

Municipal Water Treatment, Supply and Distribution



The Sulzer Advantage

Innovative and proven solutions for clean water applications

As a global leader in pump and agitator design and manufacture, Sulzer is recognized for delivering the excellent product quality and performance reliability required for a wide range of applications in the water industry.

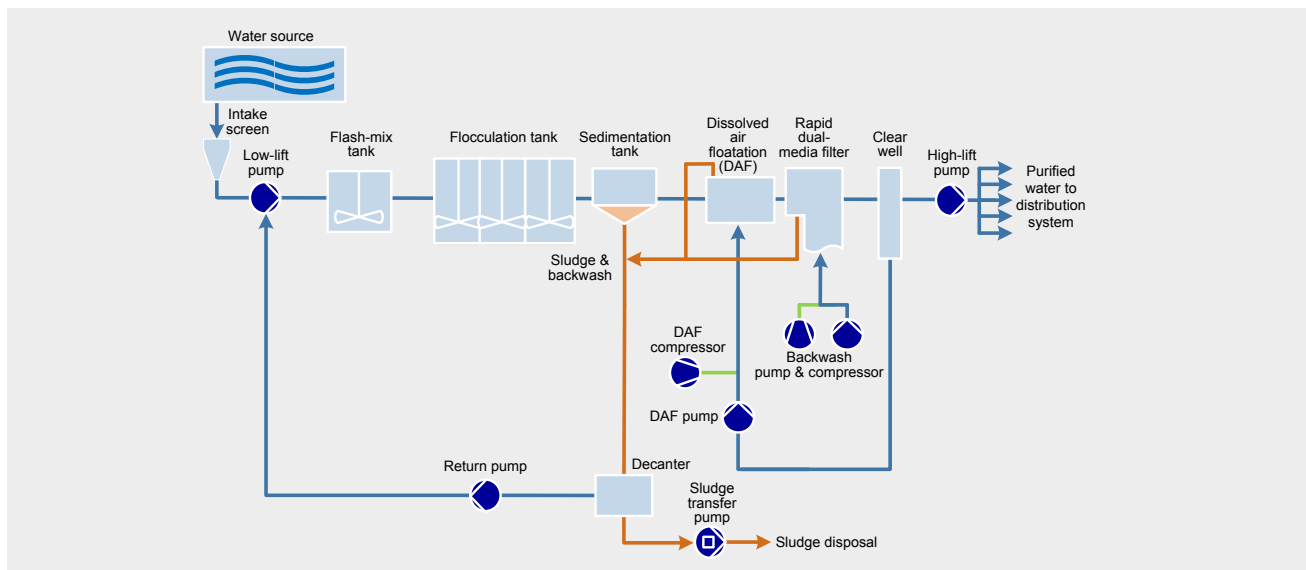


Whatever the Process, We Have the Pumping Solutions

Municipal water treatment

When planning new water treatment plants or upgrading existing ones, operating costs are as important as investment costs. Sulzer's innovative pumps, mixers and compressors combine reliable treatment performance with superior energy efficiency.

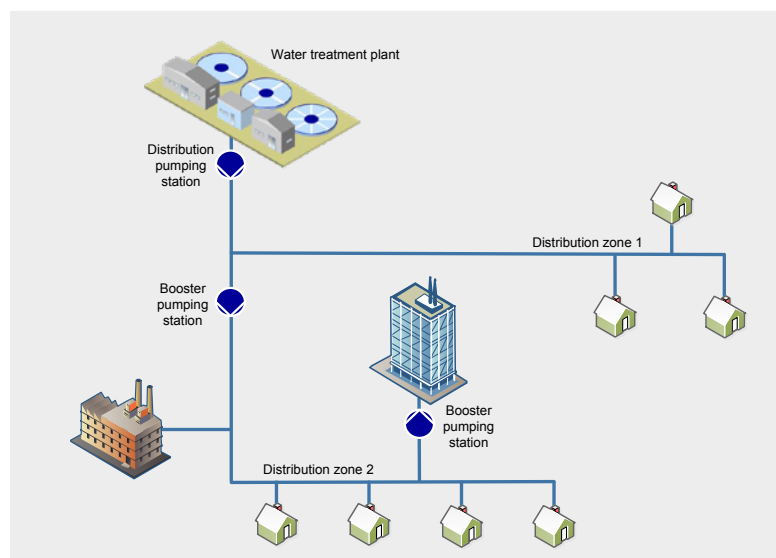
The Sulzer advantage is evident from the moment raw water is captured for your water treatment plant. No matter the process you apply in your water treatment plant, Sulzer will help you to ensure the most efficient and reliable operation, from the intake pumping station through the water treatment plant, including any pumping service along the process.



Municipal water supply and distribution

Getting drinking water to all parts of a distribution network involves many challenges along the way. From the water treatment plant through pumping stations and beyond, Sulzer pumps lift and move the drinking water to bring it to its destination at sufficient flow and pressure.

Our solutions are matched to each task for reliable performance and superior energy efficiency. From the water treatment plant to water tap, Sulzer makes the difference with innovative pumping solutions.



Our Comprehensive Product Portfolio

The Sulzer advantage is shown in the design and innovative construction of our equipment, including state-of-the-art hydraulics as well as robust and reliable mechanical designs. Other features, like our Premium Efficiency IE3 motors in our submersible pump range and the superior magnetic bearings of our near-silent turbocompressors, further enhance energy efficiency.

The advantage also comes from our extensive knowledge and innovative tools. Using both, we can analyze your existing plant or a new plant design to recommend the ideal solutions for a complete upgrade or tailored new equipment.

In Sulzer, you have a single partner with comprehensive expertise. Our solutions live up to the highest standards related to drinking water applications, including the most recognized international certification standards, such as ACS, WRAS and NSF 61.

| Application | Pump type | | | | | | |
|--|---------------------------|-------------------------------|-----------------------------------|----------------------------------|--------------------------|--------------------------------|--------------------|
| | Split casing pumps SMD | Vertical turbine pumps JTS | End suction pumps SNS / A /CPT | Vertical multistage pumps VMS | Turbo-compressors HST | Progressing cavity pumps PC | Agitators Scaba |
| Water treatment | | | | | | | |
| Inlet PS / intake / low lift | ✓ | ✓ | ✓ | | | | |
| Flocculation and sedimentation | ✓ | | ✓ | | | | ✓ |
| DAF - Dissolved Air Flotation | ✓ | | ✓ | | ✓ | | |
| Filtration | ✓ | | ✓ | ✓ | ✓ | | |
| Backwash | ✓ | | ✓ | ✓ | | | |
| Outlet PS / high lift | ✓ | ✓ | ✓ | ✓ | | | |
| Sludge transfer | | | | | | ✓ | |
| Water supply & distribution | | | | | | | |
| Supply & distribution | ✓ | ✓ | ✓ | | | | |
| Boosting | | | ✓ | ✓ | | | |

SMD AXIALLY SPLIT CASING DOUBLE SUCTION PUMP

FEATURES AND BENEFITS

- Optimum hydraulic fit with high efficiency maintained over a wider flow range
- Exceptionally low Net Positive Suction Head Required (NPSHR) value not only at the best efficiency point but also on overload
- Maintenance-friendly features; excellent interchangeability of parts
- Horizontal and vertical constructions

KEY CHARACTERISTICS

| | |
|--------------|---|
| Capacities | up to 16,000 m ³ /h / 70,000 USgpm |
| Heads | up to 260 m / 850 ft |
| Pressures | up to 34 bar / 490 psi |
| Temperatures | up to 140°C / 280°F |

APPLICATIONS

- Water intake, transport, supply and distribution
- Desalination
- Municipal water treatment
- Irrigation



JTS STANDARD VERTICAL TURBINE PUMP

FEATURES AND BENEFITS

- Reliable vertical turbine pump with standard configurations for short lead time that meets market demands
- Packed stuffing box for reliable sealing and simple maintenance, mechanical seal is optional
- Rubber-lined product-lubricated bearing in bowls and columns for long maintenance-free periods, other bearing materials are also available
- Suction bell provided with anti-vortex ribs, tail bearing, and replaceable wear rings or bowl liner
- Axial thrust bearing in pump or in motor

KEY CHARACTERISTICS

| | |
|--------------|---|
| Capacities | up to 1,500 m ³ /h / 8,000 USgpm |
| Heads | up to 300 m / 1,000 ft |
| Pressures | up to 36 bar / 525 psi |
| Temperatures | up to 85°C / 185°F |

APPLICATIONS

- Water intake
- Municipal water supply and distribution
- Irrigation



VMS VERTICAL MULTI-STAGE PUMP

FEATURES AND BENEFITS

- The reliable range VMS vertical multistage pumps offers state-of-the-art efficiency meeting Ecodesign ErP guideline requirements
- The modular construction makes the VMS range easy to select and adjust to the required application
- The low NPSHR, the high durability of selected materials, and maintenance free electric motors ensures high cost effectiveness throughout the entire pump life cycle

KEY CHARACTERISTICS

| | |
|--------------|--|
| Capacities | 1.90 - 160 m ³ /h / 8 - 705 USgpm |
| Heads | 3 - 400 m / 10 - 1,312 ft |
| Pressures | up to 40 bar / 363 psi |
| Temperatures | -20°C to +40°C / -4°F to +104°F |

APPLICATIONS

- Municipal water treatment
- Municipal water distribution
- Pressure boosting
- Irrigation



AHLSTAR A END SUCTION SINGLE STAGE CENTRIFUGAL PUMP

FEATURES AND BENEFITS

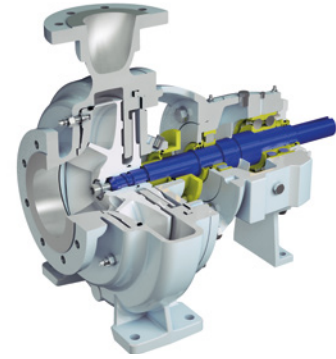
- AHLSTAR pumps save energy, sealing water and environment
- Designed to meet the EN ISO 5199 standard, these pumps also comply to EN 22858 (ISO 2858) standard
- The modular interchangeability of parts and components enables low spare parts inventory
- The pump range offers the lowest total cost shaft seal concept, with dynamic seal, mechanical seals and packing
- Every AHLSTAR is designed for fast and easy installation, maintenance and service

KEY CHARACTERISTICS

| | |
|--------------|---|
| Capacities | 11,000 m ³ /h / 48,400 USgpm |
| Heads | 160 m / 525 ft |
| Pressures | 16 / 25 bar, 230 / 360 psi, depending on material and size |
| Temperatures | 180°C / 355°F |

APPLICATIONS

- Clean and lightly contaminated liquids
- Gas containing liquids and self-priming applications
- Desalination
- Municipal water treatment



CPT END SUCTION SINGLE STAGE CENTRIFUGAL PUMP

FEATURES AND BENEFITS

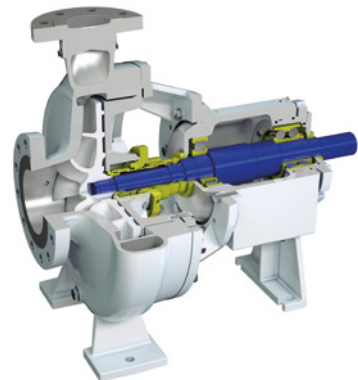
- Exceeds standard requirements of ANSI/ASME B73.1 standards
- Suitable for the most demanding industrial applications
- Unique, patented and superior design features minimize life cycle costs
- Quick and easy installation, safe operation, easy maintenance and service

KEY CHARACTERISTICS

| | |
|--------------|---|
| Capacities | up to 1,600 m ³ /h / 7,000 USgpm |
| Heads | up to 220 m / 720 ft |
| Pressures | up to 26 bar / 375 psi |
| Temperatures | up to 260°C / 500°F |

APPLICATIONS

- Clean and lightly contaminated liquids
- Desalination
- Municipal water treatment



SNS END SUCTION SINGLE STAGE CENTRIFUGAL PUMP

FEATURES AND BENEFITS

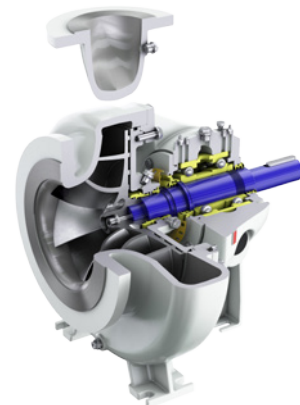
- Designed to meet the design requirement of EN ISO 5199 international standard
- Exceeding EU's (European Union) requirements for energy-related products (ErP)
- Highest efficiency across the whole pump range, exceeding the benchmark efficiency index MEI 0.7 (Minimum Efficiency Index)
- New, state-of-the art hydraulics ensure optimum capacity with low net positive suction head required (NPSHr)
- Low energy consumption, high standardization, easy installation and unique construction also equate to lower maintenance and operating costs

KEY CHARACTERISTICS

| | |
|--------------|---|
| Capacities | up to 1,400 m ³ /h / 6,000 USgpm |
| Heads | up to 160 m / 525 ft |
| Pressures | up to 16 bar / 230 psi |
| Temperatures | up to 120°C / 250°F |

APPLICATIONS

- Clean and slightly contaminated liquids
- Desalination
- Municipal water treatment
- Municipal water distribution



SCABA TOP-MOUNTED GEAR OR BELT DRIVEN AGITATOR

FEATURES AND BENEFITS

- The top-mounted series covers gear or belt driven agitators mounted vertically on the tank top or bottom flange
- Dry installed agitators rely on a deep process knowledge, which enable us to tailor-make the agitators to meet your specific need. This ensures the required process result with a minimum energy input
- Versatile impeller options
- High efficiency SHP propellers
- Good axial flow

KEY CHARACTERISTICS

| | |
|-------------------|-------------------------|
| Impeller diameter | up to 8,000 mm / 316 in |
| Shaft length | up to 30 m / 100 ft |
| Power | up to 450 kW / 600 hp |

APPLICATIONS

- Mixing in tank
- Clean and lightly contaminated liquids
- Municipal water treatment



TURBOCOMPRESSOR TYPE ABS HST

FEATURES AND BENEFITS

- High efficiency, guaranteeing optimal life cycle costs
- Low noise: no need for additional soundproofing
- Wear-free, requiring minimal maintenance
- Simple design with integrated components
- Accurate flow measurement
- Vibration-free, ensuring less stress for pipe work
- Fully certified
- Operates alongside all types of conventional blowers

KEY CHARACTERISTICS

| | |
|---------------|--|
| Flow | up to 16,000 Nm ³ /jh / 10,200 SCFM |
| Pressure rise | up to 125 kPa / 18 psi |
| Motor power | 75 kW–400 kW / 100–500 hp |

APPLICATIONS

- Dissolved air floatation (DAF)
- Filter backwash by air



PC TRANSFER PERFORM PUMP

FEATURES AND BENEFITS

- Saves time with maintain in place features, easy to de-rag and no need to disconnect the pipework
- Designed for use in sludge plants, where high reliability is essential and downtime is kept to a minimum
- An extension of the PC transfer pump with material variants for a wide range of process applications
- Robust drives and gearboxes with low running speeds form an integral part of the unit design

KEY CHARACTERISTICS

| | |
|--------------|---|
| Capacities | up to 225 m ³ /h / 990 USgpm |
| Pressures | up to 12 bar / 170 psi |
| Temperatures | -10 up to 100°C / 14 up to 212°F |

APPLICATIONS

- Sludge handling and transfer
- Municipal and industrial effluent
- Shear sensitive processes
- Shear thinning slurries



www.sulzer.com



E10415 en 5.2017, Copyright © Sulzer Ltd 2017
This brochure is a general product presentation. It does not provide a warranty or guarantee of any kind. Please, contact us for a description of the warranties and guarantees offered with our products. Directions for use and safety will be given separately. All information herein is subject to change without notice.