
- High tension and low elongation.
- Wide ranges of mesh counts for choice.
- Special discount for large orders.
- Large stocks for urgent orders.
- ISO certificated factory



Stable physical and chemical stability



Supply the most producible result

Dimensions

- **Material:** stainless steel wires.
- **Mesh counts:** 200 mesh to 500 mesh.
- **Weave method:** plain weave.
- **Width:** 48" or 40" or other customized widths.
- **Length:** 30 m and customized lengths.

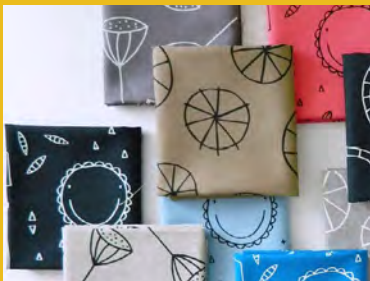
Specifications of Stainless Steel Printing Screen Mesh

Item	Mesh count	Thread Diameter	Open Area	Aperture	Theoretical ink
	mesh/inch	μm	%	μm	cm3/m2
SPMS-200-50	200	50	37.0	77	42.0
SPMS-230-35	230	35	46.7	75	37.0
SPMS-250-40	250	40	36.8	62	34.0
SPMS-250-30	250	30	49.7	72	30.0
SPMS-250-35	250	35	43.0	67	32.0
SPMS-270-35	270	35	39.4	59	30.0
SPMS-300-30	300	30	41.7	55	28.0
SPMS-325-30	325	30	38.0	48	24.0
SPMS-325-28	325	28	41.2	50	26.4
SPMS-325-23	325	23	49.8	55	25.4
SPMS-350-25	350	25	43.0	48	18.7
SPMS-400-23	400	23	40.7	41	19.0
SPMS-400-18	400	18	51.3	46	20.0
SPMS-500-18	500	18	41.7	33	15.3

Applications

Textiles

- Garments/T-shirts
- Flatbed Textiles & Heavy Fabrics
- For High-end Textiles & Light Fabrics



Electronics

- Printed Circuit Board (PCB)
- Membrane Switches
- Batteries
- Dials
- Touch Screens



Ceramics

- Ceramic decals
- Hollow ware ceramics
- Tiles



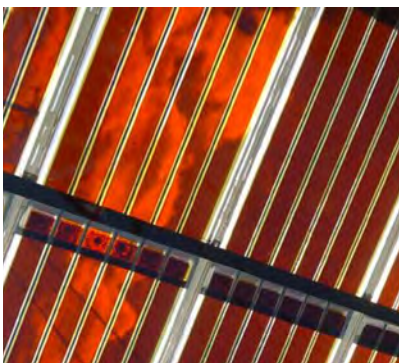
Glass

- Automotive glass
- Architectural decoration glass
- Home appliance glass



Solar Cells

- Crystalline solar cells
- Dye-sensitized solar cells



Plastic & Packaging

- Plastic bottles
- Plastic packages





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