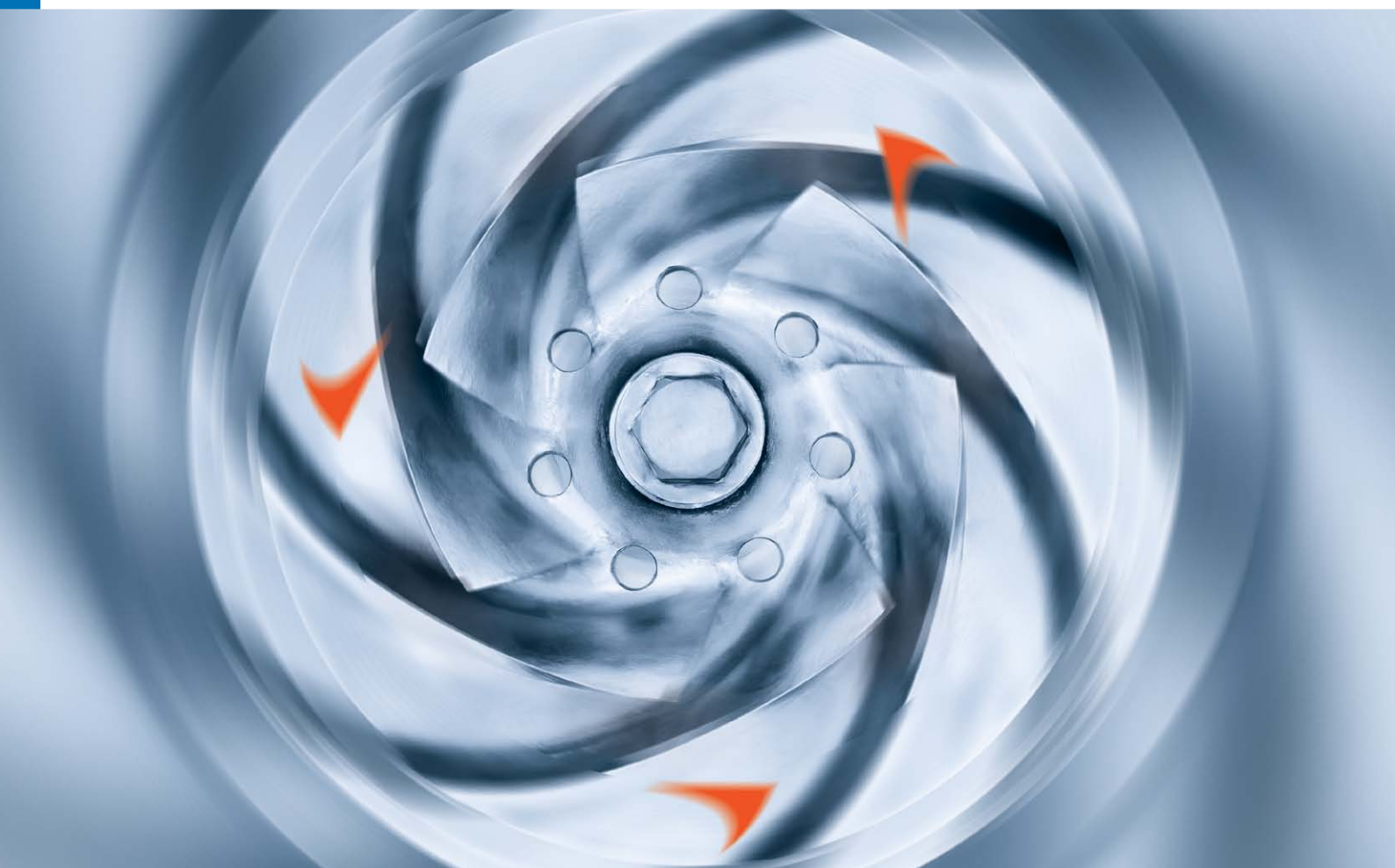


# ANDRITZ centrifugal pump

ACP/ARE series



# High efficiency and robust design

For over 100 years, ANDRITZ has been a byword for competence and innovation in designing centrifugal pumps.

ANDRITZ horizontal centrifugal pumps are operating successfully all over the world. They offer robustness and wear resistance, and fulfill high customer expectations in terms of efficiency, life cycle, maintenance-friendliness, and economic efficiency.

## Modular system

The standard components in ANDRITZ pumps provide high availability and enable the use of proven components.

## Fields of application

- Pulp and paper industry
- Water supply and waste water treatment
- Power industry
- Food industry (e.g. sugar)
- Bioethanol
- Chemical industry

## Facts

- Flow rates up to 6.000 m<sup>3</sup>/h
- Heads up to 160 m
- Casing pressure up to 25 bar
- Temperatures up to 200° C
- Consistencies up to 6% atro (ARE-design up to 8% atro)
- Efficiency up to 90%
- Only five bearing support sizes for the entire series!

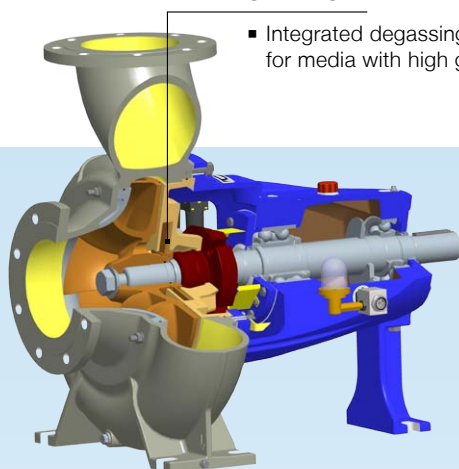


## Technology to convince you

The high standard of ANDRITZ centrifugal pumps, is based on decades of experience in designing hydraulic machines and on extensive process know-how.

**SMARTSEP**

- Integrated degassing-system for media with high gas content



**ARE series with SMARTSEP degassing system**

ANDRITZ offers the newly developed SMARTSEP-degassing system especially designed for high gas content and stock suspensions of up to 8%. The pump is equipped with an integrated degassing system which removes gas from the media and conveys any fibres back to the pump. Controlling of the degassing valve becomes very easy: pump is running – valve is open, pump is not running – valve is closed.

**Proven open-impeller design, series ACP**

The open-impeller design of the ANDRITZ centrifugal pumps ACP series is characterized by low axial thrust. With its open channels, it is suitable for conveying many different media.

**Shaft sealing**

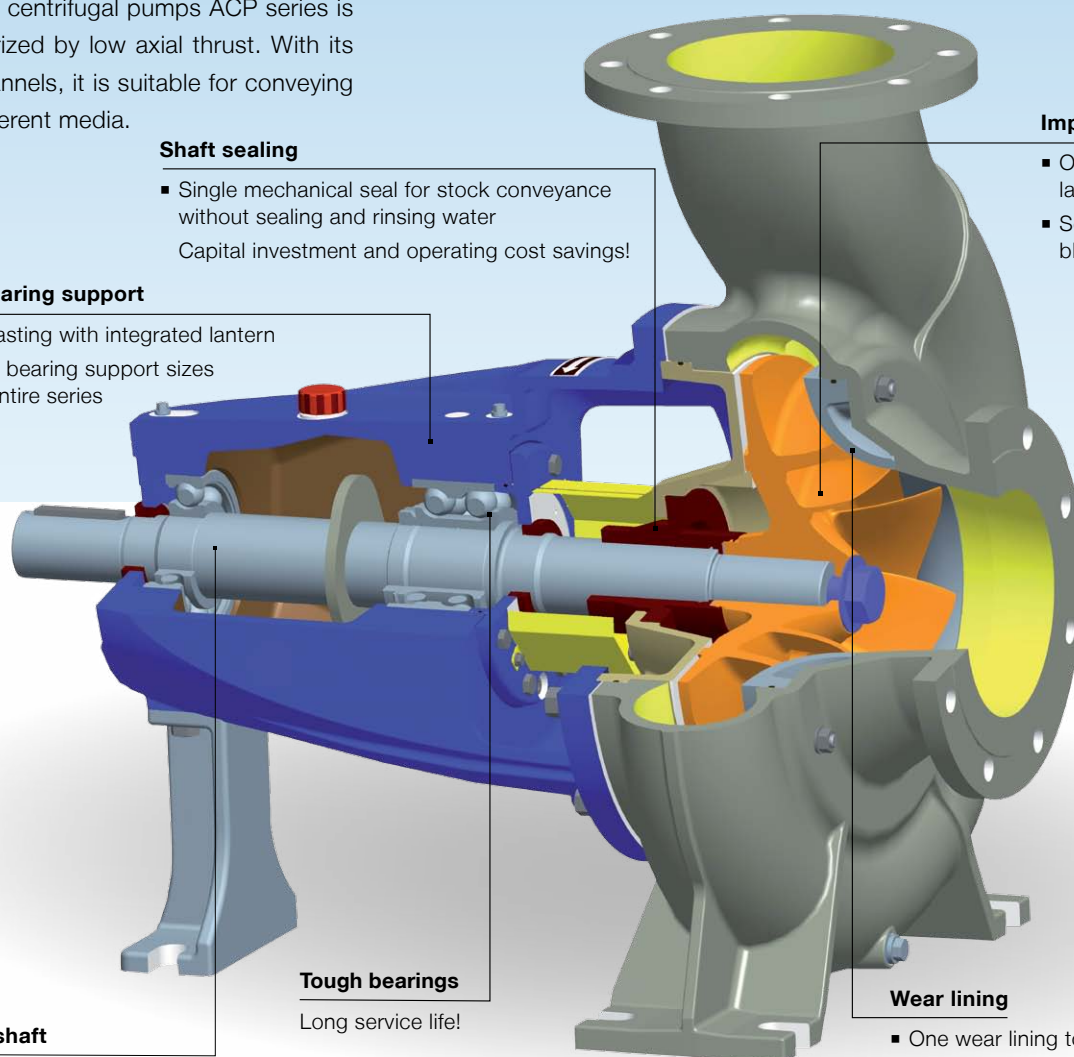
- Single mechanical seal for stock conveyance without sealing and rinsing water  
Capital investment and operating cost savings!

**Sturdy bearing support**

- Single casting with integrated lantern
- Only five bearing support sizes for the entire series

**Impeller design**

- Open with three blades for a large open cross section
- Semi-open with five to eight blades for high pressures



**Tough bearings**

Long service life!

**Wear lining**

- One wear lining to protect the pump casing

**Sturdy shaft**

Ensures minimum shaft deflection and low mechanical vibration!

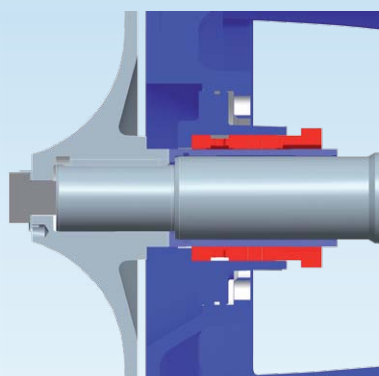


## High research and development capabilities

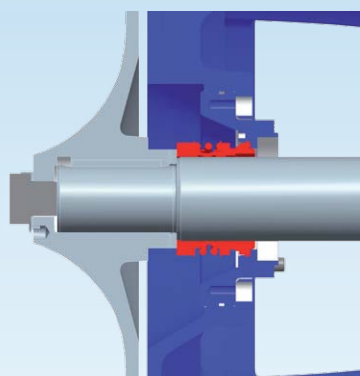
We run a pilot plant at our affiliate ASTRÖ, which enjoys international renown for its hydraulic developments and investigations. The high quality, safety and reliability of the ACP/ARE series pumps are ensured by extensive model testing.



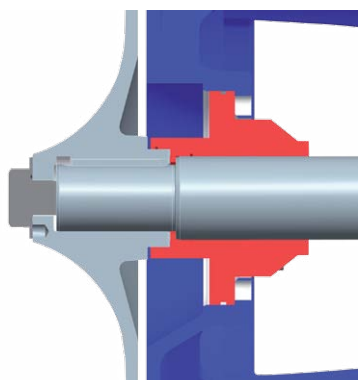
## Various sealing systems



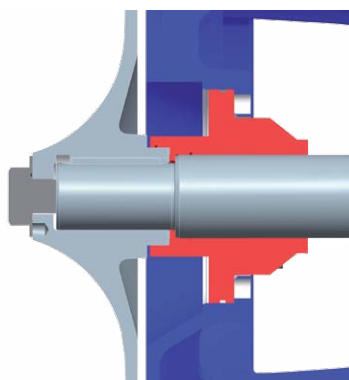
**Stuffing box seal**



**Single mechanical seal**



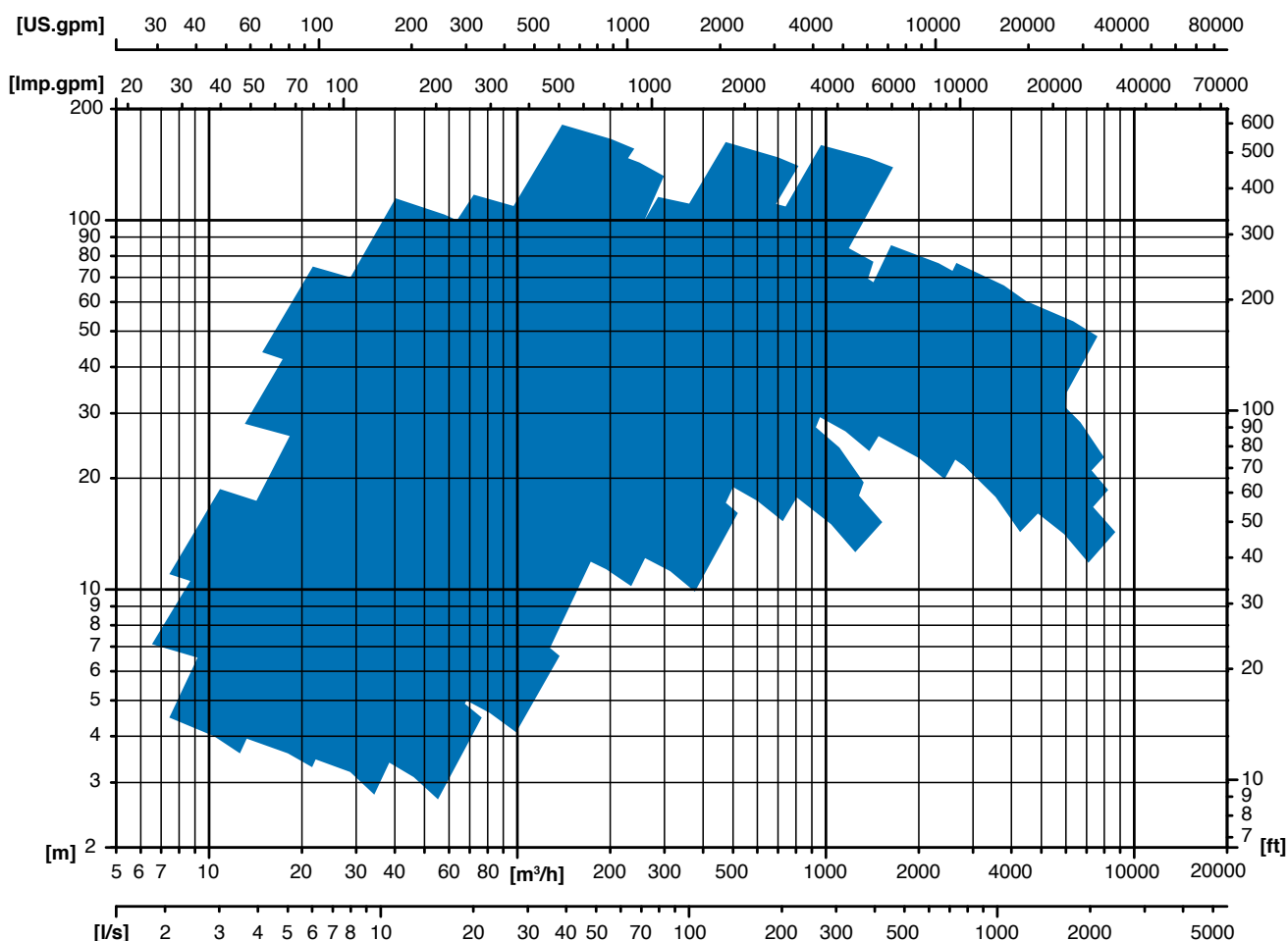
**Tandem mechanical seal**



**Single or double cartridge seal**

# Characteristic curves

## Centrifugal pumps, ACP/ARE series



### Material combinations

| ACP/ARE series      | EN-GJL 250 | 1.4460 | 1.4021 | 1.4462 | 1.4517 | 1.4517 h | 1.4404 | 1.4439 | 1.4469 |
|---------------------|------------|--------|--------|--------|--------|----------|--------|--------|--------|
| Impeller            |            | ■      |        |        | ■      | ■        |        |        | ■      |
| Casing/casing cover | ■          | ■      |        |        |        |          |        |        | ■      |
| Bearing housing     | ■          |        |        |        |        |          |        |        |        |
| Front lining        |            | ■      |        |        | ■      | ■        |        |        | ■      |
| Stuffing box body   | ■          | ■      |        |        |        |          |        |        | ■      |
| Shaft               |            |        |        | ■      |        |          |        |        |        |

| European standard |                      | US standard |        |
|-------------------|----------------------|-------------|--------|
| Number            | Name                 | Grade       | UNS    |
| EN-JL1040         | EN-GJL 250           | Class 40B   | /      |
| 1.4460            | X3CrNiMoN27-5-2      | Grade 1A    | J93370 |
| 1.4462            | X2CrNiMoN22-5-3      | S32205      | S32205 |
| 1.4517            | GX2CrNiMoCuN25-6-3-3 | Grade 1C    | J93373 |
| 1.4517 h          | GX2CrNiMoCuN25-6-3-3 | Grade 1C    | J93373 |
| 1.4469            | GX2CrNiMoN26-7-4     | Grade 5A    | J93404 |

## Close to our customers



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