



# SEPARATION EXPERTISE FOR YOUR SUCCESS IN THE MINING AND MINERALS INDUSTRY

ASK YOUR SEPARATION SPECIALIST

**ANDRITZ**

ENGINEERED SUCCESS





**YOUR**  
IDEAS

**YOUR**  
NEEDS

**YOUR**  
BUSINESS

**YOUR**  
SEPARATION  
SPECIALIST

# What's next for your business?

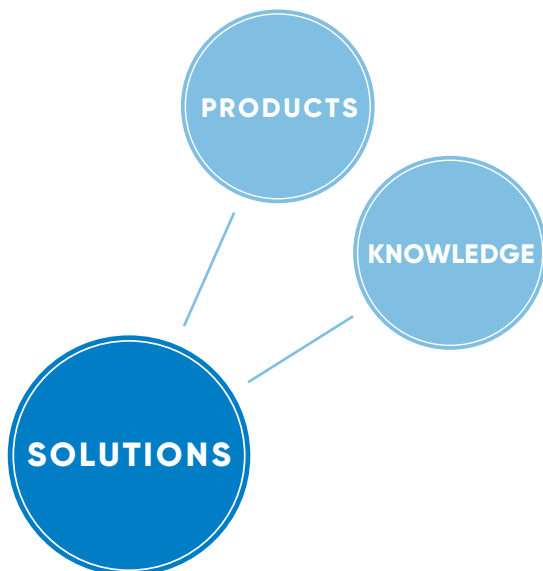
Need to boost throughput? Improve tailings treatment? Or maximize water recovery? Whatever your process demands, we ensure you have the right separation solution to achieve optimal yield and product quality at the lowest total cost of ownership.

## MEETING TOMORROW'S CHALLENGES

In the mining and minerals business, efficient separation can be a crucial competitive advantage. Sometimes it's the age-old challenge of increasing dewatering throughput while preserving product quality. Other times it means drying with the lowest possible energy consumption, no matter what heat source is available. And increasingly, it means exploring innovative new ways to safely handle tailings or automate and monitor remote facilities.

## YOUR COMPLETE SEPARATION PARTNER

At ANDRITZ, we have been mastering many of these challenges for more than a century with the world's broadest portfolio of solutions and services for mechanical and thermal separation. Whether your business aims to minimize operating costs through reduced power consumption, increased water reuse, or significantly smaller tailing ponds, our complete range of state-of-the-art technologies can be tailored to meet your needs. So what's next for your business?







# Your lifecycle partner for any separation challenge

The mining and minerals industry demands unique capabilities from technology suppliers. Starting with your process requirements and mineral characteristics, we provide an unmatched combination of expertise and technologies to master your separation, drying, and automation challenges.

## **THE BEST FIT FOR ANY REQUIREMENT**

ANDRITZ systems are designed for the most demanding applications in mining and minerals processing. This includes some of the highest capacity technologies in the industry, from thickeners and presses to filters, centrifuges, and flocculant plants. Whatever your mineral characteristics and end product specifications, our pilot facility allows us to test, tailor, and optimize the ideal combination of technologies to meet your needs.

## **COMPLETE AUTOMATION SOLUTIONS**

To ensure safe, trouble-free operations, our automation solutions range from upgrades of individual systems, including electrical, control, and instrumentation, to full automation of entire plants. For greenfield plants,

we design and test against dynamic simulations in order to ensure error-free start-up. For upgrades and optimization projects, we can customize a complete range of engineering, simulation, control, and training solutions, depending on your local requirements.

## **STRONG GLOBAL PRESENCE**

All of our installations are backed by the resources of one of the world's strongest networks of separation specialists, with personnel available near you. As a partner to many of the world's leading processors of iron ore, potash, coal, and more, every solution comes with a deep understanding of all the separation processes involved in even the most complex global operations.





# Your separation specialist

As the world's leading separation specialist, we are committed to delivering the right knowledge, services, and solutions for any separation challenge.

## **SERVICE CONTRACTS**

From spare parts to full-service contracts.

## **FEASIBILITY STUDIES**

Process simulations and OPEX/CAPEX options.

## **TECHNICAL SUPPORT**

Remote diagnostics to on-site presence to troubleshoot and fine-tune equipment performance.

## **UPGRADES**

Mechanical improvements to existing machines as well as control system upgrades.

## **PROCESS ENHANCEMENTS**

To reduce waste, improve yield, and maximize recovery.

## **MECHANICAL AUDITS/ INSPECTIONS**

Services to check performance and recommend improvements.

## **CONSULTING**

Providing customer-oriented process solutions.

## **AUTOMATION**

Design, supply, and installation of electrical equipment, controls, and instrumentation solutions.

## **BROADEST PRODUCT PORTFOLIO**

Full range of solid/liquid separation technologies.

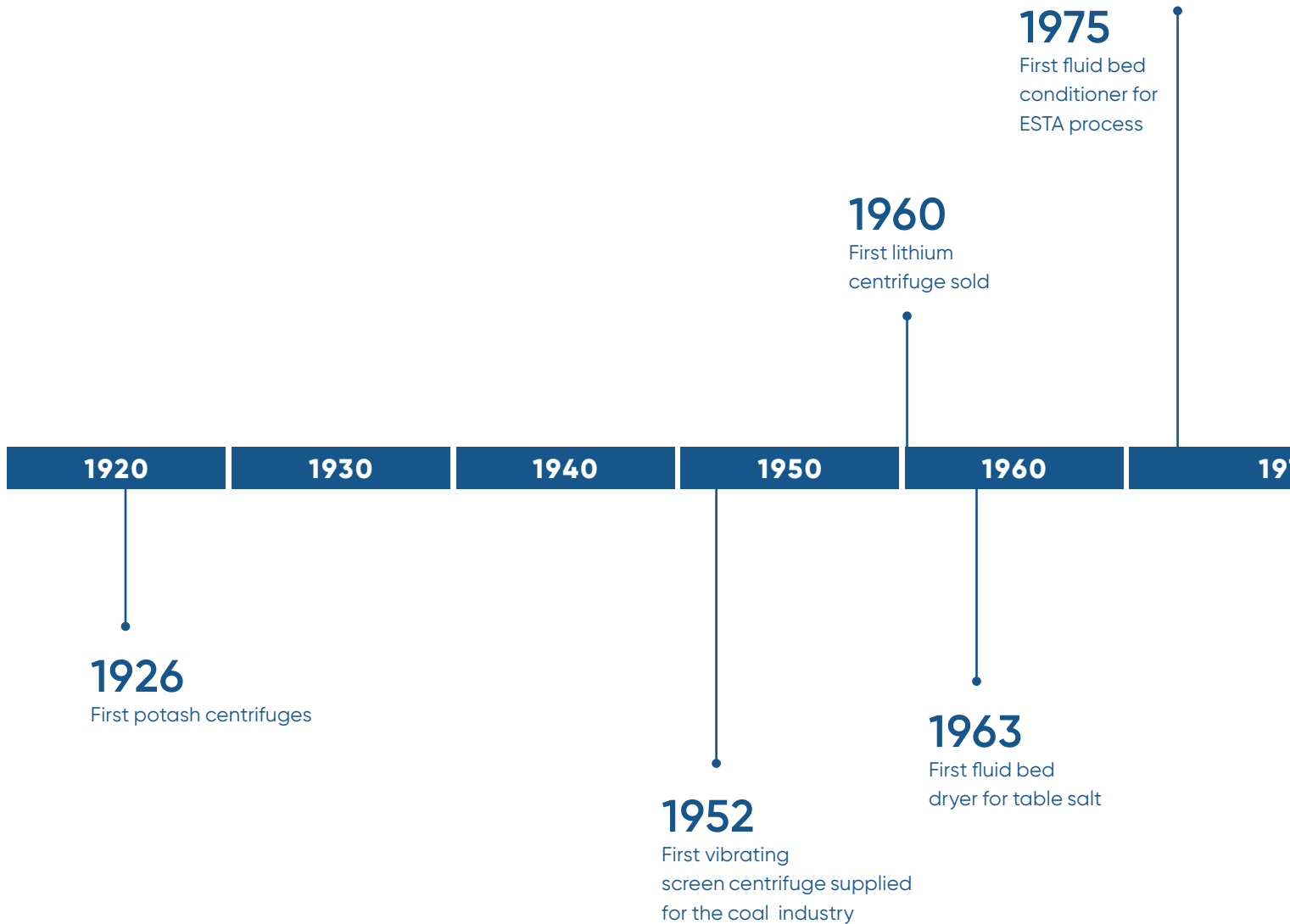
## **R&D PARTNERSHIP**

Joint product development for tailor-made customer solutions.





# Nearly a century of innovation in mining and minerals





**1984**

Development of linear screen for gold recovery by ANDRITZ Delkor (Pty) Ltd.

**2000**

First SmartFIX filter cloth fastening system for drum filters

**2009**

World's largest coal filter press (China)

**2017**

One of the world's largest filter presses (A4 2500) installed for tailings treatment

**2010**

First conical decanter developed and installed

70

1980

1990

2000

2010

2020

**1976**

Launch of high-rate thickeners

**1989**

Installation of world's largest vacuum filtration plant

**1985**

Hyperbaric disc filter developed

**2006**

Development of flat CCD circuit

**2016**

World's largest paste thickener installed for phosphate

RheoScan automated optical polymer system launched

Development of SmartFIX for filter centrifuges to reduce maintenance time and costs by around 50%

**2011**

World's largest decanter for oil sands tailings





**250** / ANDRITZ GROUP  
production sites, service,  
and sales companies

**2,000** / machines sold  
every year by  
ANDRITZ Separation

# The world's strongest network of separation specialists and service centers

For more than a century, ANDRITZ has supported the evolution of industries ranging from potash to rare earth metals. This long track record together with the broadest portfolio of mechanical and thermal separation technologies guarantees you the resources you need to ensure decades of profitable performance.

## **EXPERIENCED SPECIALISTS, RESPECTED BRANDS**

Today we install more than 2,000 machines every year, including equipment for the world's largest producers of potash, soda ash, and fertilizers. Much of this experience is due to the growth of the ANDRITZ GROUP, which now numbers around 25,800 employees in 40 locations worldwide. This means we have the resources to develop and tailor exactly the right solution from the world's most reliable technology brands.



**25,800** / employees in  
40 countries in the  
ANDRITZ GROUP

**150** / years of experience  
in the separation  
business



### **SOLUTIONS TAILORED TO YOUR NEEDS**

To help you optimize for real-world conditions, our unique capabilities make it possible to run pilot-scale production tests at our labs or carry out on-site testing and trial runs for seamless start-up wherever you are located. And thanks to 250 ANDRITZ production sites, service, and sales companies in every major market, the right upgrades, optimizations, or tailored automation solutions are never more than a phone call away.

### **STRONG BRANDS:**

- 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
- Vandenbroek



# The right technology for any separation process

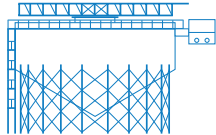
ANDRITZ

## MECHANICAL SEPARATION

### SEDIMENTATION

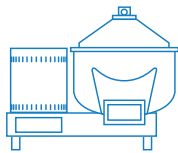


Clarifiers/  
High-rate thickeners

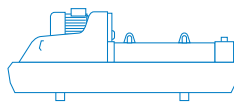


Paste thickener

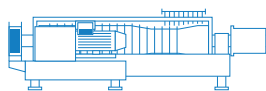
### CENTRIFUGATION



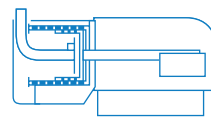
Separator



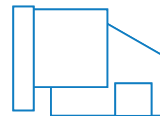
Solid bowl  
decanter



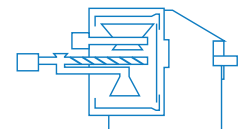
Screen bowl  
decanter



Pusher  
centrifuge



Screen scroll  
centrifuge



Horizontal peeler





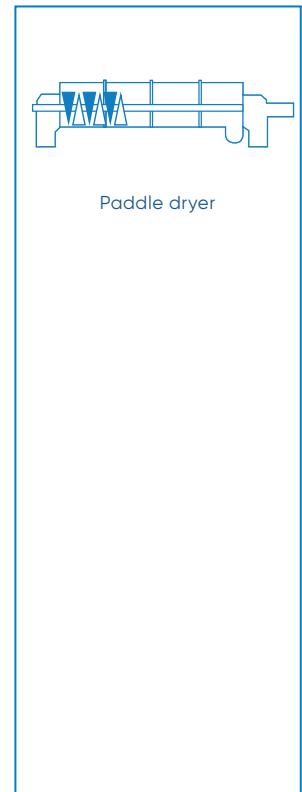
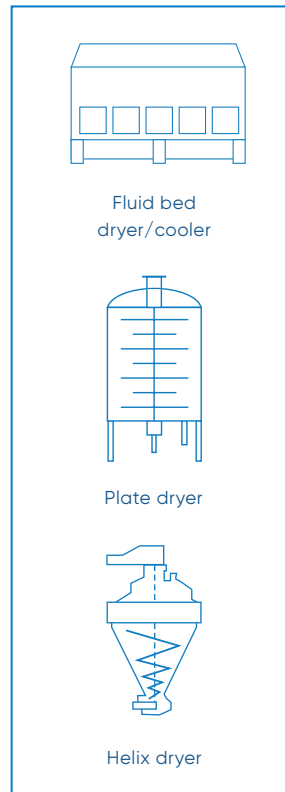
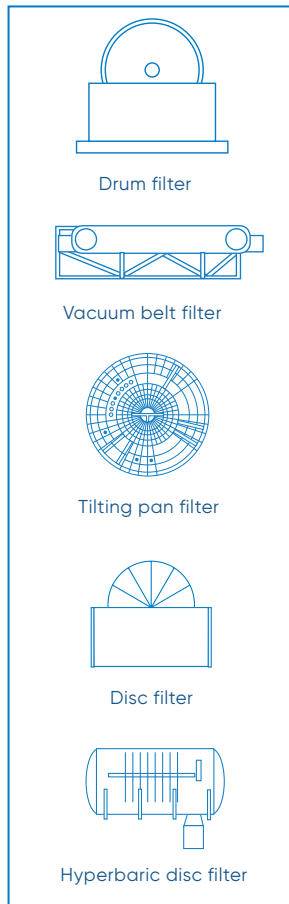
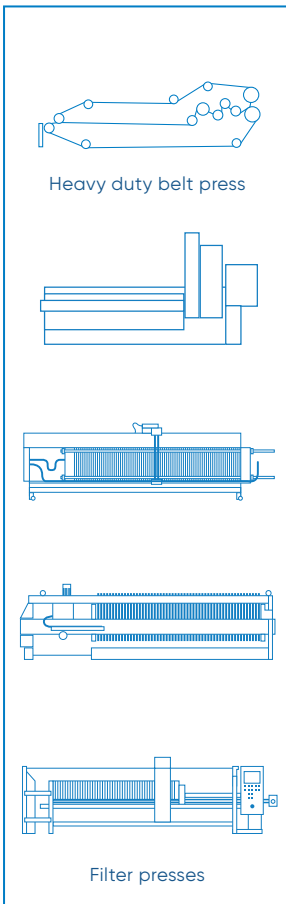


## SEPARATION

### THERMAL SEPARATION

#### FILTRATION

#### DRYING



# Separation expertise for your success

When it comes to achieving the lowest total cost of operations, everything starts with the right technology. From the highest availability and lowest maintenance to the optimal product quality and water recovery, ANDRITZ offers the most comprehensive product range for the mining and minerals industry.

## GET THE MOST FROM YOUR MINERALS

Centrifuge capacities up to 450 t/hr per unit? Tilting pan filters up to 30 m in diameter? Or Hyperbaric Disc Filters (HBF) that ensure residual moisture as low as 8%? Thanks to our leading range of high-capacity technologies, we can help you maximize productivity in a vast number of applications and processing environments. With a long

track record in some of the world's most challenging industries, we not only supply the initial equipment and systems, but also help to maximize process efficiency over the entire plant life cycle. Whether you need consulting or wear and spare parts, full-time technical support, upgrades, or process optimization, we have the expertise and equipment to support your ambitions.



## FGD, GYPSUM

Leading separation technologies for Flue Gas Desulfurization (FGD) and gypsum



## CALCIUM CARBONATE

Complete separation solutions for calcium carbonate, kaolin, and cement







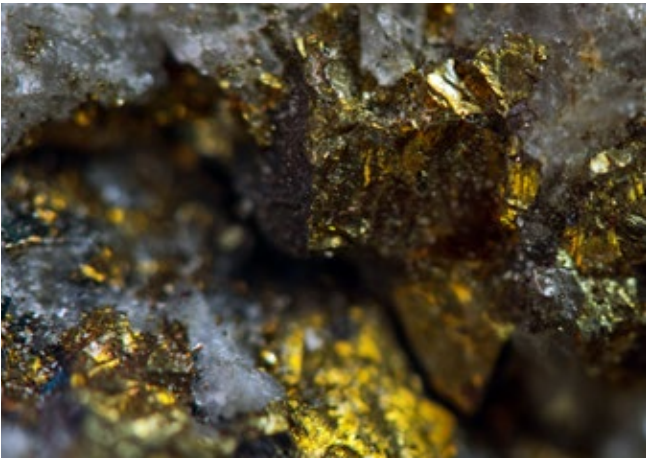
## POTASH

World-leading range of potash solutions for flocculation, thickening, debrining, glazing, cooling, dewatering, screening, and classification



## COAL

A wide selection of flocculation, thickening, mechanical dewatering, and automation solutions for coal producing companies of all sizes



## BASE METALS

Screening, flocculation, thickening, dewatering, and classification systems for iron ore, copper, gold, zinc, nickel, alumina, cobalt, uranium, molybdenum, and more



## TAILINGS

Thickening and filtration technologies as well as turnkey systems for efficient water recovery, safe dry stacking, reduced operating costs, and low maintenance requirements



## BATTERY MINERALS

Efficient concentration, purification, and dewatering solutions for lithium, cobalt, graphite, and salt/borax



# World-leading solutions for potash separation and drying

Are you looking to boost throughput? Improve product quality? Or discover innovative ways to save space, water, and energy? As the world leader in potash separation, we offer the broadest range of dewatering, brine, and tailings treatment solutions for any type of end product.

## MORE THAN 90 YEARS OF EXPERTISE

Starting with our first potash centrifuge, installed in 1926, we have dedicated nearly a century to tailoring the right solutions and services for any capacity, process conditions, or end product. We have since expanded to a total installed base of more than 600 potash solutions on five continents, in every major potash producing market. Together this amounts to more tonnage produced than all other companies combined.

## PIONEERING TECHNOLOGIES WORLDWIDE

We apply this collective know-how every day in developing innovative new ways of mastering all types of process challenges. Recent examples include a series of eight large-diameter disc filters installed in Belarus, Russia, and South America, as well as a growing base of innovative conical screen bowl decanters for high-quality crystalline products in operation throughout North America and Belarus. Our leading technology range includes screen bowl decanters, pusher centrifuges, filters, thickeners, and fluid bed dryers, making it possible to provide complete systems covering the full process from dewatering to drying.

## THE BEST FIT FOR ANY REQUIREMENT

Whatever your ambitions, we have an unmatched range of knowledge, services, technologies, and R&D capabilities to help you achieve them. As a result, you can always count on the industry's lowest life cycle costs, highest availability and capacity, most reliable end product quality, and longest equipment lifetime.

## KEY PROCESS STEPS

- Flocculation
- Thickening
- Mechanical and thermal product debrining
- Glazing
- Cooling
- Mechanical and thermal tailings dewatering
- Screening and classification

## KEYBRANDS

Bird, Delkor Capital Equipment (Pty) Ltd., Escher Wyss dryers, KHD Humboldt Wedag, Krauss-Maffei centrifuges, dryers and filters.

## KEY BENEFITS

- Continuous operations for high capacities
- Abrasion-resistant (durable)
- Maintenance-friendly designs
- Lowest moisture content
- Lower operating costs
- Highest product quality
- Best technological fit for any requirement
- One-stop-shop for mechanical and thermal separation



ANDRITZ Conical screen bowl decanter



**>80%** of potash plants worldwide use ANDRITZ equipment

**Most experience** More than 90 years in the potash industry

**1926** First potash centrifuge delivered

**"As a global leader in potash production, we had incredibly tough requirements for reducing costs and boosting capacity and quality. The fact that ANDRITZ could do all this in 1/3 less space was frankly astonishing."**

**ALEXANDER GORBATCHEV**  
Plant Manager of Plant No. 1 Belaruskali



# Advanced separation technologies for gold, copper, iron, and other base metals

From iron ore and copper concentrate to precious metals and rare earth elements, every producer faces highly specific requirements in terms of separation technologies and services. Our broad portfolio makes it possible to tailor our offering to meet your exact needs for screening, flocculation, thickening, dewatering, and classification.

## HIGH THROUGHPUT, LOW COST

In the iron ore, copper, and alumina industries, many customers know us as the developer of uniquely cost-efficient Hyperbaric Disc Filter (HBF) units – capable of throughputs up to 500 t/hr per unit. Other high-capacity solutions include our innovative flat CCD circuits, which combine efficient inter-stage mixing and dilution to dramatically reduce space requirements and operating costs. This innovative paste thickener design helps to ensure substantial savings in water recovery and tailing pond disposal for the entire plant life cycle.

## LEADING DRYING AND DEWATERING SOLUTIONS

For rare earth metal producers, our closed cycle contact dryers make it possible to profitably handle the distinct processing properties of a wide array of valuable elements. The same innovative thinking applies to a wide range of dewatering technologies, all of which are designed for high capacity, efficient production rates, and maximum recovery of dissolved metals. Whatever your needs or specific product requirements, we can test a range of options in our pilot facilities in order to develop and tailor the right solution.

## GLOBAL RESOURCES TO SUPPORT YOUR NEEDS

With ANDRITZ, you have access to one of the world's strongest networks in solid/liquid separation, with specialists in all major mining regions. Whether yours is an urban smelter or remote open pit mine, we have the resources to support your global operations with proven results across many metal mining processing segments.

## KEY PROCESS STEPS

- Screening
- Flocculation
- Thickening
- Mechanical and thermal dewatering
- Screening and classification

## KEY APPLICATION AREAS

- Iron ore
- Copper
- Gold
- Zinc
- Nickel
- Alumina
- Cobalt
- Uranium
- Rare metals

## CUSTOMERS INCLUDE

LKAB, CodelCo, Anglo American, China Gold, Jindal, CML Metal



ANDRITZ Hyperbaric Disc Filter (HBF)



up to  
**500 t/hr** / throughput per unit

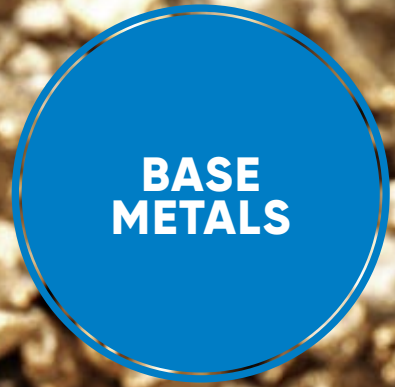
**>70 years** / of experience in metal mining

**First** / to introduce high-capacity disc filters for alumina

**"Our Hyperbaric Disc Filters (HBF) have successfully demonstrated that they are a validated and competitive option for this application compared to other technologies available on the market."**

**RAINER RABERGER**

Product Manager Hyperbaric Disc Filters,  
ANDRITZ





**How can you  
dewater more ore  
with less impact?**







The PMC magnetite dewatering plant lies just outside one of the world's most biodiverse national parks. But excess pond usage had resulted in oversaturation, 20% longer drying times, and increased environmental risks. Our solution? A new turnkey dewatering plant with three continuously operating, horizontal vacuum belt filters.

The result? More capacity, less downtime, and more efficient use of recycled filtration water. Or to put it simply: more iron ore with less environmental impact.

# Efficient tailings treatment with a smaller footprint

Tailings treatment continues to be one of the fastest growing challenges in the mining sector. At the same time, environmental risks, space constraints, and water scarcity all need to be managed cost-effectively. Our complete range of individual technologies and turnkey solutions can be tailored to help you achieve your goals at the optimal OPEX or CAPEX for your specific operations.

## THE RIGHT SOLUTION FOR YOUR REQUIREMENTS

Higher dryness with lower energy consumption? Or high specific throughput with the smallest equipment footprint? When it comes to finding the right tailings treatment solution, everything starts with your requirements. Based on the conditions at your site, we can recommend and fine-tune a solution that gives you the highest possible process efficiency.

## HIGH CAPACITY, HIGH EFFICIENCY

Whether you are aiming to increase water recovery or ensure safe dry stacking, ANDRITZ has decades of experience supplying robust, maintenance-friendly designs. We also specialize in high-capacity technologies, including the world's largest decanters and filter presses, with up to 2,200 m<sup>2</sup> of filtration area per filter press unit. Other operations benefit from from one of the industry's most space-effective CCD circuits, whose uniquely efficient inter-stage mixing and dilution system substantially reduces space requirements and operating costs.

## IDENTIFYING PROFITABLE OPPORTUNITIES

All of the latest filtration and thickening solutions are provided together with joint project development and a comprehensive service portfolio. From new equipment and systems to upgrades of existing processes, our process audits can help you identify the best opportunities for enhancing productivity, safety, and capacity in nearly any mining application.

## KEY PROCESS STEPS

- Flocculation
- Thickening
- Mechanical dewatering
- Granulation

## KEY BENEFITS

- Water recovery
- Safe dry stacking
- Increased product recovery
- Lower environmental risks
- Reduced operating costs
- Complete turnkey solution
- Maintenance-friendly and robust designs
- Fewer equipment items/highest process efficiency



ANDRITZ Overhead filter press A4 2500



**>70 years**

experience with red  
mud

**up to  
2,200 m<sup>2</sup>**

filtration area per filter  
press unit

**World's  
largest**

decanter and  
filter press

**"To save and reuse as much water as possible, we needed both the right technology and a close collaboration partner. ANDRITZ gave us both, working as one team with our engineers to install a superior solution on time and on budget."**

**BAASANDORJ TSOGOO**

Senior Vice President, Energy Resources, Mongolia



**TAILINGS**



# From desert coal mine to award-winning oasis







In the Mongolian Gobi desert, conditions are harsh and water resources are scarce. Fortunately for one mining company, our coal tailings dewatering solution makes it possible to achieve annual water savings of more than 3 million cubic meters. Powered by a continuously operating series of eight belt presses, it saves time as well as resources – with uptime gains of more than 1,000 hours per year.

Ultimately, it all came down to choosing the most economical solution with the best technical performance, together with a partner able to execute all deliveries on schedule in one of the world's most remote locations. As an added confirmation, the project was awarded Best Technology of 2013 in the Mining Journal Awards.

# Coal washings and tailings treatment at its finest

Coal producers everywhere are under pressure to improve everything from washing efficiency and throughput to water recycling and environmental safety. Our separation specialists tackle these challenges based on decades of experience recommending, configuring, and commissioning a wide range of solutions for all types of coal applications.

## EFFICIENT FINE AND COARSE DEWATERING

Production companies of all sizes depend on our solutions to achieve continuous, efficient operations in dewatering, thickening, and tailings. Examples range from world-leading companies like Exxaro, Anglo Coal, and Jindal, to many local mines in South Africa, Europe, and the Americas. For coarse dewatering, we supply a range of efficient filter presses to ensure the lowest possible residual moisture and eliminate the need for drying. For finer particle sizes, our innovative hyperbaric disc filters have helped to set new standards in high-capacity, low-cost coal dewatering.

## COST-EFFECTIVE TAILINGS TREATMENT

The coal industry, of course, faces a number of growing challenges. In some cases, success means reducing maintenance with a robust fluid bed dryer, or improving automation through advanced instrumentation, process control, or dynamic simulations of mining operations. Other times, water recovery can be a significant competitive advantage. In fact, one coal mine in the Mongolian Gobi desert was able to save more than three million cubic meters of water annually using a highly efficient series of belt presses for tailings dewatering.

## KEY PROCESS STEPS

- Flocculation
- Thickening
- Mechanical dewatering
- Granulation

## KEY BENEFITS

- Water recovery
- Safe dry stacking
- Increased product recovery
- Lower environment risks
- Reduced operating costs
- Complete turnkey solution
- Maintenance-friendly and robust designs
- Fewer equipment items/highest process efficiency



ANDRITZ Heavy-duty belt press



**>100 years** / supporting the coal industry

**Global** / pioneer in new process standards

**First** / to introduce screen bowl decanters supplied to the coal industry

**“Due to installation of the ANDRITZ CPF 2200 S7 belt presses, there is no longer any need for wet dumping. The facility’s water and sludge loop is completely closed.”**

**A. J. SCHUBODEROV**

Director of the Central Preparation Plant  
“Kuzbasskaja”, Southern Kuzbass, Department  
of Preparation and Treatment of Coal



**COAL**



# High-purity lithium, graphite, and cobalt with lower energy costs

As battery production continues to rise, so does the demand for high-purity lithium carbonate, graphite, and cobalt. Our turnkey process solutions for dewatering, purifying, and drying make it possible to meet this challenge with high efficiency and product quality.

## FIVE DECADES OF EXPERTISE IN LITHIUM

The first ANDRITZ pusher centrifuge for lithium carbonate, installed more than 50 years ago, is still in operation today. This represents our commitment to supplying the world's largest lithium producers with robust separation technologies that withstand a long lifetime of continuous use. Our technologies, ranging from decanters and centrifuges to thickeners and dryers, cover the entire process from dewatering to purification and drying. In the case of lithium hydroxide, a low-temperature, low-energy drying solution is often required in order to avoid product decomposition. ANDRITZ makes this possible with a range of drying technologies based on closed gas loop operation, which better preserve product quality while conserving energy.

## HIGH-VOLUME GRAPHITE AND COBALT

High product throughput is, of course, critical to reliable and cost-efficient production of all types of battery minerals. This is why many larger processors of graphite and cobalt have long depended on us for the most efficient mechanical dewatering and purification solutions. Our high-capacity filter presses and thickeners ensure low operating and energy costs for some of the highest volume operations worldwide. When put together, our complete process solutions for battery minerals help leading producers to continuously expand and compete in this fast-growing global market.

## KEY PROCESS STEPS

- Concentration
- Purification
- Mechanical and thermal dewatering of main and by-products

## KEY BENEFITS

- Higher purity battery-grade lithium carbonate
- Turnkey process solutions for dewatering, purifying and drying
- Avoid decomposition and overdrying
- Closed gas loop for improved product quality
- Low-energy drying



ANDRITZ Peeler centrifuge HZ SI



**Purity**

Solutions for high product purity and dryness

**40 ppm**

chloride content with contact and fluid bed dryers

**Serving largest producers**

Supplying the world's largest lithium producer

**BATTERY MINERALS**





# Powering the lithium battery revolution







When the world's largest lithium producer decides to expand production, there's no time to waste. Which is exactly why they turned to the industry's most trusted technologies to get the job done quickly and reliably.

To ensure low moisture and sodium chloride concentration, together with the highest washing efficiency, the plant expansion will include four sidebar filter presses, six peeler centrifuges, three vacuum drum filters, as well as thickeners, a vacuum belt filter, and a pusher centrifuge. In addition to providing proven technologies, ANDRITZ was chosen as the one-stop-shop for a rapid response to a growing market opportunity.

As the lithium battery market continues its rise, we're determined to keep our customers running ahead of the competition. With complete process solutions that leave no time or resources to waste.



**R&D**

—

YOU'VE GOT AN IDEA. WE'VE GOT THE CAPABILITIES. LET'S CREATE A SUCCESSFUL CONCEPT.

# Let's be brilliant – together

No one knows your operations better than you. And no one devotes more resources to advancing the science of mechanical and thermal separation than ANDRITZ. Together we can discover new ways to bring your product to the market more efficiently, affordably, and reliably than ever before.

Investing in R&D in solid/liquid separation is critical to meeting the demands of tomorrow's mining and minerals industry. Which is why we continuously collaborate with customers and leading universities to go beyond the limits of current technologies. Whether you are looking for cutting-edge filtration technologies, innovative drying solutions, or a more straightforward performance upgrade, we can find ways to do it better.

How do we know? Because we do this every day for many of the largest cities and most advanced mining facilities across the globe. Because your challenges are complex and because many of our customers are based in remote locations, we provide accessible mobile test equipment so you can test your parameters on-site and be assured of an easy transition to industrial scale. Whatever your ambitions, we can provide the knowledge and capabilities to support your goals.

## Our brain power is your strength

### LAB TESTING FACILITIES

- Europe: Austria, Germany
- North America: Texas
- South America: Brazil
- Asia Pacific: China, Singapore

### MOBILE TESTING FACILITIES

- Europe: Germany
- North America: Texas
- Asia Pacific: China, Singapore

**3%** of our sales are reinvested in R&D



# 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.

Our tailored turnkey systems from a single supplier can improve entire plants or individual machines. By providing state-of-the-art automation technologies and digitalization, we ensure best-in-class performance. Automating machine and plant equipment measurably reduces gaps in many different production process steps. By using automation from ANDRITZ, you can reduce downtime thanks to features such as predictive analysis that allow you to optimize productivity.

Metris addIQ covers all levels of automation, starting at basic automation (machine, process, and plant control), to upgrades, and add-ons for process optimization. Together, you get a full range of optimized solutions that help reduce maintenance efforts and ensure preventive service for your machines and plants. These are all delivered from a single source and always individually tailored to your business demands. Metris addIQ control systems are part of the ANDRITZ brand for Digital IIoT (Industrial Internet of Things) Solutions.









# Put our 150 years of OEM experience to work for you

Need to optimize your process? Boost availability? Ensure non-stop productivity? When you work with ANDRITZ, you gain access to one of the world's largest OEM manufacturers for solid/liquid separation. Put our in-depth knowledge of separation equipment and processing to work for you.

## VAST EXPERIENCE THROUGH LARGE INSTALLED BASE

With an installed global base of more than 55,000 solid/liquid separation machines and systems, you can imagine that we take service seriously. Wherever these customers are located, we work very closely with them to maximize uptime and boost efficiency.

## WELL-KNOWN OEM BRANDS

Some customers know us as the people with ANDRITZ on our overalls. Others have come to understand that we are the OEM behind former brand names like 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 – all companies that have been acquired by ANDRITZ. But frankly, we are capable of servicing and supplying spare parts for nearly all brands of solid/liquid separation equipment on the market.

## LOCAL SUPPORT BACKED BY GLOBAL EXPERTISE

Our service philosophy is simple: One phone call, one contact person, one dedicated team that speaks your language and knows your equipment and process. This is not an empty promise. It is backed by a network of 550 service specialists for separation equipment and systems as well as service centers all around the world.

## A TRUE FULL-SERVICE PROVIDER

Whether you need spare parts, rentals, local service, repairs, upgrades, or modernization of your equipment, ANDRITZ is your service specialist in all aspects of separation. 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. In short, we've got you covered.



### LOCAL SUPPORT

Responsive local service centers and field service technicians



### REPAIRS & UPGRADES

Optimization of machine and process performance, repair work, retrofitting, and modernization



### SECOND-HAND & RENTALS

Certified second-hand and rental machines



### TRAINING

Operator training and tailored seminars for operating and maintenance personnel



### OEM SPARE PARTS

Filter cloths, spare and wear parts from OEMs or with OEM level quality, all readily available



### SERVICE AGREEMENTS

Preventive maintenance, contracts for spare parts, maintenance, inspections, repairs, upgrades, operation, and equipment monitoring



### PROCESS OPTIMIZATION

Automation tools and process expertise to boost your profit



### LAB AND ON-SITE TESTS

Lab and testing capabilities for process optimization and machine upgrades



**What's your biggest  
separation challenge?**







## Ask your separation specialist.

Now you've seen how ANDRITZ is striving to bring you the world's broadest range of separation solutions that you can count on. With proven reliability, knowledgeable local service specialists, and state-of-the-art automation systems.

Let's sit down and see how we could take your operations to the next level. Contact us today.

[ANDRITZ.COM/SEPARATION](https://www.andritz.com/separation)



## 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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**ANDRITZ.COM/SEPARATION**



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