# HYDRAULICS FOR SMOOTH OPERATION

ANDRITZ Sewage Dry,
ASD series

ANDRITZ

## **ANDRITZ Pumps** for your industry









ANDRITZ specializes in the development and manufacturing of high-quality pumps, offering a comprehensive range from standardized products to tailor-made solutions across various industries. Our pumps have achieved global success in diverse applications, including municipal drinking water supply, wastewater disposal, industrial water distribution, and significant infrastructure projects such as irrigation, seawater desalination, and water transmission.

In flood control, irrigation, and water transport, ANDRITZ not only provides the largest and most powerful pumps, but also complete systems and pumping stations. As a prominent supplier to the pulp and paper industry, we leverage strong process expertise to deliver pump solutions that enhance process stability and energy efficiency. Our product portfolio encompasses a full range of robust process pumps and innovative medium-consistency pumps with an advanced system to avoid fiber losses. Notably, our double-suction headbox pumps boast efficiency levels of up to 93% and low-pulsation impellers, crafted with innovative methods. They thus provide the best performance in the paper manufacturing process.

In line with our commitment to sustainability, ANDRITZ offers reliable small hydroelectric power plants and pumps utilized as turbines for private, municipal, industrial, and commercial applications. Our diverse range ensures economically and ecologically sustainable energy production. Specializing in hydroelectric storage, our pumps cover a wide range from high heads to high flows, showcasing our engineering competence.

Our pump series, distinguished by modern and robust designs, high efficiency levels, and sustainability features, find applications in various demanding industries, including sugar and starch, lysine, bioethanol, hydrogen, fertilizer, mining, offshore, and general process industries.

Additionally, ANDRITZ provides IIOT-enabled premium pump technology for enhanced process monitoring, thus reflecting our commitment to cutting-edge solutions.

### Premium pumping technology

For 170 years, ANDRITZ has been synonymous with design ability and innovation. Our products are sturdy and wear-resistant and can meet high customer Standards in terms of efficiency, service life, easy maintenance, and economic benefits. They have been successfully operated in multiple industries around the world. ANDRITZ's high standards are based on decades of experience in hydraulic machinery design and extensive professional knowledge. Our goal is to provide high-quality products and services to ensure sustained customer satisfaction.

#### **ANDRITZ SEWAGE DRY PUMP, ASD SERIES**

This is an innovative pump that sets a new benchmark in terms of functionality and performance. With its non-clogging hydraulics, it ensures smooth operation and minimizes downtime. Particularly impressive is its best-in-class handling of wet wipes, which are handled effortlessly without blocking the pump. In addition, the pump has a practical maintenance carriage for easy servicing and maintenance. This reliable and high-performance pump offers customers the technology they need to handle the most demanding challenges.

Pumps from the ASD series are indispensable for wastewater and sludge handling, with key applications in conveyance, treatment, and disposal. A crucial element of the pump is the impeller. Non-clogging (N), semi-open (S), closed (C) or vortex (V) impellers can be used and are essential to the efficiency and performance of the pump. Selecting the right impeller following an analysis of the application's requirements ensures that the pump will perform optimally and reliably.

#### **FIELDS OF APPLICATION**

- Wastewater management
- Industrial water systems
- Wastewater transport
- · Wastewater disposal
- Wastewater treatment plants
- Sludge disposal
- Sludge processing
- Municipal wastewater

#### **PRODUCT BENEFITS**

- Non-clogging hydraulics
- · Maintenance carriage
- Best-in-class handling of wet wipes
- Modular design
- · Reliable and stable
- High efficiency and energy saving
- Multiple monitoring and protection possibilities

#### PRODUCT FACTS

- Nominal diameter (DN) 80 to 800 mm
- Flow rates up to 9.000 m<sup>3</sup>/h
- Heads up to 90 m
- Efficiency up to 88%
- Pressure class up to PN16

\*These values are guidelines and may differ depending on project requirements.

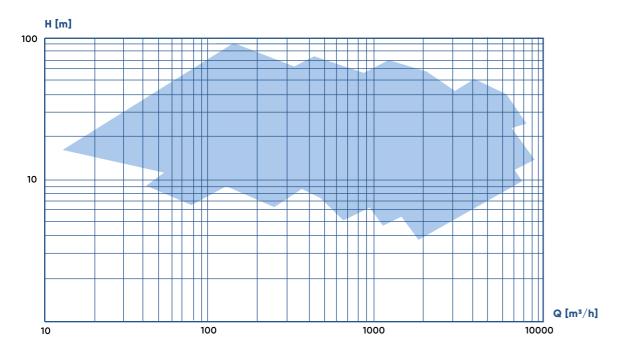
The pump's modular design also allows installation in wet conditions with a submersible IP68 motor, with or without internal cooling system - the ASW, ANDRITZ SEWAGE WET series.





Horizontal installation

# ANDRITZ sewage dry, ASD series

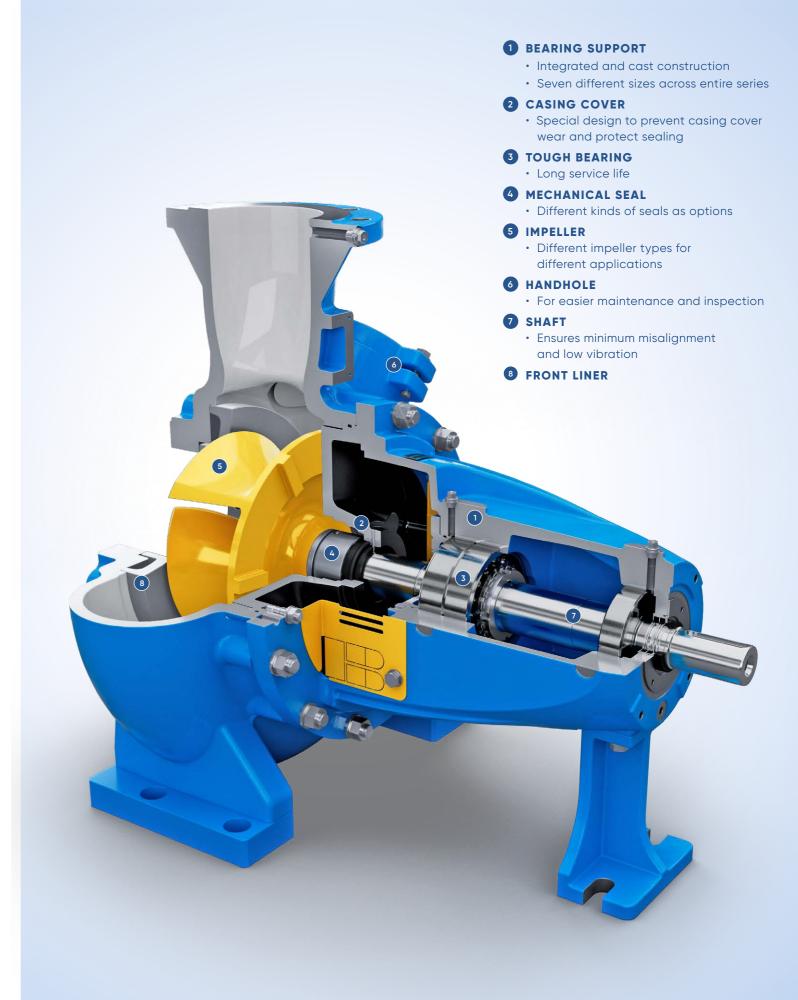


#### **MATERIAL COMBINATIONS**

ASD SERIES	EN-GJL-250	1.4474	1.4404	1.4021	1.4462	1.4517 M
Volute casing	•	•				
Impeller		•				•
Wear ring			•			
Front liner		•				
Casing cover		•				
Shaft						
Bearing support						

European standard		US standard		
Number	Name	Grade	UNS	
5.1301	EN-GJL 250	/	Class 40B	
1.4474	GX4GrNiMoN26-5-2	1A	J93370	

3.1301	LIN-GJL 230	/	C1033 40D
1.4474	GX4GrNiMoN26-5-2	1A	J93370
1.4404	X2CrNiMo17-12-2	316L	\$13603
1.4021	X20Cr13	420	\$42000
1.4462	X2CrNiMoN22-5-3	S32205	S432255
1.4517 M	GX2CrNiMoCuN26-6-3-3	ASTM A890 Grade 1B	J93372



5

# Superior clog resistance for maximum reliability

#### HOW CAN YOU BE SURE A WASTEWATER PUMP WON'T CLOG?

Our ASD series has been rigorously tested in accordance with DWA-A120-2, the recognized German standard for evaluating wastewater pump performance.

The test simulates real-world conditions by introducing varying quantities of wipes (25, 50, and 100 pieces per m³) over a one-hour period, during which the pump's efficiency and operational reliability are closely monitored.

According to the standard, a pump with a DLTF (Degree of Long-Term Functional Performance) value above 0.7 is considered reliably clog resistant. Our ASD pumpsequipped with both non-clogging (N) and vortex (V) hydraulics-consistently achieve scores above 0.9, demonstrating exceptionally low clogging tendency and high operational reliability.

With their robust design and proven performance, ASD pumps deliver dependable operation even in the most demanding wastewater environments.



# **Greater efficiency for** a competitive edge

#### RESEARCH AND DEVELOPMENT

Continuously increasing demands by customers in our operating industries emphasize the significance of R&D in the constant optimization of products and services. Today, efficiency, flexibility, and reliability over an extended lifetime are the major challenges of the market. Our commitment to research and development forms the basis for our advances in hydraulic machine manufacturing. With Pump Technology Center (PTC) ASTROE, center for hydraulic engineering and laboratory, we have an internationally renowned institute for hydraulic development work at our disposal. We are developing and testing our pumps at different locations worldwide. Our test stands are among the most accurate in the world. By networking these research and development centers, we provide a continuous transfer of know-how within the ANDRITZ GROUP for the benefit of our customers. The main tools for R&D are numerical

simulation methods as well as experimental measurements in the laboratory and on site. State-of-the-art equipment, highly precise measuring instruments as well as the latest simulation technologies, and powerful software form the basis of the high technical quality of the pumps and turbines from ANDRITZ.





#### AN OVERVIEW OF OUR SERVICES

- Supply of original spare parts
- Deployment of trained personnel
- Installation and start-up
- Inspection
- Repairs, overhauls, maintenance
- Machine assessment by an expert for early fault detection
- · Consulting and modernization
- Performance and vibration measurement
- Fault and damage analyses
- · Feasibility studies
- Energy consulting for pumps and systems
- Preparation of maintenance schedules
- Service and maintenance agreements
- Automation and Electrical Power Systems
- · Electronic equipment
- Training



#### **INNOVATION SINCE 1852**

The internationally renowned ANDRITZ GROUP has been building pumps for more than 170 years. We offer innovative and targeted solutions with pumps and complete pumping stations. Our longstanding experience in hydraulic machine manufacturing and complete process know-how forms the basis of the high standard of ANDRITZ pump engineering. Our quality and highefficiency products as well as our understanding of customer requirements have made us a preferred partner for pumping solutions worldwide. ANDRITZ offers everything from a single source – from development work, model tests, engineering design, manufacture and project management, to aftersales service and training. We also perform complete start-up on site and guarantee our customers the best support. Our declared goal is your complete satisfaction. See for yourself!

#### **EUROPE**

ANDRITZ AG Stattegger Strasse 18 8045 Graz, Austria p: +43 316 6902-2509 f: +43 316 6902-413 pumps@andritz.com

ANDRITZ Pumps Germany GmbH Marie-Curie-Straße 19 73529 Schwäbisch Gmünd, Germany p: +49 7171 609-0 f: +49 7171 609-287 ritz@andritz.com

ANDRITZ Hydro SRL
Polígono Industrial La Garza 2
Carretera de Algete M-106, Km. 2
28110 Algete
Spain
p: +34 91 6636 409
f: +34 91 425 1001

#### ASIA

ANDRITZ (CHINA) LTD.

No.83 B Zone, Leping Central
Technology & Industry Park,
Sanshui District, Foshan 528137,
Guangdong, P.R.China
p: +86 0757 6663-3102
atc\_pumps@andritz.com

ANDRITZ Technologies Pvt. Ltd. S.No. 389, 400/2A & 400/2C, Padur Road, Kuthambakkam Village, Poonamallee Talluk, Thiruvallur District –600124, Chennai, India p: +91 44 4399-1111 pump.in@andritz.com

ANDRITZ FZCO
Building 6WA – Office No. 329
54522 Dubai,
United Arab Emirates
p: +971 506 069 884
dubai@andritz.com

#### **SOUTH AMERICA**

ANDRITZ HYDRO
Alameda Tocantins 350,
120 andar 06455-020,
Barueri, SP - Brasil
p: +55 11 4133-0000
f: +55 11 4133-0037
bombas.br@andritz.com

#### **NORTH AMERICA**

ANDRITZ Inc. 5405 Windward
Parkway, Suite 100W Alpharetta
Georgia 30004-3894m
United States of America
p: +1770 640-2500
f: +1770 640-9454
pumps.us@andritz.com

ANDRITZ.COM/PUMPS

bombas.es@andritz.com



