

# **ANDRITZ Pumps** Products, systems, applications





# **ANDRITZ** Pumps

Performance based on experience, competence and quality







Vertical line shaft pumpe.g. for an irrigation pumping station

▲ **Double suction split case pump** for conveying water and suspensions

 Process pumps
for conveying water and suspensions in different industries such as pulp and paper

Many years of experience and comprehensive know-how are the solid footing for the high performance standards met by our pumps.

Specialized know-how and understanding the customers' requirements make us a preferred partner. Our innovative and targeted solutions – from single pumps to large pumping stations – are convincing arguments. We act as single-source supplier: from development to the model test, from design to manufacture, to project management, site installation, service and training.

This is why customers from all corners of the globe rely on us and our long-term experience over the entire value-added chain.

# **Product portfolio and applications**

Products	Water	Energy	Pulp and paper	Other industries*	Product groups
Vertical Line Shaft Pump					Large Pumps
Vertical Volute Pump					Large Pumps
Double Suction Split Case Pump					Large Pumps
Horizontal Bulp Pump					Large Pumps
Main Coolant Pump PWR for the primary loop					Reactor Pumps
Main Coolant Pump BWR for the primary loop					Reactor Pumps
Shutdown Cooling Pump PWR					Reactor Pumps
Moderator Pump – CANDU reactor					Reactor Pumps
Centrifugal Pump – S and SP Series	•	•	•		Standard Pumps
Centrifugal Pump – ISO Series	•		- <b>-</b> -	•	Standard Pumps
Vertical Submerged Pump – SAT Series			•	•	Standard Pumps
Self-Priming Pump – AD Series	•		•	•	Standard Pumps
Free-Flow Pump – VP and CP Series	•		•	•	Standard Pumps
High-Pressure Pump – MP Series					Standard Pumps
Double Suction Split Case Pump – FP Series			•		Standard Pumps
Medium Consistency Pump – MC Series					Standard Pumps
Steam Heating Systems – DSHM, DSHL, DSHD and DSHP Series		•	•	•	Standard Pumps

 $^{\star}$  examples: bioethanol (second generation), chemical, food

# **Technical data**

# **Vertical Line Shaft Pump**

Model	pull-out or non pull-out
Impeller	radial, mixed flow or axial, adjustable or fixed
Head	up to 100 m
Flow rate	up to 70,000 m³/h
Power	up to 10,000 kW

# **Vertical Volute Pump**

Model	metal or concrete volute, with or without guide vanes
Impeller	radial or mixed flow
Head	single-stage up to 250 m
Flow rate	up to 180,000 m³/h

#### Double Suction Split Case Pump

Model	horizontal or vertical, axially or radially split
Impeller	radial
Head	up to 100 m
Flow rate	up to 55,000 m³/h
Power	up to 10,000 kW

# **Horizontal Bulb Pump**

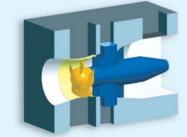
Model	horizontal, direct drive
Impeller	axial, adjustable or fixed
Head	up to 20 m
Flow rate	up to 250,000 m³/h
Power	up to 10,000 kW

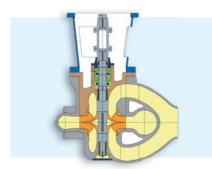
#### **Reactor Pump**

Model	shutdown cooling pump PWR, moderator pump CANDU reactor
Impeller	radial
Head	50-70 m
Flow rate	800-4,000 m³/h
Power	250-750 kW









# **Reactor Pump – Primary Loop**

Model	main coolant pump PWR, main coolant pump BWR
Impeller	axial or semi-axial
Head	60-135 m
Flow rate	6,000-24,000 m <sup>3</sup> /h
Power	650-13,000 kW

# **Centrifugal Pump – S and SP Series**

Model	single-stage; single-flow, open impeller
Consistency	up to 6%
Head	SP: up to 150 m, S: 10-140 m
Flow rate	7,500 m³/h
Pressure	SP: up to 25 bar, S: up to 16 bar
Temperature	SP: standard up to 140 °C, centerline up to 200 °C / S: up to 140 °C

# **Centrifugal Pump – ISO Series**

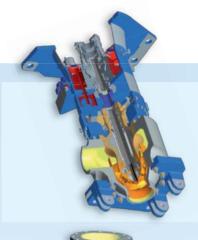
Model	single-stage; single-flow, closed impeller
Consistency	up to 1%
Head	up to 160 m
Flow rate	up to 300 m <sup>3</sup> /h
Pressure	up to 16 bar
Temperature	up to 140 °C

# Vertical Submerged Pump – SAT Series

Model	single-stage; single-flow, open impeller
Head	up to 35 m
Flow rate	up to 800 m³/h
Pressure	up to 10 bar
Temperature	up to 60 °C

#### Self-Priming Pump – AD Series

Model	single-stage; single-flow, semi-open impeller
Head	up to 75 m
Flow rate	up to 2,000 m³/h
Pressure	up to 16 bar
Temperature	up to 140 °C











# Free-Flow Pump – VP and CP Series

Model	single-stage; single-flow, semi-open channel impeller
Consistency	up to 4%
Head	up to 75 m
Free passage	up to 140 mm
Flow rate	up to 1,000 m³/h
Pressure	up to 16 bar
Temperature	up to 120 °C

### **High-Pressure Pump – MP Series**

Model	multi-stage; single-flow, closed impeller
Head	up to 800 m
Flow rate	up to 400 m³/h
Pressure	up to 100 bar
Temperature	up to 160 °C

#### Double Suction Split Case Pump – FP Series

Model	single-stage; double suction, closed impeller
Consistency	up to 2%
Head	up to 160 m
Flow rate	up to 20,000 m³/h
Pressure	up to 15 bar – depending on pump size

### Medium Consistency Pump – MC Series

Model	single-stage; single-flow,
	semi-open impeller
Consistency	up to 14%
Head	up to 195 m
Flow rate	up to 4,000 admt/d
Pressure	up to 25 bar
Temperature	up to 140 °C

### Steam Heating Systems – DSHM, DSHL, DSHD and DSHP Series

System components	steam heater, direct driven
Consistency	water, for DSHM up to 9%
Heat capacity	up to 50,000 kW
Head	up to 140 m
Temperature	Heating per cycle: 20 °C
Steam parameters/ Pressure	Heating wiht saturated steam: 2-7 bar (above atmospheric) possible

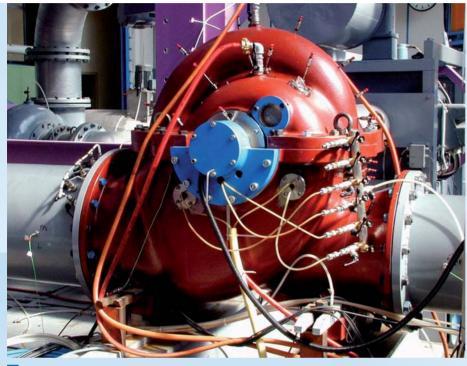












1 Focus on research and development



2 Global quality management



3 Close to our customers

1 The top position that we hold in the supply of hydraulic machines is based on our strong commitment to research and development.

At present we run four test loops in Austria and Switzerland, where we develop our pumps and turbines and "put them to the test".

These R&D centres work together closely, creating a network within the ANDRITZ GROUP with continuous know-how transfer, to the benefit of our customers.

<sup>2</sup> The high technical quality of our pumps derives from our stringent manufacturing standards, targeted organisation, clearly defined processes and well-trained staff.

Quality assurance, process requirements and the quality standards that our pumps have to meet are defined on a globally uniform level. 3 Providing service and maintenance support has a long tradition at ANDRITZ and has been an important part of the company's philosophy from its very beginnings.

The goal still is to offer top-class service to secure sustained customer satisfaction and product reliability.

Our most valuable capital is the experience and expertise of our service staff, as well as the service and production sites around the globe.



# **Close to our customers**



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