



SEPARATION

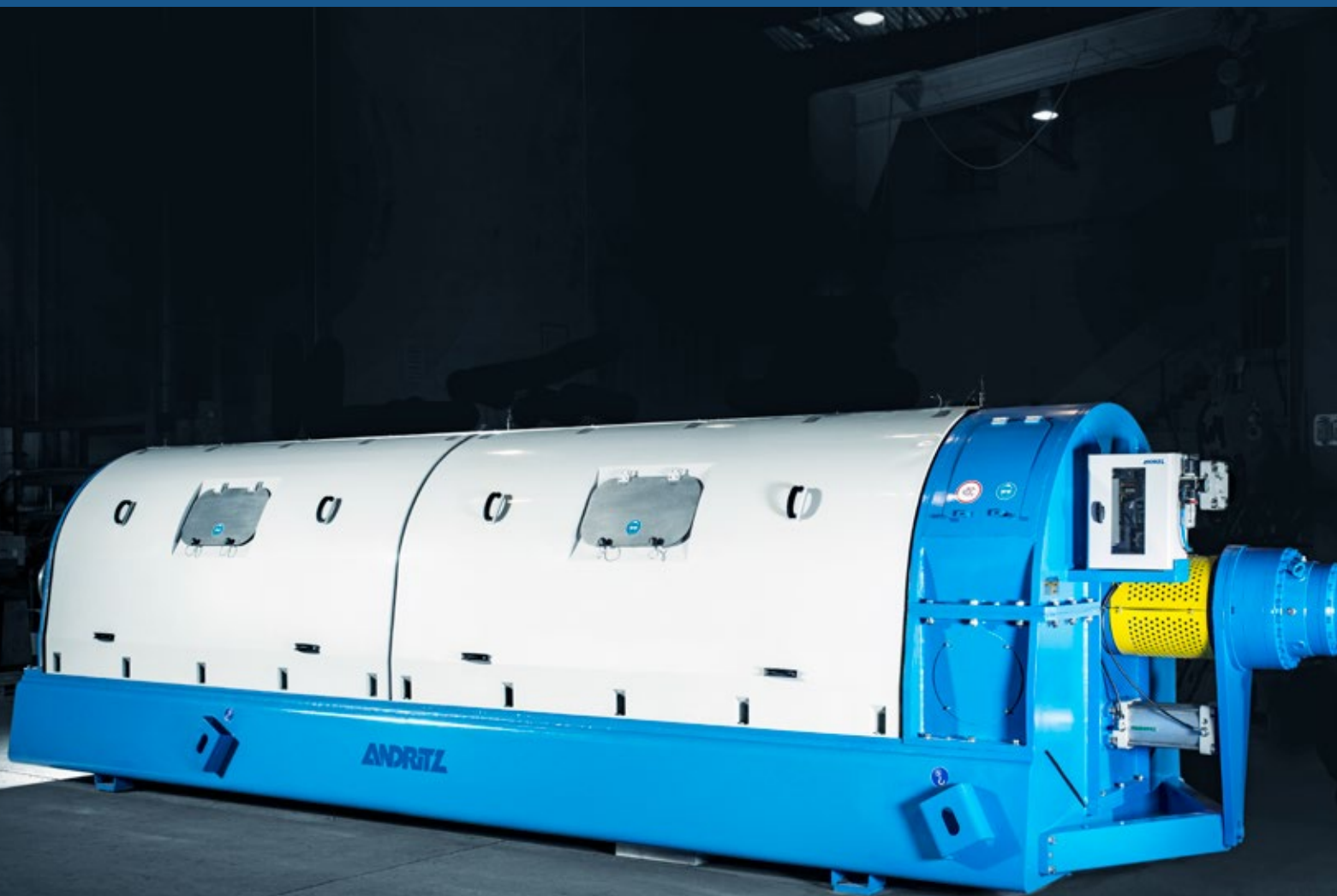
**EFFICIENT SLUDGE  
DEWATERING WITH SCREW  
PRESS TECHNOLOGY**

C-PRESS

**ANDRITZ**

ENGINEERED SUCCESS

The C-Press is the latest result of more than 20 years of experience in designing and manufacturing screwpresses. By combining multiple ANDRITZ Separation dewatering technologies, its uniquely compact design and purpose-developed features enable easy, operatorfree sludge dewatering operations together with low energy and maintenance costs.



## HIGH-PERFORMANCE SYSTEM

Maximizing the open area of the basket, the C-Press offers a high specific capacity and capture rate compared to equivalent technologies. The screw velocity is adjusted automatically according to feed fluctuation to ensure a constant feed flow while delivering optimal performance in terms of dryness and capture rate, even during washing sequences.

## OPERATING PRINCIPLE

The flocculated product is fed into the screw press, where it is thickened and compressed gradually along the length of the machine. A screw conveys the product through the machine at low speed (0.1 to 1 rpm), and the conical screw shaft makes it possible to increase pressure gradually. A pneumatic counter-pressure device prevents the product from moving too quickly, squeezing the product and achieving maximum possible dryness. The screw speed is adjusted continuously and automatically to maintain a constant feed pressure, while a dual cleaning device cleans the thickening and squeezing zones separately from time to time to ensure constant dewatering efficiency while reducing water consumption by up to 50%.

## YOUR BENEFITS

- Fully automatic machine with continuous control of performance, screw speed, counter-pressure, and washing
- Enclosed system to minimize odor emissions and ensure cleanliness
- Very low noise emissions <60 dB(A)
- Highest capacity on the market achieved by multi-stage dewatering zones, providing the largest open area in the thickening zone
- Consistent performance with very low power consumption compared to other dewatering technologies
- Dual cleaning to optimize and decrease water consumption by up to 50%, as well as continuous dewatering, even during cleaning phases
- High capture rate thanks to basket design that is optimized with the experience of ANDRITZ in designing screw presses
- Optimized flocculation mixing device to minimize consumption of polymer and energy
- Easy maintenance:
  - Minimum of operator attendance and of maintenance work
  - Easy-access "strip design" (optional split basket design for maintenance in place, fiberglass cover, etc.)
  - Easy dismantling for fast maintenance without removing screw and basket from frame
  - Basket constructed of two perforated plates (screen and support cage); inner screen can be changed when necessary without having to replace the complete basket





# Technical data and range

## APPLICATIONS

- Wastewater treatment plants
- Industrial treatment plants
- Food applications

## CHARACTERISTICS

- Conical shaft
- Multi-stage basket
- Direct drive by planetary gear box with flange-mounted motor
- Low-speed screw (0.1 to 1 rpm)
- Standard and customized control packages
- Wetted parts in stainless steel (frame with cladding)
- Dual shower rings for separate cleaning and optimized water consumption

## RANGE

- Single machine, with an outlet capacity from 20 to 890 kg DS/h
- Turnkey installation and mobile unit
- Unit suitable for on-site or lab tests



## C-PRESS

| Size   | Feed capacity*<br>(m <sup>3</sup> /hr) | Average dry solids throughput*<br>(kg/hr) | Drive power<br>(kW) |
|--------|--|---|---------------------|
| 40-10  | 1-5                                    | 20-85                                     | 0.75                |
| 40-20  | 2-10                                   | 50-125                                    | 1.5                 |
| 54-27  | 4-20                                   | 100-300                                   | 1.5                 |
| 70-35  | 9-26                                   | 125-450                                   | 2.2                 |
| 100-50 | 18-50                                  | 300-890                                   | 3                   |

\* Higher flow rate for specific products and low concentration

# Metris addIQ control systems: Automation solutions for enhanced performance

With ANDRITZ being one of the major suppliers of dewatering equipment, it stands to reason that the automation of such equipment would also be an in-house specialty.

## ADDIQ PURE

The addIQ Pure package is the entry level of the addIQ series. It comes with a 4" widescreen touch panel and intuitive operator design along with a high-performance controller. addIQ Pure combines full machine control functions, compact design and cost effectiveness.

- Controller for pure machine regulation
- Extremely compact design
- Includes specific machine control functions
- Easy integration into overall control systems
- Cost-efficient solution for standalone machines
- Intuitive design of operator interface
- 4 " HMI panel for monitoring and parameter set up

## ADDIQ ECO

The addIQ Eco package is the most cost-efficient solution for your separation challenge. It comes also with a 4" widescreen touch panel and intuitive operator design, along with a high-performance controller. The design is optimized to the dedicated machine equipped with addIQ Eco.

- All of the above +
- Monitoring and control of machine-mounted instruments and actuators
- Direct connection of machine instrumentation on controller
- 4" HMI panel as standard with possibility to upscale bigger screen sizes

## ADDIQ DYNAMIC

The mid-size addIQ Dynamic package brings a 9" wide-

screen touch panel, intuitive operator design and a safety-integrated controller. It comes with a bigger screen on top of the addIQ Eco version.

- All of the above +
- Monitoring and control of machine and machine peripherals
- 9" touchscreen as standard with possibility to upscale
- Advanced control and optimization functions
- Full process line control system
- Remote-access function\*
- Advanced trending and diagnostic functions\*

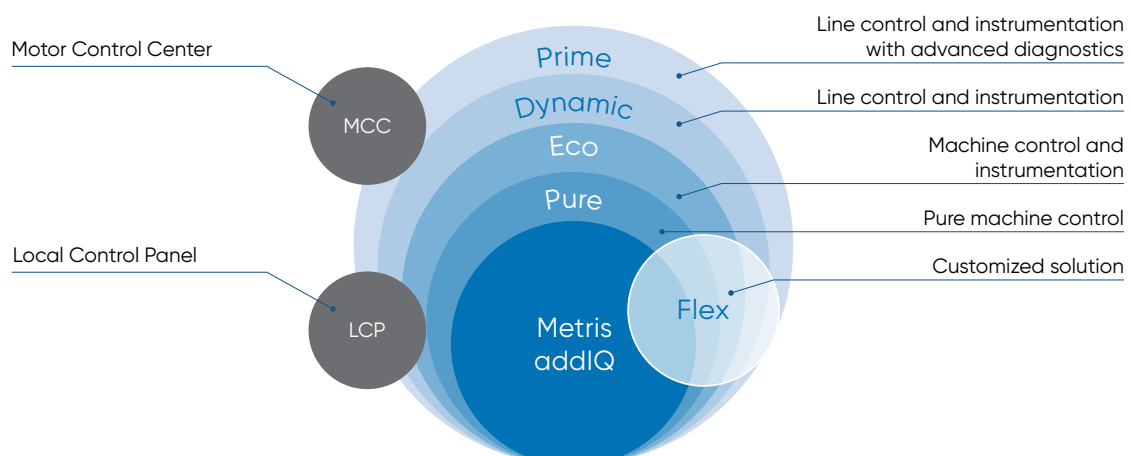
## ADDIQ PRIME

The high-end solution is the addIQ Prime package, ideal for complete systems and plants. It comes with a 15" widescreen panel PC and the most sophisticated features of the intuitive operator design. The controller is a high-end device with extensive expansion possibilities. It goes without saying that integrated safety functions come as standard.

- All of the above +
- High-end control system hardware
- Remote-access function
- Advanced trending and diagnostic functions

## ADDIQ FLEX

The most flexible solution is addIQ Flex, giving the customer maximum flexibility. The controller type, HMI, IO-cards, and design of documentation are all fully customizable.





# 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 Vandebroek.

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!**

### AFRICA

ANDRITZ Delkor (Pty) Ltd.  
p: +27 11 012 7300  
separation.za@andritz.com

### EUROPE

ANDRITZ S.A.S.  
p: +33 1 39 26 05 50  
separation.fr@andritz.com

### ASIA

ANDRITZ Singapore Pte. Ltd.  
p: +65 6512 1800  
separation.sg@andritz.com

### NORTH AMERICA

ANDRITZ Separation Inc.  
p: +1 817 465 5611  
separation.us@andritz.com

### AUSTRALIA

ANDRITZ Pty. Ltd.  
p: +61 3 8773 4888  
separation.au@andritz.com

### SOUTH AMERICA

ANDRITZ Separation Ltda.  
p: +55 47 3387 9100  
separation.bra@andritz.com

### CHINA

ANDRITZ (China) Ltd.  
p: +86 757 8258 6802  
separation.cn@andritz.com

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

JOIN US ON SOCIAL MEDIA



# ANDRITZ

All data, information, statements, photographs, and graphic illustrations in this leaflet are without any obligation and raise no liabilities to or form part of any sales contracts of ANDRITZ AG or any affiliates for equipment and/or systems referred to herein. © ANDRITZ AG 2021. All rights reserved. No part of this copyrighted work may be reproduced, modified, or distributed in any form or by any means, or stored in any database or retrieval system, without the prior written permission of ANDRITZ AG or its affiliates. Any such unauthorized use for any purpose is a violation of the relevant copyright laws. ANDRITZ AG, Statterger Strasse 18, 8045 Graz, Austria. C-Press 3.0/09.2021 EN

