

# ANDRITZ Pumps for your industry















ater Pu

Puip an paper

Mining o

Power

Otner industries

ANDRITZ develops and manufactures high-quality custom tailored pumps for various industries. We supply pumps for different water and waste water applications. ANDRITZ pumps are operating successfully worldwide, for example in water resources management, waste water disposal, as well as large infrastructure projects for irrigation, desalination, and for drinking water and industrial water supplies.

Thousands of ANDRITZ submersible motors and pumps have been installed in mines around the world, working under severest conditions in water management and emergency drainage, including the largest submersible dewatering pumps in the world.

As plant and equipment supplier to the pulp and paper industry, ANDRITZ provides a complete pump program. Our product portfolio comprises medium-consistency pumps with an innovative fiber separation system, for example, as well as headbox pumps with efficiencies of over 90% and particularly low pulsation.

We also supply high-performance and reliable pumps for food applications such as proteins, dairy products, or beverages as well as a complete pump program for the entire sugar and starch industry. To round off the portfolio, ANDRITZ small hydropower plants and pumps used as turbines suitable for the private as well as the municipal sectors, and for industrial and commercial facilities ensure an economic and ecological independent power generation.

## Premium pumping technology

For over 165 years, ANDRITZ has been a byword for competence and innovation in designing centrifugal pumps. Our end-suction centrifugal pumps are operating in various industrial applications successfully all over the world. They offer robustness and wear resistance, and fulfill highest customer expectations in terms of efficiency, life cycle, maintenance friendliness, and economic efficiency. The high standard of ANDRITZ centrifugal pumps is based on decades of experience in designing hydraulic machines and on extensive know-how. Our goals at ANDRITZ are to provide first-class products and service to secure sustained customer satisfaction.

### **ANDRITZ SPLIT CASE PUMPS**

With efficiencies of up to 91%, ANDRITZ split case pumps help to save valuable energy. All pumps are fitted with a double-flow radial impeller which achieves very favorable NPSH values. Due to the axial split case design, maintenance is fast and easy. Designed with a double-flow radial impeller and in-line casing, the pump can be installed horizontally or vertically (with horizontal installation, the motor can be placed on the left and/or right). These pumps can be used in a wide range of industrial processes. In the water sector, ANDRITZ split case pumps operate in water treatment and water supply systems as well as in irrigation, flood control, and desalination. They can also be used as circulation water or cooling water pumps for power stations, industrial plants and district heating networks. As plant and equipment supplier to the pulp and paper industry, ANDRITZ also manufactures spilt case pumps to function as cleaner and headbox pumps. ANDRITZ fan pumps convey stock suspensions with consistencies of up to 2%. They are characterized by low pulsation and very high efficiencies. Regardless of the industrial application, ANDRITZ split case pumps can be delivered with and for an Industrial Internet of Things upward integrateable base.

### FIELDS OF APPLICATION

- Cooling water, circulation water pumps for power stations, industrial plants and district heating networks
- Raw water pumps for water treatment plants
- Drinking water pumps for water supply systems
- Water pumps for desalination plants
- Headbox pumps, cleaner pumps or filtrate and water pumps for the pulp and paper industry

### **PRODUCT FACTS:\***

- Consistency (pulp and paper industry) up to 2%
- Head up to 250 m
- Flow rate up to 40,000 m<sup>3</sup>/h
- · Pressure up to 25 bar
- Temperature up to 80° C
- Power up to 7,000 KW
- Efficiency up to 91%

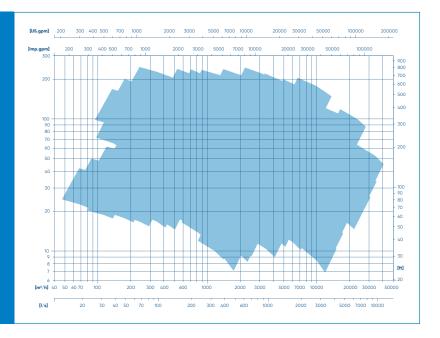
\*These values are guidelines and may differ depending on project requirements



## Split-case pump ASP series

## **PRODUCT BENEFITS**

- Energy savings
- Highest efficiency (91%)
- Low pulsation
- · Horizontal split casing
- Easy and fast maintenance
- Excellent NPSH values
- IIoT ready



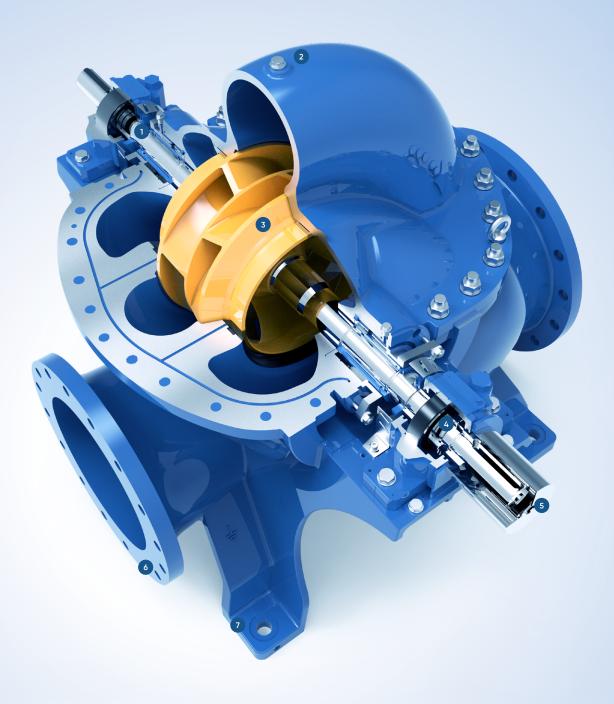
## **MATERIAL COMBINATIONS**

ASP series	EN-GJL-250	EN-GJS-400-18	1.4408	1.4474	1.4462	EN-GJS-500-7
Impeller/ Wear ring				•		
Casing						•
Shaft seal housing	•		•	•		
Shaft						

## European standard

## **US** standard

Number	Name	Grade	UNS
5.1301	EN-GJL-250	Class 40B	/
5.3105	EN-GJS-400-18	Grade 60-40-18	/
1.4408	GX5CrNiMo19-11-2	CF8M	J92900
1.4474	X3CrNiMoN27-5-2	Grade 1A	J93370
1.4462	X2CrNiMoN22-5-3	S32205	S32205
5.3200	EN-GJS-500-7	/	/



## 1 SEALING SYSTEMS

- Stuffing box
- Single or double mechanical seal
- Cartridge seal
- Split seal for short maintenance times
- Replacement of seals without dismantling the casing

### 2 SPLIT VOLUTE CASING

 Sealing of the upper and lower parts with O-rings ensures short maintenance times

## 3 DOUBLE SUCTION IMPELLER

- Efficiency of up to 91%
- Impeller with or without staggered blades (according to specific design)
- For P&P, low pulsation impeller with staggered blades

### SHAFT BEARING FOR OIL OR GREASE LUBRICATION

 Compact and robust bearing ensures ease of installation and long life

## 5 SECOND SHAFT END

- For flexible choice of drive side
- Provided as standard

## 6 CONNECTION FLANGE

 According to DIN, ANSI, matingflange with polishing on demand

### 7 PEDESTAL/LEGS

- Flexible and easy pump mounting
- Foundation with motor available on request

## Always a flow ahead - Research and development

Our affiliate ASTROE enjoys an internationally renowned reputation for its hydraulic developments and investigations. The high efficiency of the ANDRITZ pump series is ensured by Computational Fluid Dynamic (CFD) calculations and extensive testing carried out in our company owned laboratory.

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 ASTROE, center for hydraulic engineering and laboratory, we have an internationally renowned institute for hydraulic development work at our disposal. We are currently developing and testing our pumps and

turbines at five locations in Austria, Germany, Switzerland, and China. 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.



# Greater efficiency for a competitive edge – Pumps service

## Optimization / Modernization / Operating reliability

The conditions of your plant have changed, but your pumps are still operating as previously and therefore, wasting energy? Would you like to optimize your system to reduce costs? With ANDRITZ, you will have a competent partner for these and numerous other services at your side.

Service and maintenance have a long tradition at ANDRITZ and complement the product portfolio. The century-long expertise is reflected not only in a service portfolio with innovative solutions and advanced products that can be optimally adapted to the respective customer needs, but also in a specially trained staff. ANDRITZ has specialized in the servicing of pumps to achieve improved efficiencies and adaptations to changed operating points of the installed pumps. A

large potential for savings can already be achieved by improving the efficiency of 20 percent of the installed pumps. Our service team provides prompt, professional, and reliable assistance – also for other manufacturers' products. Book our service package and you can be sure of the best operating reliability for your systems in the long term. We conduct an expert assessment together with you, thus creating transparency and making an optimum solution possible that is tailored to your needs. After examining your plant, we determine its savings potential and realize it by improving the efficiency of the pumps installed. Additionally, this individual solution lowers your maintenance costs. You do not have to think about personnel, nor about maintenance schedules or utilities. Assembly is conducted according to defined schedules and with assistance from our trained personnel.



### 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 165 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 form the basis of the high standard of ANDRITZ pump engineering. Our quality and high-efficiency 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 Ritz GmbH Güglingstraße 50 73529 Schwäbisch Gmünd, Germany p: +49 7171 609-0 f: +49 7171 609-287

ritz@andritz.com

ANDRITZ Hydro S.L.
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
bombas.es@andritz.com

### **SOUTH AMERICA**

ANDRITZ HYDRO S.A.
Av. Juruá 747, Alphaville Industrial
06455-010, Barueri, SP - Brasil
p: +55 11 4133-0000
f: +55 11 4133-0037
bombas-brazil@andritz.com

### 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 Separation & Pump Technologies India 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

Dubai Airport Free Zone (DAFZA) Building 6WB – Office No. 642 Dubai, United Arab Emirates p: +971 4 214 6546 dubai@andritz.com

ANDRITZ.COM/PUMPS





