ANDRITZ Fiedler PerfTec
Components for process optimization in numerous applications
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The ANDRITZ GROUP
The ANDRITZ GROUP is one of the world’s leading suppliers of systems, equipment and services for hydropower plants, the pulp and paper industry, the metalworking and steel industries and for solid/liquid separation in the municipal and industrial sectors. The listed international technology Group headquartered in Graz, Austria employs around 25,000 people and has more than 250 production facilities and service and sales companies around the world. Fiedler has been part of the ANDRITZ GROUP since 2003.

ANDRITZ Fiedler
ANDRITZ Fiedler has extensive experience and excellent know-how in machine and plant engineering and offers expertise in all processes for perforating metals and wedge wire screen technology. In addition, ANDRITZ Fiedler customers benefit from our expertise in the further processing of products to obtain ready-to-install components.

The basis of our success
Our success is founded on the design and manufacturing of machine components to very stringent standards by highly skilled personnel using state-of-the-art machinery. What sets us apart is our know-how about the processes used by our customers. We make your goals our own and develop individual solutions tailored precisely to your needs and wishes. Whether they are used for solid/liquid separation, screening, crushing or drying, our products always serve to improve process quality. Regardless of whether you want to achieve longer service lives, efficiency, smooth material flow or improved quality in your end product, your goal is our benchmark. This is why our customers are supported by experts with specific process know-how and longstanding experience in mechanical engineering.

Naturally, we also supply customized spare parts that we produce on our own facilities on a 1:1 basis according to the part or drawing you have provided or our own measurements on site.
Agricultural base products

<table>
<thead>
<tr>
<th>GRAIN/CEREALS</th>
<th>SUGAR/STARCH</th>
<th>RICE</th>
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ANDRITZ Fiedler supplies ready-to-install components and custom solutions. A wide range of manufacturing technologies, experience acquired over decades and sound know-how about our customers’ production processes guarantee maximum reliability and ongoing optimization of your production.

**Screening | Husking | Cleaning | Sorting**
Perforated and Trieur sheets for sorting, special perforated sheets for cleaning and screening, components with ConfiPerf perforation for husking: we offer a large number of machine components suitable for various applications in the processing of grains and cereals.

**Separating | Centrifuging | Drying**
For starch extraction and sugar refining we supply wedge wire screens, ConiPerf, micro-perforated or milled centrifuges and curved screens.
In addition, ConiPerf fluidized bed trays guarantee directed flow during drying.

**Pressing | De-juicing | De-watering**
Non-perforated strips in the vicinity of the support rings substantially increase the strength of half-shells for sugar pulp presses. We manufacture press screens to customer requirements, if requested also with on-site measuring. Wedge wire screen inserts are also used in this conjunction.

**Crushing | Milling | Granulating**
For crushing systems, hammer mills, impact and cone crushers: our rasp and screening plates made of (stainless) steel and other wear-resistant materials are used for crushing and milling agricultural products and animal feed.
The production of foodstuffs and beverages has always been associated with extremely stringent safety regulations. We develop ready-to-install components that meet the stringent requirements of the foodstuffs industry in every respect and in the process ensure the highest quality.

**Food and beverages**

**FRUIT/VEGETABLES**

- **Lautering**
- **Steeping**
- **Germinating**
- **Kilning**
- **Drying**

From traditionally milled lautering false bottoms “Made in Germany” through malting floors for malt houses to modern wedge wire screen bases for lautering, germination and drying processes, we manufacture perforated or wedge wire screen bottoms in all designs. Our perforated or ConiPerf screens are also used in various dryer and fluidized bed systems.

**Straining**

Our straining machine baskets are used in the production of tomato paste as well as fruit and vegetable concentrates. For this purpose our rotary screens remove suspended matter and residues from process water.

**Curd draining**

Press molds and forming tubes made from ConiPerf and fine perforated plate. Perforated plate for chutes, draining and salt bath racks and cheese draining racks in stainless steel. Embossed plates in large wall thicknesses for stabilizing the pressing processes: all of these products provided by us are used in cheese-making.

**Filtering**

Thanks to accurate separation results and high flow rates our wedge wire screen cartridges can be used in a wide range of filtration stages with different viscosity levels from chocolate to vegetable soup. Our wedge wire screen candle filters have even proved effective in diatomaceous earth filtration.

In mixing and dosing processes, e.g. for beverage concentrates, the rugged design of our products ensures high process availability and a long service life.
Water management and recycling

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<thead>
<tr>
<th>FRESH WATER</th>
<th>PROCESS WATER</th>
<th>BIOGAS</th>
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For high throughputs ANDRITZ Fiedler produces components with the greatest possible open screening surfaces. In addition, conical opening cross-sections ensure largely clogging-free operation with constant screening performance.

**Sampling**
Our static screens are used as water sampling filters in salt water and fresh water collection.

**Separating | Filtering**
We fit curved screening systems (bow screens) and drainage systems with suitable Coanda screens to separate solids from watercourses.

**Separating | Dewatering | Squeezing**
Whether wedge wire screen, perforated plate with supporting sleeve or drilled screens, we offer you the ideal product for separators and screw presses.

**Separating | Protecting | Retention**
Our filter inserts prevent the outflow of costly process media like resins in ion exchangers or active carbon in water treatment. Whether they are used in seawater or cooling water, our filter baskets filter impurities out of liquids and protect piping, pumps, valves and other assemblies.
From coarse perforated plates for resource production to ultra-fine screens for ball mills, ANDRITZ Fiedler develops precision components for the chemical and pharmaceutical industries.

**Centrifugation | Separation**
To treat salts or fertilizers like potash or sulfates, the separation processes in continuous and discontinuous centrifuges have to run extremely precisely. We provide the appropriate screen inserts for this purpose.

**Spraying | Coating**
Manufacturers of coating and dispersion systems use perforated screens and drums from ANDRITZ Fiedler. Their finely ground surfaces ensure that the process is as gentle as possible.

**Drying | Air flow**
We produce distributor plates with ultra-fine openings, documented pressure loss values and directed flow for fluidized bed systems of all kinds.

**Filtration | Wet milling | Separation**
Our filter baskets ensure reliable separation of foreign matter in paints, sizes and dispersions. Our screen inserts hold back even the finest milling balls in the milling process and guarantee optimum process reliability in grinding ball or bead mills. For paper production we offer special coating color filters in wedge wire screen.
Petrochemicals and refinery technology

ANDRITZ Fiedler develops custom-made semi-finished goods for plant and piping engineering as well as state-of-the-art components for use in power plants and the entire petrochemical sector.

MTBE/ETBE production | Acid catalysis
For the production of methyl-tert-butyl ether (MTBE) and ethyl-tert-butyl ether (ETBE) we supply all necessary reactor internals from a single source: Octagonal manifolds, twin nozzles and side arms.

Distributing | Collecting | Supporting
For the distribution and collection of liquid and gaseous media in adsorbers, absorbers, ion exchangers and dryers we not only offer suitable distribution and collecting systems but also discharge baskets in wedge wire screen or perforated plate.

Hydrofining | Desulfurization | Hydrocracking
For hydrofiners, hydrocrackers and other desulfurization or downflow processes we produce and install support grids in wedge wire or perforated plate. In this conjunction, a particular technical innovation is the connection of the wedge wire screens to the framework structure, which ensures easy installation and smooth operation.

Reforming
For catalytic reforming we supply reactor internals like center pipes and scallops in perforated plate and wedge wire screen. To this end we undertake installation and repair of the existing reactor internals.
ANDRITZ Fiedler develops and produces screening and sorting components for a wide range of applications in the paper, wood, plastics and textile industries.

**Paper and textile industry**

<table>
<thead>
<tr>
<th>COTTON</th>
<th>PAPER</th>
<th>WOOD</th>
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<table>
<thead>
<tr>
<th>Screening</th>
<th>Breaking down</th>
<th>Cleaning</th>
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<tbody>
<tr>
<td>Screen baskets and rotors for the paper and pulp industry represent some of our company’s core products. In the recycling process in the plastics industry our screens also meet numerous requirements.</td>
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<tr>
<th>Milling</th>
<th>De-fibering</th>
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<tbody>
<tr>
<td>Our refiner plates and screen rings for mills are used for de-fibering cellulose, wood and plants. In wood processing in particular, our mill screens help to break down the fibers gently and ensure homogeneous fiber length.</td>
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<tr>
<th>Carding</th>
<th>Cleaning</th>
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<tbody>
<tr>
<td>Especially for the textile industry, our perforated plates are finished to prevent fibers adhering to them and therefore help ensure a smooth production process.</td>
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<tr>
<th>Granulating</th>
<th>Cooling</th>
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<tr>
<td>For producing synthetic yarns, plastics are granulated on our screens to be able to ensure smooth dosing. The resulting yarns are cooled on our screens which are treated to stop fibers adhering to them.</td>
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</table>
Customers in almost all industrial sectors are suffering from excessive noise exposure at the workplace. ANDRITZ Fiedler offers suitable solutions for both office complexes and hygiene areas where the use of conventional sound absorbers is normally not admissible.

**SonoPerf Office**  
*For undisturbed communication and concentration*

Reverberating surfaces, clean lines or the use of concrete elements: current architectural trends often fail to take account of the requirements for pleasant room acoustics. Yet room acoustics are essential, for example when designing and furnishing open-plan offices. After all, on the one hand the conditions should be ideal for communication (speech intelligibility) and on the other undisturbed, focused working should be possible (noise protection). In any case, undesirable background noise and having to listen to other people’s conversations have a huge impact on our performance.

SonoPerf elements in sound absorber class A (DIN EN ISO 11654) create an acoustically pleasing room environment even under unfavorable prior conditions. Our acoustics experts will be happy to show you the options for obtaining the desired values for sound level, reverberation times and speech intelligibility in an office or conference room.

**SonoPerf Serie**  
*For stringent hygiene and acoustic requirements*

Operations in which hygiene plays a leading role need to meet special requirements for soundproofing that make it difficult to use conventional sound absorbers. The core material used in conventional sound absorbers has to be wrapped in a foil to prevent bacteria and mold forming. However, these foils become porous and unsuitable over time through exposure to cleaning agents and solar radiation.

Products from the SonoPerf Series range are durable, perfectly hygienic and non-combustible and are therefore ideal as sound insulation in clean room areas. The fiber-free design in high-quality stainless steel has been proven not to provide a breeding ground for bacteria. Using acoustic measurements and needs analyses our soundproofing experts will help you to create a working environment that is perfectly hygienic and offers excellent acoustics.
Broad range of perforated and wedge wire screen technology

ANDRITZ Fiedler offers the complete range of perforation technology, from drilled, embossed, milled and ConiPerf plate through to micro-perforation and wedge wire screen technology.

The adjacent diagram provides an initial overview of the technical possibilities of perforating technology.

Optimize processes with ready-to-install machine components

Customized products
Machine components from ANDRITZ Fiedler are customized products: every single component is manufactured and supplied ready-to-fit exactly according to customer specifications.

Further processing
Our strength is in the further processing of perforated plates to produce ready-to-install machine components.
On request, the surfaces of the perforated plates are deburred, ground, brushed, sand or glass bead blasted, electro-polished, resin-coated or chrome-plated.
Cutting, rolling, leveling, rounding, edging, bending, welding, turning or shaping: with all our processes you benefit from our ultra-modern machinery and experienced, highly skilled workforce.

Process optimization
Do you want more than just a 1:1 replacement of your existing components? Our sales teams are experts and know how your production processes can be optimized. Thanks to the use of new, process-optimized parts you can achieve more revenue, better product quality or lower energy costs. Talk to us about your process goals.

Filter candles in wedge wire screen material in the beverage industry
## Slot, hole and embossing types

### Overview

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<th>Wedge wire screen technology</th>
<th>Milling technology</th>
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<tbody>
<tr>
<td>Cylindrical profile drilled</td>
<td>Wedge wire screen Wound profile rods with support rods, resistance-welded structure</td>
<td>Milled slots, parabolic profile</td>
</tr>
<tr>
<td>Bi-cylindrical profile drilled</td>
<td>BAR-TEC Plugged-in profile rods, highly stable design with supporting rings</td>
<td></td>
</tr>
<tr>
<td>Cylindrical-conical profile drilled</td>
<td>Micro-perforation</td>
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### ConiPerf

<table>
<thead>
<tr>
<th>Drilling technology</th>
<th>Wedge wire screen technology</th>
<th>Milling technology</th>
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<tbody>
<tr>
<td>Micro-perforation Openings from 0.05 mm</td>
<td>ConiPerf Triangular perforation</td>
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<tr>
<td>ConiPerf Slotted perforation</td>
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### Punching

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<thead>
<tr>
<th>Drilling technology</th>
<th>Wedge wire screen technology</th>
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<tbody>
<tr>
<td>Round perforation, punched e.g. Ø 1.5 mm, pitch 2 mm in stainless steel 1 mm thick</td>
<td>Slotted perforation, punched e.g. 1.4 mm slot width in stainless steel 3 mm thick</td>
<td>Rasp perforation Various geometries available</td>
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### Embossing

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<thead>
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<th>Drilling technology</th>
<th>Wedge wire screen technology</th>
<th>Milling technology</th>
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</thead>
<tbody>
<tr>
<td>Decorative embossing in stainless steel</td>
<td>Decorative embossing in aluminum</td>
<td>Trieur embossing</td>
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Service & quality
Your expert partner on site

Service
ANDRITZ Fiedler means more than 125 years of experience and technical know-how in separation and filtration, drying and crushing processes in various sectors of industry. To combine these resources in specialist know-how with personal support to our customers all over the world we work with a reliable network of partners.

Quality
The quality of our products is a decisive factor in enabling our customers to create reliable processes. ANDRITZ Fiedler has an integrated, ISO-certified management system for quality, safety and the environment. This includes both process monitoring and internal audits. Maintaining high quality standards, the ongoing improvement of manufacturing processes and workflows and constant striving for error-free work are what makes ANDRITZ Fiedler a highly reliable partner. Qualified and experienced auditors conduct the necessary quality checks. This allows us to meet the requirements and wishes of our customers under all circumstances. The steadily growing expectations of our products and services motivate us to strive for higher quality, more efficiency and innovation.