

Polymer Extruder Screen

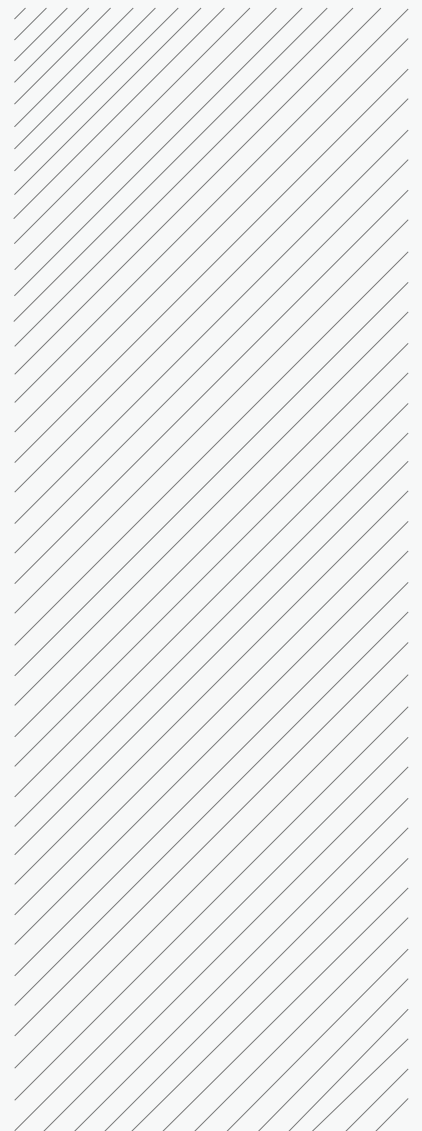
Weave Impossible to Possible



BOEDON Industech Limited

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BOEDON Brochure



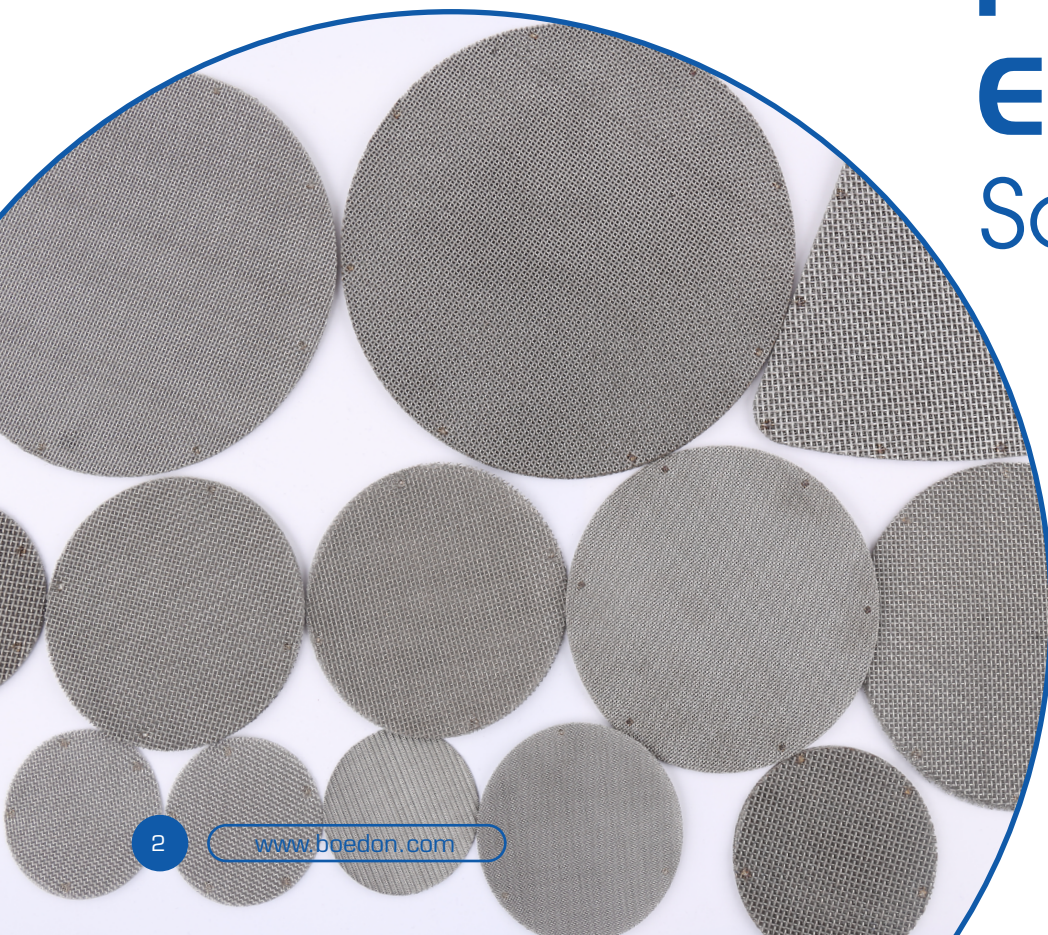
We can offer a variety of polymer extruder screens to meet your specific requirements of extruding process and polymer melt filtration applications.

Polymer extruder screen is made of high quality corrosion resistance materials (galvanized copper, stainless steel and nickel alloy). A wide range of micron ratings are available to meet different filtration demands.

Polymer extruder screens are widely used for filtration and co-mingling processes in the production of various viscous flow materials and products such as plastics, chemical fibers, rubber, hot melt adhesives, adhesives, finishing materials, blends, etc. It can effectively block foreign matter from being mixed in the final plastic and rubber extrusion process and provide a clean, viable extrusion.

As we use high quality non-toxic raw materials, our polymer extruder screens can also be used in the food and beverage industry.

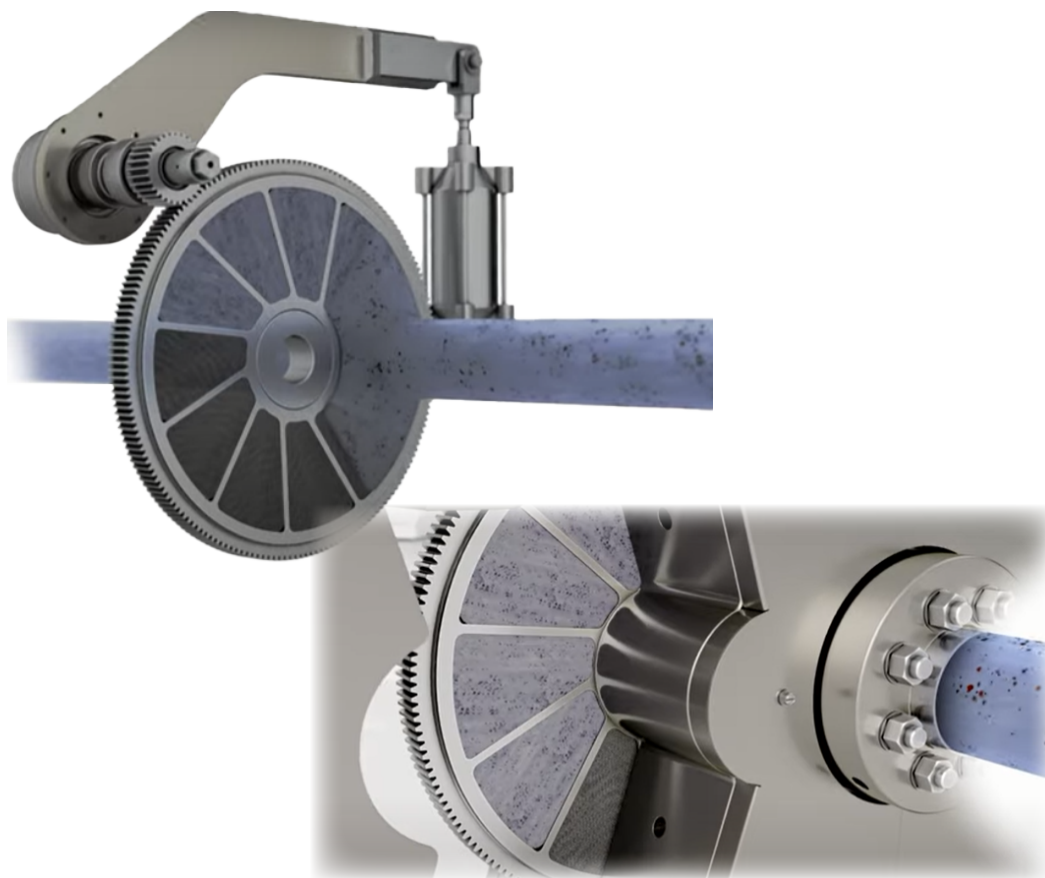
Polymer Extruder Screen



POLYMER EXTRUDER SCREEN

Working Principle

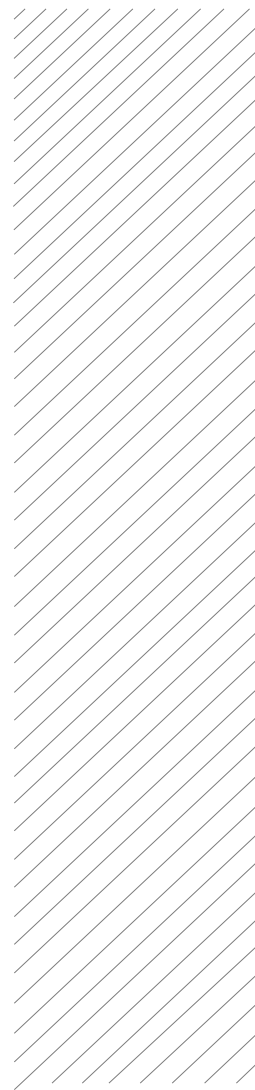
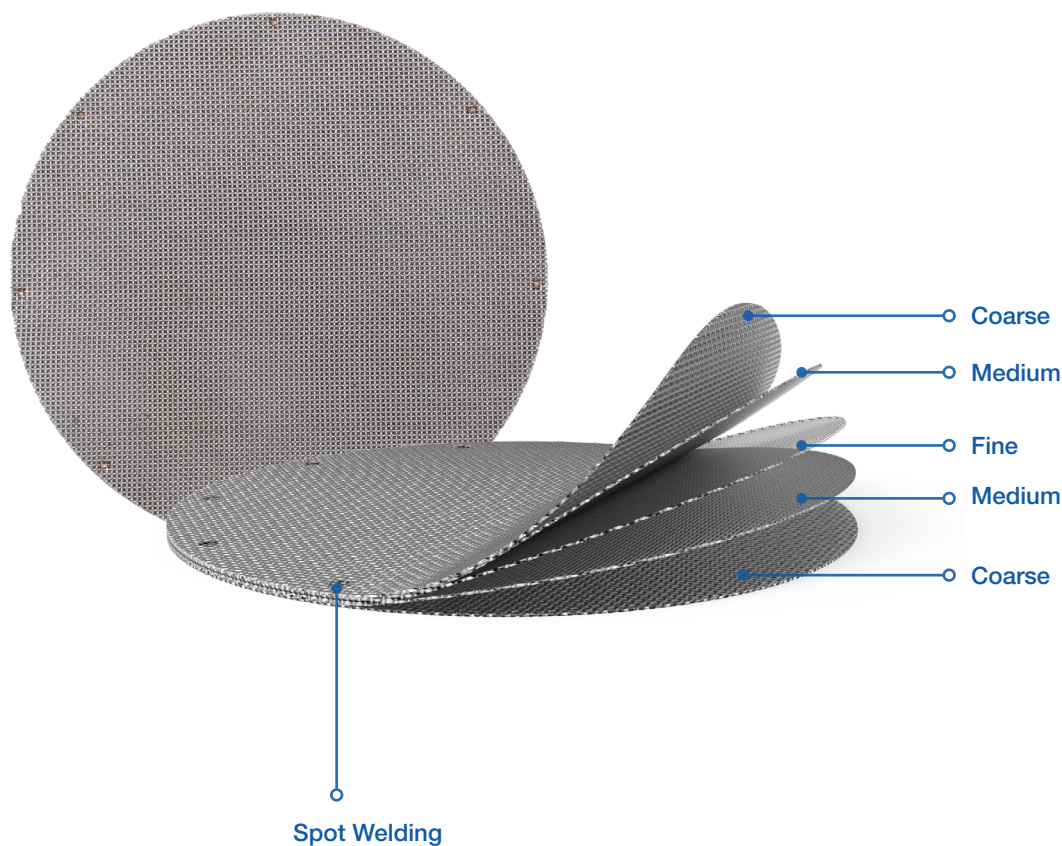
The filter disk is equipped with a large number of polymer extruder screens. The filtration time or pressure value is preset. The melt enters from the inlet, the screen at the inlet starts to filter impurities and gel impurities are trapped on the screen surface. When the filtration time or pressure reaches the preset value, the filter disk begins to rotate. The clean part of the screen rotates to the inlet and starts to filter impurities, meanwhile the screen saturated with impurities moves to the screen change port. The turntable stops rotating, the screen change port opens, the screen with impurities is removed and replaced with a clean screen. In this process, the resting part of the screen keeps operating smoothly, thus realizing continuous operation.



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Structure

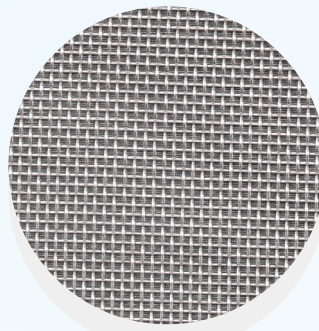
Polymer extruder screen is generally made of plain weave and Dutch weave wire mesh. The plain weave wire mesh features simple structure, economic to process and high cost-effectiveness and can meet the most filtration requirements of plastic products and rubber industries. In a filter, the Dutch weave wire mesh plays the role of fine filtration without requiring a backup filter screen, featuring high strength, high load capacity, simple structure and long service life.



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Manufacturing Process

Polymer extruder screen is generally made of plain weave and Dutch weave wire mesh. The plain weave wire mesh features simple structure, economic to process and high cost-effectiveness and can meet the most filtration requirements of plastic products and rubber industries. In a filter, the Dutch weave wire mesh plays the role of fine filtration without requiring a backup filter screen, featuring high strength, high load capacity, simple structure and long service life.



Plain Weave

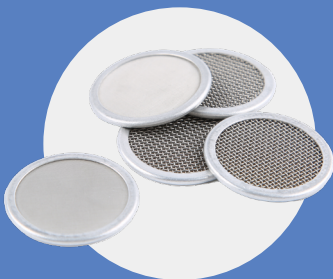


Dutch Weave

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Material

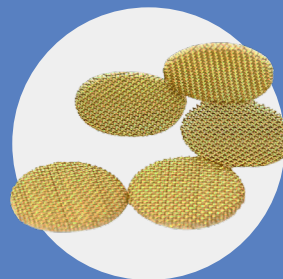
In terms of the filter media selection, the working conditions of the polymer extruder screen shall be taken into fully consideration. For example, we will choose stainless steel wire mesh in some PVC production lines or other applications need to avoid rust, and nickel alloy wire mesh is used to avoid corrosion caused by fluoropolymers or PVDC.

**Stainless steel.**

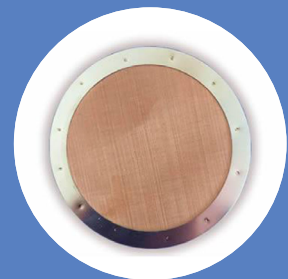
Good corrosion resistance and rust resistance.

**Black wire.**

Exceptional durability.

**Brass.**

Good ductility and machinability.

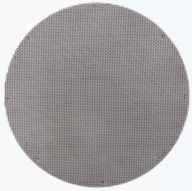
**Copper.**

Great conductivity and soft texture.

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Shape

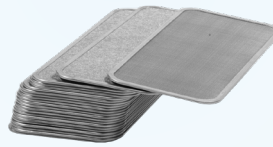
Our polymer extruder screen can be designed into different shapes to meet the need of different extruders.



Round



Ring



Rectangular



Oval

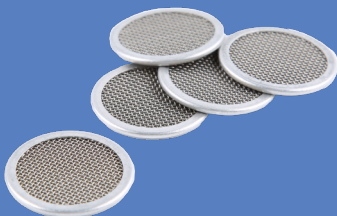


Kidney

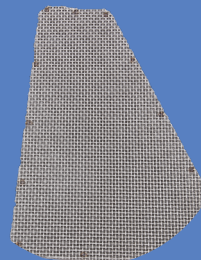
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Edge Processing

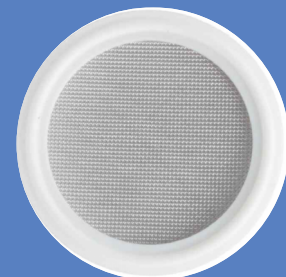
We offer metal (stainless steel or aluminum alloy) edges, spot welded or rubber edges to reduce the wear and tear of the polymer extruder screen, improve the durability and strength of the screen, ensure the stability of the overall structure and extend the life of the screen. Other edges are available upon request.



Aluminum alloy edge
Solid structure and improved abrasion resistance.



Spot welded edge
Not easy to be damaged and deform, and offers an extended service life.



Rubber edge
Elastic edges to offer good ductility and great stress resistance.

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Specification

To ensure the polymer extruder screen offers the most effective filtration and extrusion, when you choosing the product, the following aspects shall be taken into consideration: weave type (plain weave or Dutch weave), mesh count (the number of mesh per square inch), wire diameter and open area.

Popular Specifications of Plain Weave Polymer Extruder Screen

Mesh	Wire Diameter (mm)	Opening Size (mm)	Open Area (%)
10 × 10	0.711	1.829	51.8
14 × 14	0.457	1.357	55.9
16 × 16	0.457	1.131	50.7
20 × 20	0.559	0.711	31.4
20 × 20	0.457	0.813	41.0
24 × 24	0.376	0.682	41.4
30 × 30	0.376	0.531	34.2
30 × 30	0.310	0.536	40.0
40 × 40	0.274	0.361	32.3
50 × 50	0.193	0.335	43.6
60 × 60	0.193	0.230	29.8
80 × 80	0.122	0.196	37.9
100 × 100	0.102	0.152	36.0
120 × 120	0.091	0.120	31.8
150 × 150	0.071	0.088	29.6
200 × 200	0.050	0.077	36.76
250 × 250	0.040	0.062	36.76
300 × 300	0.040	0.045	27.83
325 × 325	0.035	0.043	30.49
400 × 400	0.028	0.036	31.25
500 × 500	0.025	0.026	25.79

Notes: Other specifications are available upon request.

Popular Specifications of Dutch Weave Polymer Extruder Screen

Mesh	Wire Diameter (mm)	Opening Size (mm)	Open Area (%)
12/64	26 × 26	0.457 × 0.457	180
24/110	28 × 32	0.376 × 0.274	115
30/250	38 × 42	0.132 × 0.102	70
50/250	38.5 × 41	0.140 × 0.112	60
50/600	40 × 44	0.122 × 0.081	30
80/400	40 × 45.5	0.102 × 0.063	40
80/700	42 × 44	0.102 × 0.063	35
100/600	42 × 45.5	0.102 × 0.081	25
120/600	42 × 45.5	0.102 × 0.063	28
170/1400	43.5 × 48	0.063 × 0.040	10
200/600	47 × 48	0.50 × 0.040	20
325/2300	48 × 40	0.40 × 0.122	5

Notes: Other specifications are available upon request.

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Application



Plastic & Plastic Recycling

- Plastic waste recycling
- Plastic impurities removal during plastic film production



Chemical Fiber

- Polyester fiber production
- Non-woven fabric production, etc.



Rubber

- Tire production
- Rubber products production



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