



SEPARATION

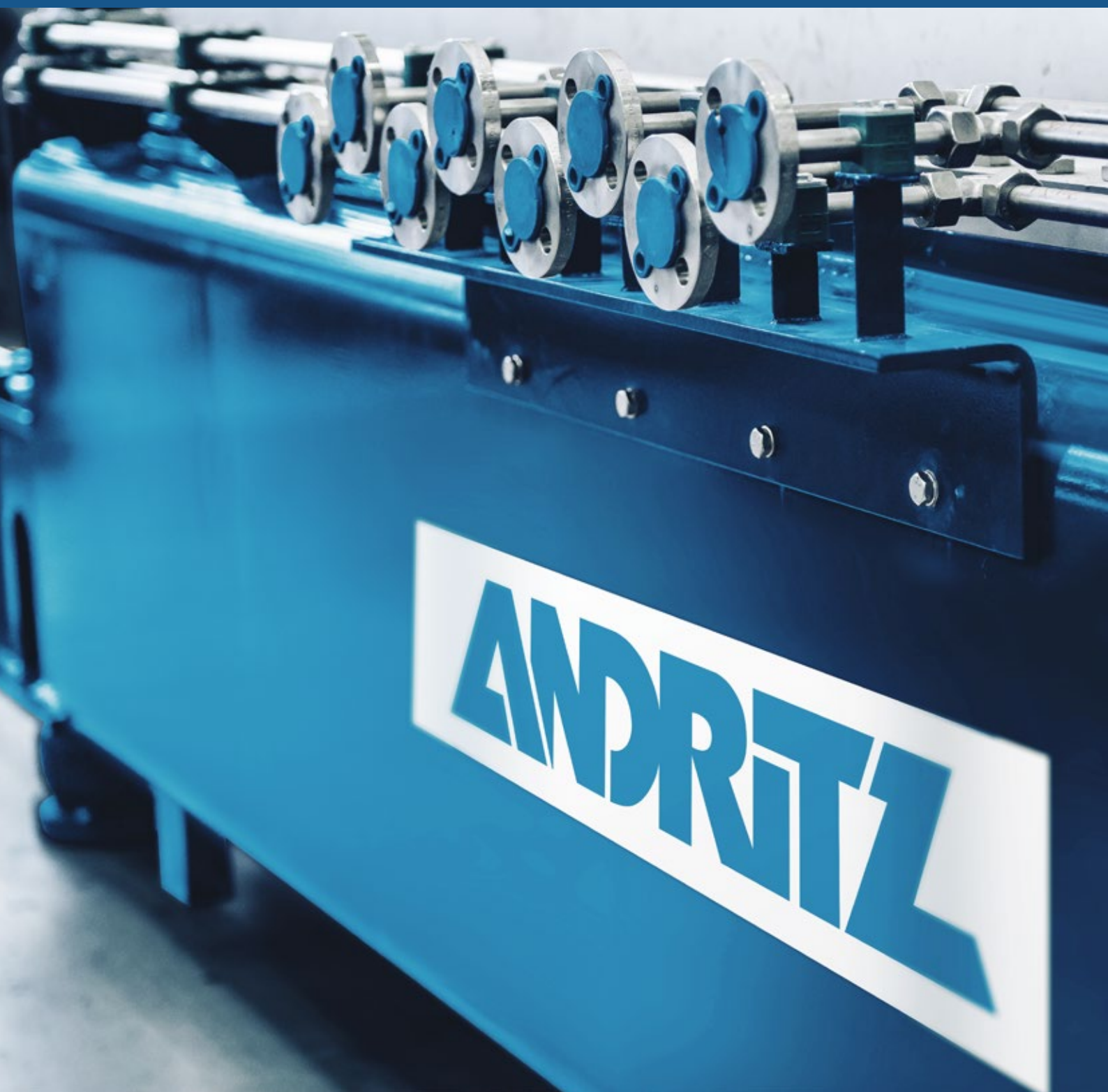
# INDUSTRIAL PROCESSING REDEFINED

ANDRITZ DECANTER CENTRIFUGES A

**ANDRITZ**

ENGINEERED SUCCESS

**The ANDRITZ decanter centrifuge A for industrial applications to meet your requirements to the fullest extent.**



ANDRITZ decanter centrifuges A are specifically suitable for the chemical and also the mining and minerals industries. ANDRITZ offers two-phase and three-phase decanter centrifuges with continuous adjustability in operation to accommodate variations in feed conditions. Based on long-term relationships with our customers, our product solutions have been optimized to manage the most demanding process situations while maintaining high performance and ensuring long lifetime of the machinery. The robust design of the machines results in a service life of several decades. Customers benefit from a wide choice of different materials of construction (MOCs) to handle even the most demanding corrosive environments. The delivery of EX-certified equipment is not an issue.

#### YOUR BENEFITS

- Highest efficiency
- High availability
- Highest capacity overall in the market
- Superior dewatering performance for best concentrate/filtrate quality
- Lowest flake content of end product
- Lowest maintenance costs

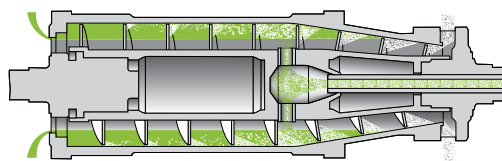
With an installed base of over 20,000 machines, ANDRITZ is one of the leading suppliers of decanter centrifuges. Continuous optimization and systematic R&D enable ANDRITZ to offer the optimum machine for almost all process applications up to 1.4 m in bowl diameter.

We offer you in-depth process experience from a large number of reference installations. Moreover, the comprehensive product portfolio comprises the product range acquired from Humboldt and Bird Machine Company.

### THE RIGHT DECANter CENTRIFUGE SOLUTION TO FIT YOUR PROCESSING NEEDS:

#### Solid-bowl decanter centrifuge A

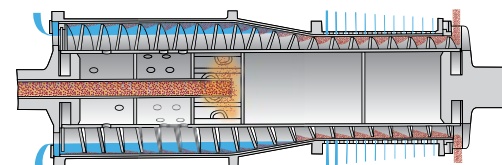
The solid-bowl decanter is the standard machine for separating solids and liquids. Typical applications are all kinds of plastic materials (PVC, HDPE, PTA), but also CaCO<sub>3</sub>, kaolin, drilling mud, tunnel drilling, and various residues.



Solid-bowl decanter centrifuge A

#### Screen-bowl decanter centrifuge AS

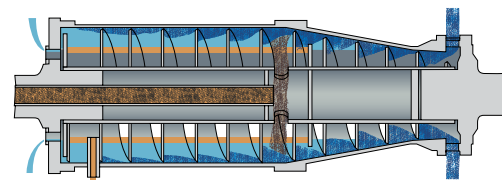
Screen-bowl decanters transport and dewater crystalline solids over the conical section, followed by transport along a cylindrical screen section, where the solids are further dewatered – combining the steps of sedimentation and filtration in one machine. If useful, the solids can be washed on the screen. Common applications are potash, fine coal, PX, and BPA, but also other challenging applications.



Screen-bowl decanter centrifuge AS

#### 3-phase decanter centrifuge

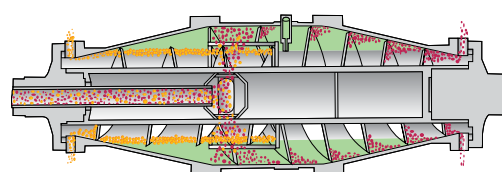
This machine is used when – in addition to the solid/liquid separation task – the liquid contains two phases of different densities. Besides the treatment of oil and fats, these machines are used to recover oil from tank and pond cleaning operations (slop oil).



3-phase decanter centrifuge

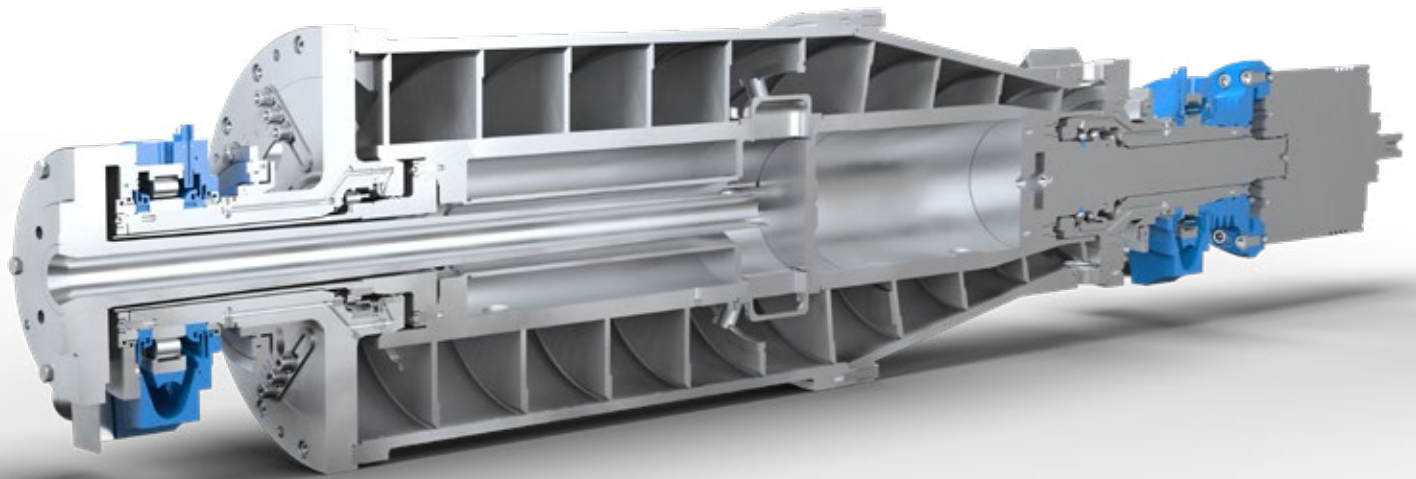
#### Decanter centrifuge CENSOR ACZ

The CENSOR ACZ decanter centrifuge is used to selectively separate plastic fractions of different densities. During the process, the product is washed using a minimal quantity of water. The resulting recycled products are available for high-quality reuse.



Decanter centrifuge CENSOR ACZ



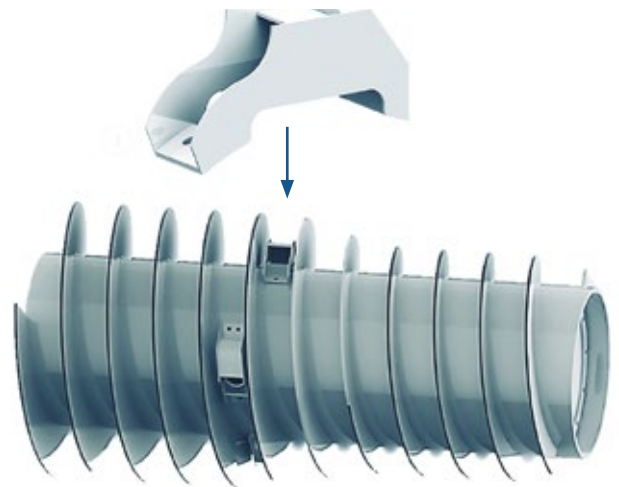


The special design of the ANDRITZ decanter centrifuge A ensures maximum efficiency and process reliability.

### FEATURES

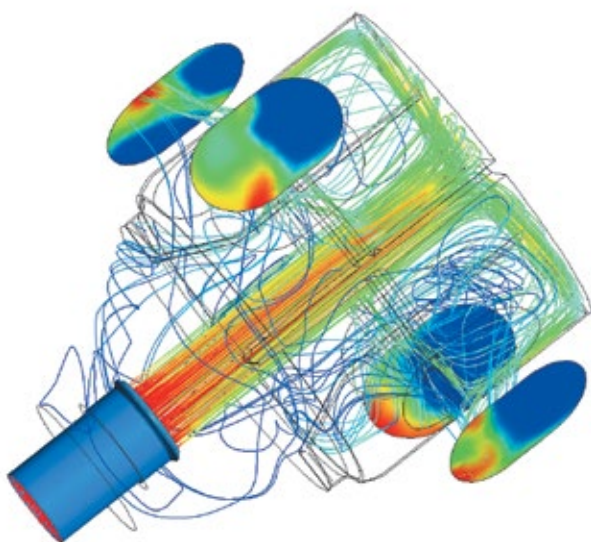
Optimized design

- Single, double, triple, or quad lead conveyor
- Optimized bearings and seals
- Rigid design to minimize vibrations
- Optimized scroll geometry for numerous applications
- Wide choice of MOCs, such as stainless steel, Hastelloy, titanium, or nickel
- Optimized wear protection
- Heavy-duty gearbox up to 120,000 Nm
- Also for gas-tight and pressurized operation
- Solid and robust design for demanding operating conditions



The GentleFeeder - Easy to upgrade existing decaners

The CFD-optimized design of the GentleFeeder to reduce shear forces and smoothen the injection impact has been shown to increase revenue due to the product quality with half the amount of solids in the centrate. The Gentle Feeder has thereby become a standard feature for selected applications of special interest, in particular for crystallites and brittle solids. It minimizes crystal breakage while preserving the product value.



Optimum feed chamber design for maximum production

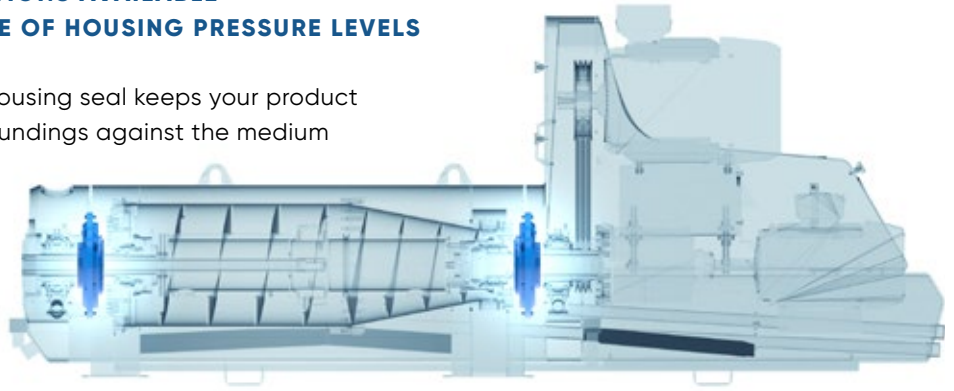
### YOUR BENEFITS

- For high capacity and low chatter
- Longevity and less wear, even for the most demanding operating conditions
- For a broad range of applications and media (from non-abrasive to highly abrasive)
- Suitable for low- to heavy-duty tasks
- Minimized maintenance effort
- Reduced downtimes

**DIFFERENT HOUSING SEALING OPTIONS AVAILABLE TO ACCOMMODATE A WIDE RANGE OF HOUSING PRESSURE LEVELS**

Designed for your requirements, the housing seal keeps your product clean from outside and protects surroundings against the medium inside the machine.

ANDRITZ has developed different types of housing sealings. The range covers atmospheric, vapor-tight, gas-tight, and pressure-tight housing sealings.



ANDRITZ decanter centrifuges A feature different housing sealings to cater to the requirements of different media processed.



Atmospheric standard housing sealing



Atmospheric advanced housing sealing



Vapor-tight standard housing sealing



Gas-tight standard housing sealing

**BEST PROTECTION AGAINST WEAR, FOR AN EXTENDED DECANTER LIFE CYCLE**

Good wear protection is a strategic, long-term investment with a safe ROI. Exchangeable wear parts mean less downtime, which in turn results in reduced maintenance costs.

Through performance surveys and R&D work, ANDRITZ continuously improves wear resistance, ensuring that customers have value-added components. The different zones and elements in a decanter that may be subject to higher wear are protected by a carefully composed selection of wear protection systems.

Depending on the extent of wear, different material compositions ranging from polyurethane to sintered tungsten carbide elements are used to protect:

- the scroll (feed chamber, flight)
- the bowl (inside, solids discharge ports)
- the solids discharge casing
- the feed pipe



Standard feed ports in different materials available to ensure longer lifetime

**ANDRITZ offers the best combination of protection choice versus cost, to ensure the best fit for the wide range of applications.**

# Configurable to your needs

The latest generation of ANDRITZ decanter centrifuges A offers the optimum solution – whatever process you need to handle

The latest generation of the ANDRITZ decanter centrifuge A is a solid-bowl decanter configurable to individual process needs. It features a standard design platform that can be configured with innovative modules for a perfect fit.

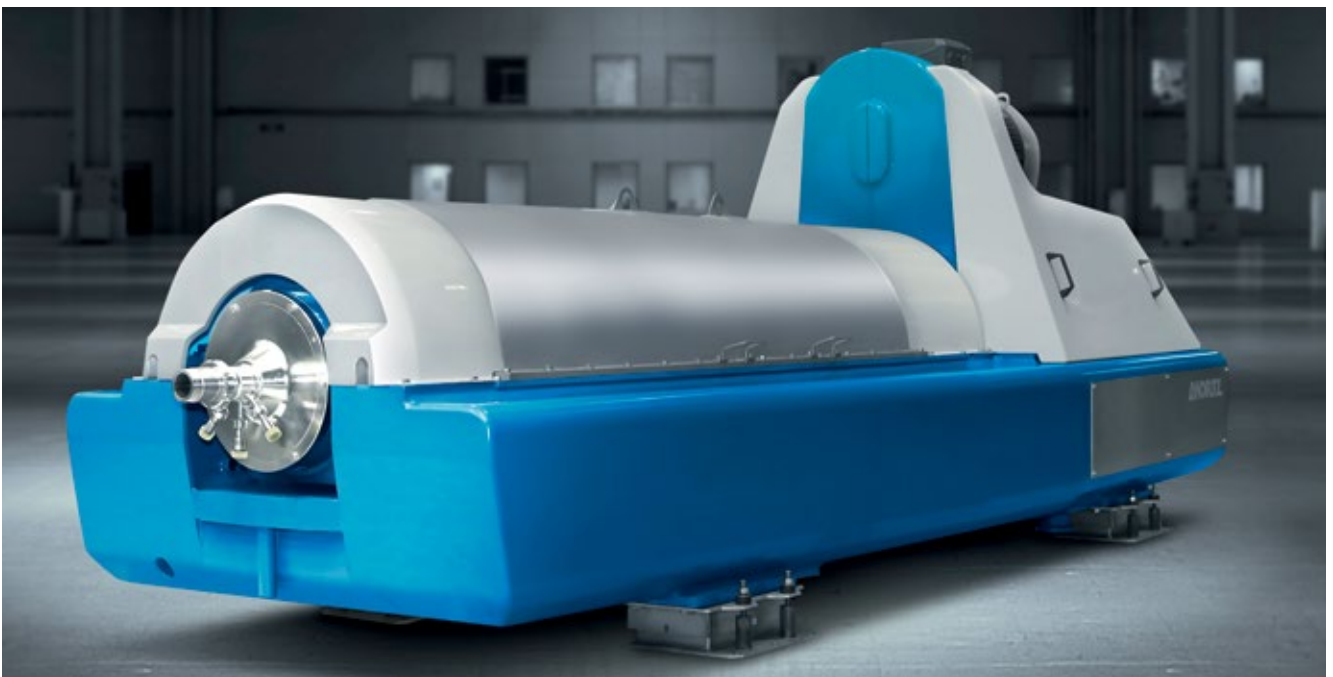
## MODULAR DESIGN

- Cleaning-in-Place (CIP) for highest hygienic standards while minimizing downtimes
- Different conveyor bearing and seal for a broad range of media
- Fiberglass Reinforced Plastic (FRP) casing for highly corrosive environments
- Housing seal options for process safety
- Various feed port systems, including the innovative GentleFeeder for less particle breakage
- Multiple wear protection options (e.g. flame-sprayed tungsten carbide, ceramic, TC-tiles with back-ups for blade protection and solids outlet bushing) for longer lifetime

- Solids washing for cleaner solids output
- Several drive and gear box options, including TurboJets for energy recovery with optimum power transmission for each application
- Reverse design for heavy materials
- Adapted conveyor designs for different media processed
- Different length ratios and cone angles for specific processes
- Maintenance-friendly design

## YOUR BENEFITS

- Configured to process
- Cleaner centrate
- Better recovery rate
- Small footprint
- Compact design
- Reduced downtimes



The latest generation of ANDRITZ decanter centrifuges A is a modular decanter series for perfect fit.



# Intelligence for machine and process control

## Metris addIQ control systems

With Metris addIQ, you get a well-proven, intelligent control solution for industrial processes and machines. Our solid/liquid separation specialists use their in-depth expertise to provide scalable solutions that are individually tailored to regional and application requirements. Whether you're automating new equipment or upgrading to extend the lifecycle of existing systems, we find the ideal solution for you.



## Your full-service provider

With ANDRITZ Separation, you gain access to one of the world's largest OEM manufacturers for solid/liquid separation systems, including such well-known brands as 3Sys Technologies, Bird, Delkor Capital Equipment (Pty) Ltd., Escher Wyss dryers, Frautech, Guinard Centrifugation, KHD Humboldt Wedag, Krauss-Maffei centrifuges, dryers, and filters, Lenser, Netzsch Filtration, Rittershaus & Blecher, Royal GMF Gouda, Sprout Bauer, and Vandenbroek. Whether you need spare parts, rentals, local service, repairs, upgrades, or modernization of your equipment,

ANDRITZ Separation is your true full-service provider. From initial consulting through to service agreements, process optimization, and training programs, we are always looking for ways to minimize downtime and increase predictability in operations while raising your overall production efficiency. Wherever you operate, our network of 550 service specialists and global service centers ensures we'll always be there to support you for many life cycles to come. Let's sit down and see how we could take your operations to the next level.



LOCAL SUPPORT



REPAIRS & UPGRADES



SECOND-HAND & RENTALS



TRAINING



OEM SPARE PARTS



SERVICE AGREEMENTS



PROCESS OPTIMIZATION



LAB AND ON-SITE TESTS





## WHAT'S YOUR SEPARATION CHALLENGE?

ANDRITZ Separation is the world's leading separation specialist with the broadest technology portfolio and more than 2,000 specialists in 40 countries. For more than 150 years, we have been a driving force in the evolution of separation solutions and services for industries ranging from environment to food, chemicals, and mining & minerals. As the OEM for many of the world's leading brands, we have the solutions and services to transform your business to meet tomorrow's changing demands – wherever you are and whatever your separation challenge. **Ask your separation specialist!**

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