



SEPARATION

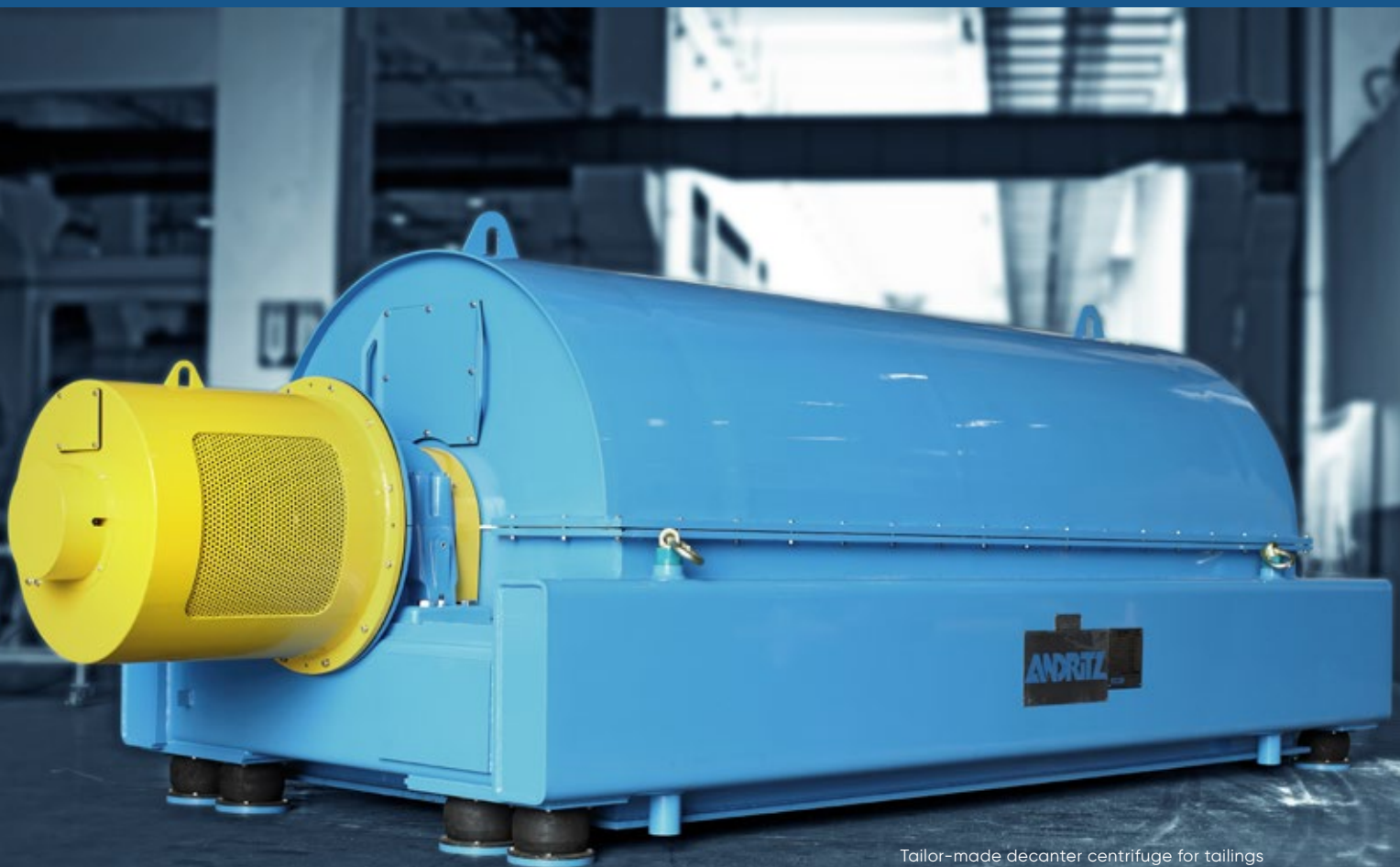
EFFICIENT TAILINGS DEWATERING

ANDRITZ DECANter CENTRIFUGE

ANDRITZ

ENGINEERED SUCCESS

Tailings treatment continues to come with the fastest growing safety, environmental and operational challenges in the mining sector. As many mining areas worldwide also face the problem of water shortages, the recovery of valuable process water is an added benefit of responsible tailings treatment. Based on the unique conditions at your site, ANDRITZ recommends and fine-tunes a solution that gives not only the highest possible process efficiency, but also state-of-the-art dewatering and reclamation: the ANDRITZ decanter centrifuge.



Tailor-made decanter centrifuge for tailings

The most efficient solution for tailings dewatering

In addition to social and environmental challenges, mine operators also face various operational challenges on a daily basis:

- Handling of slurries with high density
- Handling of high throughputs
- Very abrasive materials to process
- Longevity of assets, continuous and automatic operation
- Majority inorganic content, containing difficult-to-settle components such as clay
- Need for minimal or no flocculant consumption
- High dryness output required
- Low energy consumption targets
- Smaller particle size fractions

With tailor-made machines for your application and more than 30,000 references in various applications worldwide, the ANDRITZ decanter centrifuge for tailings brings you a lot of benefits.

YOUR ADDED VALUE

- Continuous and fully automatic operating system contributing to reduced labor costs
- Handling of large product quantities with highest throughput per footprint and thus smallest building requirements
- Reliable and robust machinery
- Flexibility to handle varying process parameters with double variable-speed drive (variable absolute and relative speed)
- Closed design for clean working environment in comparison to other technologies
- Longer average time between servicing - usually once per year - reduces maintenance and operating costs
- Protection against abrasion:
 - Best-in-class wear protection variants resulting in a strategic, long-term investment with a tangible return
 - On-site exchangeable wear parts wherever possible mean less downtime and reduced maintenance costs
 - Continuous performance assessment using ANDRITZ Metris Connect solutions and R&D help us work towards improved wear resistance and reduced component costs



Decanter centrifuge for tailings with continuous and fully automatic operating system

Efficient dewatering thanks to high-speed decaners

For dewatering of slurries with fine PSD, high G-forces are required. The ANDRITZ decanter centrifuge A10-4 operates with high-speed design capabilities for tailings and fine solids dewatering. Due to its large diameter-to-length ratio, it allows you to handle high volumes and increase recovery rates.

To achieve this high efficiency, the ANDRITZ decanter centrifuge A10-4 provides the following features and application-related benefits:

- **Flexible:** Designed for maximum flexibility with construction material options (carbon steel, stainless steel), and unique features such as:
 - **TurboJet** weir plate to recover energy
 - **GentleFeeder™** reduces turbulence and shear forces in the feed section, while also enabling better separation efficiency and solids recovery
- **High speed:** The high-speed decanter centrifuge for tailings operates at up to 2,700 G for efficient separation (high recovery rate of fine particles) and to achieve high throughput
- **Dual VFD drive:** The decanter centrifuge A10-4 is configured with a dual VFD drive system to react automatically in torque control mode to varying process parameters during operation
- **Deep pond design:** Deep pond configuration enables reduced power consumption



High-speed ANDRITZ decanter centrifuge A10-4

A comprehensive decanter centrifuge range for tailings

Model	A4-3	A6-3	A8-4	A10-4	A11-3	A14-4
G-force	3,000	2,500	2,400	2,700	1,600	2,000
Diameter [mm]	450	610	762	1,000	1,100	1,400
Weight [kg]	3,400	7,000	9,300	26,500	22,000	62,000
Max motor [kW]*	55/30	110/55	115/75	355/160	315	1,100

*Depending on application

FEATURES

- Dual VFD drive system to allow for automatic torque control operation and to fine-tune dewatering parameters
- Deep pond design to reduce power consumption
- Optimum protection against abrasion for less downtime and reduced maintenance costs.

OPTIONS

- GentleFeeder™ feeding system – allows for less turbulence in the feed zone to decrease shearing forces (preventing potential particle breakage, improving flocculant efficiency, and reducing fines in centrate).
- TurboJet weir plate – enables less energy consumption by re-using the machine's rotational energy and discharging the centrate in the direction of rotation.



Decanter centrifuge A14, the largest decanter ever sold worldwide

Intelligence for machine and process control

With Metris addIQ, you have 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.

METRIS addIQ CONTROL SYSTEMS

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 have 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. addIQ control systems are part of Metris, the ANDRITZ brand for digital solutions.

ANDRITZ offers a broad and constantly growing range of innovative products and services in the industrial digitalization sector under the brand name Metris, helping customers to enhance plant efficiency and profitability, optimize the use of resources, achieve constant and highest product quality, reduce production downtime, and maximize user-friendliness.

Your full-service provider

With ANDRITZ, 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, 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 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

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 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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