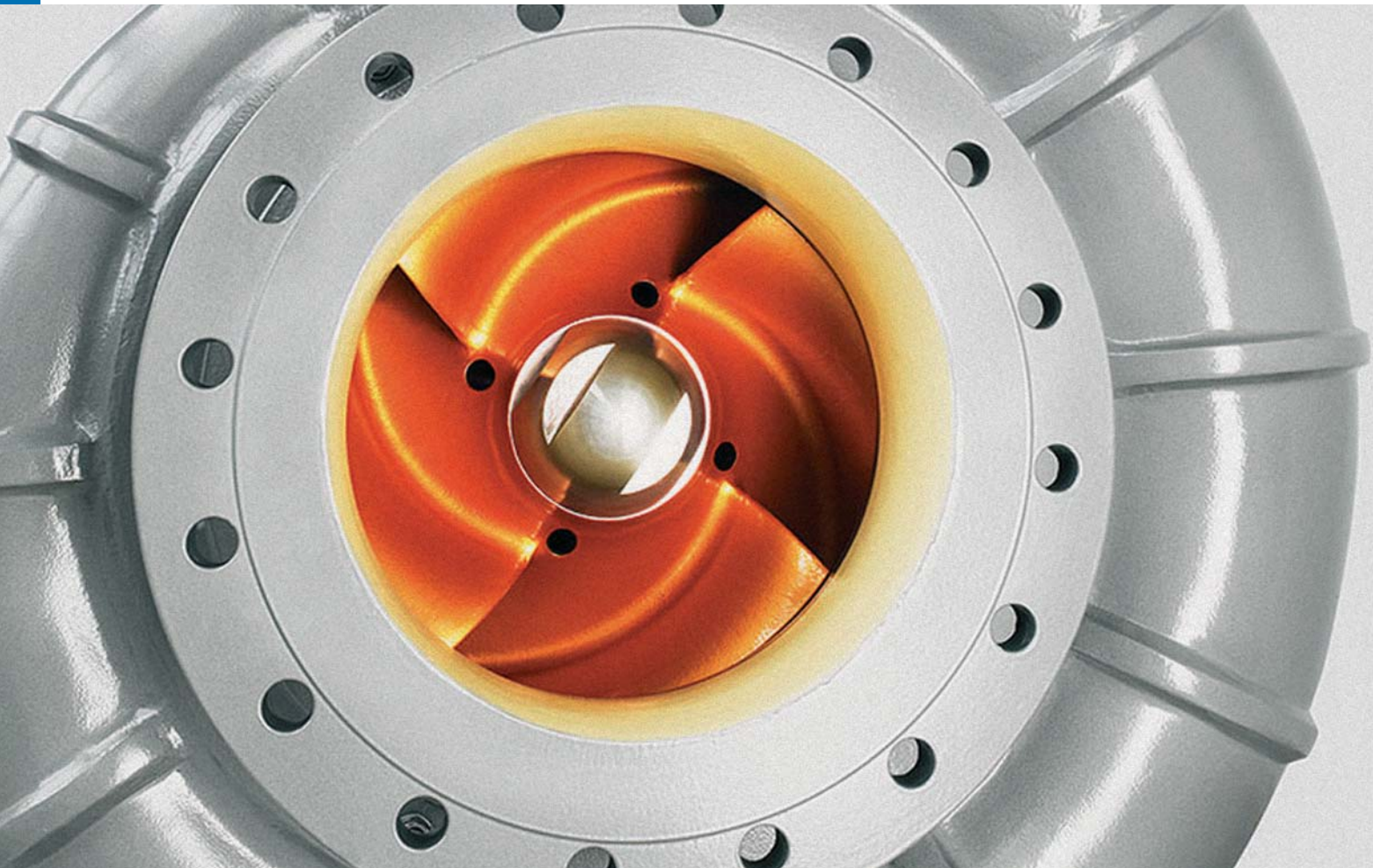


# **ANDRITZ Pumps**

Products, systems, applications



# ANDRITZ Pumps

Performance based on experience, competence and quality



▲ **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

◀ **Vertical line shaft pump**  
e.g. for an irrigation pumping station

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.

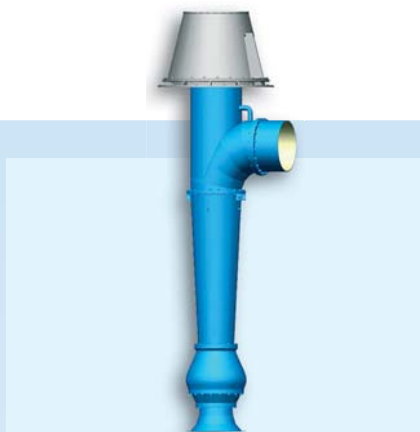
This is why customers from all corners of the globe rely on us and our long-term experience over the entire value-added chain.

# 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 ACP Series	■	■	■	■	Standard Pumps
Centrifugal Pump – ISO Series	■	■	■	■	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

\* examples: bioethanol (second generation), chemical, food

# Technical data



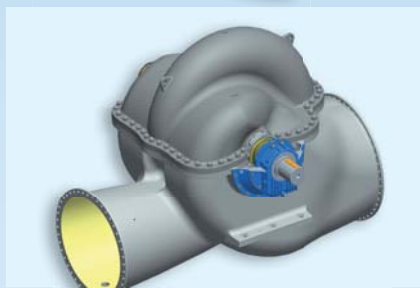
## Vertical Line Shaft Pump

<b>Model</b>	pull-out or non pull-out
<b>Impeller</b>	radial, mixed flow or axial, adjustable or fixed
<b>Head</b>	up to 100 m
<b>Flow rate</b>	up to 70,000 m <sup>3</sup> /h
<b>Power</b>	up to 10,000 kW



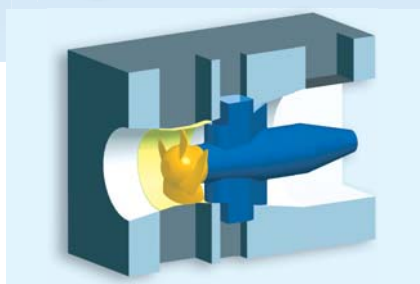
## Vertical Volute Pump

<b>Model</b>	metal or concrete volute, with or without guide vanes
<b>Impeller</b>	radial or mixed flow
<b>Head</b>	single-stage up to 250 m
<b>Flow rate</b>	up to 180,000 m <sup>3</sup> /h
<b>Power</b>	up to 50,000 kW



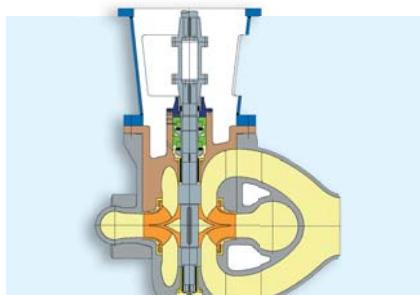
## Double Suction Split Case Pump

<b>Model</b>	horizontal or vertical, axially or radially split
<b>Impeller</b>	radial
<b>Head</b>	up to 100 m
<b>Flow rate</b>	up to 55,000 m <sup>3</sup> /h
<b>Power</b>	up to 10,000 kW



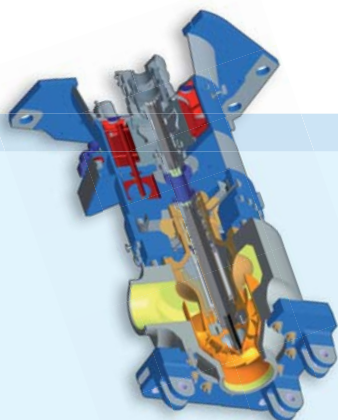
## Horizontal Bulb Pump

<b>Model</b>	horizontal, direct drive
<b>Impeller</b>	axial, adjustable or fixed
<b>Head</b>	up to 20 m
<b>Flow rate</b>	up to 250,000 m <sup>3</sup> /h
<b>Power</b>	up to 10,000 kW



## Reactor Pump

<b>Model</b>	shutdown cooling pump PWR, moderator pump CANDU reactor
<b>Impeller</b>	radial
<b>Head</b>	50-70 m
<b>Flow rate</b>	800-4,000 m <sup>3</sup> /h
<b>Power</b>	250-750 kW



## Reactor Pump – Primary Loop

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



## Centrifugal Pump – S and ACP Series

<b>Model</b>	single-stage; single-flow, open impeller
<b>Consistency</b>	up to 6%
<b>Head</b>	10-160 m
<b>Flow rate</b>	up to 6,000 m <sup>3</sup> /h
<b>Pressure</b>	up to 25 bar
<b>Temperature</b>	up to 200 °C



## Centrifugal Pump – ISO Series

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



## Vertical Submerged Pump – SAT Series

<b>Model</b>	single-stage; single-flow, open impeller
<b>Head</b>	up to 35 m
<b>Flow rate</b>	up to 800 m <sup>3</sup> /h
<b>Pressure</b>	up to 10 bar
<b>Temperature</b>	up to 60 °C



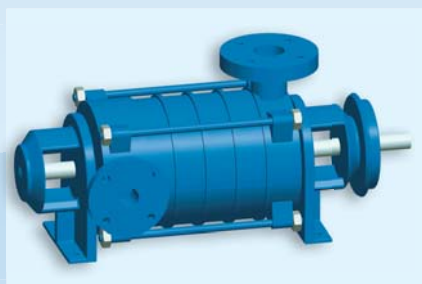
## Self-Priming Pump – AD Series

<b>Model</b>	single-stage; single-flow, semi-open impeller
<b>Head</b>	up to 75 m
<b>Flow rate</b>	up to 2,000 m <sup>3</sup> /h
<b>Pressure</b>	up to 16 bar
<b>Temperature</b>	up to 140 °C



### Free-Flow Pump – VP and CP Series

<b>Model</b>	single-stage; single-flow, semi-open channel impeller
<b>Consistency</b>	up to 4%
<b>Head</b>	up to 75 m
<b>Free passage</b>	up to 140 mm
<b>Flow rate</b>	up to 1,000 m <sup>3</sup> /h
<b>Pressure</b>	up to 16 bar
<b>Temperature</b>	up to 120 °C



### High-Pressure Pump – MP Series

<b>Model</b>	multi-stage; single-flow, closed impeller
<b>Head</b>	up to 800 m
<b>Flow rate</b>	up to 400 m <sup>3</sup> /h
<b>Pressure</b>	up to 100 bar
<b>Temperature</b>	up to 160 °C



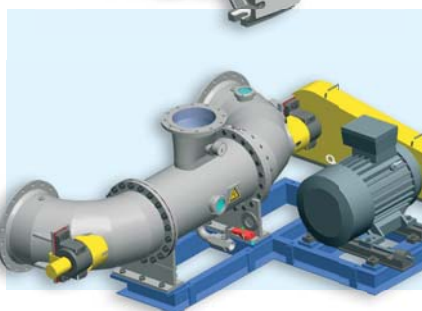
### Double Suction Split Case Pump – FP Series

<b>Model</b>	single-stage; double suction, closed impeller
<b>Consistency</b>	up to 2%
<b>Head</b>	up to 160 m
<b>Flow rate</b>	up to 20,000 m <sup>3</sup> /h
<b>Pressure</b>	up to 15 bar – depending on pump size



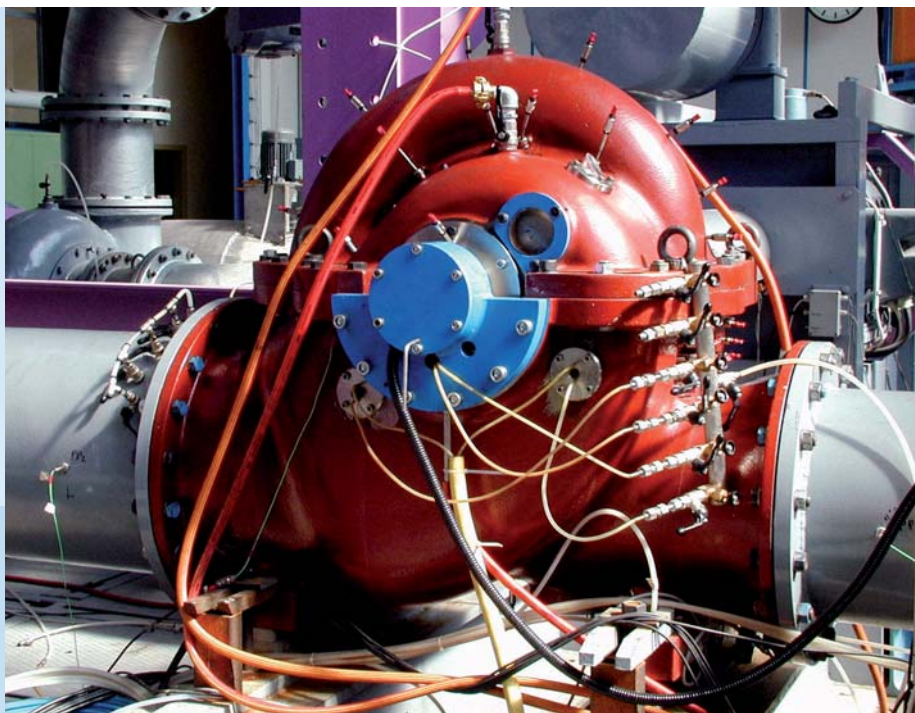
### Medium Consistency Pump – MC Series

<b>Model</b>	single-stage; single-flow, semi-open impeller
<b>Consistency</b>	up to 14%
<b>Head</b>	up to 195 m
<b>Flow rate</b>	up to 4,000 adm <sup>3</sup> /d
<b>Pressure</b>	up to 25 bar
<b>Temperature</b>	up to 140 °C



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

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



**1** Focus on research and development

**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.



**2** Global quality management



**3** Close to our customers

**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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