

INDUSTRIAL COOLING SYSTEMS

HYDROPOWER PLANTS

WATER SUPPLY PLANTS

FIREFIGHTING SYSTEMS WATER DESALINATION

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# Industrial pumps for water systems.

Water pumps are adapted to the physical properties of water - but not all water is the same. Numerous other factors must be considered when selecting a water pump, such as the size of the system, the volume of water to be processed and the intended use.

Our water pumps are used in numerous industrial sectors, e.g. the energy industry, and

deliver unbeatable results over a long period

We offer a comprehensive portfolio of water pumps for every application, and we work with you to find the right solution according to your requirements.

Made in Germany.







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#### HABERMANN AURUM PUMPEN

has been offering reliable solutions and extensive know-how in slurry transportation since 1927.



www.habermann-aurum-pumpen.de

# 1927.

Habermann Aurum Pumpen is one of the leading manufacturers of centrifugal pumps, ideal for processing slurries. With almost 100 years of experience and more than 30,000 pumps installed worldwide, serving various applications, we have built a strong market position across the globe.

Our fundamental goal is to create the most durable and sustainable industrial pumps by combining our multi-decade experience with the state-of-the-art technologies. Our pumps are integrated into a wide variety of industries, such as: mining and mineral processing, energy industry, metallurgy, chemical and pigment industries, tunnelling, special civil engineering and many more. We are continuously improving our pumping systems to ensure their exceptional quality and optimal performance capabilities. Based on the technical skills of our work force, we customize and manufacture pumps you can rely on, most of which have been in trouble-free operation for many years, which speaks for their longevity, safety and efficiency. We always ensure your industrial needs are covered with our proven operational

designs combined with the most reliable and robust materials to make a functional unit. Our broad product line of pumps, valves and fittings complies with the most diverse and challenging customer's requirements. Thanks to our in-house engineering we can find solutions to any system demand, regardless of technical complexity or application conditions.

We have built an excellent quality profile, which allowed us to establish Habermann Aurum as a high-valued and reliable partner for industrial pumping systems. We proudly design, produce and install our pumps all over the world. Through our network of partners and branch offices, our market presence extends across all continents. We are well prepared to meet current and future market demands and to support our customers in the best possible way.

# Tradition meets modern technologies.

# Double-suction volute casing pump.

#### For clean, mildly contaminated and aggressive liquids

#### APWD (V) pump series

This type of pump has a wide range of applications and a high flow rate. The special split housing design facilitates maintenance of the internal hydraulic components without a requirement to dismantle the motor and coupling. Furthermore - thanks to the doublesuction impeller - the pump exhibits high efficiency, optimized suction behaviour (NPSH value), and pronounced cavitation safety.

The pump is equipped with a doublesuction radial impeller and can be installed horizontally or vertically. The pump units are characterised by outstanding economy, efficiency, ease of maintenance and durability. They are designed for applications involving the pumping of clean, mildly contaminated or aggressive liquids.



#### Areas of application

- Water treatment plants
- Water supply plants
- Power stations and general industrial plants
- District heating networks
- · Water desalination plants

#### Advantages

- Up to 91 % efficiency
- Energy saving
- Low pulsation
- Simple and cost-efficient maintenance
- Outstanding NPSH values

**Technical properties** 

Delivery rate up to

Head up to

Pressure up to

Efficiency up to Motor power up to

Solids content up to

Working temperature up to

• A range of different seal types (gland seal packing, single and double acting mechanical seal)

40,000 [m<sup>3</sup>/h]

250 [m]

25 [bar]

7 [MW]

110° C

3 [wt.] %





**Materials** 







ALUMINIUM-BRONZE

(SUPER) OTHER
DUPLEX STEEL MATERIALS ON
REQUEST



Media: Pure; mildly contaminated and aggressive liquids up to a viscosity of 150 mm<sup>2</sup>/s without abrasive and solid components; solids content up to 3 wt. %.

Impeller shape: Double-flow radial impeller with optimum suction behaviour and low NPSH values.

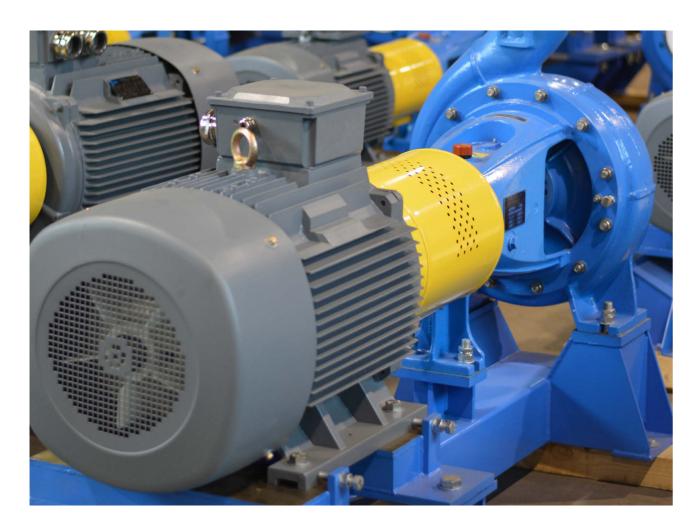
Pure, mildly contaminated and aggressive liquids without abrasive and solid components

#### APWE (V) pump series

This type of pump can handle a wide range of different media due to the proven impeller design. The modular system delivers high reliability, allows the use of tried and tested components, and reduces the quantity of spare parts required - making it extremely maintenance-friendly.

irrigation and drainage.

Depending on the impeller type, pumps of this series can handle liquids with a solids content of up to 8 wt. %. This series is widely used in the mining, marine, power, food and chemical sectors. Single-stage centrifugal pumps can also be used in water supply, waste water treatment, desalination plants, as well as



#### Areas of application

- Water supply
- Water cooling and air conditioning systems
- Irrigation and drainage
- Water desalination plants
- Bioethanol production
- Chemical industry
- Food industry
- Energy industry
- Mining industry

#### Advantages

- Up to 90 % efficiency
- Perfect NPSH values
- High efficiency even in partial load operation
- Low volume of spare parts required
- High reliability and rapid service thanks to modular system
- A range of different seal types (gland seal packing, as well as single and double acting mechanical seal)





#### **Technical properties**

Delivery rate up to	9,000 [m³/h]
Head up to	190 [m]
Pressure up to	40 [bar]
Efficiency up to	90 %
Working temperature up to	200° C
Solids content up to	8 [wt.] %

#### **Materials**



SPHEROIDAL



HIGH-QUALITY STAINLESS



OTHER MATERIALS ON REQUEST



Media: Pure, mildly contaminated and aggressive liquids up to a viscosity of 150 mm<sup>2</sup>/s without abrasive and solid components

Impeller shape: Closed impeller; radial impeller; partly free-flow impeller and dual-channel impeller available

# Multi-stage pumps.

Available in horizontal and vertical design for clean and mildly contaminated liquids

#### APWEM (V) pump series

Multi-stage volute casing pumps are designed according to a modular compact system. This construction type is suitable for continuous operation under industrial working conditions, enabling the implementation of various pump unit designs quickly, easily and, above all, economically.

load cases that arise during operation.

The axial thermal expansion of the pump rotor is compensated internally without affecting the alignment on the coupling side. Thanks to the maintenance-friendly concept, it is possible to replace the bearings and shaft seal without dismantling the pump housing. This model design is based on stability; as such pump units in this series are designed for all



#### Areas of application

- Water transport for irrigation and drainage
- Drinking and industrial water supplies
- · Industrial cooling systems for power plants, including power supplies
- Extraction plants for seawater
- Water storage facilities
- · Industrial plants for condensates, water desalination and oil
- Thermal and hydropower plants with low capacity

#### Advantages

- Easy maintenance
- Outstanding efficiency and low NPSH values
- · Low energy consumption
- A range of different seal types (gland seal packing, as well as single and double acting mechanical seal)





#### **Technical properties**

Delivery rate up to	36,000 [m³/h]
Head up to	1,000 [m]
Pressure up to	100 [bar]
Motor power up to	40 [MW]
Working temperature up to	160° C

#### **Materials**











**BRONZE** 

OTHER MATERIALS ON REQUEST



Media: Pure and mildly contaminated liquids up to a viscosity of 150 mm<sup>2</sup>/s without abrasive and solid components

Impeller shape: Single or double-suction, closed radial impeller with optimum suction behaviour and very good NPSH values



## Borehole pumps.

For clean, mildly contaminated and abrasive cooling water

#### **APWB** pump series

Single and multi-stage submersible pumps have been used for many years under harsh conditions in water supply, oil production and mining industries. This also applies in many areas of water extraction and water supply, to the work processes in open-cast coal mining, gold, copper and tin mining or in diamond mines. The continuous drive shaft concept in single-stage submersible pumps satisfies all current requirements and offers a technically and economically efficient flow machine.

Flexible adaptation to pressure changes is implemented quickly and easily by increasing or decreasing the number of stages. Multistage submersible pumps, on the other hand, consist of two pump parts arranged one above the other, which are driven by a continuous shaft. This design solves the problem of high loads on the unit.



#### Areas of application

- Water supply
- Mining industry
- Offshore oil production
- Mining under harsh conditions
- Drainage

#### **Advantages**

- · Long service life
- Optimum operational reliability
- Modular system for flexible adjustment of the number of stages
- Adaptation to changes in pressure
- · Economic and technical efficiency
- A range of different seal types (gland seal packing, and single and double acting mechanical seal)





#### **Technical properties**

Delivery rate up to	6,000 [m³/h]
Head up to	1,500 [m]
Pressure up to	150 [bar]
Efficiency up to	90 %
Working temperature up to	75° C

#### **Materials**







ALUMINI-



(SUPER)



Impeller shape: Radial wheel, semi-axial wheel



**Media:** Pure, mildly contaminated and abrasive raw water, pure mineral water, seawater, industrial water, pit water and cooling water

# Vertical turbine pumps.

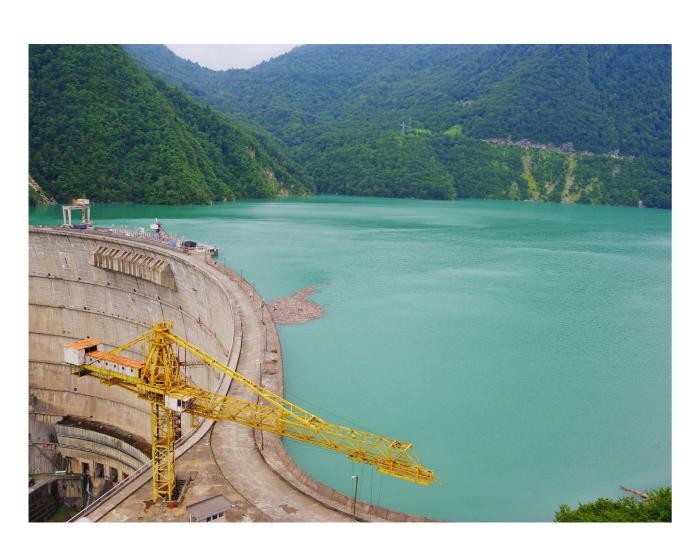
#### Pure and mildly contaminated liquids

#### **APWTV** pump series

Vertical turbine pumps are in successful use around the world. They impress thanks to their reliability and durability, and therefore satisfy the high demands of customers when it comes to efficiency, service life, ease of maintenance and economy.

Tailored concepts are developed and produced for customers worldwide, according to requirements. Turbine pumps are executed in

a multi-stage design. Thanks to this concept, this pump series delivers high efficiency and is widely used in many areas of industry, such as: Industrial plants for the conveyance of waste water and river water, as well as the supply of drinking and service water.



#### Areas of application

- Power stations
- Pressure reduction systems in industrial plants
- Power generation
- Pumped storage power plants

#### Advantages

- Very high efficiency of up to 87 %
- Easy maintenance
- Optimum NPSH values
- Low power consumption
- A range of different seal types (gland seal packing, single and double acting mechanical seal)



#### **Technical properties**

Delivery rate up to	15,000 [m³/h]
Head up to	300 [m]
Pressure up to	100 [bar]
Efficiency up to	87 %

#### **Materials**



SPHEROIDAL



ALUMINI-

UM-BRONZE

(SUPER)



Media: Pure and mildly contaminated liquids up to a viscosity of 150 mm<sup>2</sup>/s without abrasive and solid components

Impeller shape: Radial wheel

# www.habermann-aurum-pumpen.de

# Self-priming centrifugal pumps.

#### For water, viscous media and media containing solids

#### **APWS** pump series

This series of pumps is ideally suited for pumping viscous media (e.g. sugar icing up to 70 %) and media with solid content such as waste water. No air builds up in front of the impeller, thanks to the built-in pressure chamber. The modular pump system keeps the volume of spare parts required in stock to

a minimum. This pump series also impresses with its reliability and wear resistance, therefore satisfying the high demands of customers when it comes to operating and life costs.



#### Areas of application

- Sugar industry
- · Water supply and sewage disposal
- Food industry

#### Advantages

- Suitable for gas-laden and viscous media
- Automatic suction
- High reliability and wear resistance
- Easy maintenance
- Economical



#### **Technical properties**

Delivery rate up to	2,000 [m³/h]
Head up to	75 [m]
Pressure up to	16 [bar]
Working temperature up to	90°C
Nominal diameter up to (DN)	250 [mm]

#### **Materials**



SPHEROIDAL



HIGH-OUALITY





Media: Water, viscous masses (e.g. with a sugar content of up to 70 %) and media containing solids (e.g. for use in drainage systems)

Impeller shape: Semi-open impeller

**Special features:** Automatic priming; the built-in pressure chamber does not allow air to accumulate in front of the impeller, which means that the centrifugal pump works well even with a high proportion of air in the pumped medium; the pump is therefore capable of pumping viscous liquids.





Our service team with trained specialists will help you after purchase and commissioning to ensure that your pump always works reliably

aftersales@aurumpumpen.de +49 234 893 570 0

### Pump service.

Our professional team of experts is here to offer you complete optimization and repair services to ensure the safety and efficiency of your pumping system.

Our goal is to not only properly repair your pump, but to clarify why a possible failure could occur and ensure that all pump components are in fully operational condition.

#### **Spare parts**

With original spare parts from Habermann Aurum Pumpen, you get the highest quality and functionality when replacing individual components. Powered by our multi-decade experience and a vast network of partners, we can support you with suitable products and solutions globally.

#### Modernization

Our modernization services allow you to modify and improve Habermann Aurum pumps and systems that have been in operation for a number of years. Whether you wish to maximize your production capacity or optimize specific processes within an application, we will assist you every step of the way. Thereby you can ensure an optimal performance across your network and extend your pump's shelf life without having to invest in new systems. We will work with you to find the best possible solutions that are tailored to your needs.





#### Maintanance and repair services

- System analysis
- Pump optimization
- Productivity assessment
- Pump commissioning and integration
- Maintenance and repair services

We have the solution for you.





PUMPS | VALVES | DREDGERS | ENGINEERING

# WE LOOK FORWARD TO WORKING WITH YOU!

#### HABERMANN AURUM PUMPEN GMBH

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