



DORSTENER DRAHTWERKE
Group of Companies



Polymer Filtration



Extruder Screens, Spin Packs & Polymer Melt Filters

High quality filtration requires high quality media. Dorstener Drahtwerke is a fully integrated company that not only produces polymer filters and extruder screens, we produce much of the media we use in our filters. Our fully integrated manufacturing facilities allow us to offer high performance filters direct from the manufacture at an economical cost.

Proper filter design is critical. Questions that need to be asked are:

- What level of filtration do you require?
- Are your screens or filters back flushed during operation?
- What is the type and size of your standard contaminants?
- What are your target throughput rates?
- What is the type or style of your screen changer?
- What are the details on previous screen failures?

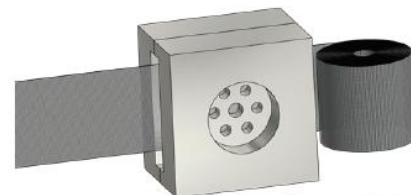
The Dorstener Group has production facilities both in Europe and on other continents.

We produce extruder screens and other polymer filters in Germany, USA, Czech Republic, and China. Dorstener maintains a full range of tooling to produce screens and filters for all makes and models of screen changers.

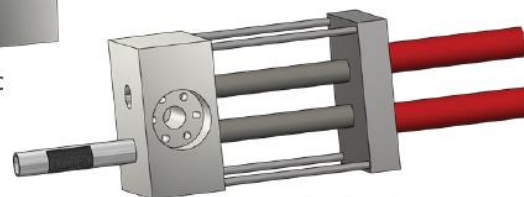
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|------------------------|-------------------------------|
| -Single Screen Filters | -Candle Elements |
| -Spot Weld Packs | -Continuous Melt Screens |
| -Rim Bound Packs | -Screens for Rotary Changers |
| -Cylinders | -Continuous Auto Screen Belts |
| -Cones | |



Rotary Disc



Continuous Belt



Dual Bolt

Virgin Resin Production and Compounding

Polymer manufacturing requires numerous types of filters to produce the highest quality resin.

- Custom filter elements to your specifications and requirements.
- Screen pack optimization and wide selection of alloys for demanding environments: 304ss, 316ss, Alloy 20, Inconel, Hastalloy, Nickel 200, Monel and many more.
- Ultrasonically cleaned packs.
- Cleanable elements or packs.



Dorstener produces filtration components for standard and custom resin production, as well as compounding of resins.



Acrylonitrile
butadiene styrene



Polypropylene



Bisphenol A
and others



Polystyrene



Polyethylene
terephthalate



Polyethylene
(high density)



Polyvinyl
chloride



Polyethylene
(low density)

The more you know:

Dorstener produces 1000's of mesh specifications. For any given micron rating there are multiple weave patterns. Weave patterns impact flow, filtration performance, screen life and final screen pack design.

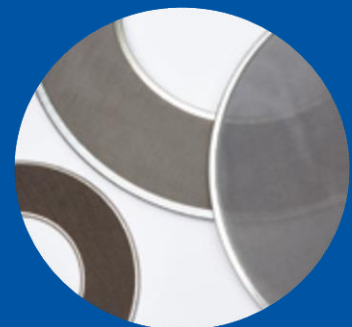
We can help optimize your screen pack.



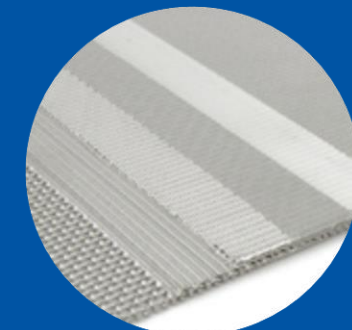
Pleated Extended Area
Elements



Pleated / Extended
Area Packs



Frame Packs and Spot-weld
Packs



Numerous Mesh Types

Plastic Recycling

There are many styles of filtration products used in the plastic recycling industry. Dorstener Drahtwerke can supply you with all of them. Dorstener has the expertise and manufacturing capabilities to design superior packs to aid in the following:

- Product Throughput vs. Filtration Requirements.
- Screen pack performance & cost.
- Vendor Stocking Programs so you never are without screens.
- Domestic and International Manufacturing.
- Single disc screens for ultimate flexibility.
- Spot Weld & Rim Bound packs for easy of handling.

Considering all the factors that impact processing helps us to provide a screen pack that performs at optimal levels at an economical cost .

FOOD GRADE RECYCLING SCREENS:

- Sintered screen packs eliminate the issue of loose wire contamination in pellets
- Ultrasonically Cleaned to remove oils
- Food Grade Alloy: 316Lss, 304ss, 304Lss and others
- Framed screens to help reduce loose wire contamination

CONTINUOUS MELT FILTERS:

- Continuous melt filter
- Disc or Drums
- Laser Beam Drilling & Micro Perforating
- Hardened steel / hard chrome plating available

Examples of screen pack design

Micron rating	Heavy Duty Series	Flow coefficient *	Standard Duty Series	Flow coefficient *	High Output Series	Flow coefficient *
60	20/50x250/20/10	1	20/60/250/100/40/20	1,09	20/42/300/145/60/20	1,23
75	20/40x200/20/10	1,07	20/60/200/100/40/20	1,12	20/42/230/120/42/20	1,41
100	20/30x150/20/10	1,13	20/60/150/100/40/20	1,19	20/42/165/120/42/20	1,63
125	20/24x110/20/10	1,04	20/60/120/100/40/20	1,23	20/42/145/80/42/20	1,74
250	20/14x88/20/10	1,32	20/30/60/30/20	1,61	20/42/78/42/20	2,23
300	20/12x64/20/10	1,34	20/30/50/30/20	1,66	20/42/64/42/20	2,29



Single Screens & Spot-weld Packs

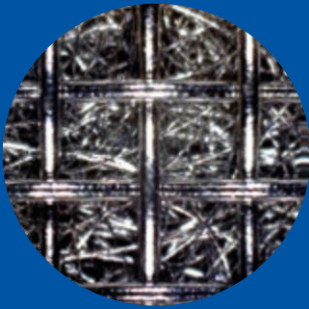


Framed Screens



Food grade Screens

*Flow coefficient 1 = 59 m³/min/m at 250 Pa (measured with air)



Fiber Felt Media



Frame Packs & Spot-weld Packs



Pleated & Extended Area Filters



Pleated Spin Packs



Gaskets

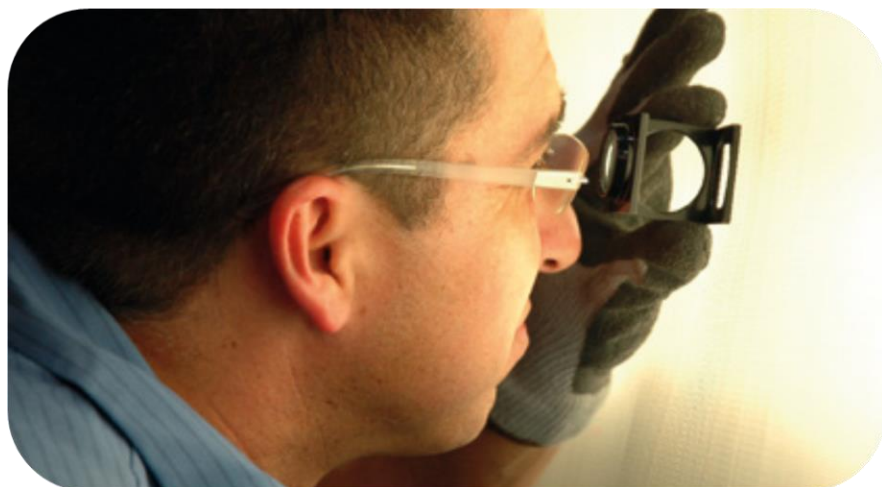
Synthetic Fibers and Filaments

Synthetic fiber and monofilament production require many styles of filters. From different shape spinnerets and multiple filtration requirements, Dorstener offers a full range of spin packs and accessories.



Spin Pack Screens require quality from the start.

- Media made of woven wire mesh (from 5 μm)
- Sintered metal fibre felt media (from 5 μm)
- ISO certified quality assurance systems: We control our woven and metal fibre media
- Visual and automated inspection systems for media and filters
- Full on site testing capabilities: Bubble Point Test, Flow measurement, alloy test
- Proper control of tooling
- Ultrasonic cleaning of spin packs





Film Production



Pleated Extended
Area Elements



Disc Filters



Filter Selection

Specialty & Blown Film Filters

Dorstener Drahtwerke understands that the manufacturing processes for optical film and display films include strict quality control standards. Dorstener Drahtwerke can produce filters that will help eliminate any anomalies such as carbon specs and the presence of gel from your melt stream.

Pleated Candle Elements and Leaf Disc Filters:

Dorstener Drahtwerke provides pleated elements and Leaf Disc Filters made with both woven mesh and sintered fiber felt. Dorstener provides pricing and lead-time for filter elements that is unparalleled in the market place.



Extruder Screens:

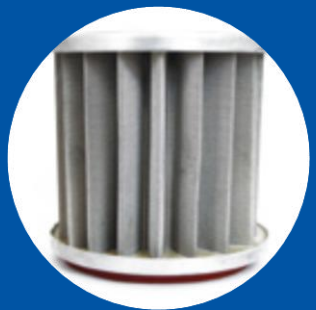
- Extruder Screens in a multitude of shapes and sizes are available for film production equipment.
- Single screen disc for ultimate flexibility.
- Weld Packs for easy handling & Inventory control.
- Mesh Cylinders with carbon or stainless steel media.
- Aluminum bound Packs.



Gaskets



Vacuum Screens



Dryer Filter



Copper Gauze

Auxiliary Production Components

Dorstener Drahtwerke also provides a vast array of auxiliary filtration components used in the polymer processing industry. These products might not be consumed at the same volume as process filters but can be just as costly if not managed correctly.

Gaskets

Gaskets of many alloys (most commonly aluminum) are common in synthetic fiber production and provide the seal necessary for optimal spin pack performance.

Vacuum Screens

Like any air system it's critical that the filters in your material transport lines are kept clean and replaced.

Dryer Filters

Keeping fines and dust particles out of the heat exchangers on drying equipment will extend the life of your equipment. Switching to stainless filter media also allows for filters to be cleaned.

Copper Gauze

Copper gauze is an economical tool used to clean polymer processing equipment such as extruders, dies, screws, and similar machinery.



Production sites in Dorsten



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