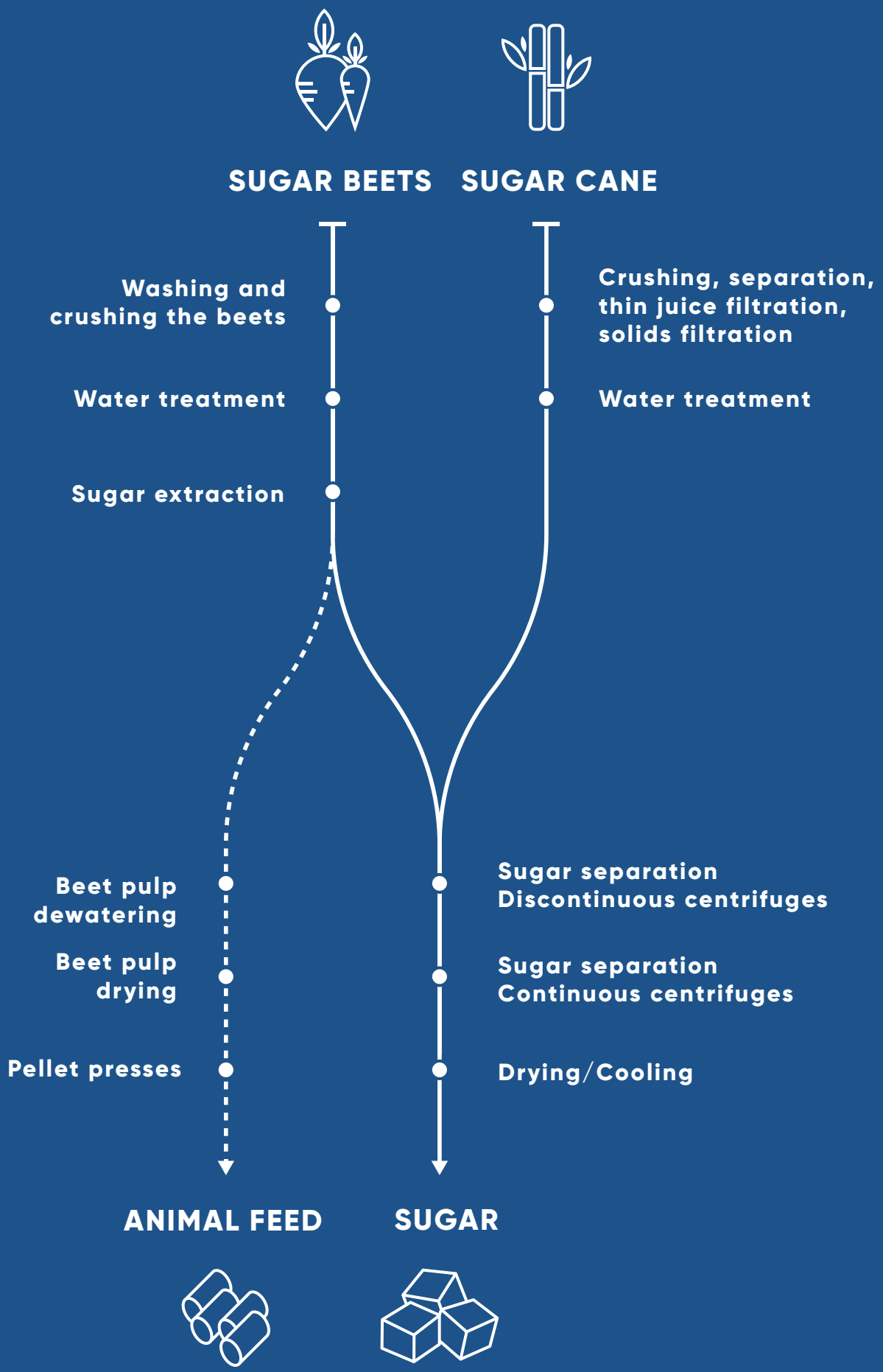
SUGAR PROCESS OPTIMIZATION WITH HIGH-PERFORMANCE COMPONENTS

ANDRITZ wedge wire and perforated plates


SUGAR BEETS
SUGAR CANE
Washing and crushing the beets
Water treatment
Sugar extraction
Crushing, separation, thin juice filtration, solids filtration
Water treatment
Beet pulp dewatering
Beet pulp drying
Pellet presses
Sugar separation Discontinuous centrifuges
Sugar separation Continuous centrifuges
Drying/Cooling
ANIMAL FEED
SUGAR

Smart filtration solutions for sugar production processes

Sugar production involves a sequence of precisely coordinated process steps – from raw material preparation to extraction, separation, and final drying. Whether processing sugar beets or sugar cane, each stage requires robust and reliable screening and filtration components to ensure stable operation, high product quality, and efficient plant performance.

ANDRITZ delivers engineered wedge wire and perforated components designed to meet the specific demands of sugar production:

- **Water treatment and material preparation**
  Efficient washing of sugar beets and soaking of sugar cane are essential first steps in sugar production. ANDRITZ provides durable and precise screening and filtration components to remove impurities, protect downstream equipment, and ensure stable process conditions from the very beginning.

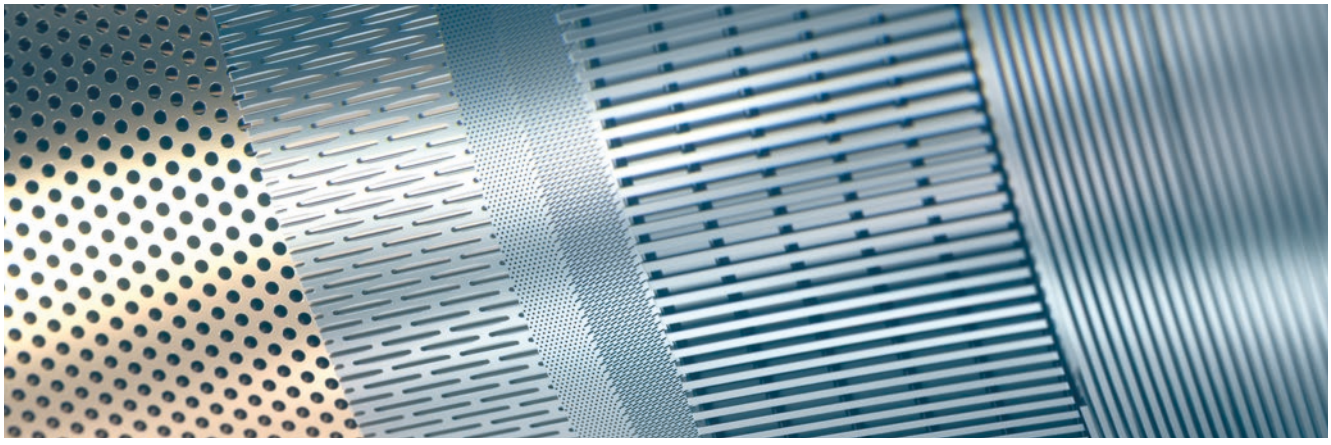
- **Extraction / diffusion**
  Efficient sugar extraction from sugar beet is essential for maximizing yield, capacity, and profitability. ANDRITZ provides optimized screen solutions for extraction towers, DDS troughs, and rotating diffusion drums to improve leaching performance, reduce bottlenecks, simplify cleaning, and unlock additional optimization potential.

- **Dewatering**
  High dry mass content in pulp dewatering is essential for efficient downstream processing and lower drying costs. ANDRITZ helps identify and exploit optimization potential across the dewatering process to improve performance, maintain or increase throughput, and reduce overall energy consumption.

- **Discontinuous separation**
  Reliable screen components in sugar centrifuges are essential for product quality, capacity, and operational safety. ANDRITZ has developed advanced centrifuge screens that reduce mechanical stress, lower the risk of breakage and contamination, protect equipment and personnel, and shorten cycle times.

- **Continuous separation**
  Optimized screens for continuous centrifuges are essential for maximizing yield in B and C sugar stages as well as post-product lines. ANDRITZ supplies custom-fit wedge wire screens that can replace galvanic chrome-nickel screens without plant modifications and help increase profitability through improved sugar recovery.

- **Drying / cooling**
  Precisely designed screens are essential for stable performance in fluid bed dryers and fluidized bed systems. ANDRITZ supplies punched, drilled, micro-perforated, and ConiPerf screens for vibrating and static machines, with documented pressure loss values and defined flow direction tailored to your process.



All filtration options from one trusted source

In sugar production, precision and reliability are non-negotiable. ANDRITZ delivers both wedge wire and perforated plate solutions from a single source – ensuring seamless integration and maximum efficiency.

Choosing one partner for all your filtration needs simplifies operations, guarantees consistent quality, and optimizes every stage of sugar processing.

ALL PRODUCT OPTIONS FROM A SINGLE SOURCE

DRILLING TECHNOLOGY

- Bi-cylindrical, cylindrical, countersunk, conical or cylindrical conical hole geometry
- From 0.4 mm hole diameter, sheet thickness up to 20 mm
- Optimal for critical ratios (the smallest hole diameter in thick sheets)

WEDGE WIRE SCREEN TECHNOLOGY

- Filtration direction from inside to out or from outside to in
- Radial or axial slot direction
- Various profile shapes and sizes
- Slot widths from 0.015 mm

MILLING TECHNOLOGY

- With or without pre-milling
- With or without profile milling
- From slot widths of 0.1 mm, sheet thickness up to 10 mm

MICRO-PERFORATION

- Round, long or special perforation
- From 0.05 mm hole diameter, sheet thickness up to 6 mm

YOUR BENEFITS

- Complete process coverage: Solutions for washing, steeping, grinding, drying, and more
- Consistent quality: Uniform standards for precision and durability across all components
- Simplified procurement: One supplier for all technologies reduces complexity and downtime
- Expert support: Holistic process optimization and tailored service for peak performance

ConiPerf

- Triangular or slot perforation
- Smoothed or polished
- Screen openings from 0.06 mm, sheet thickness up to 1.5 mm

PUNCHING TECHNOLOGY

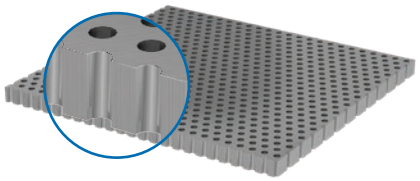
- Round, long or special perforations
- From 0.4 mm hole diameter, sheet thickness up to 20 mm
- Wide range on different materials, such as Duplex, Hardox, etc.

EMBOSSING TECHNOLOGY

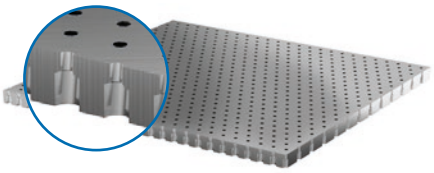
- Wide range of different types available
- Special geometries on request
- For decorative and process specific purposes

Overview of slots, holes and embossing types

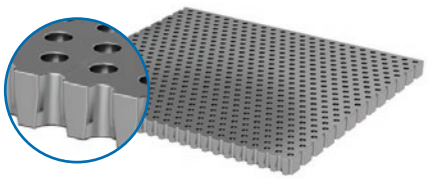
DRILLING TECHNOLOGY



Cylindrical profile drilled

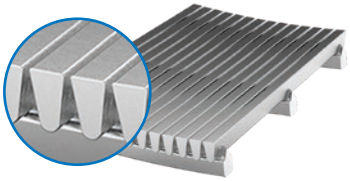


Bi-cylindrical profile drilled

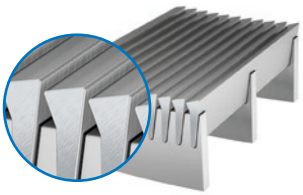


Cylindrical-conical profile drilled

WEDGE WIRE SCREEN TECHNOLOGY

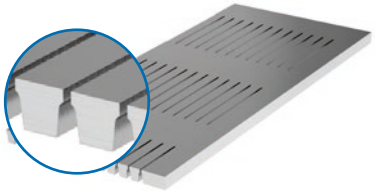


Welded profile wires with support rods, resistance-welded structure.



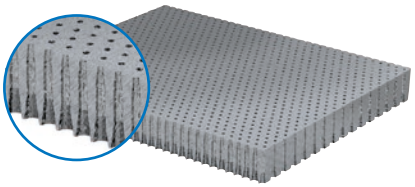
BAR-TEC. Plugged-in profile rods, highly stable design with supporting rings

MILLING TECHNOLOGY



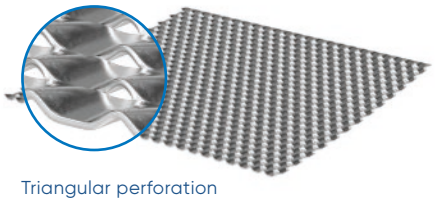
Milled slots, parabolic profile

MICRO-PERFORATION

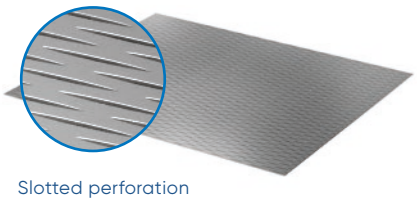


Openings from 0.05 mm

ConiPerf

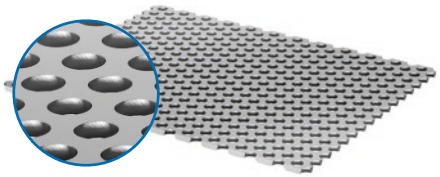


Triangular perforation

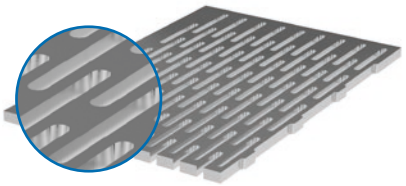


Slotted perforation

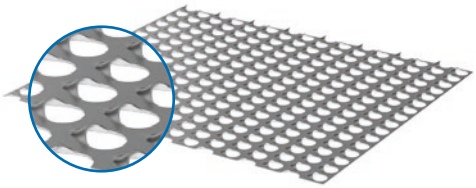
PUNCHING TECHNOLOGY



Round perforation, punched, e.g. Ø 1.5 mm, pitch 2 mm, in stainless steel 1 mm thick

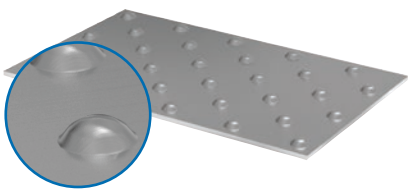


Slotted perforation, punched, e.g. 1.4 mm slot, width, in stainless steel 3 mm thick

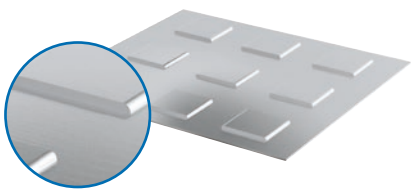


Rasp perforation, various geometries available

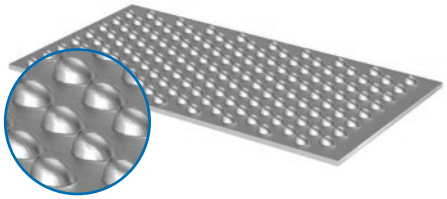
EMBOSSING TECHNOLOGY



Decorative embossing in stainless steel



Decorative embossing in aluminum

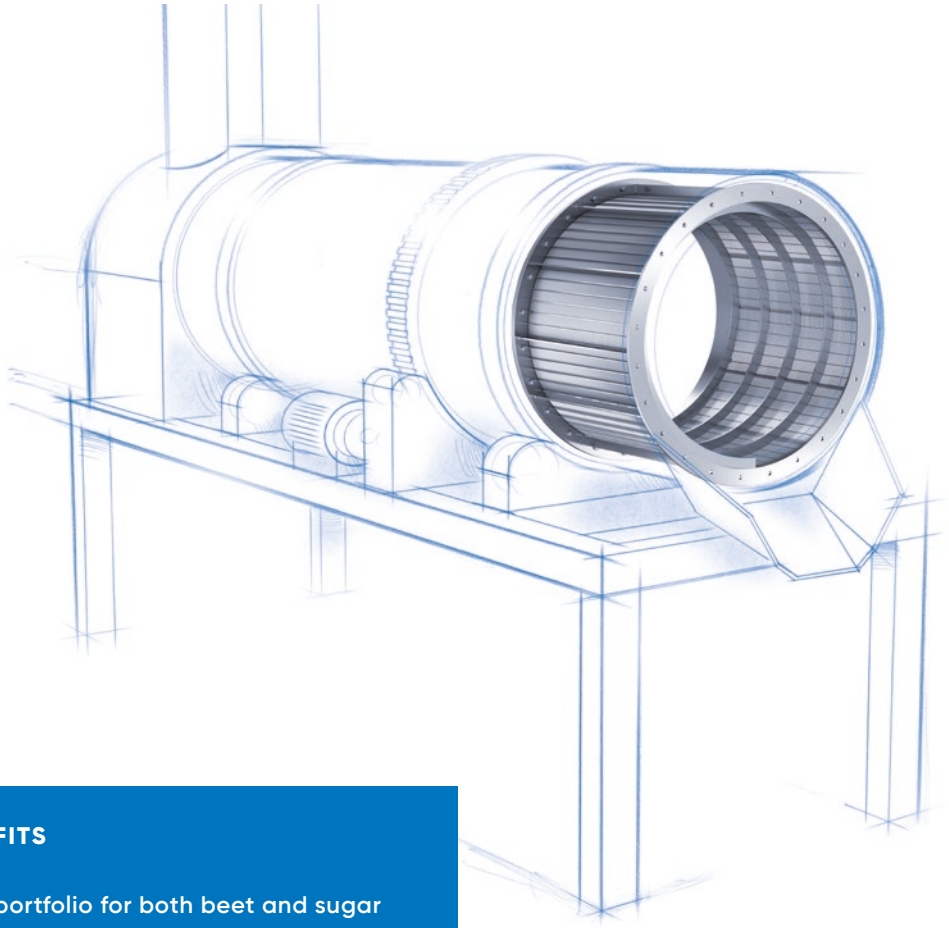


Trieur embossing

Water treatment and material preparation

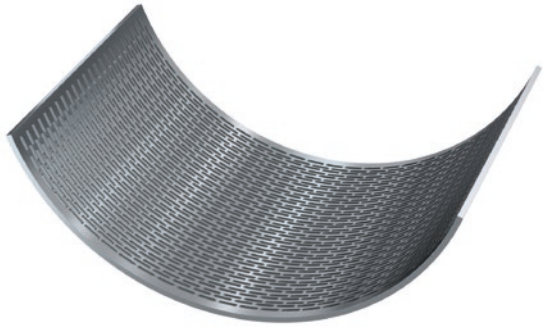
In sugar production, efficiency starts with the very first process steps: washing sugar beets and soaking sugar cane.

ANDRITZ supports these critical early-stage processes with durable, high-precision screening and filtration components designed for reliable water, material, and raw material processing. Our portfolio includes punched, drilled, milled, micro-perforated, and wedge wire screen components, complemented by a wide range of filtration solutions tailored to the demanding requirements of sugar production.

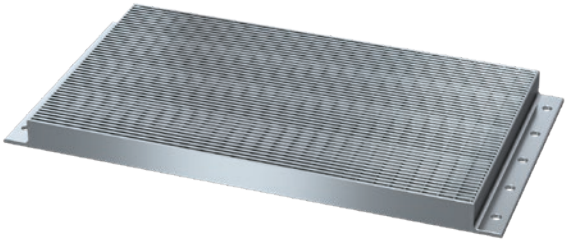


YOUR BENEFITS

- Complete portfolio for both beet and sugar cane processing
- Solutions for water treatment and secondary processes such as green waste handling
- Precise fit for seamless integration into existing systems
- Durable components for reliable long-term operation



Bent screen for the beet washing



Flat screen for the beet washing

COMPONENTS FOR BEET WASHING

Whether it is bent screens, flat screens or screen drums for beet washing, ANDRITZ supplies durable components for beet cleaning. The beets are washed gently due to the burr-free, outwardly conically shaped screen opening.

- Durable and low maintenance
- The lowest possible damage to the beet
- High separation performance due the maximum open area

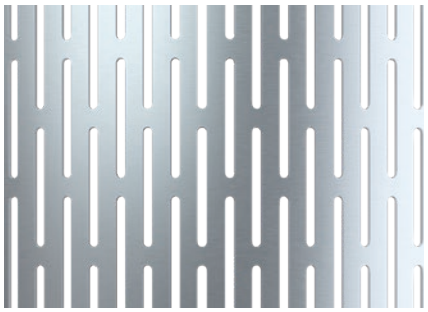
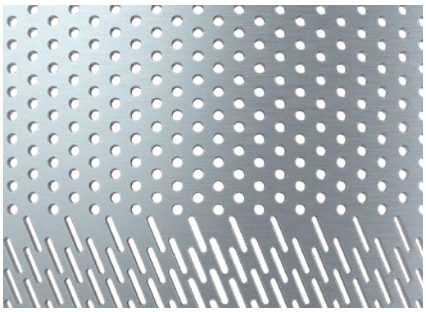
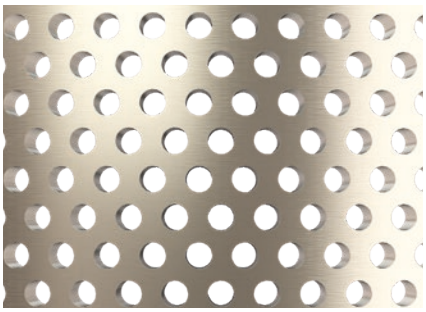
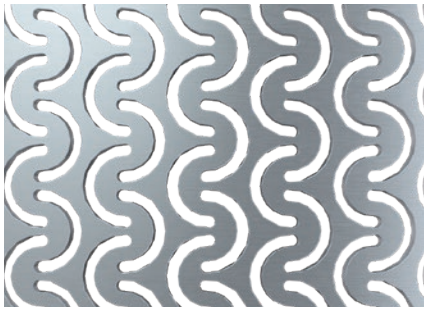
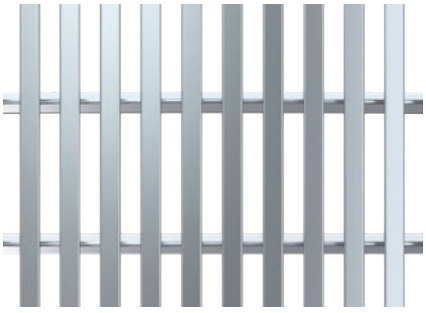
Screen drum for the beet washing

Lime-milk drum

LIME-MILK DRUMS

Lime-milk drums are used in sugar production for the cleaning of coarse elements from the lime milk. Due to its stable construction combined with a large open area, ANDRITZ recommends the use of wedge wire screen drums.

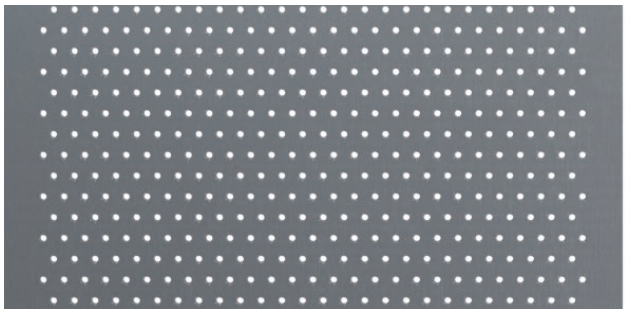
- Large open area
- Easy to clean
- Long lifetime


FILTER ELEMENTS

All perforation options are available from a single source. We are happy to advise you which of our production technologies is best suited for your application.

- High-precision perforation
- Smooth surface without burrs
- High wear resistance
- All types of production technologies possible

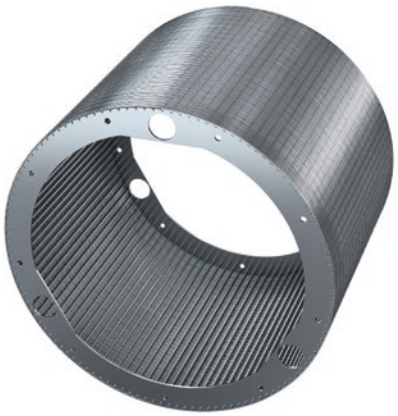


Vacuum filter in stainless steel with 0.5 mm perforation

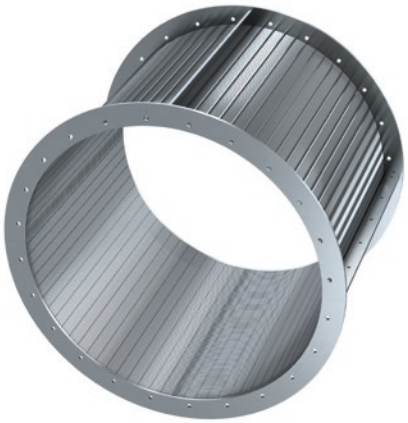
PERFORATED SCREENS FOR VACUUM FILTERS

Vacuum filters are used to remove unwanted contaminants (fibres, sand) from the juice.
Vacuum filters are offered with different perforations in both stainless steel and copper.

- Inexpensive filtration solution
- Very effective process
- Tailored to your process



Drum filter, filtration direction from outside to in

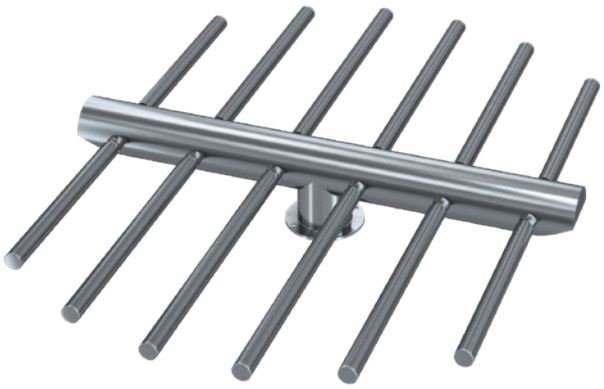


Drum filter, filtration direction from inside to out

WEDGE WIRE SCREEN DRUM FILTERS

Wedge wire screen drums can be used both for washing the beets, and for the filtration and separation of solid and liquid components in other areas. ANDRITZ supplies wedge wire screen drums for processes with flows from inside to out as well as from outside to in.

- Low blockage tendency
- For filtration of fibres from 100µm and up
- Low maintenance
- Wide range of profile wire geometries and materials
- High slot width accuracy for the best process results

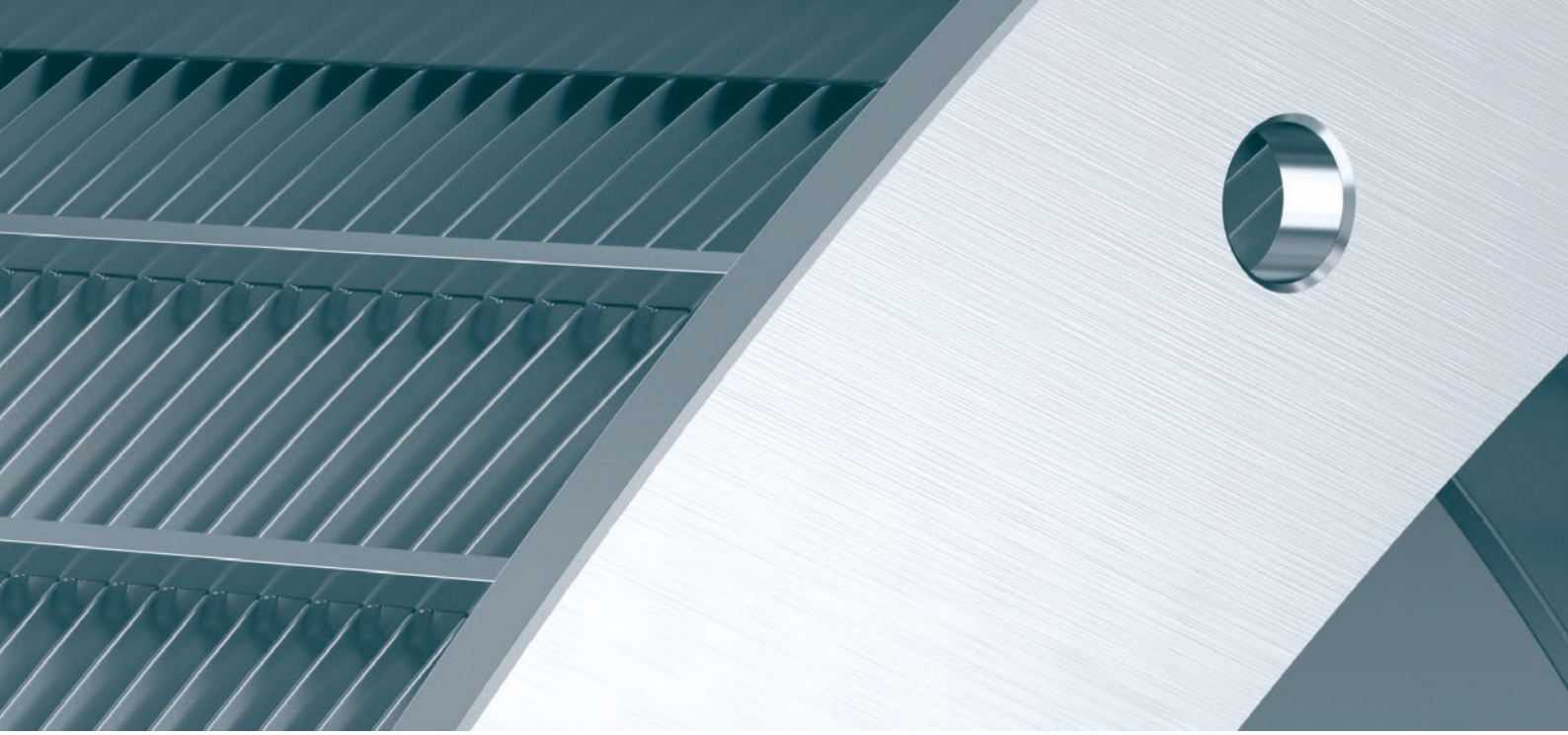


Distribution/Collection system

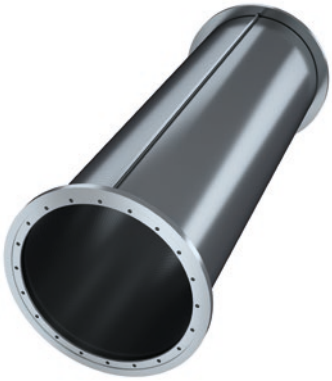
DISTRIBUTION AND COLLECTION SYSTEMS

Wedge wire screen distribution and collection systems are used for filtration and even distribution of liquids. The precise slot openings ensure an improvement of the process cycles and a longer running time.

- No product contamination due to leakage of reactor resins or filter aids
- Improved regeneration time
- Possibility of additional use of the container bottom



Bent screen



Whitener screen

BENT SCREENS

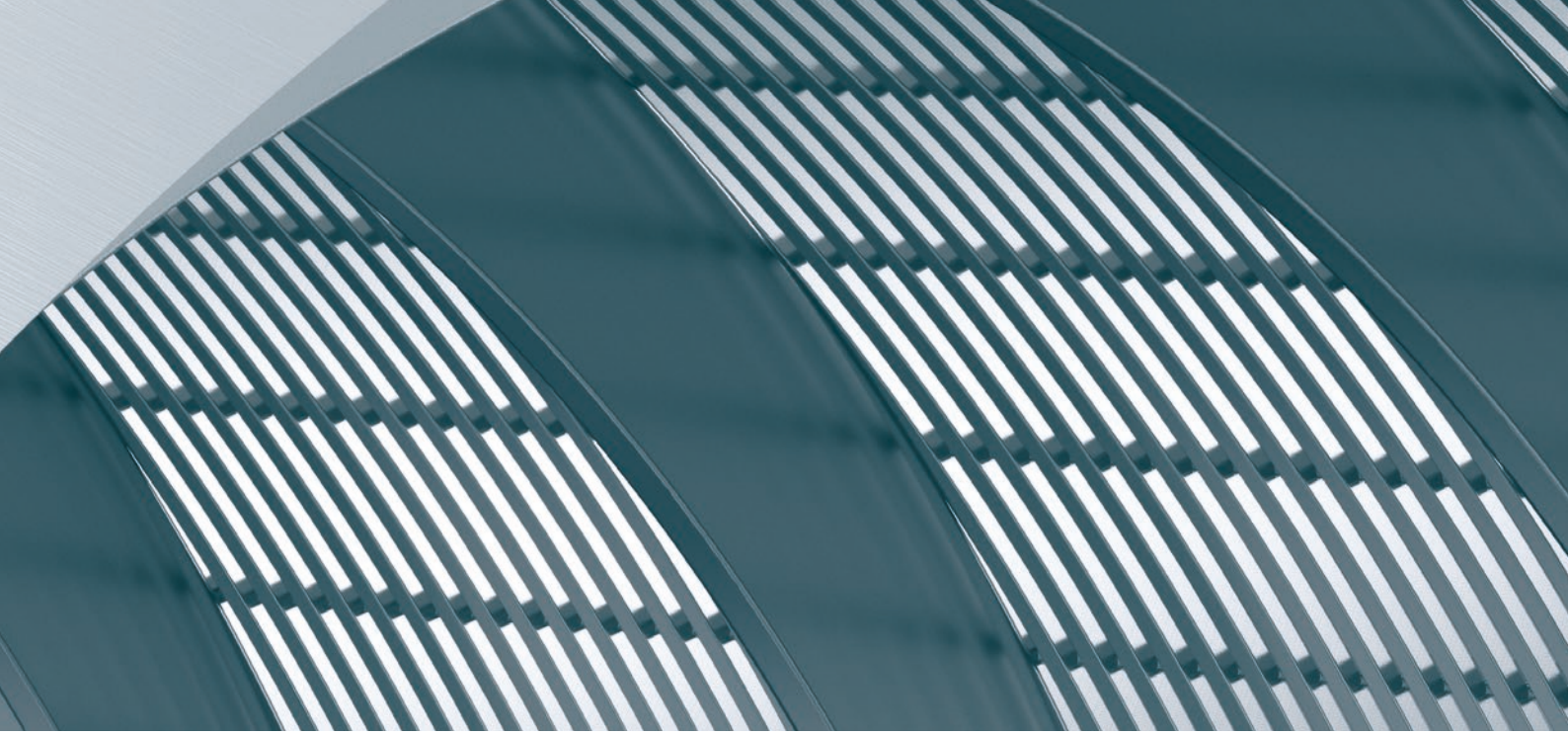
Bent screens are used to separate solids from liquids in a wide variety of applications. For example, in water treatment and the filtration of process water, in the separation of pulp and in the filtration of sugar juice.

- Increased throughput due to optimized profile wire geometry
- High surface quality, optionally polished
- Ready-to-install delivery on request, including screen housing

WHITENER SCREENS AND BACKWASH FILTER

ANDRITZ also supplies many other filtration elements such as whitener screens and backwash filters. Whitener screens are used to remove the brownish colour of cane sugar, backwash filters are used for water treatment. Both filtration components can be produced as a drilled variant with or without multilayered mesh, or as a wedge wire screen filter.

- The smallest screen openings possible (from 10µm)
- The most diverse, process-adapted screen configurations possible
- Also available as wedge wire screen solution



Filter nozzle

Ion exchanger

FILTER NOZZLES

Filter nozzles are used for filtration e.g.of the sugar extract. Unlike standard plastic nozzles, no inert medium is required for wedge wire screen nozzles, which increases the regeneration capacity.

- Significantly longer life and reduced maintenance costs
- Precisely manufactured slot openings prevent unwanted foreign matter or filter aids leaking
- Resistant to high temperature, corrosion and high pressure

ION EXCHANGER

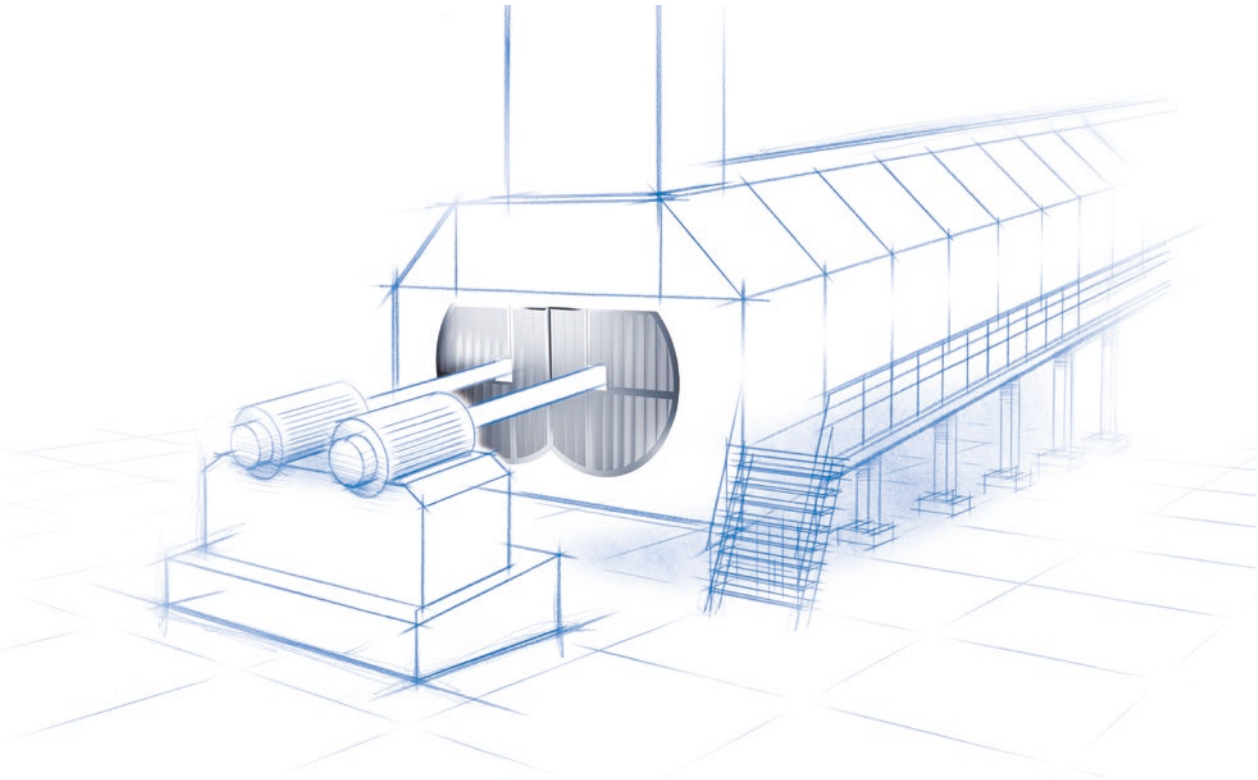
Ion exchangers are used in the sugar industry for decalcification of the beet juice, decolourisation of the sugar cane juice and for separating glucose and fructose in column chromatographs.

- Precise slot widths for a reliable process
- Long lifetime
- Optimized for your process

Extraction/diffusion

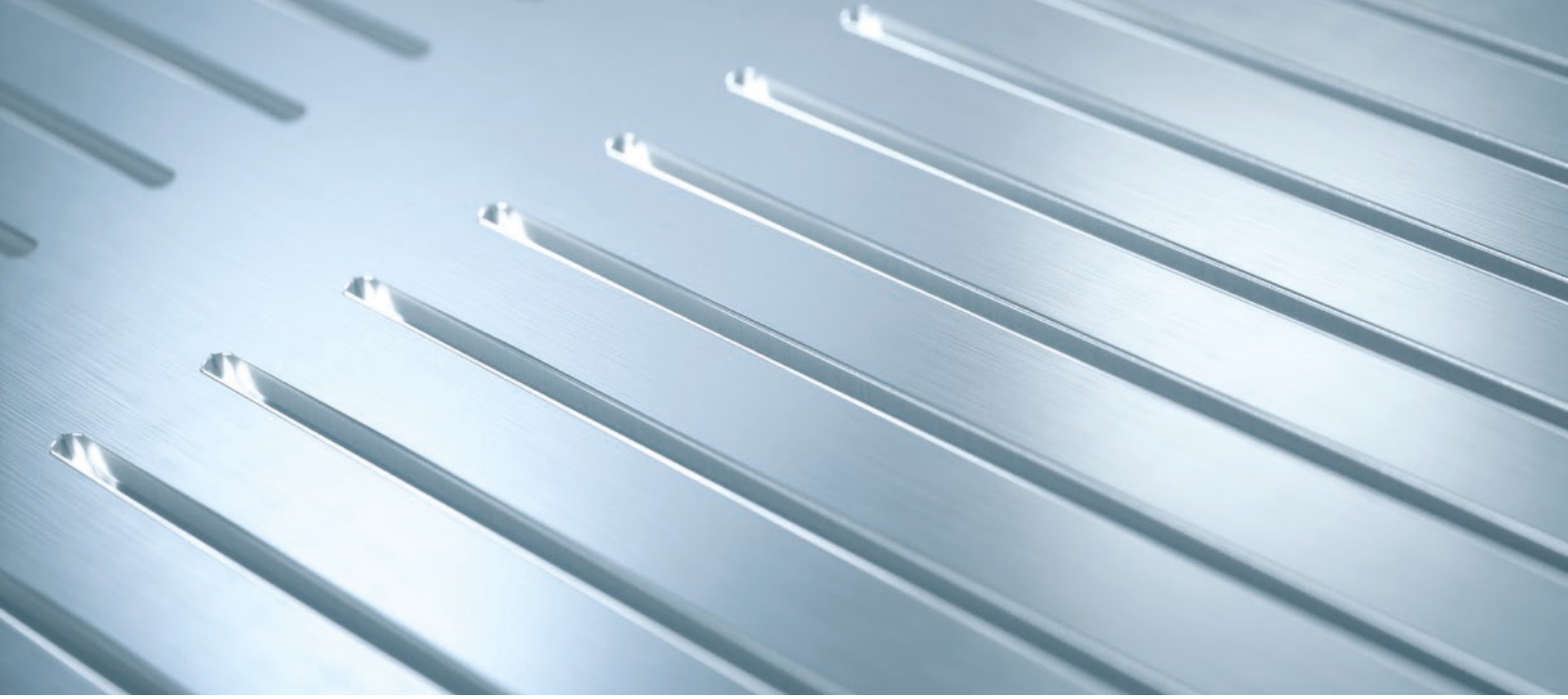
Sugar extraction is a decisive step in beet processing, with a direct impact on sugar yield, plant capacity, and overall profitability.

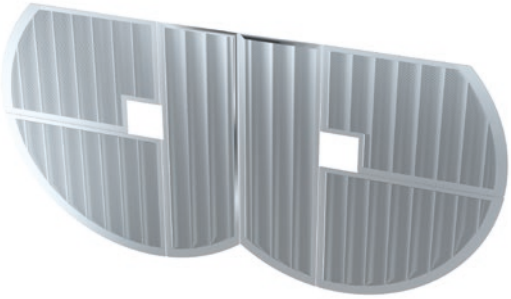
To achieve the best possible output, the leaching process must be controlled with maximum efficiency and reliability. ANDRITZ supports you with optimized screening solutions for extraction towers, DDS troughs, and rotating diffusion drums – helping to increase capacity, improve process stability, and reduce bottlenecks in the production chain. We also provide solutions designed to simplify screen cleaning and support consistent performance over time. Together with you, we analyze your system and identify optimization potential to help maximize sugar yield.



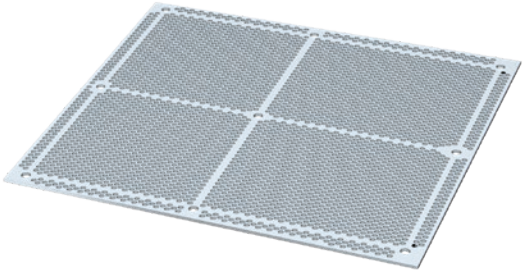
YOUR BENEFITS

- Optimization opportunities in several process stages
- Improved filtration performance and increased output
- Simplified cleaning and reduced maintenance effort
- Installation of upgrades and equipment conversion possible on site





DDS bottom screen



RT diffusion screen

DDS (DIFFUSION)

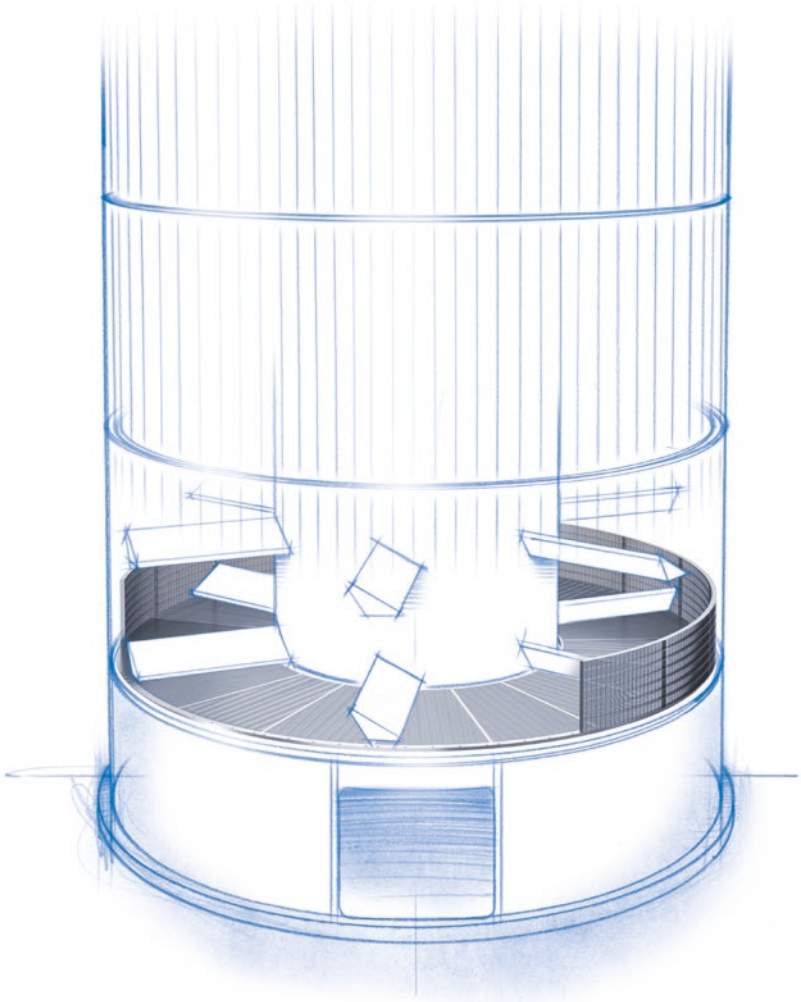
DDS screen trays are used during extraction. They are used to retain the pulp. We can offer you DDS screens in punched, drilled and slot-milled versions. The retention of the pulp and additionally the capacity can be increased by the choice of perforation.

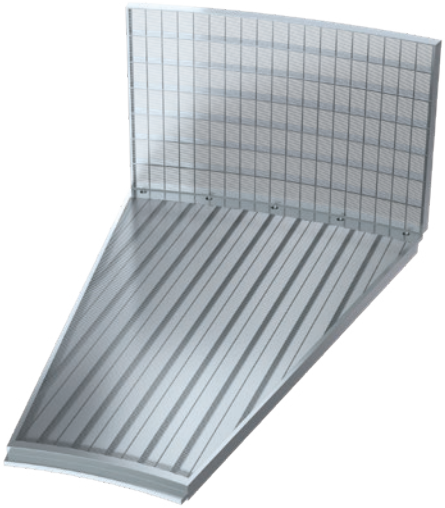
- High stability and durability due to high material thickness
- Improved dewatering performance
- Process optimization by changing the screen opening possible
- Available drilled, milled or punched

RT (DIFFUSION)

Screens for RT diffusion drums can be supplied as a cost-effective, punched version or as an optimized, drilled version. With the drilled version, thicker and more wear resistant materials can be machined. In addition, using this method, the screening area can be increased, increasing the capacity significantly.

- Capacity increase (large open area)
- Increase in service life
- Precise screen openings





Bottom and side screen for extraction towers

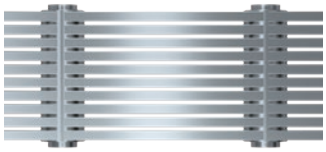
EXTRACTION TOWERS

In many cases, maximum capacity in the extraction process has already been achieved and can only be expanded by commissioning a further tower. ANDRITZ manufactures optimized screens as an alternative solution to this, which achieve an increase in throughput. The higher open area and smaller screen openings retain the pulp more efficiently and significantly increase its capacity. Optimized opening geometries reduce the risk of blockage of the screens by small stones or pulp and simplify cleaning.

- Capacity increase due to large open area
- Very easy cleaning of the screens
- Precisely manufactured screen openings ensure
- efficient retention of pulp and foreign matter
- Can be retrofitted without structural changes to the basic system
- Optimized, slot-milled screen trays

BOTTOM AND SIDE SCREENS FOR EXTRACTION





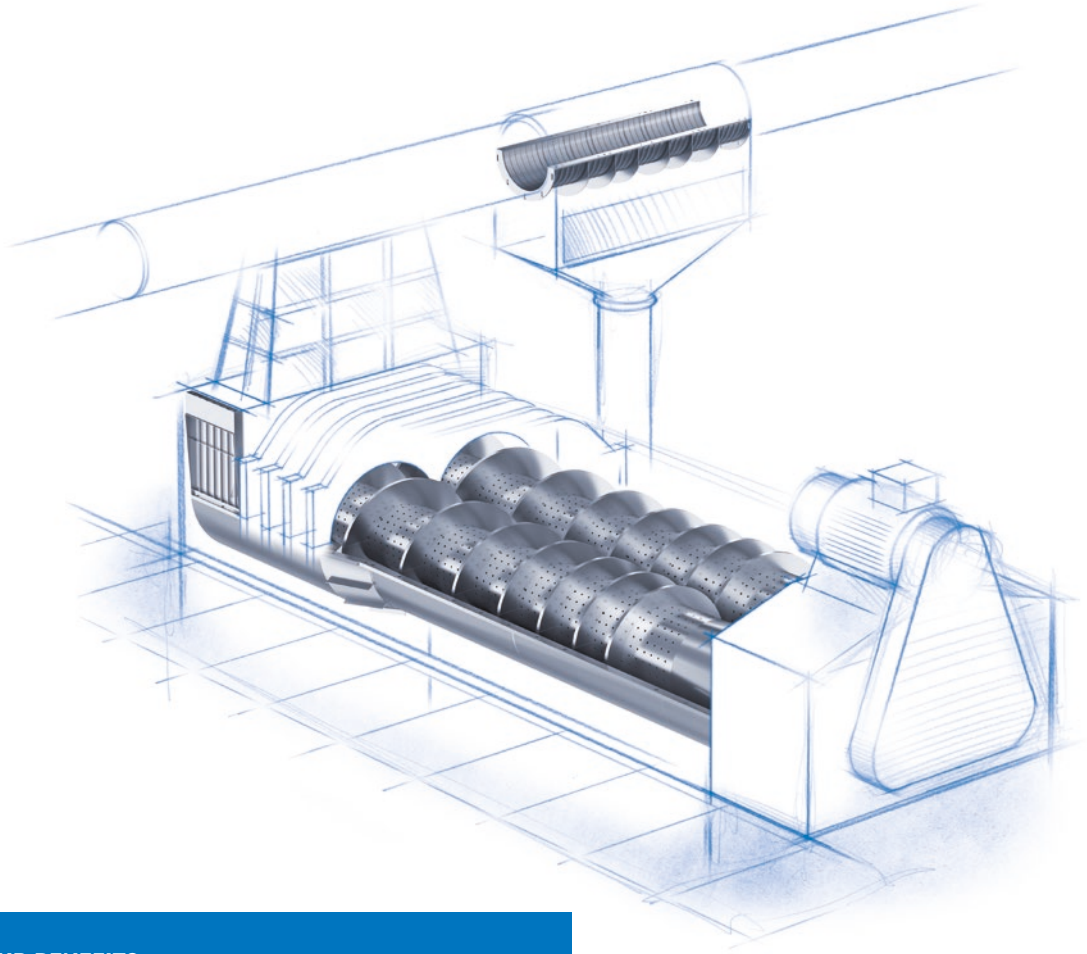
	MILLED SLOT SCREEN	WEDGE WIRE SCREEN	LOOPED WIRE SCREEN
Slot geometry	*** Conical and parallel	** Parallel but consistent	*** Conical and parallel
Tolerances	**	***	*
Open area	** up to 35%	*** up to 45%	* up to 30%
Cleaning and maintenance	***	**	*
Wear resistance	***	***	*
Recommendation	*** The best performance for optimal process results	** The largest open area	* Cost-effective solution

*** optimal results
** good results
* satisfactory results

Dewatering

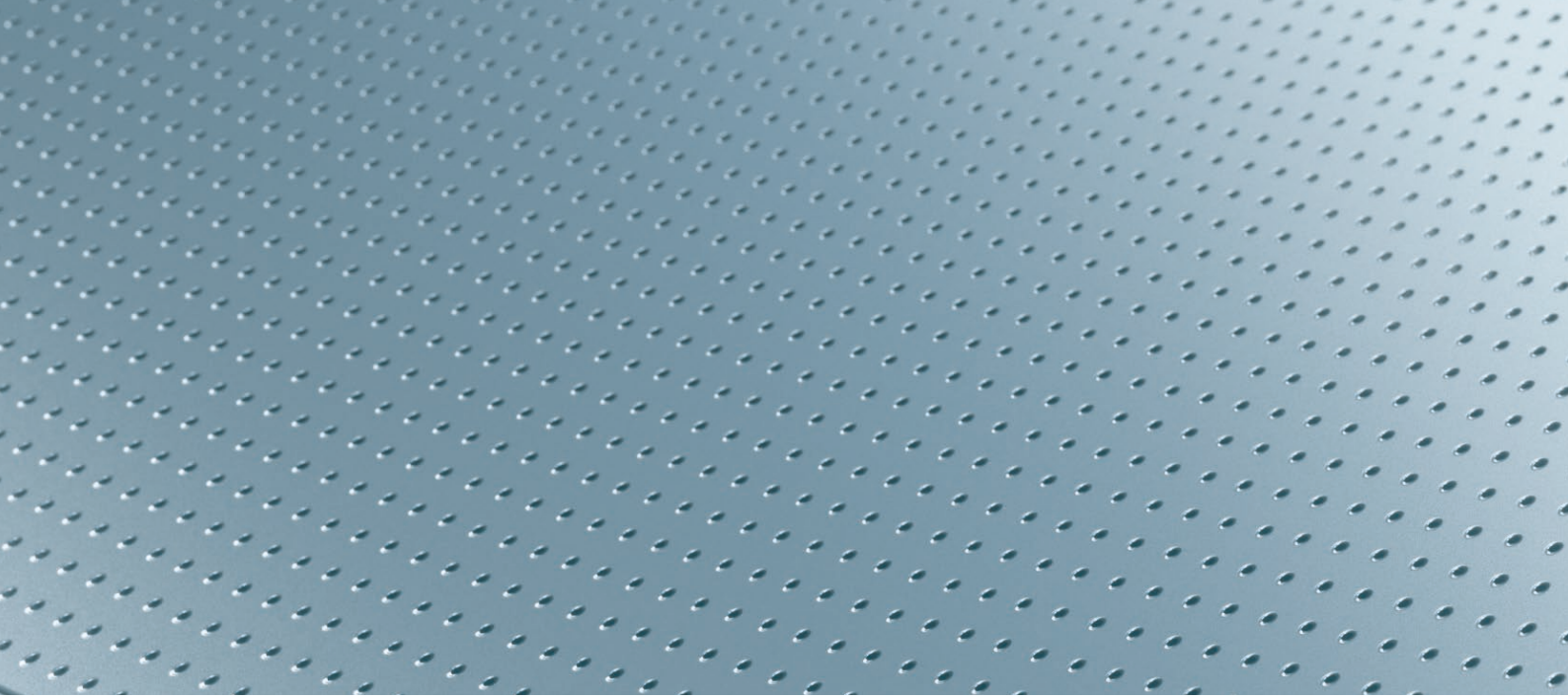
Efficient pulp dewatering plays a key role in reducing downstream drying costs and improving overall process performance.

Achieving a high dry mass content at constant or increased pulp press throughput is essential for energy-efficient sugar production. ANDRITZ supports you in identifying and leveraging optimization potential throughout the dewatering process – helping you improve dewatering performance, reduce energy consumption, and create a more efficient basis for subsequent production steps.



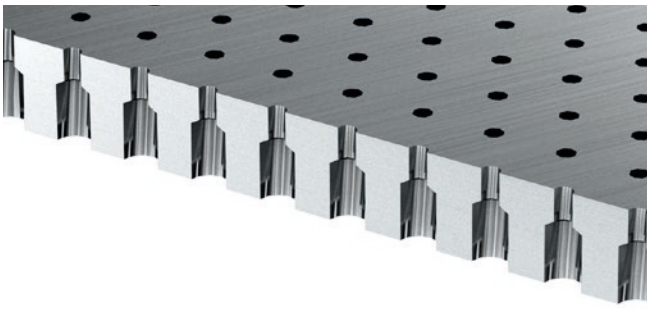
YOUR BENEFITS

- Optimized dewatering performance for beet pulp presses
- Higher dry mass content of pressed beet pulp
- Reduced energy consumption during downstream drying
- Proven process know-how and on-site services for beet pulp presses

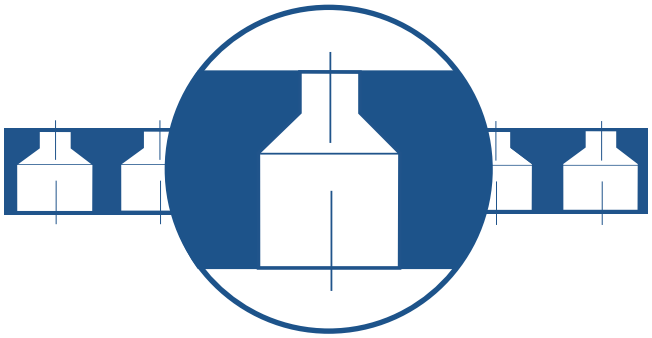


DRILLED PRESS SCREENS

ANDRITZ supplies drilled press screens with a special bi-cylindrical hole for maximum dewatering performance. The different geometries of the drilled holes reduce the risk of clogging, while maximizing dewatering performance, dimensional stability and wear resistance.



Cross section of the bi-cylindrical drilling



Bi-cylindrical drilling

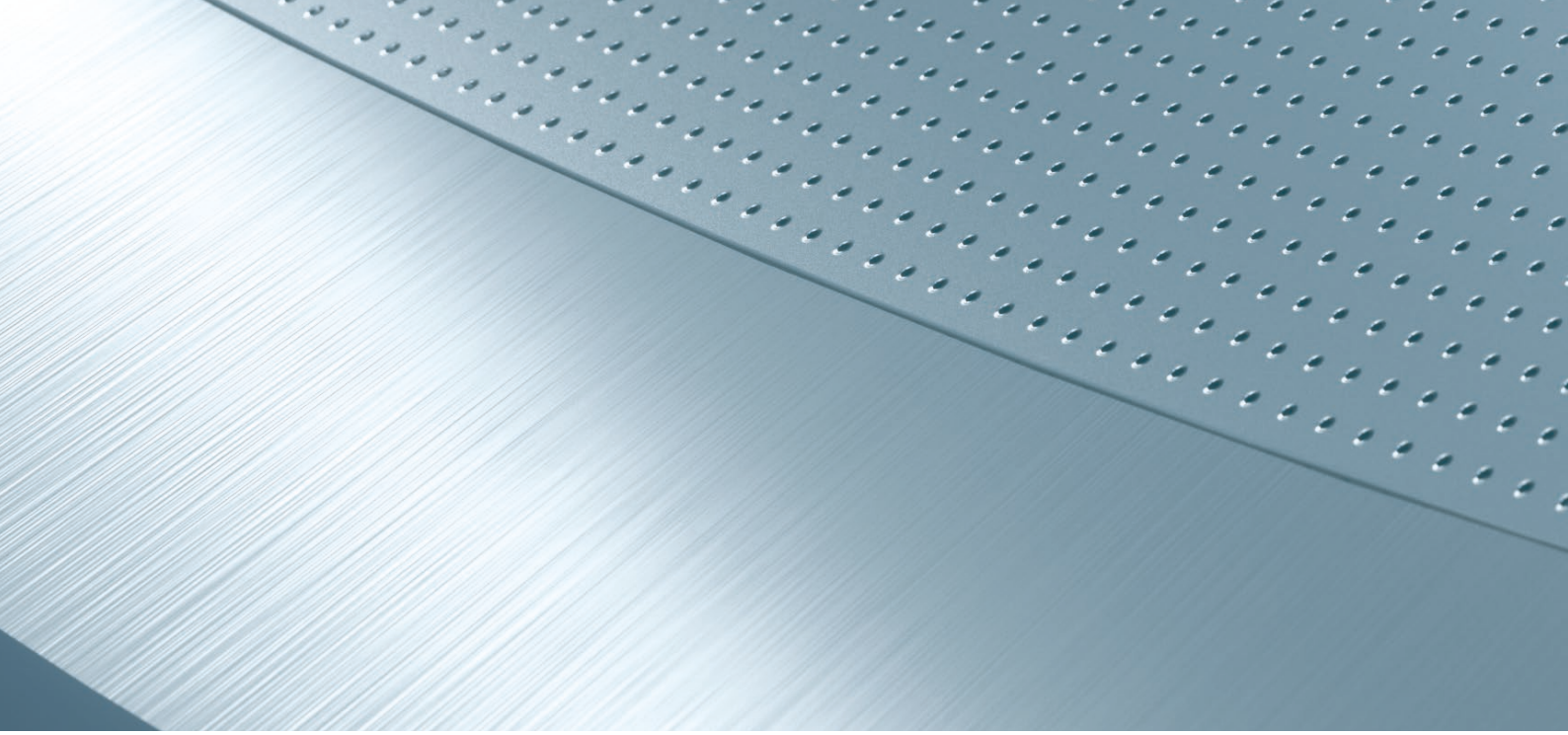
MATERIAL

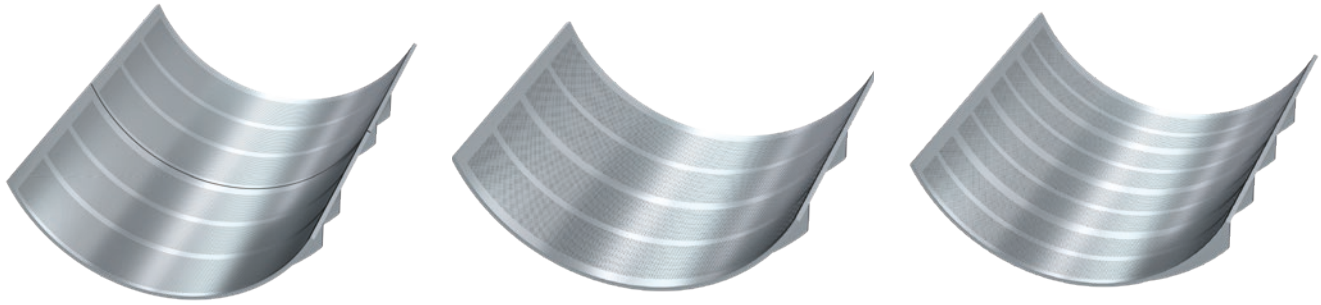
Many suppliers of screen elements use standard stainless steels that can be deformed or damaged under high loads. As a result, the dewatering performance is significantly reduced. For optimum dewatering performance, ANDRITZ supplies all drilled press screens in wear resistant duplex material.

OPTIONS

The yield strength Rp shows the force that can be applied before the material deforms. The higher the Rp, the more dimensionally stable the material and the longer the screen element will last without damage.

- AISI 303/1.4305 Rp: 300 N/mm
- AISI 304/1.4301 Rp: 360 N/mm
- ANDRITZ: L-Duplex/1.4162 Rp: 450 N/mm



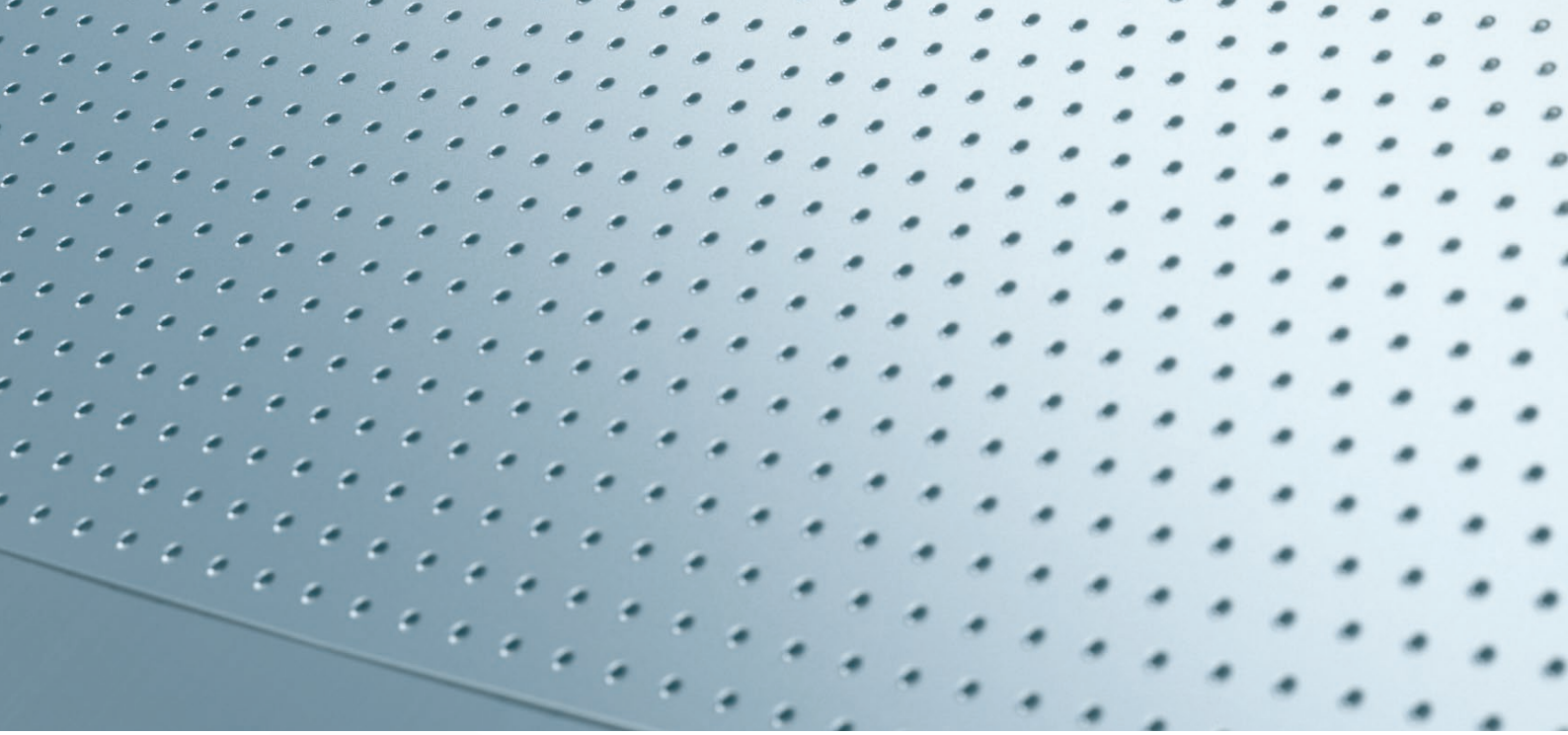


Press screens

DRILLED PRESS SCREENS (HORIZONTAL)

The drilled screens from ANDRITZ ensure optimal dewatering in the pulp presses and enable both a reduction in energy consumption and maintenance costs. Thanks to the maximum number of holes and an ideal hole geometry, the risk of clogging is minimized and optimum dewatering results are achieved, which reduces energy consumption for the subsequent drying of the beet pulp.

Another important aspect of dewatering is the correct distance between the screw and the screens in the press, in addition to the number of holes. Our customized drilled screens for sugar are more resistant to abrasion and deflection, and therefore have a longer service life. This robustness is a result of the screen design and the use of particularly wear-resistant stainless steel alloys, which are perfectly matched to the requirements in the presses.

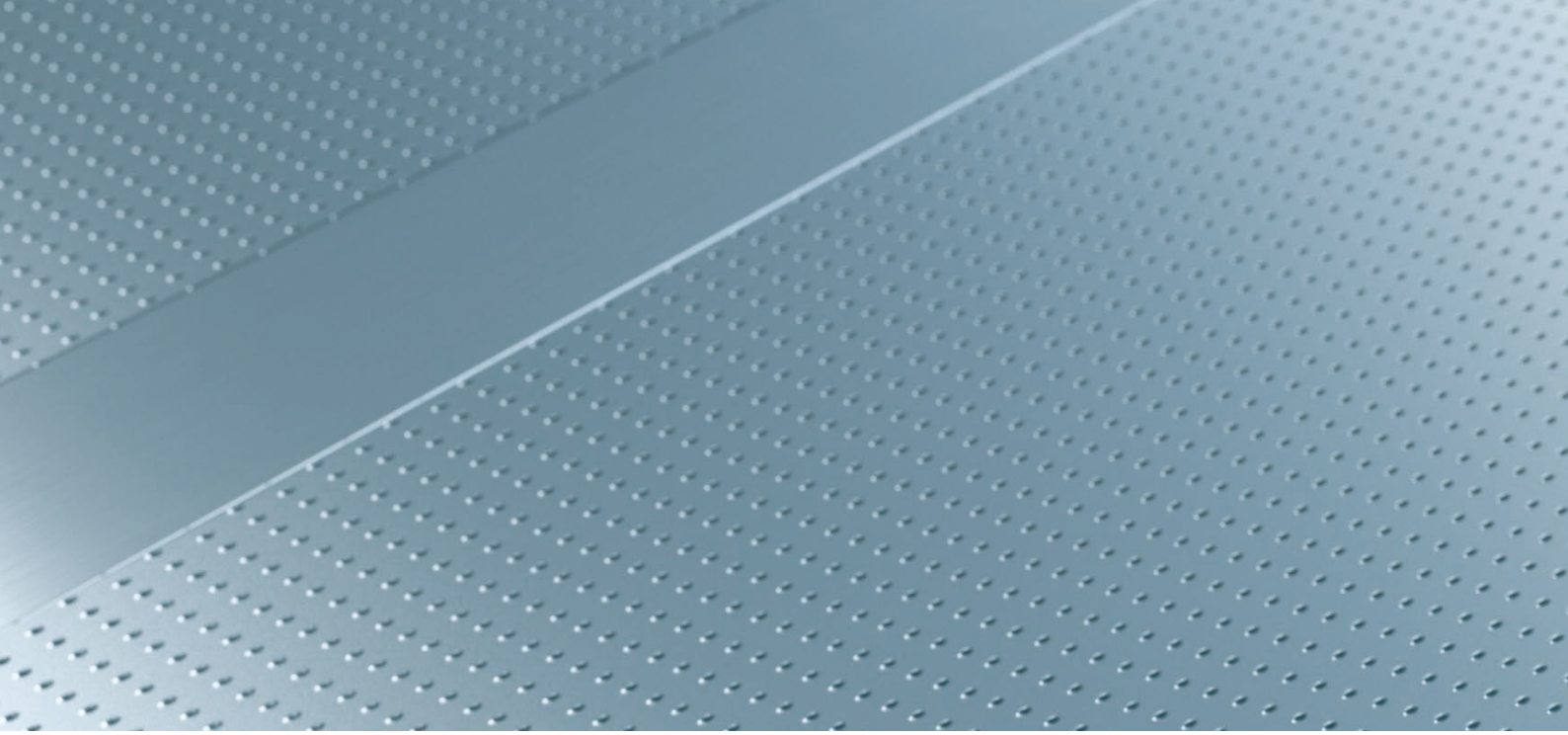


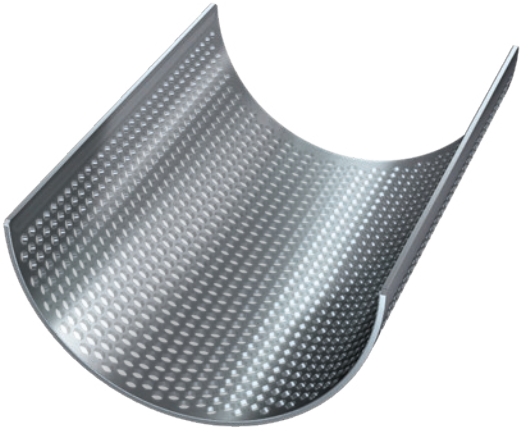
Perforated screens for press spindles (schematic representation)

SPINDLE ASSIGNMENT PLATES

Depending on the design of the press, the dewatering performance of spindles with internal dewatering can be optimized by suitable spindle plates. An important factor here is the open area. Drilled spindle plates from ANDRITZ offer the greatest possible open area for optimal dewatering.

- Optimized open area and perforation for optimal dewatering performance
- Also available as a punched variant
- Use of duplex materials for the highest wear resistance possible





Punched screen for screw presses

Mounting bar for screw presses

PUNCHED PRESS SCREENS

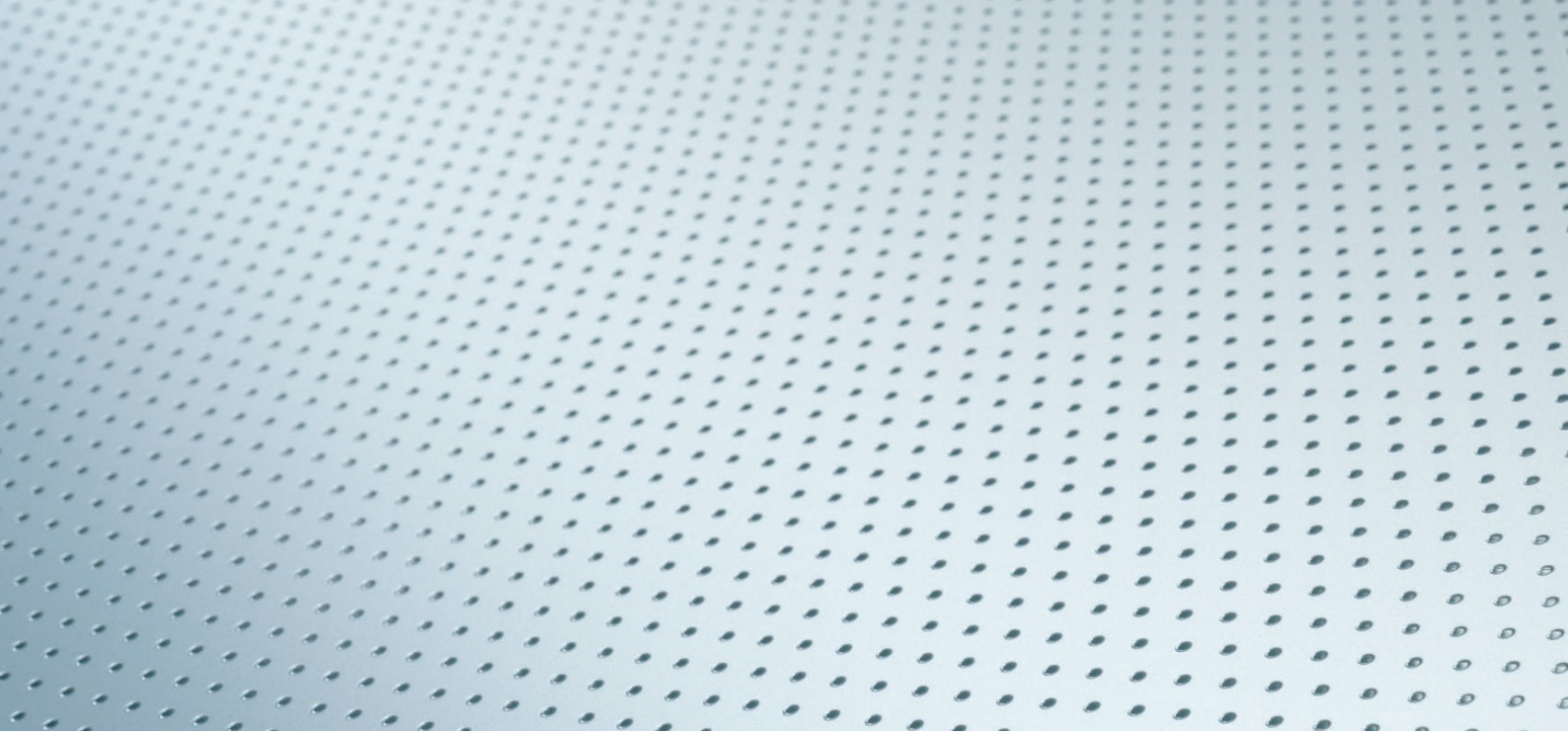
As a less expensive alternative to drilled press screens, ANDRITZ also supplies punched screens for sugar beet presses. Punched screens for pulp presses have a hole diameter greater than 1 mm and a sheet thickness of 1-2.5 mm, depending on the hole diameter. The lower stability of these thin sheets is compensated by punched support screens.

- Less expensive alternative to drilled screens
- Increased stability due to "sandwich" construction
- If damaged, only the fine inner screen is replaced

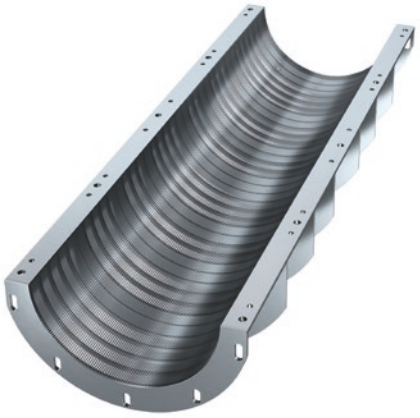
MOUNTING BARS

Mounting bars are used to fix the screen elements and, like the screens, are subject to wear. Therefore, the mounting bars should generally be renewed with the screens. Each bar is manufactured according to the screw press and screen type.

- 100% stainless steel
- Custom-fit after measurement
- Standard bars and raw material in stock



Screen for screw press inlet funnels



Pre-dewatering screen

SCREENS FOR INLET FUNNELS

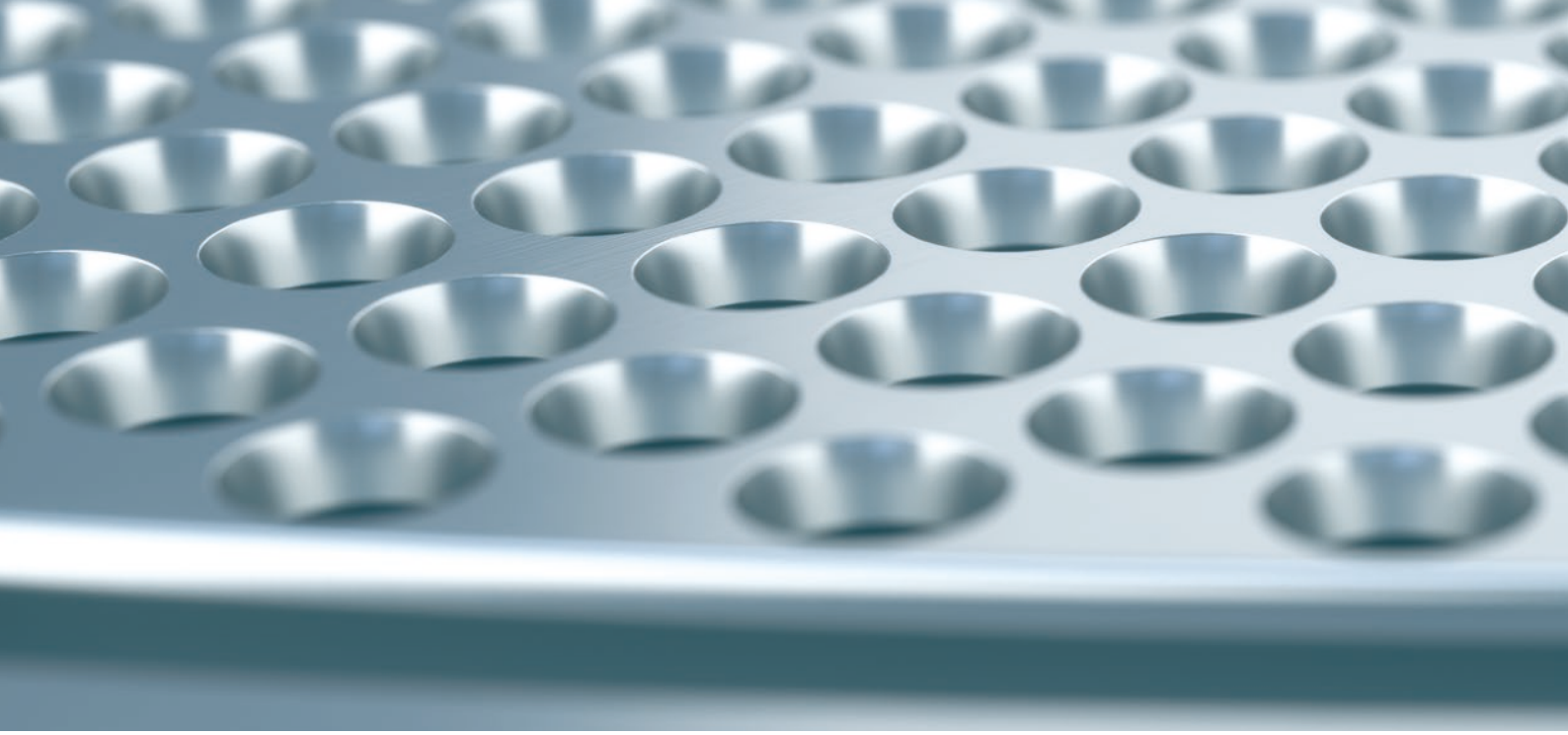
Screens for inlet funnels are used for pre-dewatering and thus improve the dewatering performance of the pulp press. ANDRITZ offers the entire range of production options: whether punched, drilled, embossed or made of wedge wire, we are happy to advise you which screen is the right one for your process.

- Dewatering screens available individually or as a complete assembly including frame and support structure
- 100% suitable for your press type
- Tailored to your process

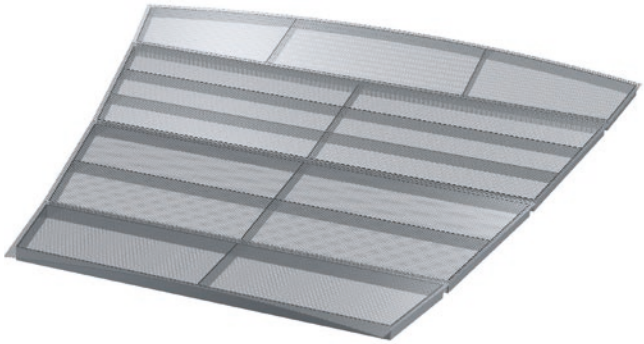
PRE-DEWATERING SCREEN PULP PRESS

Another step to increasing the dewatering performance of the pulp press is to start dewatering in the pulp feed. For this purpose, ANDRITZ offers pre-dewatering screens made of wedge wire for maximum dewatering performance.

- Effective pre-dewatering
- Improvement of the dry mass content of the beet pulp
- Available in wedge wire and alternatively drilled



Screen for vertical press towers



Perforated sheet for pulp dryers

DRILLED PRESS SCREENS

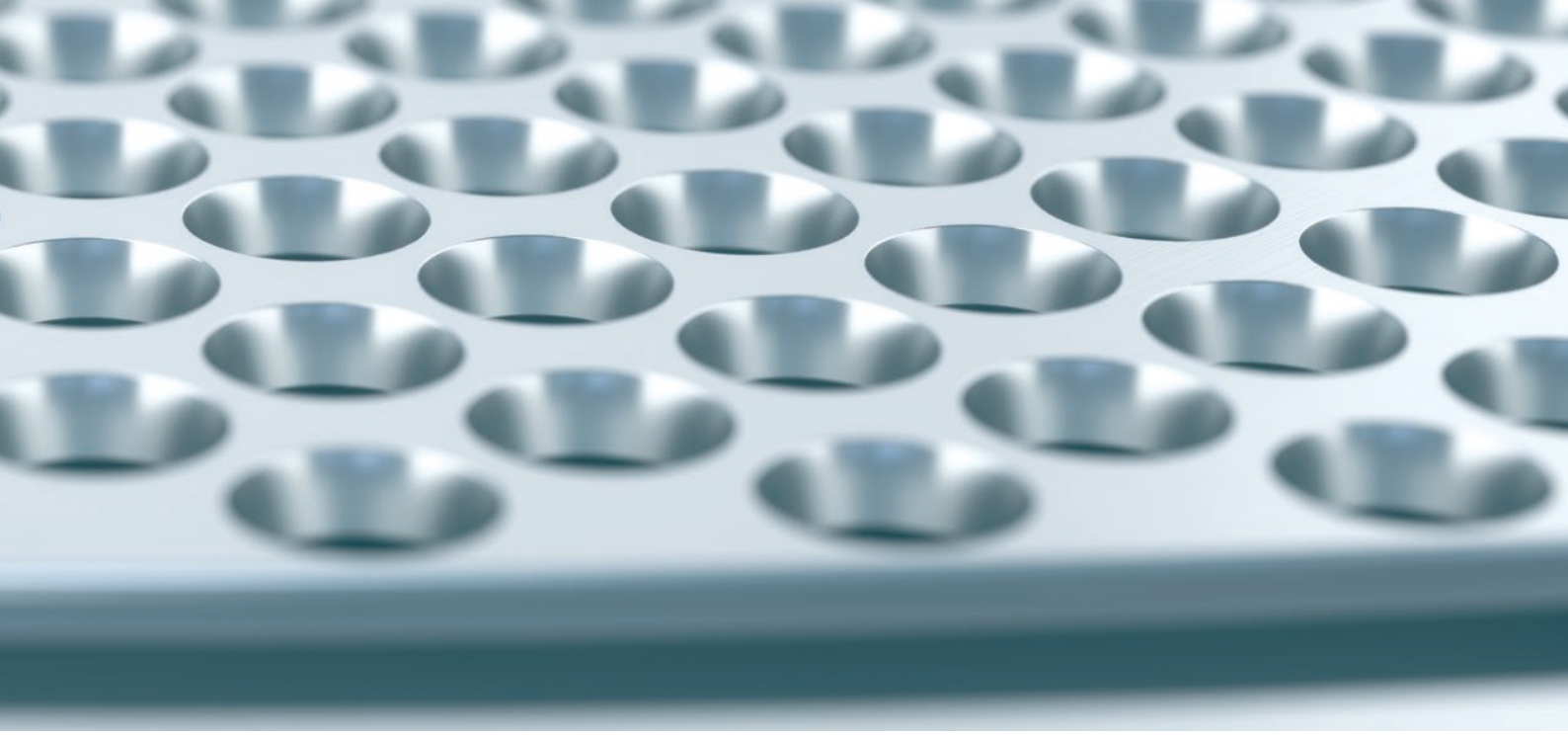
ANDRITZ supplies optimized, custom-fit screens for vertical press towers. Here, too, we optionally offer a version made of special material and with optimized bores.

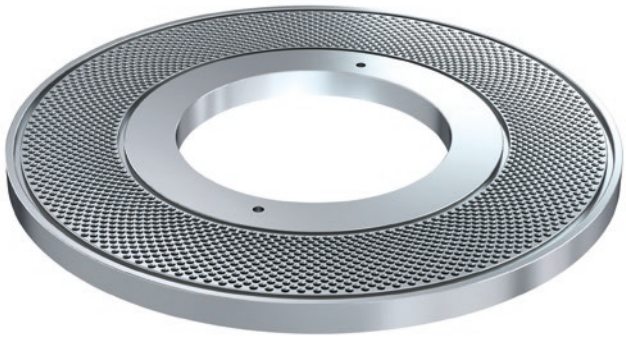
- Optimized open area and perforation for the best dewatering performance
- With retention openings and reinforcing elements
- Use of duplex materials for the highest wear resistance possible

PULP DRYERS

Punched or drilled screens are used in pulp dryers. ANDRITZ offers standard screens as well as optimized screens, and components made of special materials. Upon request, the screens are measured on site and supplied ready for installation, including frames. The removal and installation can also be carried out on request by our service staff.

- Drilled and punched screens for pulp drying
- Optimized processes possible due manufacturing in heat-resistant and special materials
- Available with and without mounting frame





Matrix for pellet presses

MATRICES FOR PELLET PRESSES

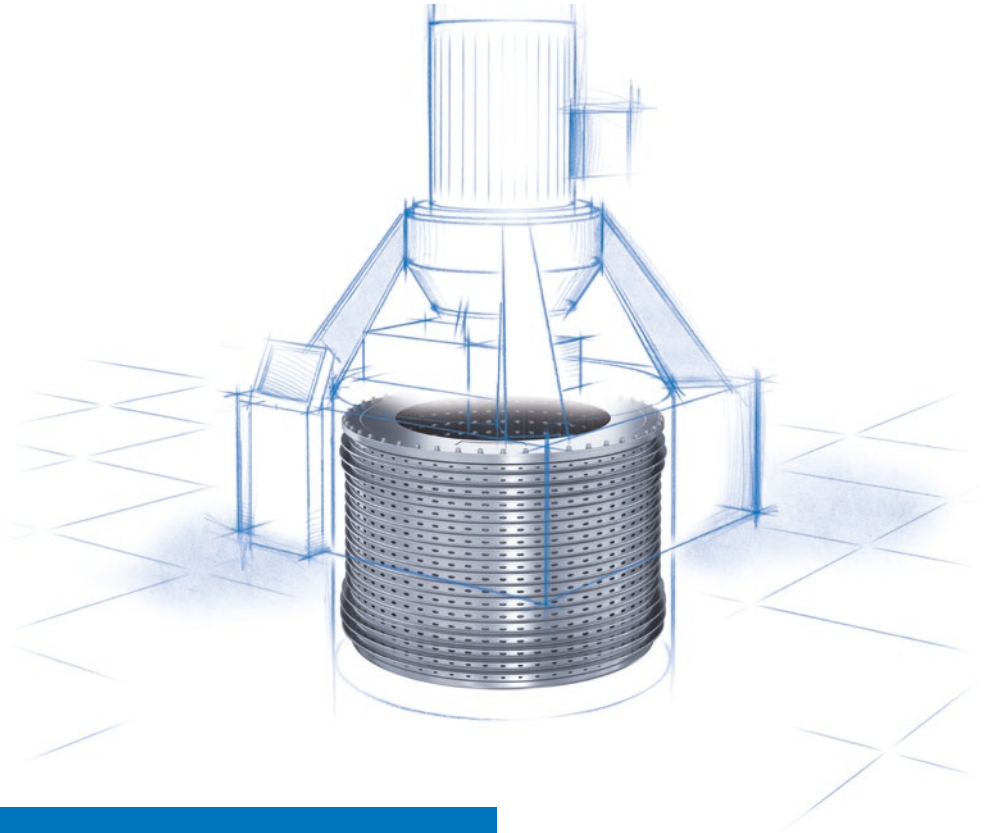
Pellet presses are used in the further processing of beet pulp residues. The dewatered beet residues are pressed through drilled matrices into pellets, which are then used as animal feed.

- Long durability due to wear-resistant stainless steel
- Optionally more resistant with hardened stainless steel
- Suitable for every pellet press, no matter which manufacturer

Discontinuous separation

In sugar centrifuges, reliable screen components are critical for product quality, process capacity, and operational safety.

During centrifugation, sugar crystals are separated from the mother liquor under extremely demanding conditions. High mechanical loads can place significant stress on conventional screens, increasing the risk of screen breakage, metal contamination in the final product, equipment damage, and safety hazards for operating personnel. To address these challenges, ANDRITZ has developed an advanced centrifuge screen designed to significantly reduce screen stress while also shortening cycle times – supporting safer, more efficient, and more reliable sugar production.



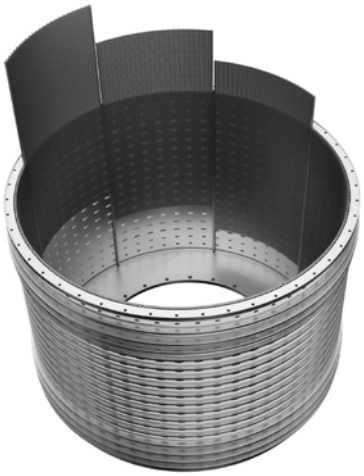
YOUR BENEFITS

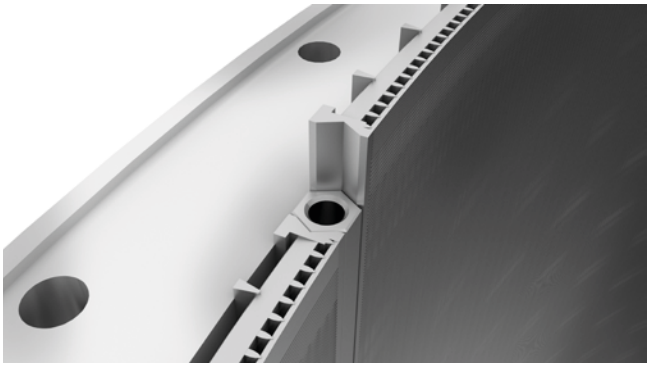
- Improved dewatering performance and shorter centrifuge cycle times
- Higher runtime with reduced mechanical stress on centrifuge components
- Reliable separation for consistent sugar quality
- Proven screen design developed specifically for sugar centrifuges

MAXIMUM YIELD CENTRIFUGE BASKET

Our high-performance centrifuge baskets for discontinuous centrifuges with maximum yield technology consist of specially engineered screen basket designs. These solutions are developed to improve sugar recovery while maintaining reliable and stable centrifuge operation under demanding process conditions.

- Maximum open area for highest dewatering performance
- Reinforcement ring for maximum stability and operational safety
- Reduced cycle times (up to 50%)
- Reduced residual moisture in the sugar crystals (up to 5%)
- Increased sugar yield (up to 6%)





Complete and detailed view of maximum yield centrifuge basket

FINE SCREEN BASKET

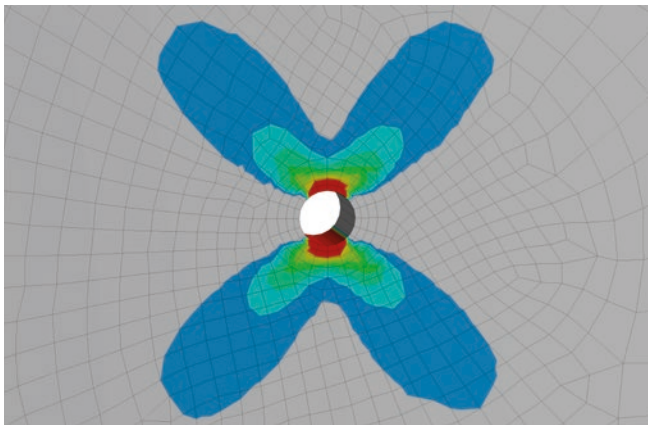
The fine screen basket uses an enlarged wedge wire profile compared to conventional screens. This design enables significantly higher separation efficiency, allowing sugar crystals to be separated from the mother liquor more effectively.

AUTOPEAK BASKET

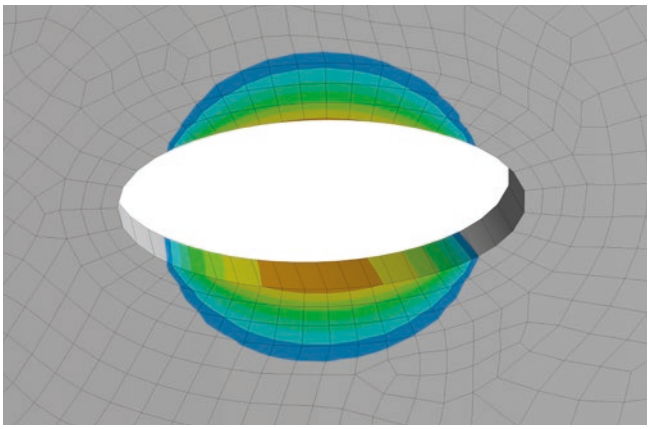
In the autopeak basket, the screen and wedge wire are arranged in a way that increases the mechanical stability of the basket without reducing the open area of the screen. This ensures reliable separation performance while maintaining structural strength.

DUPLEX SCREEN DRUM

The screen drum is manufactured from modern duplex materials and designed for long service intervals. The construction includes vertical openings and a V-ring design that reduces mechanical stress on the basket under process loads from approximately 500 MPa to around 275 MPa, improving operational reliability.



Maximum stress peak of a standard screen drum:
above 500 MPa, greater than the yield strength of the drum material



Maximum stress peak of the ANDRITZ Maximum Yield Centrifuge Basket: **235 MPa**

38 MPa

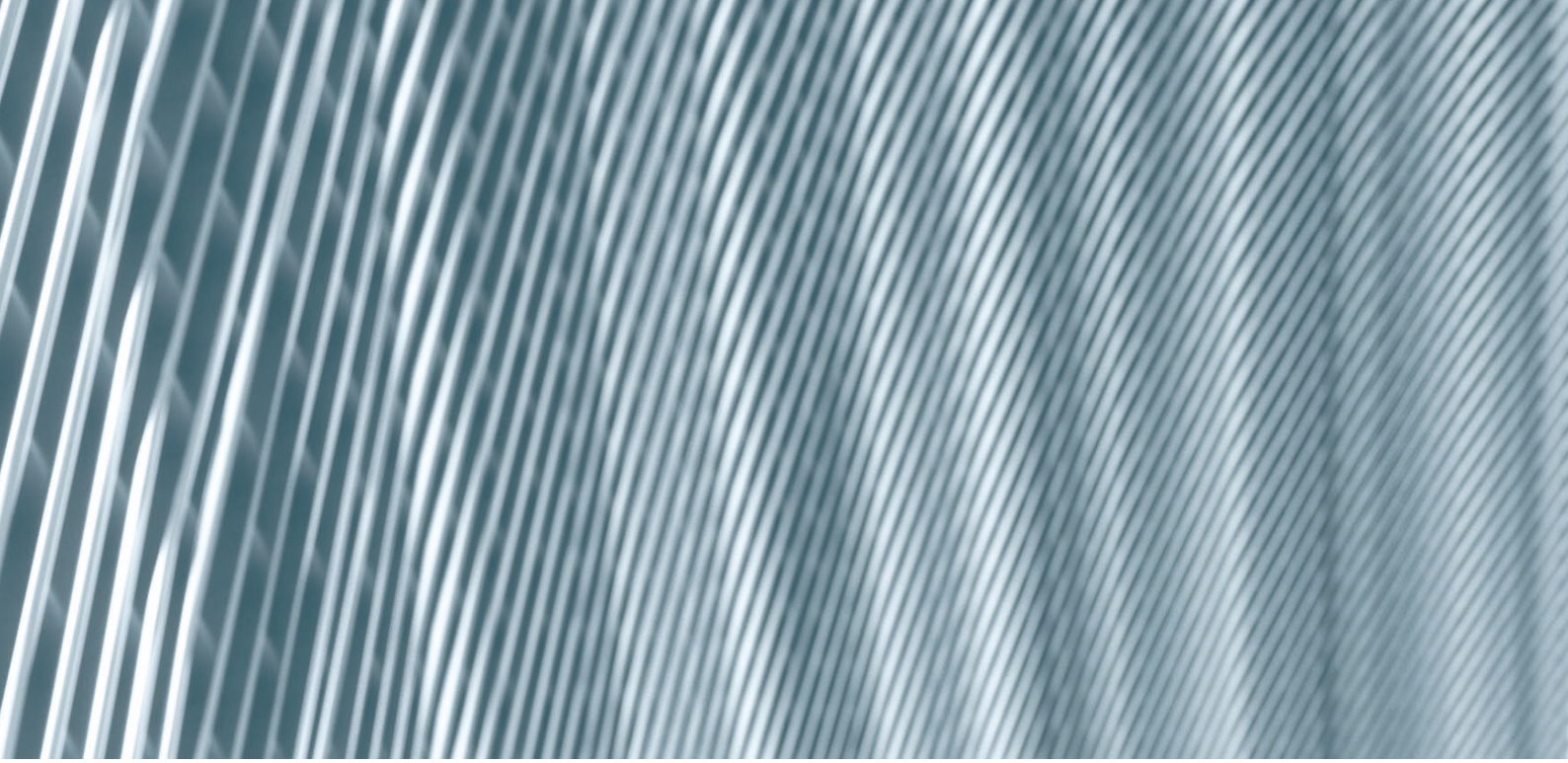
510 MPa

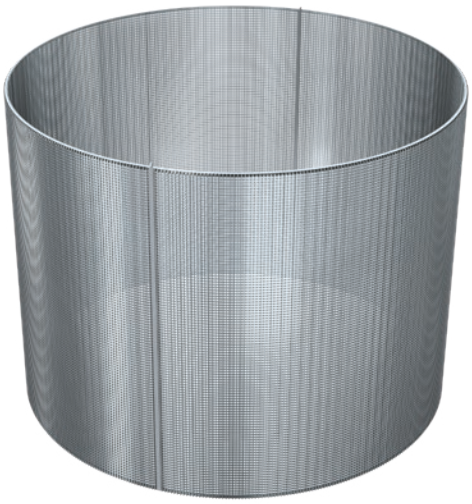
Perfect fit centrifuge basket

PERFECT FIT CENTRIFUGE BASKET

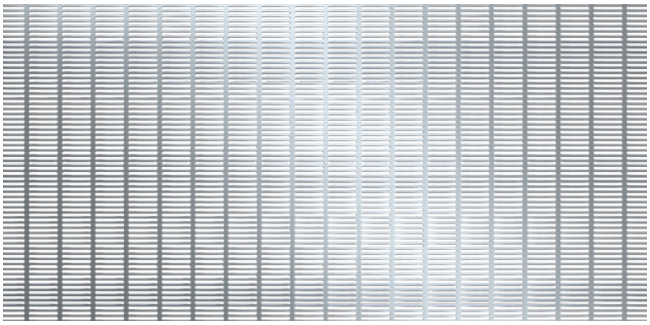
Our weight-optimized alternative. This basket can also be used with an existing motor and reduces cycle times by up to 25% compared to a standard basket. In addition, it offers a higher open area and thus increased dewatering performance.

- Weight-optimized variant, works without modification of the machine
- Higher open area compared to a standard basket
- Cycle times can be reduced by up to 25%

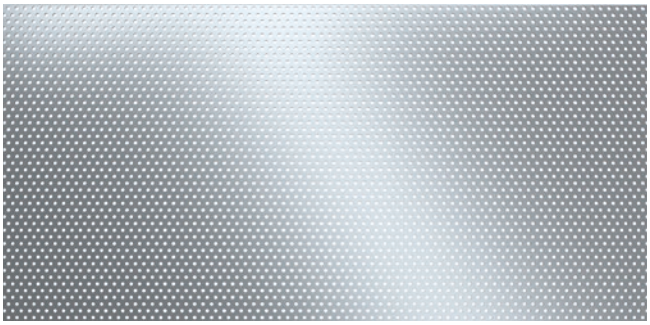




Wedge wire inner basket



Punched oblong perforation



Punched/Micro-perforated round perforation

INNER BASKET DESIGN VARIANTS

Do you want to keep your existing screen drum, but still increase dewatering performance and the sugar extraction rate? ANDRITZ offers optimized internal screens that are compatible with your existing centrifuge drum.

WEDGE WIRE INNER BASKET

- Open area up to 50%
- Optimized slot direction for the best syrup separation and protection of the sugar crystal from damage

PUNCHED INNER BASKET

- Open area up to 25%
- Round or oblong perforation

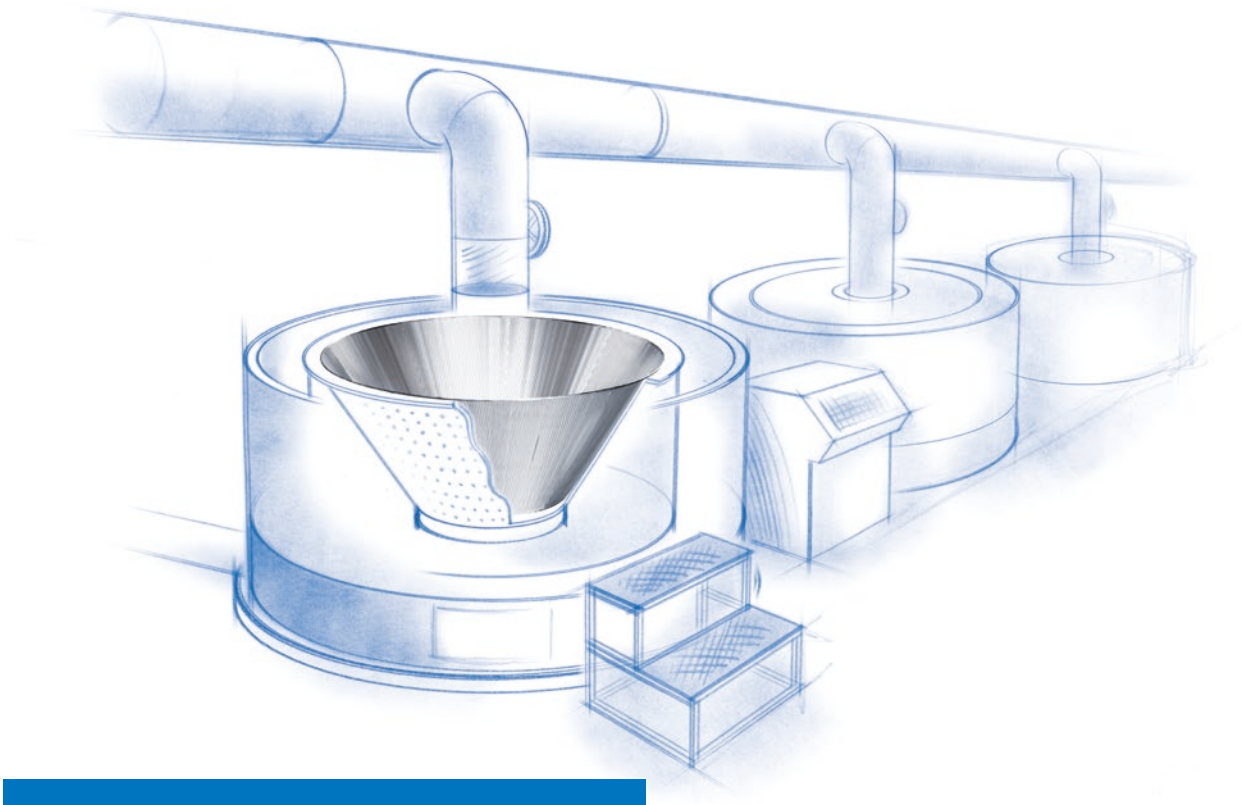
MICRO-PERFORATED INNER BASKET

- Open area up to 25%
- Use of thicker Duplex material sheets for maximum wear resistance
- Round or oblong geometry

Continuous separation

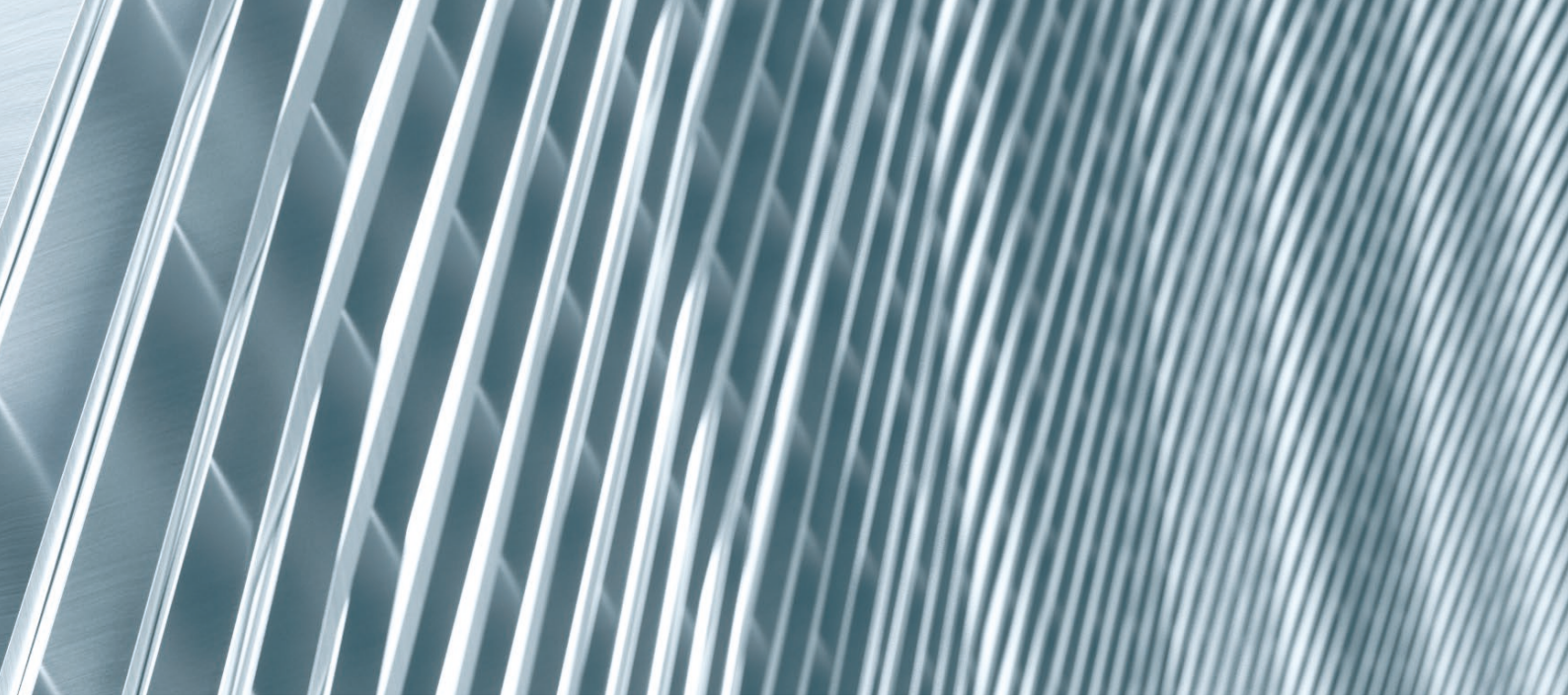
Optimized centrifuge screens can make a measurable difference in sugar yield, process efficiency, and overall profitability.

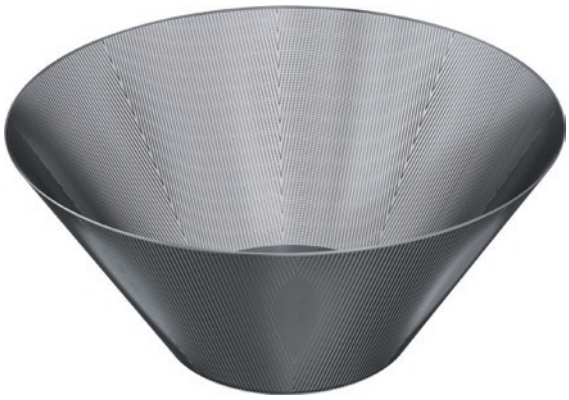
ANDRITZ supplies custom-fit screens for continuous centrifuges in B and C sugar stages as well as post-product lines, designed to support maximum yield in your existing plant setup. Our optimized wedge wire technology can replace galvanic chrome-nickel screens without the need for modifications, making the conversion simple and efficient. Even a 1% increase in sugar yield can translate into significant additional income, depending on sugar market prices and production volume. Together with our product specialists, you can calculate your individual optimization potential and identify the best solution for your operation.



YOUR BENEFITS

- Improved product quality through precise separation
- Higher sugar yield through optimized filtration performance
- High wear resistance for extended component lifetime
- Custom-fit solutions for existing centrifuge installations





Monocone centrifuge basket

MonoCone CENTRIFUGE SCREENS FOR RELIABLE SUGAR SEPARATION

Unlike screens with short vertical slots, polished wedge wire screens with continuous horizontal slots enable fast and uniform separation of sugar crystals and molasses. The horizontal slot design distributes the crystals evenly across the screen surface, allowing them to slide smoothly without breakage.

This optimized flow behavior significantly reduces mechanical stress on the screen while improving separation performance. Compared to conventional screen designs, wedge wire screens provide higher robustness and long-term reliability under demanding operating conditions.

OPERATIONAL RELIABILITY AND REDUCED MAINTENANCE

Designed for continuous centrifuge operation, MonoCone screens help reduce maintenance effort and minimize production interruptions.

- No production losses due to frequent or unplanned screen changes
- Reduced maintenance effort and service requirements
- No machine balancing required after installation
- Installation without complex equipment modifications
- No downtime required during project implementation
- Lower overall maintenance costs

OPTIMIZED SEPARATION PERFORMANCE

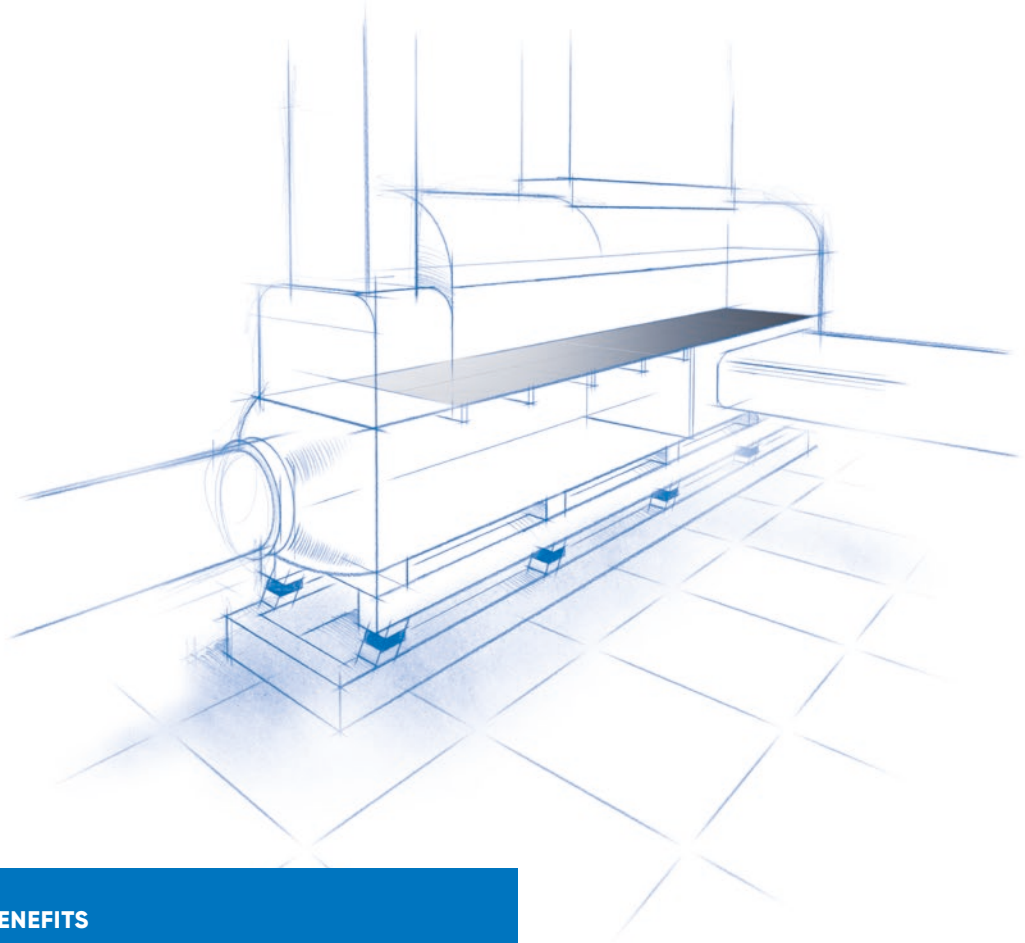
MonoCone centrifuge screens are designed to support stable centrifuge operation and improved product quality in continuous sugar separation processes.

- Higher sugar retention (up to 2% more)
- Fast separation of sugar crystals from molasses
- High wear resistance and longer service life
- Less breakage of large sugar crystals
- Reduced sugar losses through molasses
- No nickel or chrome contamination of the final product
- Increased production capacity due to optimized open area and slot geometry

Drying/cooling

Reliable screen performance is essential for efficient and consistent operation in fluid bed dryers and fluidized bed systems.

ANDRITZ supplies tailor-made screens for all types of vibrating and static machines, precisely matched to your process requirements. Our portfolio includes punched, drilled, micro-perforated, and ConiPerf screen designs, all supplied with documented pressure loss values for reliable process planning and performance transparency. Depending on your application, screens can also be manufactured with a defined flow direction to support optimal drying and fluidization results.



YOUR BENEFITS

- Process-optimized drying components for all systems
- Total range of production types
- 100% accuracy of fit for ANDRITZ and other OEM systems

DRILLED DRYER FLOOR SCREENS

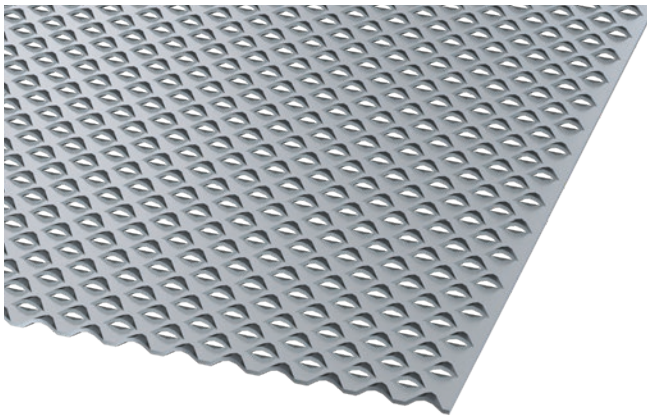
In the case of very fine final product, drilled and micro-perforated floor screens are frequently used. This has the advantage that the finest holes can be achieved even with thicker materials.

- The finest holes in high material thickness
- Longer life
- Variable perforation possible

PUNCHED DRYER FLOOR SCREENS

Punched floor screens are the most cost-effective solution for drying processes without high demands. The hole size can be adjusted according to specification. For very small hole diameters in thicker materials, however, it is necessary to switch to drilled dryer floors.

- Cost-effective alternative
- Variable hole diameter possible



ConiPerf DRYER FLOOR SCREENS

ConiPerf dryer floor screens are the first choice for all static fluid bed applications. ConiPerf is different from other perforations because it is a „covered" hole. ConiPerf sheets have oblique, slightly conical perforations in the bore direction. The hole arrangement generates a flow component parallel to the sheet surface. This causes the material to flow in a fixed direction and not fall through the holes.

- Even air distribution
- Adjustment of the perforation at separate air zones
- Different flow directions possible

ANDRITZ service for sugar production

Reliable plant performance depends not only on high-quality components, but also on expert service throughout the entire lifecycle. ANDRITZ offers a comprehensive global service portfolio covering inspection, maintenance, optimization, upgrades, and spare parts supply to support efficient and reliable plant operation.

SERVICE WITH COMPETENCE AND EXPERIENCE

From analysis through to the revealing of optimization potential, ANDRITZ offers a variety of services for your plants in the area of water treatment and material preparation, extraction and diffusion, dewatering and separation as well as in the drying processes for sugar and beet pulp.

SPINDLE REDESIGN

The longer a screw press operates the more signs of wear there are on flights of the screw - the dewatering performance decreases progressively and it can lead to blockages. For worn spindles, which are difficult to access due to local conditions or can only be removed at considerable expense, ANDRITZ offers an attractive solution: complete repair and upgrade with the mobile OSR unit. Old and large screw presses are modernised by this flexible on-site repair and subsequent adaptation with wear protection so that they can provide a consistently high performance again.

YOUR BENEFITS

- **Installation of optimized screens for pulp presses**
- **Spindle repair, maintenance, and performance optimization for pulp presses**
- **Precision surveying for custom-fit spare parts**
- **Emergency screen supply during campaign operation**
- **Professional repair of damaged screens**
- **Maintenance and repair of transmission systems**
- **Process optimization through upgraded and optimized spare parts**
- **Comprehensive on-site service support**

OSR UNIT FOR ON-SITE REPAIR OF SCREW PRESSES

The ANDRITZ on-site service eliminates the hassle of removing and installing the screw press spindles and eliminates the need for a replacement shaft. Expensive costs and time-consuming transportation are saved. Compared with conventional repairs, downtime is reduced by about 20%. The service life of the spindle can be further increased if the shaft is equipped with complete wear protection from ANDRITZ during the repair. After conversion to complete screw protection, you can repair it by yourself by replacing the wear shoes.

SPINDLE OPTIMIZATION WITH ANDRITZ WEAR SHOES

The wear shoes have been optimized for the three press zones of the screw press. A patented carbide alloy for the high pressure zone reduces wear and provides stability. This leads to less wear and lower maintenance. The wear shoes of the medium pressure zone are coated with a patented special alloy. The low pressure zone is protected by hard edged steel rings. The economically optimized concept not only increases the service life of the screw press, but also maintains its performance.

SHAFT COATING FOR SCREW PRESSES

ANDRITZ has developed a special shaft coating that is highly resistant to wear and guarantees an optimum surface (which does not entail any adhesion to the worn shaft). The result: constant dewatering performance and longer service intervals. The coating is applied to specific plates which are welded to the surface of the shaft. This makes it easy to replace the section when worn. For this upgrade, removal of the shaft is not necessary.

SPINDLE DISASSEMBLY AND ASSEMBLY

In addition to spindle optimization and reworking, ANDRITZ also offers complete replacement including disassembly of your old spindle as well as installation of your new ANDRITZ spindle. So you get a complete all-round service from a single source. We guarantee a smooth commissioning of your screw press, because the acceptance is on site together with our service experts.

Building on this global service network, ANDRITZ also offers specialized services for sugar processing equipment. At our service center in Regensburg, experienced experts support customers with dedicated solutions for centrifuge screens, pulp presses, and related process equipment.

DISCOVER
ANDRITZ global service offerings

INVENTORY AND ASSESSMENT BEFORE THE START OF YOUR NEW CAMPAIGN

To maximize revenue and minimize losses, your campaign should run as smoothly as possible. We ensure that your pulp press delivers maximum performance without incidents and maintenance breaks. We check your pulp press before the campaign starts, replace your defective screens on site or recommend suitable products for maximum dewatering performance. In the discussion with our experts you will learn how to maximize revenue and save energy in subsequent processes.

DISASSEMBLY AND INSTALLATION OF YOUR SCREENS

In addition to advising on optimizing the dewatering performance of your pulp press, we also take care of disassembling the old screens and installing new ANDRITZ press screens. We also offer you matching mounting bars, which should always be exchanged during a replacement.

SCREEN REPLACEMENT INDICATORS

- Reduced screen thickness due to wear
- Screen deformation between support ribs
- Blocked screen openings caused by metal or foreign materials
- Dry mass content below target level

The right solution for any separation challenge

PEACE OF MIND, COST EFFICIENCY, AND SUSTAINABILITY – ALL FROM ONE TRUSTED PARTNER.

Regardless of your industry – whether environmental, chemicals, mining and minerals, or food and beverage – efficient separation processes are essential for high product quality, reduced waste, and the responsible use of valuable resources. With our advanced technologies, comprehensive services, and smart automation and digitalization solutions, we deliver peace of mind today and lasting success for tomorrow – efficiently, responsibly, and with measurable impact. What's more, with us you also gain access to one of the world's largest OEM manufacturers for solid/liquid separation for well-known brands such as 3Sys Technologies, Bird, Dedert, Delkor Capital Equipment (Pty) Ltd., Escher Wyss dryers, Guinard Centrifugation, KHD Humboldt Wedag, Krauss-Maffei centrifuges, dryers, and filters, LENSER Filtration, Netzsch Filtration, REINEVELD centrifuges, Rittershaus and Blecher, Royal GMF Gouda, Sprout Bauer, and Vandenbroek.

SEPARATION EQUIPMENT AND SYSTEMS

- Decanter and filter centrifuges
- Filter presses
- Dryers
- Presses and screens
- Extractors
- Thickeners
- Evaporators and crystallizers
- Disc and drum filters
- Screening and filtration components
- Specialized thermal systems

FULL-SERVICE OFFERING

- OEM spare and wear parts
- Maintenance and repairs
- Service agreements
- Automation and digitalization
- Machine and process optimization
- Second-hand and rentals

AUTOMATION AND DIGITALIZATION SOLUTIONS

Site assessment and integration • Advanced process control and artificial intelligence • Simulation and training • Digital twin technology • Data analytics and prediction • Electrification, instrumentation and controls

Enabling the green transition

As a technology leader in a changing world, we strive to make a positive impact on our environment. We believe that what we do today can make a difference tomorrow and in the future. We drive change and enable our customers to achieve their sustainability goals and make the world greener with our sustainable solutions in decarbonization, circular economy, renewable energy, and environmental technologies. It all starts with your specific process requirements and ends with a system that gives you the best results – day in and day out, for decades to come.

ANDRITZ. FOR GROWTH THAT MATTERS.

A WORLD OF SEPARATION SOLUTIONS

ANDRITZ provides mechanical and thermal solid/liquid separation technologies, complemented by comprehensive services, automation, and digitalization solutions for the chemicals, environment, food and beverage, as well as mining and minerals industries. Our customized, innovative solutions focus on minimizing resource consumption and maximizing process efficiency, thus making a substantial contribution towards sustainable environmental protection. With over 150 years of experience and more than 2,700 separation specialists around the globe, we are a driving force in the evolution of separation solutions – enabling industries to meet tomorrow's demands responsibly. **ANDRITZ. FOR GROWTH THAT MATTERS.**

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