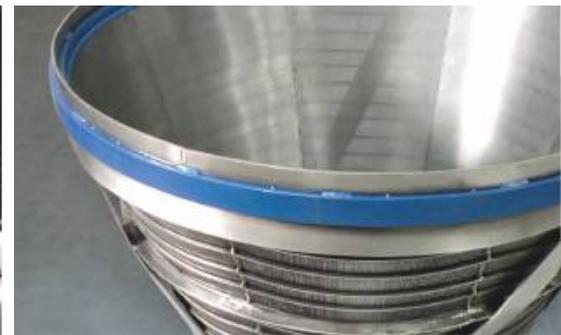


# **Screens** for food processing



Fruit and Vegetable Industry  
Milk Industry  
Potato Industry  
Beer and Wine Industry  
Meat and Poultry Industry  
Grain and Milling Industry and screening machines



# Progress Eco

We are a professional Polish producer of industrial screens from stainless steel and highly-processed related products. We have been designing and producing solutions for mechanical screening, classification, as well as dewatering and filtration for 25 years. Through their optimization, we have succeeded in increasing the efficiency and effectiveness of our Customers' plants. We provide them with a comprehensive production, designing, and consulting, as well as service programme. We offer a wide range of products for the food industry.

## Consulting



There is no such term as "the best screens" when it comes to comprehensive technological processes, different machine models and parameters, as well as discrepancies in feed or medium. However, you can select your screens optimally. We provide professional consulting services for our Customers at each stage of contract performance; from selecting the proper type of screen and its optimal parameters, to its proper installation assuring proper operation.

**We own patents and utility models - for our products, certified by all European legal standards.**

## Production



We provide a comprehensive offer of industrial screens. Our manufacturing programme and state-of-the-art machinery stock enable us to offer our Customers only the optimal solutions regardless of their application or work parameters.

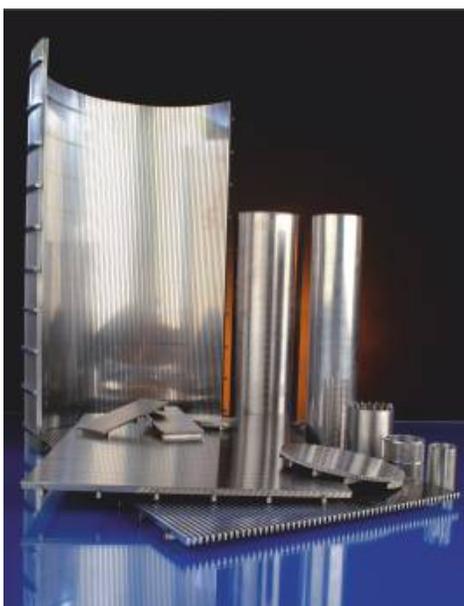
Our offer includes slotted wedge wire screens, fine wire screens, woven wire screens, and perforated screens, as well as related products.

**All products are manufactured from top quality stainless and acid-proof steel.**

## Servicing



We offer you a professional and experienced team of designers and assemblers. Our solutions give you the advantage through their easy assembly and expanded period of operation.



## 25 years of experience in designing and manufacturing industrial screens

Our technologists and designers are constantly researching world market trends for new solutions in our branch, but also designing new products and services. We have our own research laboratory where new product and material solutions are designed. At the same time, we cooperate with research and development units and academic institutes both national and abroad.

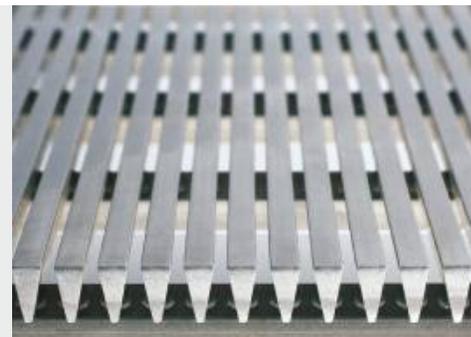
Our staff includes many experienced engineers and designers. The unchanged high quality of our products is certified by international awards, such as ISO 9001:2008 Quality Management System given by Lloyd's Quality Assurance, GOST-R, or the welding certificate.

Quality Management System includes: Designing and manufacturing of welded slotted screens, fine screens, woven screens, perforated, harp, and polyurethane screens, as well as related products.



# Wedge wire screens Pro-SLOT®

Wide range of applications in many filtration processes of solid particles is handled by Pro-SLOT® slotted screens. They are produced in the technology of electrofusing of profiled rods from high quality stainless and acid-proof steel. This technology is used for joining profiled wires for a set of supporting rods lets us obtain extremely precise dimensions of gaps. Due to their increased durability and load capacity, Pro-SLOT® slotted screens work extremely well both in static structures, as well as dynamic ones, providing optimal effectiveness of a process even in tough and aggressive work environment. We offer a wide range of profiled wires and rails.



## Characteristics of Pro-SLOT® wedge wire screens

- Ability to bear great loads
- High open space coefficient
- Self-cleaning ability and resistance to clogging
- Smooth and even surface
- Increased efficiency and precision in separation, dewatering, and filtration processes
- Low pressure loss
- Expanded period of operation and reduction in costs of repairs and maintenance

## Pro-SLOT® wedge wire cylinders

Pro-SLOT® cylindrical wedge wire screens (open-joint tubes) are produced by simultaneous spiral coiling and welding along the axis of the bearing rods (profiled wires). The technology provides maximum precision of gaps in a circumferential and parallel-to-axis configuration for screens with both inner and outer inflow.

**Maximum length of wedge wire cylinders: 6000 mm**

**Minimum profile pitch (slot): from 0,02 mm**

## Flat wedge wire sheets

Pro-SLOT® slotted screens depending on their individual application are offered also as flat sheets in customizable sizes, as well as armoured or reinforced elements of customizable shapes. We also offer flat screens with a profile gradient for special purposes.

**Maximum size for flat slotted screens: 3500 x 4000 mm**

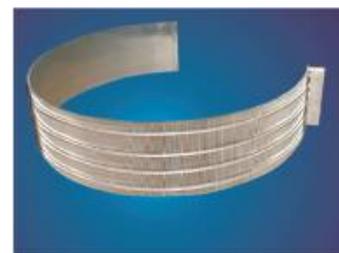
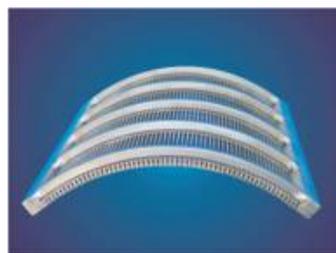
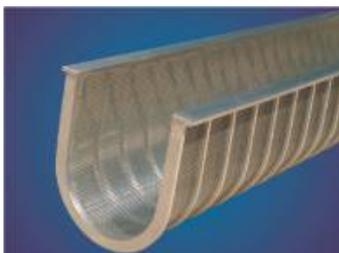
**Minimum profile pitch (slot): from 0,05 mm**

## Individual applications

Depending on the usage and parameters of machines and devices, we provide Pro-SLOT® slotted screens in customizable sizes and shapes according to the requirements of our Customers. In many applications, it is necessary to use reinforcement optimal for screen loads. Proper armoring assures proper screen installation which extends its operational period.

It is possible to join individual elements of Pro-SLOT® slotted screens into larger segments. Depending on individual applications and use, we manufacture screen elements in different shapes (gutter, conical, arch, and other screens) and materials (stainless and acid-proof steel) on the basis of flat or cylindrical screens.

- Segments for axial filters
- Candle segments for filters
- Segments for arch screens
- Slotted baskets for centrifuges
- Decks of vibration dewaterers
- Screen floors
- Rotary screens for drum traps
- Screens for presses
- Screens for washers
- Screens for calibrators
- Screens for extractors
- Screens for Mick slaking machine



## Fine wire screens and filtration fabrics

Fine screens from stainless steel with straight and slanted coil have large clearance, are easy to clean, and have great durability. Their pitch may be rectangular or square. The end products are sheets or rolls, as well as armoured screens adjusted for installation in sifters and other devices.

**Maximum width: 4000 mm**  
**Pitch range: from 0.02 mm**

Fine screens are commonly used in filtration processes of liquids, such as water; juices, milk, or for sieving fine-grained materials.

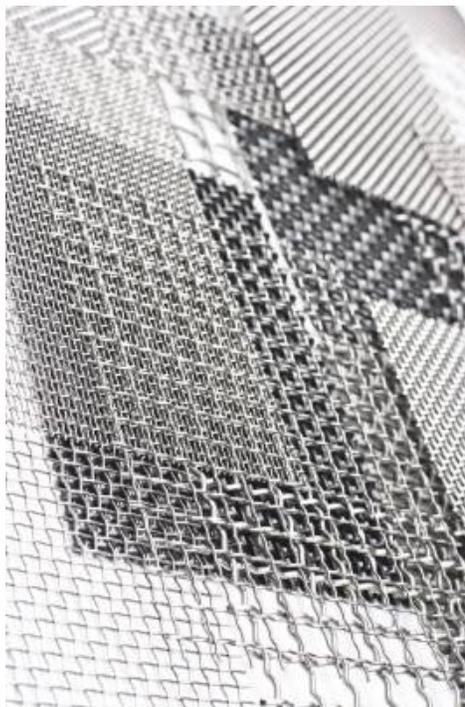
### Application:

- ↘ Filtration mats
- ↘ Filter segments
- ↘ Sieves for shake sifters
- ↘ Rotary screens

**We also offer different filtration fabrics (non-pitch screens)**



## Screens woven from stainless wires with rectangular or square pitch



Screens woven in Progress Eco are produced in one- or multi-notch types from round wire, from tear-resistant spring steel or stainless steel. For materials which are difficult to sieve, we offer harp screens. Depending on their applications, these screens are reinforced with batten plates of steel, polyurethane, or rubber.

**Pitch range: 1,0 - 100 mm**  
**Wire diameter: 0,8 - 6,3 mm**  
**Size: according to Customer's requirement**

### Application:

- ↘ Screens for vibrating sifters
- ↘ Screens for calibrators
- ↘ Elements in filter segments
- ↘ Trays for smokehouse trolleys
- ↘ Baskets
- ↘ Construction elements
- ↘ Covers and safety grates

Screens are delivered in rolls, sheets or armoured sheets for installation in sifters and other devices.

## Perforated screens from stainless steel

Perforated screens from stainless steel are commonly used in all types of machines and devices in the food industry due to the variety of shapes, sizes, and pitch set, as well as mechanical resistance.

### Application:

- ↘ Screens for vibrating sifters
- ↘ Segments for axial filters
- ↘ Screen segments for feeders
- ↘ Screens for hammer mills
- ↘ Screens for air separators
- ↘ Screens for destemmers
- ↘ Screens for presses

- ↘ Screens for coffee, cocoa, and other grinders
- ↘ Casing elements
- ↘ Safety and fencing elements



# Filter segments and filter elements

We offer filter segments and filter elements for pressure and non-pressure filtration, manufactured on the basis of industrial screens. Our offer includes:

- Filter segments from Pro-SLOT® slotted screen
- Filter segments from woven screen
- Filter segments from fine screen
- Filter segments from perforated screen
- Special Filter segments (from different types of screens)

We manufacture filter segments according to our own documentation, as well as technical documentation delivered to us by Customers.



## Filter segments on the basis of Pro-SLOT® slotted screens

Segments from Pro-SLOT® slotted screen are used usually for medium or technological water filtration. They protect the devices in the assembly against mechanical impurities, and reduce the suspension in the media.

They are characterized by great load resistance, which may prolong their operational period by even a couple of times in comparison to woven screen segments.

**Filtration: from 0,02 mm (20 µm)**

## Filter segments on the basis of woven and perforated screens

We offer a large variety of filter segments manufactured on the basis of woven and non-pitch filtration screens. Perforated screens are used as frames forming and bearing the cartridge. They have a high open space coefficient.

**Filtration: from 0,03 mm**

**We offer professional technical consulting and ready-made solutions for given applications in filtration.**

## Segments for presses

Segments for presses based on Pro-SLOT® slotted and perforated screens are used for separating solid particles from liquid suspension, their condensation, and dewatering afterwards. They work exceptionally well for weight reduction.

### Application of segmentsfilter segments:

- Segments for axial filters
- Segments for presses for screenings
- Segments for fruit and vegetable feeders
- Frames of fabric filters
- Segments for injectors

# Screens for vibrating sifters rectangular and round

We offer a wide range of screens for vibrating sifters manufactured on the basis of Pro-SLOT® slotted, woven, fine, and perforated screens. A large variety of fastenings makes it possible to install them laterally or longitudinally in each type of sifter.

We also offer regeneration services for frames in round sifters.



# Decks and floors on the basis of wedge wire screens

Decks of wedge wire screens are a construction reinforcing used in:

- Floors in malt houses
- Floors of lauter tuns (filter tanks) in breweries
- Elements of storage and sewage reservoirs
- Floors of tower diffusers

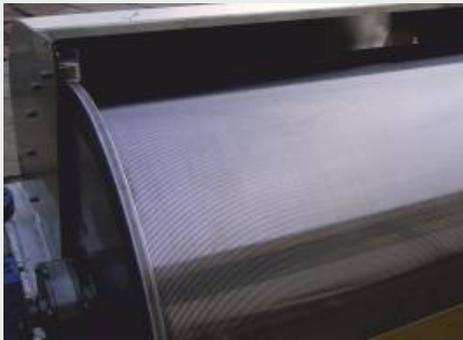


# Rotary screens

## on the basis of slotted, woven, and perforated screens

Our long-standing experience in filtration of fluids and individual working conditions and parameters of a device makes us offer you optimal solutions for gap selection, and the size of profiled wire of the drum.

Rotary screens are used usually as filter segments in drum traps for cleaning liquids from solid particles formed during different stages of processing. We offer rotary screens both for newly designed devices according to the technical documentation of a Customer, as well as exchangeable segments for already operational applications.



### Pro-SLOT® rotary wedge wire screens - outer inflow

Polluted liquid rinses the surface of the rotating Pro-SLOT® rotary wedge wire screen. After separating solid particles from the outer surface of the drum, the liquid flows through the gaps to its interior, and flows out rinsing them from the other side.



### Pro-SLOT® rotary wedge wire screens - inner inflow

The polluted water coming to the Pro-SLOT® slotted rotary screen is distributed along the inner surface of the screen. The solid particles are caught by means of a coil installed on the inner side of the drum.



### Rotary screens on the basis of woven and perforated screens

Depending on their application, we manufacture rotary screens with perforated screens, and woven screens, or any combination of them.

### Characteristics of Pro-SLOT® rotary wedge wire screens

- High efficiency and effectiveness of dewatering, filtration, and separation processes
- Low clogging and self-cleaning ability
- High craftsmanship in stainless and acid-proof steel
- Sizes, parameters, and types of profiled wires are selected according to individual work conditions, as well as types of machines and devices in use



## Pro-SLOT® wedge wire sieve bends



Segments for wedge wire sieve bends are mainly used in dewatering and separating solid particles in liquids. We offer segments for screens with gravitational and pressure inflow. Working wires are welded in a special angle towards bearing wires. Due to this operation, the inflow speed on the screen is greater, while its surface is used fully. In this way it increases separation effectiveness and efficiency. Particles of pollution slide down from its surface, and the rest of the water is removed by the gaps in the screen.

**Easy use, durability, and self-cleaning ensure low operational costs.**



Sizes and parameters of slotted segments for arch screens are adjusted by our technologists and engineers for individual process requirements of our Customers.

**Gap range: from 0,25 to 4 mm**

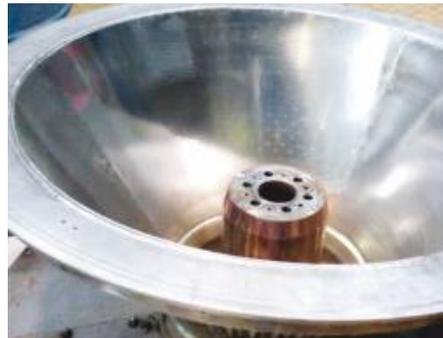
# Baskets for centrifuges

Baskets for centrifuges are manufactured according to the needs of a Customer and needed sizes, both for new and already operational technological systems.

Conical and cylindrical baskets are usually used in centrifuges for dewatering products. Depending on their design, we may divide them into:

- Baskets with self-supporting construction of ribs, rings, and collars; when the operational comes to an end, the entire basket needs to be replaced
- Baskets without the supporting construction as segments for supporting frames which may be reused

Individual types of baskets are equipped with additional supporting elements, such as frames or special joints for achieving a proper size and work parameters.



## Starch centrifuge wedge wire baskets

Baskets for starch centrifuges based on fine screens are used in processing plants of grain and tomato industry, and for separating solid pollutants from potato starch. We adjust the type of fabric to the individual process needs due to our extensive range of screens.

## Sugar centrifuge wedge wire baskets

Baskets for sugar centrifuges made from Pro-SLOT<sup>®</sup> slotted screens are used in sugar plants to separate sugar crystals from the inter-crystal syrup of the massecuite. The newest design of the basket enables for increase in durability and efficiency parameters.

## Baskets for juice centrifuges

These baskets are used in fruit and vegetable processing plants for suit purification. They come in a Pro-SLOT<sup>®</sup> slotted version, and a fine one.

## Salt centrifuge wedge wire baskets



**We produce different types of such baskets according to the technical documentation of a Customer. Before start-up, each basket undergoes careful quality control and dynamic balancing.**

# Conveyor belts

Conveyor belts are used for transporting solid media, and contribute to shortening the production time, and increasing manufacturing effectiveness. By proper assembly of coils of round or flat wires, different types of belts are created, which may be used in processing and manufacturing of food products, e.g.

- Vegetable drying rooms
- Baking ovens
- Transporting devices
- Packing devices
- Washing machines (ZPOW)
- Chocolate distributors
- Baking salty sticks and biscuits

**Type:** PTS, PTZK, PTSG, PTZ, PTD1, PTD2  
**Width:** od 80 mm do 4200 mm  
**Length:** Customizable. Belts are delivered in rolls with mechanical fastenings



# Usage of Progress Eco industrial screens in food industry

Our screens work in many different conditions and sets (dynamic and static). They are often the key component of processing in plants owned by our Customers. By knowing the specificity of these processes, we know just how important it is to remain their continuity, and what are the risks of installing low quality screens. This is why we are dedicated to deliver products of best unchanged quality to our Customers providing optimal efficiency and effectiveness.

## Fruit and Vegetable Industry



- ↘ Regeneration of filtration panels
- ↘ Rotary screens on the basis of Pro-SLOT<sup>®</sup> slotted and perforated screens
- ↘ Pro-SLOT<sup>®</sup> slotted and perforated screens for vibrating sifters
- ↘ Pro-SLOT<sup>®</sup> slotted and perforated screens for calibrators
- ↘ Perforated segments for feeders
- ↘ Conveyor belts
- ↘ Pro-SLOT<sup>®</sup> slotted and perforated segments for angular filters

## Milk Industry



- ↘ Filtration mats
- ↘ Regeneration of frames for vibrating separators
- ↘ Pro-SLOT<sup>®</sup> slotted and perforated segments for axial filters
- ↘ Fine screens for vibrating sifters

## Potato Industry



- ↘ Regeneration of baskets for starch centrifuges
- ↘ Slotted segments for arch screens
- ↘ Rotary screens on the basis of Pro-SLOT<sup>®</sup> slotted and perforated screens
- ↘ Fine screens for vacuum filters
- ↘ Woven and welded screens for calibrators

## Beer and Wine Industry



- ↘ Regeneration of filtration plates
- ↘ Floors of lauter tuns (filter tanks) in breweries
- ↘ Candle segments on the basis Pro-SLOT<sup>®</sup> slotted and perforated screens for beer filtration
- ↘ Perforated screens for vibrating filters
- ↘ Conveyor belts
- ↘ Filter segments on the basis Pro-SLOT<sup>®</sup> slotted and perforated segments for axial filters

## Meat and Poultry Industry



- ↘ Rotary screens on the basis of Pro-SLOT<sup>®</sup> slotted and perforated screens
- ↘ Slotted segments for arch screens
- ↘ Slotted segments for screw presses
- ↘ Screens for trays for smokehouse trolleys
- ↘ Arch screens
- ↘ Filter segments for cleaning brine

## Grain and Milling Industry



- ↘ Screens woven for vibrating sifters
- ↘ Perforated screens for air separators
- ↘ Perforated screens for mills
- ↘ Screens woven from square wire for scrubbing machines
- ↘ Screens woven for stone separator

Progress Eco has a comprehensive offer of industrial screens for the following industries: machine, power, petrochemistry, chemistry, refining, pharmacology, wood and paper, environment, recycling, natural resources, aggregates, and coal dressing.

The full product offer of Progress Eco is available at [www.progress-screens.com](http://www.progress-screens.com)