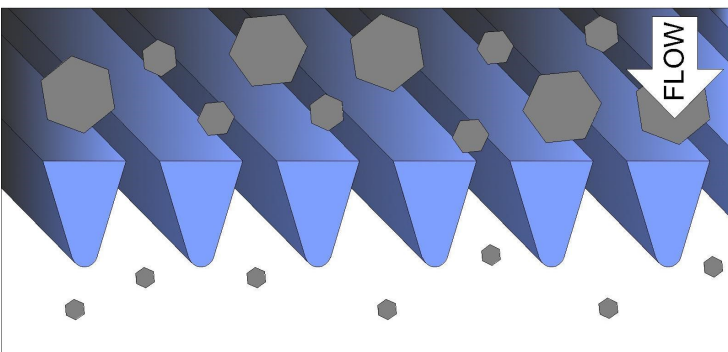
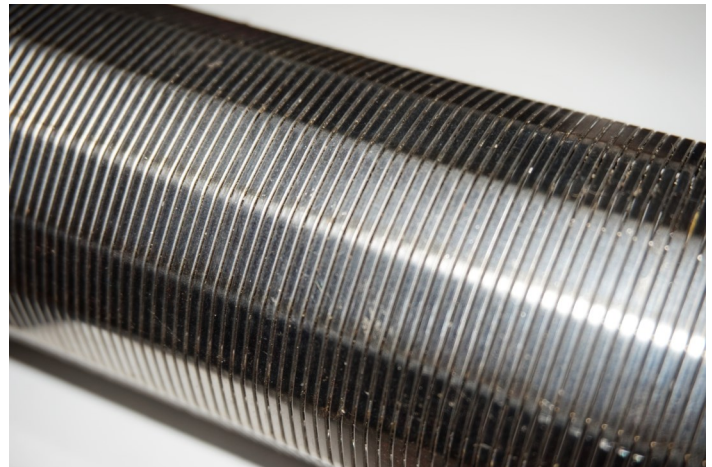


FILTER SOLUTIONS INC.

WEDGE WIRE SCREENS HIGH EFFICIENCY, HIGH CAPACITY

Quality Screens.... Consistent Filtration....

- **Wedge wire** screens are manufactured by resistance welding vee-shaped wire on support rods. The distance between the vee-shaped wire is controlled accurately, as it forms the slot through which the filtrate flows. Welding is performed in a continuous rolled motion to join the wire and the rods. The welding process welds the continuous length of the wire to the rods as it circulates.
- The **Vee-shaped** opening results in only two contact points between the retained particles and the slot. This minimizes clogging and increases backwashing efficiency.



FEATURES

- Screens are available in slot sizes from 0.001 in. (25µm) up to 1 in. (25 mm).
- The most common material of construction is 300 series stainless steel, however many exotic alloys are available such as 321SS, 347SS, Duplex SS, Alloy 20, Hastelloy C-76, Alloy B-3, Titanium, Monel 400, etc.
- Screen diameters from 0.787 in. (20 mm) and larger.

INDUSTRY APPLICATIONS

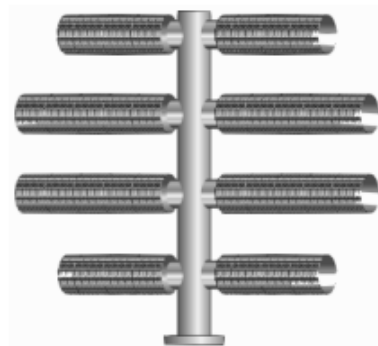
Industry

- Water and waste water
- Pulp and paper
- Chemical
- Petrochemical
- Water Supply
- Mineral and aggregate processing
- Plastics extrusion
- Machine coolant filtration
- Architectural applications
- Water Well
- Construction
- Drilling

Applications

- Separating
- Filtering
- Media retention
- Sizing
- Dewatering
- Classifying
- Straining
- Drying
- Water Intake
- Fish diversion
- Backwashing
- Centrifuges
- Floor Grating

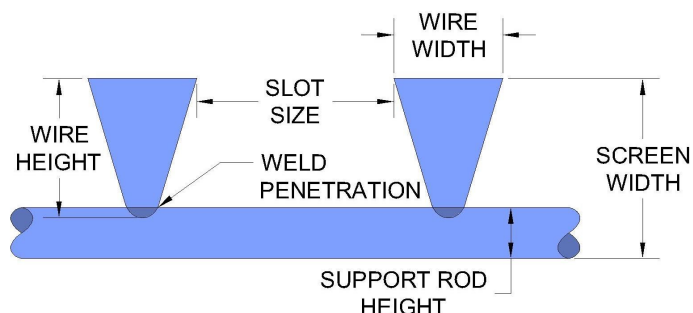
CUSTOM SOLUTIONS



Wedge wire products manufactured by Filter Solutions include:

- Flat Screens
- Support Grids
- Candle Filters
- Cartridges
- Nozzles
- Resin Traps
- Screen Lateral Systems
- Fractal Collectors and Distributors
- Sieve Bends and Boxes
- Cylindrical Baskets
- Conical Baskets
- Pressure Screens
- Screw Press Screens
- And much more.....

CONSTRUCTION DETAILS



Quality Screens.... Consistent Filtration....

Screens can be made in various different configurations, including cylindrical, flat, or curved.

Many different variations of wire and rod sizes and slot size (opening) can be chosen to develop the exact screen of your choice. A wide range of wire and rod shapes make it possible to achieve the optimum balance of strength, open area, abrasion resistance and filtration efficiency.

$$\text{OPEN AREA (\%)} = \frac{\text{SLOT SIZE} \times 100}{\text{SLOT SIZE} + \text{WIRE WIDTH}}$$

STANDARD WOUND

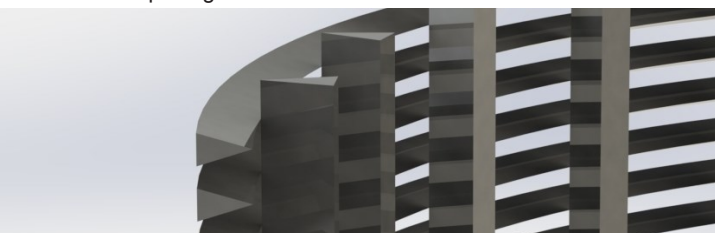
External circumferential wire and axial internal support rods.

BENEFITS

- Flow Outside to Inside
- Economical
- Suitable for most applications
- Precision openings

APPLICATIONS

- Resin Traps
- Nozzles
- Header laterals
- Candle Filters



EXTERNAL AXIAL

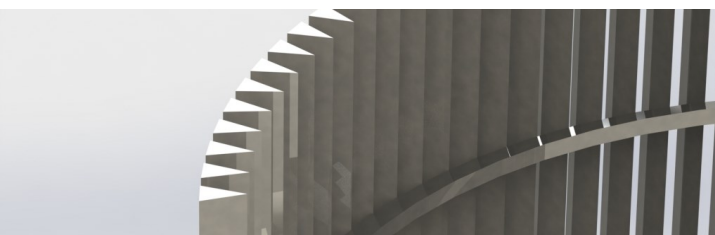
Re-rolled construction. External axial wire with internal circumferential support rods.

BENEFITS

- Flow Outside to Inside
- Facilitates cleaning with an external axial-movement scraper

APPLICATIONS

- Automatic Filters



CONSTRUCTION DETAILS

Quality Screens.... Consistent Filtration....



INVERTED WRAP

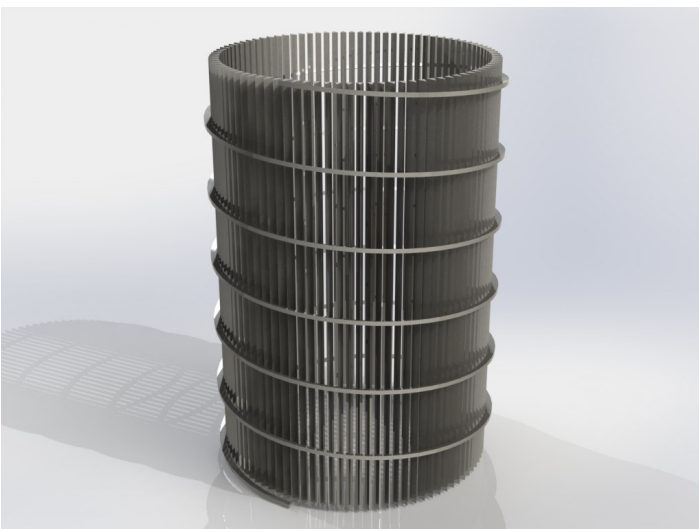
External circumferential inverted wire and axial internal support

BENEFITS

- Flow Inside to Outside
- Economical

APPLICATIONS

- Backwashing automatic strainers



INTERNAL AXIAL

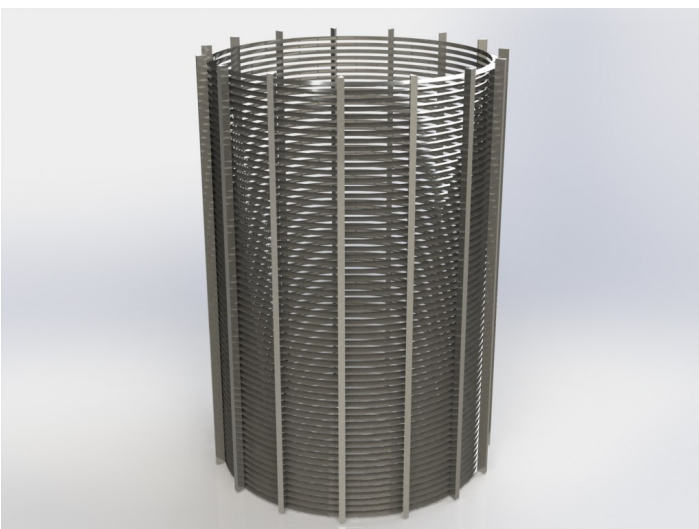
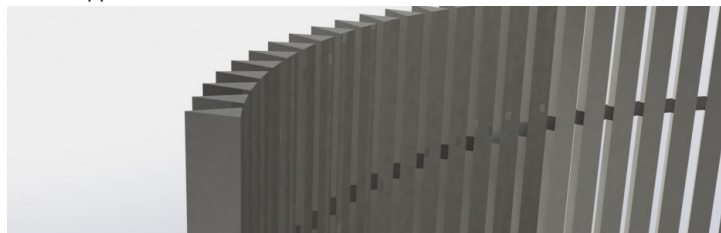
Wire based construction. Internal axial wire with external circumferential support rods.

BENEFITS

- Flow Inside to Outside
- Smooth internal screen surface
- Facilitates cleaning with an internal axial-movement scraper.

APPLICATIONS

- Dewatering systems
- Baskets
- Systems with a internal rotor or screw



REVERSE FORMED

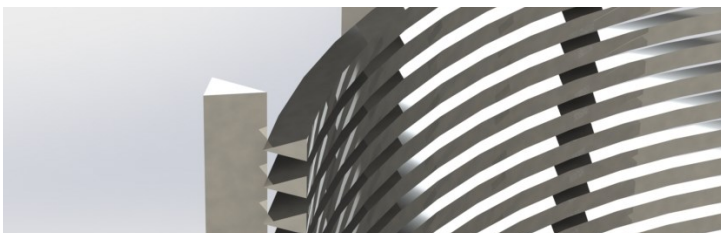
Re-rolled construction. Internal circumferential wire with external axial support rods.

BENEFITS

- Flow Inside to Outside
- Smooth internal screen surface
- Custom inner diameters can be manufactured

APPLICATIONS

- Strainer and Filter baskets
- Screw Press



FILTER SOLUTIONS INC.

WEDGE WIRE SCREENS

HIGH EFFICIENCY, HIGH CAPACITY

SCREEN SELECTION CHART

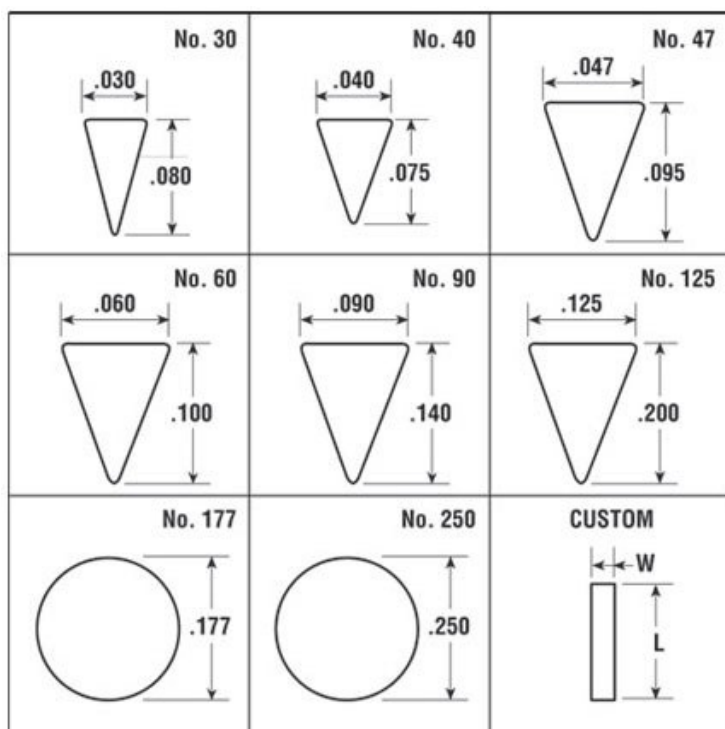
The below chart outlines common screen diameter, wrap wire and support rod combinations to produce a screen that will fit over a ASME B36.10M standard pipe.

PIPE SIZE	NOMINAL SCREEN OD (IN.)	WRAP WIRE	SUPPORT ROD
1/2"	1.375	60	60
3/4"	1.470	60	60
1"	1.750	60	60
1-1/4"	2.050	60	60
1-1/2"	2.375	60	60
2"	2.875	60	60
2-1/2"	3.500	60	90
3"	4.000	60	90
4"	5.250	60	90

SLOT OPENING CONVERSION

U.S. MESH	INCHES	MICRONS	MILLI- METERS
3	.265	6730	6.73
3 1/2	.223	5660	5.66
4	.187	4760	4.76
5	.157	4000	4.00
6	.132	3360	3.36
7	.111	2830	2.83
8	.0937	2380	2.38
10	.0787	2000	2.00
12	.0661	1680	1.68
14	.0555	1410	1.41
16	.0469	1190	1.19
18	.0394	1000	1.00
20	.0331	841	.84
25	.0280	707	.71
30	.0232	595	.59
35	.0197	500	.50
40	.0165	420	.42
45	.0138	354	.35
50	.0117	297	.297
60	.0098	250	.250
70	.0083	210	.210
80	.0070	177	.177
100	.0059	149	.149
120	.0049	125	.125
140	.0041	105	.105
170	.0035	88	.088
200	.0029	74	.074
230	.0024	63	.063
270	.0021	53	.053
325	.0017	44	.044
400	.0015	37	.037

WIRE AND ROD PROFILES



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Filter Solutions Inc. has representatives worldwide. For more information please visit www.filtersolutions.com. Changes in technology related to products, systems, and/or services described herein are subject to change. without notice.

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