



PULP & PAPER

RECYCLED FIBER SYSTEMS

FOR HIGH-QUALITY
INDUSTRIAL GRADES



ANDRITZ

ENGINEERED SUCCESS

Processing low-grade furnish to form high-quality pulp

ANDRITZ has extensive experience of processing furnishes such as OCC, AOCC, liquid packaging board, or mixed waste. These industrial grade furnishes typically contain a high number of contaminants. ANDRITZ offers a broad range of application-matched processes and equipment.

THE RIGHT TECHNOLOGY FOR ANY INDUSTRIAL GRADE APPLICATION

From pulping to the storage tower and also reject handling, our extensive know-how enables us to deliver highly profitable OCC systems. The entire process chain and every single item of equipment is designed to focus on high availability, minimized fiber loss, and low energy consumption - at the same time ensuring excellent final pulp quality.

SUPERIOR PULPING CONCEPTS

ANDRITZ offers excellent FibreSolve LC pulping systems including detraging as well as the FibreFlow drum pulper for slushing highly contaminated furnishes with superior performance.

Equipped with an optimized rotor and vat, ANDRITZ LC pulpers achieve high pulping efficiency with gentle treatment of fibers. Combining the FibreGuard detraging system, even pulps containing a high level of contaminants can be handled with ease. Specialized materials, low rotational speeds, and fast reject removal maximize the lifetimes of the individual machine components.

High production capacity and low power consumption due to the combination of pulping and screening in one compact unit make the FibreFlow drum pulper your ideal choice. As a result, less equipment is required downstream to clean the pulp. The drum removes contaminants in the first stage of the process without generating fines or damaging fibers.

"It's essential to remove contaminants early in the process before they have an opportunity to disintegrate into the stock."

Peter Clewes
Senior Vice President,
Division Manager,
Fiber & Recycling,
ANDRITZ



Five-stage cleaner plant

FibreSolve LC pulper with ragger

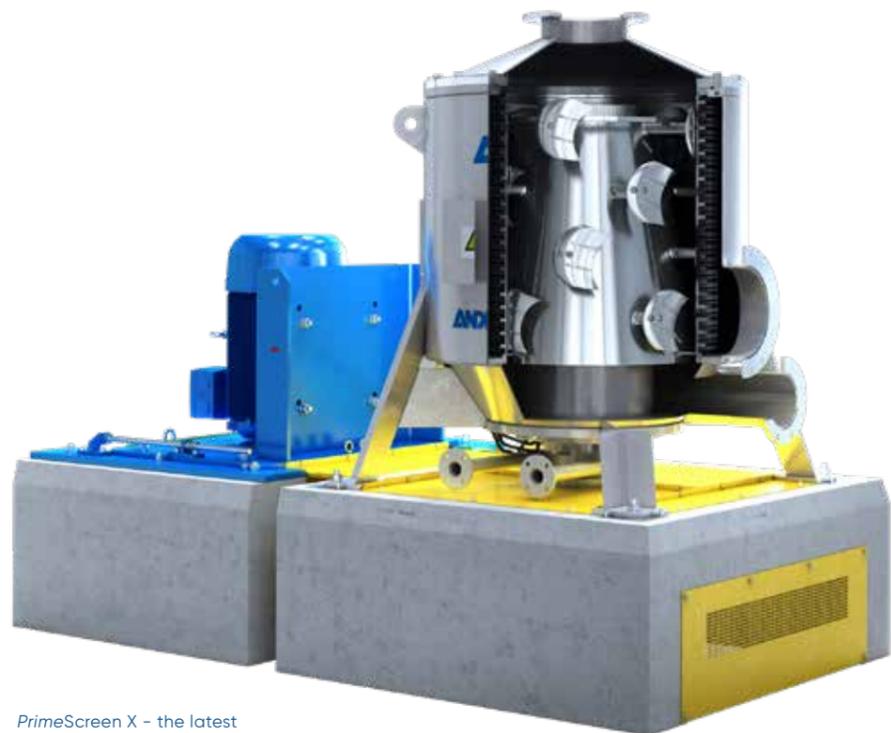
LATEST CENTRIFUGAL CLEANING

Ah!Cleaners RB are cleaners with a larger diameter that reliably remove impurities such as sand, metal, glass, and other heavy particles. These high-density cleaners are equipped with junk traps to minimize fiber losses. Ah!Cleaners SC133 are highly efficient in removing small impurities. The design features low-pressure drop resulting in minimum power consumption, while pressurized ejection of impurities prevents air from entering accept and reject flows. Specially designed cones in later cleaning stages reduce fiber losses.

Prime IN SCREENING

ANDRITZ is well known with a huge number of pressure screens installed in numerous stock preparation lines worldwide. Different types of ModuScreens are perfectly suited for any RCF application. The PrimeScreen X stands for significant improvements in energy efficiency, screening performance, and maintainability thanks to top-feed stock inlet, the PrimeRotor, optimized screen basket height-to-diameter ratios, and easier maintenance. Various rotor and screen basket types and combinations can be applied depending on specific process requirements.





PrimeScreen X - the latest ANDRITZ innovation in screening

The ModuScreen D is a proven coarse screen that achieves top deflaking performance and operates trouble-free, especially when processing brown grades. The ModuScreen TD is a continuously operating sorter which handles screening, deflaking, fiber recovery, and reject dewatering in a single compact unit.

NEXT-GENERATION DEWATERING

The PrimeFilter D brings together several key technological innovations to improve throughput and reduce both investment and operating costs. HHw technology ensures advanced feeding and optimum flow conditions within the filter. Thus, the disc filter can handle higher feed consistencies and pulp with a higher freeness even in the most demanding applications.

CC bagless sectors offer significant improvements in terms of operation thanks to very homogenous fiber mat build-up as well as fast mat knock-off. The special construction of the sectors eliminates the need for a filter bag and reduces maintenance to almost zero. The innovative double sealing arrangement is easily accessible and ensures higher reliability with superior filtrate quality.

PATENTED MULTITASKING DISPERSING

ANDRITZ dispersing minimizes the size of contaminants and improves the physical fiber properties. The ANDRITZ pressurized dispersing system is usually applied for processing brown grades, when the retention time in the heating process needs to be longer.

Ultra High Dispersion (UHD) is a technological add-on that is perfectly suited for ANDRITZ or other conventional dispersing systems. A plug screw feeder with an added dewatering zone makes it possible to operate the disperser at higher consistency. This has the result that there is less water in the pulp to heat, thus considerably reducing the necessary energy input. Faster bleaching reactions and savings in chemicals to achieve a certain bleaching target are further benefits, setting UHD as the new standard in terms of dispersing performance.

THE IMPORTANCE OF REFINING

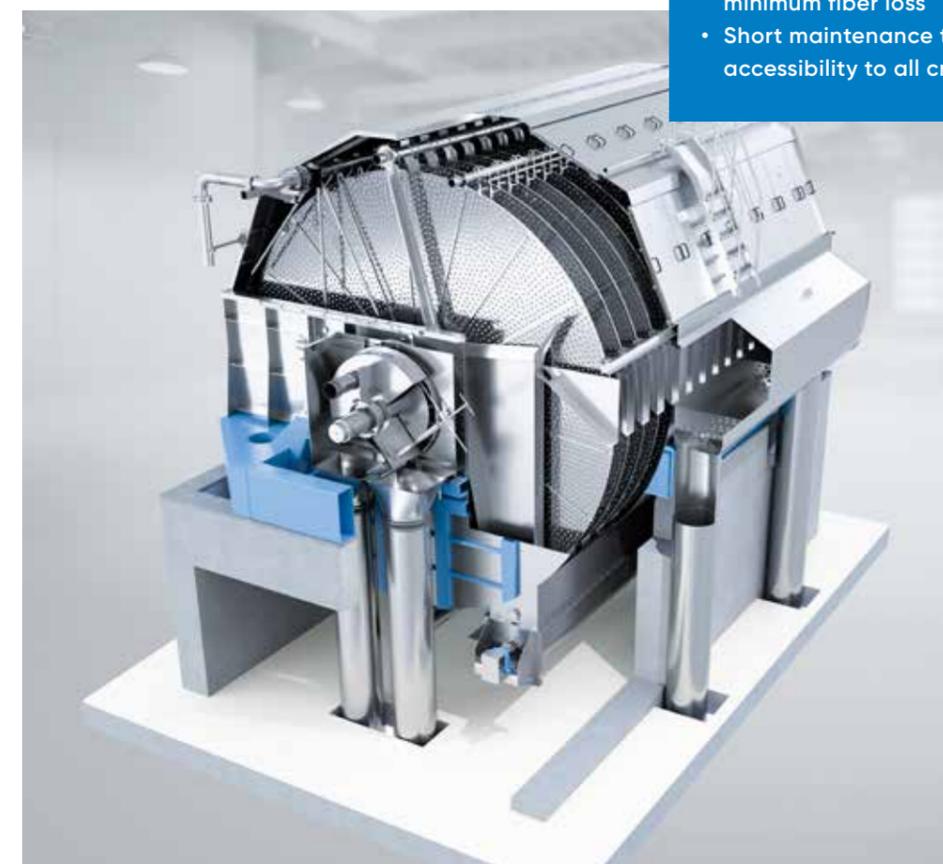
To enable optimum development of the fiber potential, ANDRITZ applies the TwinFlo double-disc refiner with its sturdy machine design that guarantees top reliability and has proven successful worldwide. Plates can be changed quickly thanks to the "swing-door" concept for the shortest possible downtimes and lowest maintenance costs.



FibreFlow drum pulper, HD cleaner, and coarse screening as part of a complete OCC line

BENEFITS:

- Reduced energy consumption thanks to optimized equipment and process design
- Process simplification reduces installation costs
- Usage of lower cost furnish without reducing final quality
- Increased runability and stability
- Equipment and process designed for minimum fiber loss
- Short maintenance time due to good accessibility to all critical wear parts



The new PrimeFilter D as cutting-edge technology in thickening and fiber recovery

Converting mill waste into valuable resources and energy

Focusing on the “bigger picture”, the ANDRITZ portfolio also includes innovative technologies for processing paper mill sludges and rejects, separating and recovering materials, as well as generating power from alternative energy sources.

PROPER DISPOSAL AND REUSE OF DEWATERED SLUDGE

The ANDRITZ sludge dewatering system portfolio covers all types of dewatering machines for all fibrous and biological paper industry sludges. When it comes to RCF processing, in particular the correct treatment of primary sludges, including fine rejects from screening and cleaning stages and sludge from microflotation, it is vital to have an extensive knowledge of the dewatering potential of different types of sludge and how to install the right equipment to meet the defined method for disposing of or reusing the dewatered sludge.

WASTE TO VALUE

It is especially valuable to process typical paper mill rejects, such as pulper rags, loose pulper rejects (containing mainly plastics, metals, stones, wood particles, etc.), sand containing cleaner rejects, and light-weight rejects from coarse screening. The savings in terms of disposal/transportation costs and greenhouse gas emissions are substantial. The possibility of using rejects for fuel generation and the additional income from recycling mill waste offer further advantages. ANDRITZ develops complete processes and supplies a wide range of equipment to recover valuable rejects.

A complete ANDRITZ reject line that processes 200 tonnes of light rejects per day.



Recycled fiber systems with engineered quality

By developing components for each process step, we also have a knowledge of how individual items of equipment perform most efficiently in the entire system. As a result, ANDRITZ systems are designed to be as simple and as efficient as possible.

ENGINEERING

To work efficiently and secure top quality, we use our in-house engineering capabilities. ANDRITZ performs basic/detailed plant and process engineering, 3D-planning, electrical and control engineering, DCS programming, and factory acceptance tests. The applied documentation system provides erection, operation, and maintenance instructions with a database, user-friendly interface, and search functions.

PROJECT MANAGEMENT

Our project managers are experienced and skilled in international project management. We have a history of success in completing first-class turnkey installations on time. Depending on the level of support needed, ANDRITZ can supply services ranging from erection supervision, start-up, and commissioning to complete turnkey responsibility, even EPC.





DISCOVER OUR FULL-RANGE PORTFOLIO FROM FIBER PROCESSING TO PAPERMAKING

An outstanding paper product requires outstanding production – matched with the particular needs of raw material and final product. Discover the full-range portfolio from ANDRITZ: Excellent stock preparation that allows best fiber development according to furnish and with economical use of resources. *PrimeLine* paper machines that are a synonym for producing top-quality tissue, paper, and board grades. Complete lines or single units, upgrades, and modernizations. Contact us and benefit from your individual package in papermaking technology.

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