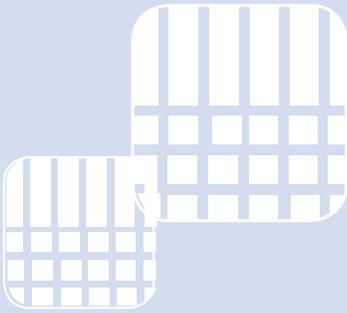


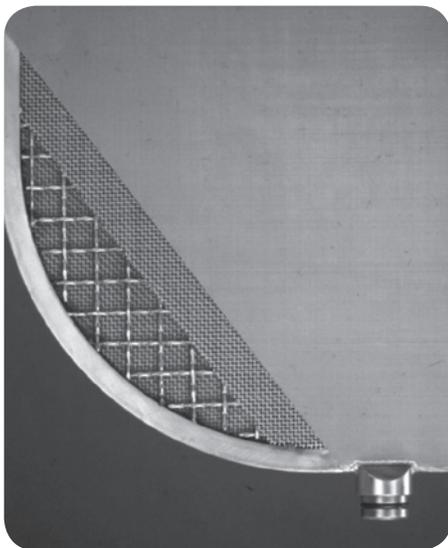
## Wire Cloth



### Wire Cloth Products & Filter Leaves

Whether your need is for the top-quality wire cloth weaves used in the chemical and food processing industries ... or for coarser weaves for sizing, dewatering, extruding or retaining operations, our comprehensive and diverse products lineup has it all.

## Continuweld® Filter Leaves



Continuweld® Filter Leaf

Representing state-of-the-art pressure filter technology, the rugged construction of Continuweld® filter leaves prevents warping and maximizes service life. Unlike standard filter leaf designs, our design features continuous welding of the filter cloth to the solid bar or offset framing, keeping the filter cloth drum-tight throughout its service life.

With no riveted or bolted seams, Continuweld filter leaves eliminate pockets where bacteria and contaminate buildup and also allow for easy cake removal during clean up. More importantly, they reduce maintenance downtime and allow you to exceed your production goals.

### 7-ply Continuweld® Filter Leaf

#### Specifications:

- Precision stainless steel outlets
- 1/2" x 1/2" solid bar frame
- 1" x 1" mesh, .177" diameter wire drainage support screen
- Double layer of perforated sheet spot welded to the support screen
- 16 x 16 mesh, .018" diameter wire intermediate screens
- Filter cloth, stretched drum-tight, aligned with warp wires horizontal to the axis of the leaf
- Continuously welded
- Easy to repair
- A variety of filter cloth types and specifications available

#### 5-ply Continuweld® Filter Leaf Specifications:

- Precision stainless steel outlets
- 3/8" x 3/4" offset bar frame
- 1 mesh, .177" diameter wire drainage support screen
- 6 mesh, .047" diameter wire cloth or 20-gauge perforated sheet intermediate components
- Filter cloth, stretched drum-tight, aligned with warp wires horizontal to the axis of the leaf
- Continuously welded
- Easy to repair
- A variety of filter cloth types and specifications available



Continuweld® 5-ply

**Note:** 3-ply Continuweld® filter leaves are also available.

#### Filter Leaf Reconditioning

In addition to a long service life, our Continuweld technology offers an attractive alternative to discarding worn or damaged standard riveted filter leaves: economical, like-new reconditioning. Our experienced filter leaf craftsmen carefully remove the outer wire cloth, thoroughly clean and inspect the inner components, and continuously weld new filter cloth to the frame.

Like-new Continuweld filter leaves are leak proof, durable, and repairable – just like the original! ■

# Standard Filter Leaves

## Quality design, materials and construction add up to outstanding performance in a filter leaf.

Our standard-construction filter leaves provide consistent, continuous, high-quality filtrate, representing an especially good value to our customers. We combine high quality materials, components and design to achieve high performance at the minimum cost.

### Premium features include:

- Quality filter cloth
- Precision fit frames – riveted, welded or bolted
- Proper cloth tension
- Extra-heavy support or drainage screens
- Machined outlets

### Constructions:

- Tubular frame riveted
- Heavy-duty tubular frame riveted
- T-Bar frame with capping channel

### Components

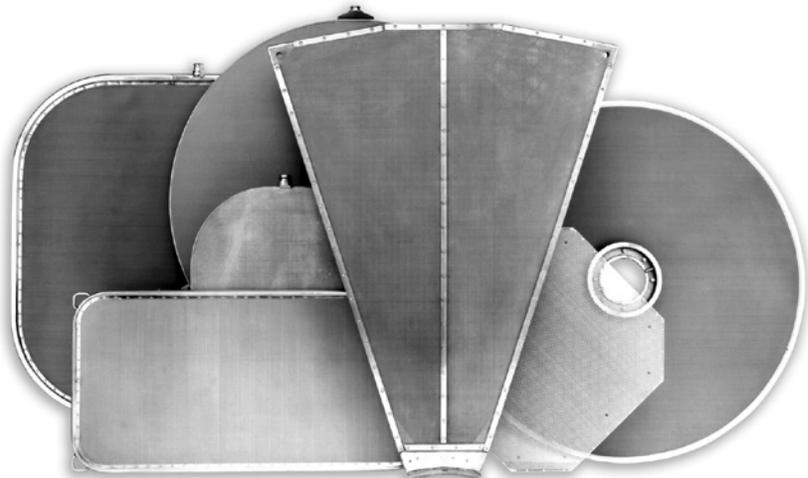
Good filter leaf design requires careful selection of each component to meet the requirements of the filtering operation and the product involved. The four basic components of all filter leaves are:

- Filter cloth
- Drainage or support screen
- Frame
- Outlet

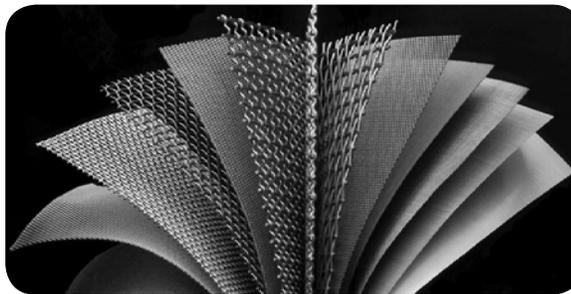
Additional intermediate screens are used, depending on the type of leaf or product being filtered.



Standard riveted filter.



Custom-manufactured filters.



A wide variety of wire cloth styles are available.

### Filter Cloth

Selection of filter cloth is determined by the nature and content of the pre-filtrate as well as the filter design. In all cases the filter cloth should provide:

- Good flow characteristics with minimum pressure drop.
- The ability to acquire and hold an even filter aid coating with no plugging or bleeding.
- Easy filter aid removal characteristics with sufficient strength to resist damage from backwash pressures or scraping.

### Drainage Screen

Proper specification selection is based on providing adequate support for the filter cloth, without restricting flow of liquid to the outlet. Support is usually a heavy wire mesh, but can also be provided by perforated metal or a slit tubular sheet.

### Frames

Selected to assure a firm, taut filter cloth and to prevent edge leakage while providing overall strength and rigidity to the leaf. Usually secured by welding, bolting or riveting, depending on application requirements.

### Outlets

Various types to adapt to any manifold available to give maximum flow rates and support for the leaf.

### Alloys

Cambridge metallic filter cloth specifications are available from stock in Type 304 and Type 316 stainless steel. Many other alloys are available from stock or by special order.

### Calendering

Filter Cloth is often calendered to provide a smoother surface or greater density. Calendering also allows better filter cake release and improves resistance to scraping.

### Special Requirements

Filter cloth can be supplied in standard rolls or cut in pieces of any size or shape. Special weaves can be developed to meet specific application requirements.

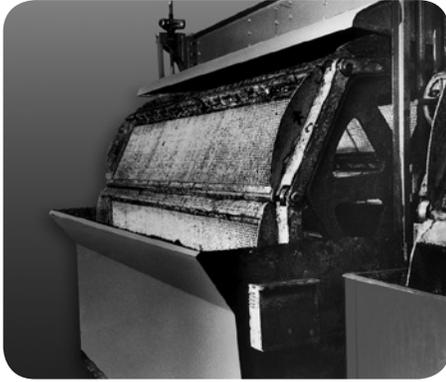
### Ultrafine Cloth

A complete line of ultrafine meshes down to a 5.0 micron opening is available.

### Drainage Screens

The most popular drainage or support screens are 4 x 4 mesh of .063" or .080" diameter wire, and 1" x 1" mesh of .177" diameter wire. ■

# Traveling Water Screens



Traveling water screen.

Traveling water screens are used for the removal of suspended solids from intake water for industrial and municipal use. They provide an effective and economical means for removing twigs, leaves, seaweed, kelp, grass, needle ice, fish, and many other solids from lake, river,

or seawater.

We offer both single-flow (thru-flow) and dual-flow type screens. With thru-flow type screens, the raw water flows through the ascending and descending runs of the screens from front to back. The refuse is carried up on the ascending tray and discharged into a draw for disposal.

Dual-flow type screens are capable of handling higher capacities than single-flow screens. Their design allows water to flow through the ascending and descending runs plus the curved bottom of the screens simultaneously. The clean water portion of the well is positioned between the two runs of the screen. Refuse disposal is the same as with thru-flow type screens.

Materials used in fabricating traveling water screens include T-304 and T-316 stainless steel, PVC, Monel, copper, bronze and galvanized steel. ■

## Traveling Water Screen Specifications

Mesh or Opening	Wire Diameter In
3/8" Sq. Opg.	0.120
3/8" Sq. Opg.	0.080
3/8" Sq. Opg.	0.105
1/4" Sq. Opg.	0.080
1/4" Sq. Opg.	0.063
5" Mesh	0.054
1" Mesh	0.105

These specifications are all available with double crimp (with or without selvage), or with single intermediate crimp (without selvage).

# Panel Belts

## For Industrial Drying applications:

- *Gelatin*
- *Cereals*
- *Other food products*
- *Pigments*
- *Chemicals*
- *Textiles*

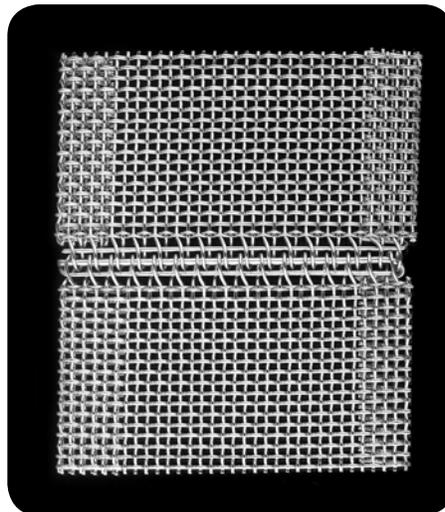
Because of their versatility in design and application, panel belts are used for processing a wide variety of food, textile, chemical and tobacco products. They are particularly suited to handling light or fine materials in industrial driers and washers.

A variety of meshes and wire diameters are available, including square or oblong specifications, allowing for a variety of product consistencies as well as the necessary permeability for circulating media. Wire cloth

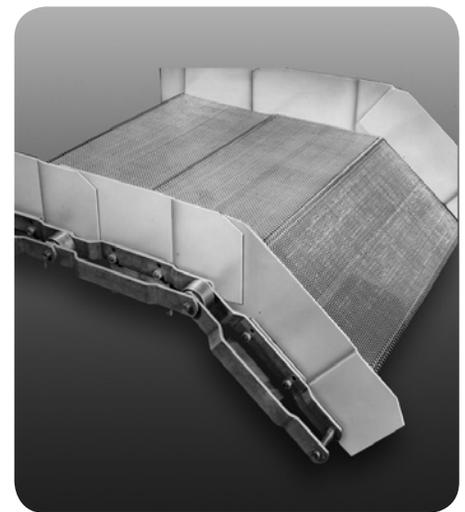
panel belts are available with plain, folded mesh, or folded plate edges.

For corrosive environments or for cleanliness, we can fabricate a panel belt in a material suited for the application, such as stainless steel, galvanized or carbon steel.

Belt lengths, widths and allowable loads for all types of applications are provided for by numerous available chain and belt support member designs. Plate edges, flights, dividers and hinges are available to meet your requirements. Replacement parts are also available. ■

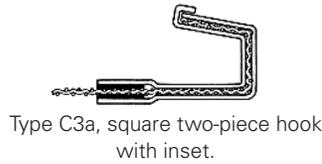
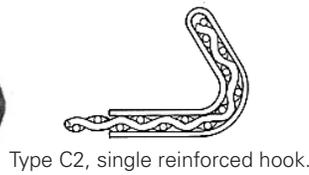
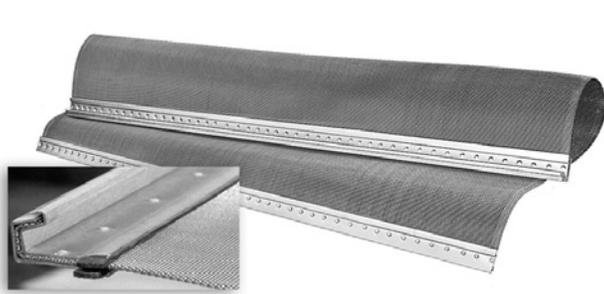


Panel belt with folded mesh edge.



Panel belting.

# Vibrating Screens



Vibrating screens are used for operations such as dewatering, washing, sizing and scalping in a wide range of industries including food processing, chemical processing, papermaking, coal, clay and metals mining and others. They are also widely used on shale shakers for reclaiming drilling mud.

We supply a wide range of screen section specifications in square mesh or oblong weaves. Each screen section is provided with the proper edge preparation to suit the wire cloth selected and to fit the screening machine on which it will be used.

Vibrating screen sections are available in stainless steel and other specialty metals. Cloth for popular specifications and standard hooks are stock items. Complete screens in standard sizes, such as 4'x5', 4'x8', and 4'x10' are also readily available.

## Edge Preparation

Our vibrating screens' standard hook design is the square two-piece hook with insert. This hook is particularly effective for lighter wire screens, as the rubber strips on both sides of the cloth prevent metal-to-metal contact and the resulting wear and screen failure.



Vibrating screen being used in vegetable processing.

For heavier screens or special applications, various other hooks are available. All hooks are available in galvanized steel, stainless steel or copper for heated screens

## For Longer Screen Life ...

**Back-up Screens** – Some vibrating screen users find that screen life is increased by using a back-up screen. The coarser mesh wire cloth supports the load while the fine mesh actually performs the screening.

A back-up is normally used with screens of 80 mesh and finer. Various meshes are used, such as 12, 20, or 30 mesh, depending on the specific application.

**Tensioning** – Proper tensioning of a vibrating screen is an important factor in screen life. Tension should be distributed evenly along the length of the hooks, and screens should be re-tensioned periodically to maintain optimum capacity and screen life.

**Half-Panels** – Since the greatest wear occurs where the load impacts the screen, this area often fails first, requiring replacement of the entire section. An alternative for 8' and 10' long screens is to use two half-panels joined by a 1" extension of cloth to make up the length. This may require modification of the screen box, but can result in significant savings on replacement screens (the half-panels can be reversed to distribute the wear, and can be replaced one at a time).

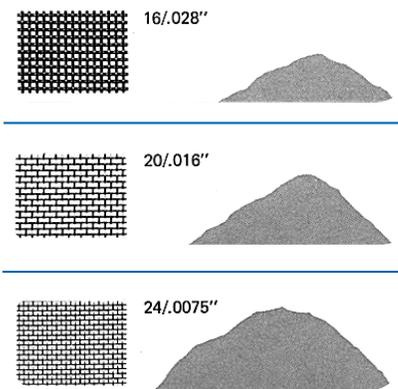
**Screening Capacity** – Effective screening area, screening rate and screen section life have a significant relationship to each other. Generally, in any given size opening, larger

## Common Vibrating Screen Specifications

Mesh Area	Wire Dia.	Opening	Open
	In	In	%
8x20	0.028/.020	0.097/.030	46.68
20x30	0.0140	0.036/.0193	41.76
40x20	0.0130	0.012/.037	35.56
60x20	0.009/.012	0.0076/.038	34.04
60x40	0.0090	0.0076/.016	29.44
80x40	0.0075	0.005/.0180	28.00
8x8	0.0280	0.0970	60.20
10x10	0.0250	0.0750	56.30
12x12	0.0230	0.0603	51.80
14x14	0.0230	0.0484	45.20
16x16	0.0180	0.0445	50.70
18x18	0.0180	0.0376	45.80
20x20	0.0165	0.0340	46.20
30x30	0.0120	0.0213	40.80
40x40	0.0100	0.0150	36.00
50x50	0.0085	0.0115	33.10
60x60	0.0075	0.0092	30.30
80x80	0.0055	0.0070	31.40
100x100	0.0045	0.0055	30.30

## Screening Capacity

(all have .034" opening)

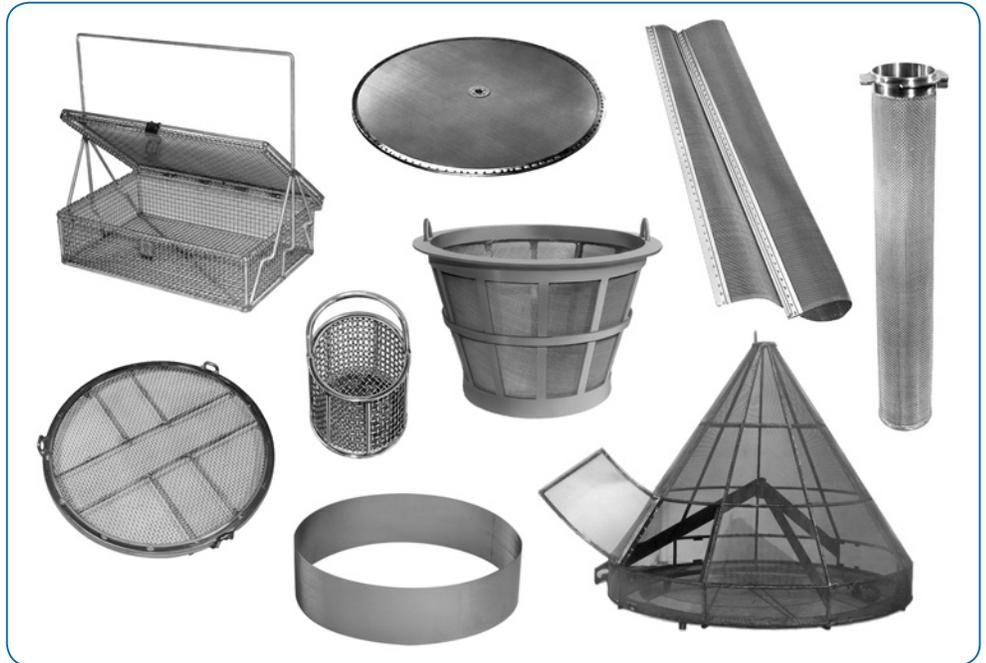


wire sizes provide longer life, but less screened material. Conversely, smaller diameter wires give greater capacity, but shorter service life. The illustrations above demonstrate the relationship between mesh, wire size, open area and screening capacity. ■

# Wire Cloth Fabrication

Wire cloth fabrication is one of the custom services we provide our clients. We can fabricate wire cloth parts of any size or shape – and in any metal or alloy – that are tailored to fit your process needs in new or replacement capacities. It's an ideal resource for accurate, durable and efficient filtering, sizing, sifting, straining, heat treating and many other processes when standard parts are not available.

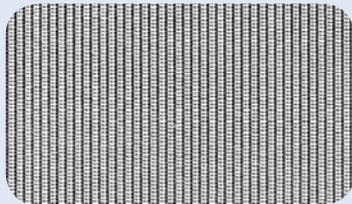
Our wire cloth fabrication department includes skilled craftsmen with years of experience, backed by extensive engineering and design facilities and precision manufacturing equipment. Filter leaves, screens, baskets, strainers, trays and other special fabrications are available. ■



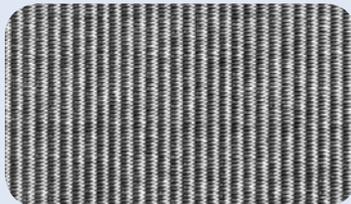
## Raw Cloth

As one of the largest wire cloth manufacturers in the U.S. we offer industrial wire cloth in a complete range of specifications from 1

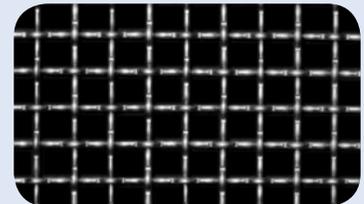
mesh to 500 mesh in various wire diameters. You may also choose from a wide variety of weaves, from ultrafine to the heaviest mesh. ■



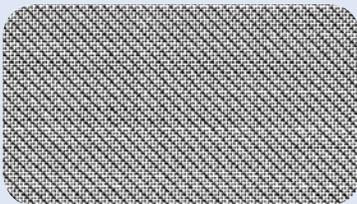
**Plain Dutch** – A compact, firm cloth combining great strength with very small openings. Openings are triangular and positioned at an angle rather than straight up, thereby providing faster and more even buildup of filter cake.



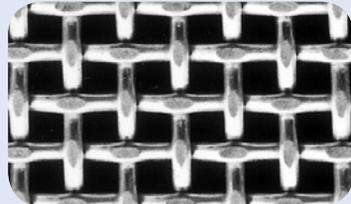
**Twilled Double Dutch** – Similar to Plain Dutch, but twilled weave permits compressing twice as many wires in the same area. The result is maximum density and smooth surface.



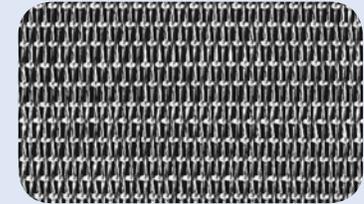
**Lock Crimp** – A securely fixed cloth features deep crimps in the wires at the point of intersection lock the weave. This design of cloth is usually used for heavy-duty screening.



**Twilled** – Permits smaller openings and increased strength as a result of being able to use larger diameter wire.



**Plain or Double Crimped** – A general-purpose weave used most often for sizing and straining, or for baskets and assemblies for heat treating processes.



**Oblong** – One of several rectangular weaves that are used primarily for sizing aggregate and similar materials. It provides a greater open area than plain weave, resulting in far less blinding or clogging.

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