

Sales Program of Pumps Equipment





SULZER
Pumps

The Sulzer Advantage

A wide range of pumping and mixing systems and services

Since 1834, Sulzer has been a key player in providing pumping and mixing solutions. Its diversified product and service portfolio answers virtually any requirements. With active research and development to support a customer-oriented approach, Sulzer has sales and service facilities all over the world to provide fast and flexible response and support.



Pump Segment Matrix

Product types		Oil and gas up- and midstream	Oil and gas downstream	Power generation	Water and wastewater	Mining and construction	Pulp and paper	General industry	Chemical processing
Axially split pumps	HPDM	•			•				
	HSB	•	•	•	•				
	MSD	•	•	•	•		•		•
	MSD-RO				•				
	SMD/SMN/SMH	•	•	•	•		•	•	•
	SZM			•	•			•	
	ZPP	•	•		•		•	•	•
	Z22	•	•		•		•	•	•
Barrel casing pumps	CP	•	•						
	GSG	•	•	•				•	
	GVG			•					
	HPT			•					
	HPcp	•							
Multiphase pumps	MPP	•							
Ring section pumps	HPH/HPL				•	•		•	
	MBN	•		•	•		•	•	•
	MBN-RO				•				
	MC/MD/ME	•		•	•		•	•	•
Single stage pumps	AFC				•				
	AHLSTAR A	•	•	•	•		•	•	•
	AHLSTAR N, W, E	•	•	•	•		•	•	•
	BBS/CD	•	•	•					
	CPT	•	•		•		•	•	•
	FR				•			•	
	HPTd			•					
	HZB			•					
	OHH/OHHL	•	•						•
	OHV/OHVL	•	•						•
	REL			•					
	VMOA			•					
	ZE/ZF	•	•	•	•		•	•	•
	ZFn			•					
Submersible pumps	Robusta				•	•			
	Coronada				•	•			
	MF				•	•			
	IP				•				
	AS				•				
	Piranha				•				
	AFP				•		•	•	
	XFP				•	•	•	•	
	VUPX				•			•	
	AFLX				•			•	•
Lifting stations	XRCP/RCP				•				
	Piranhamat				•				
	Sanimat				•				
	Synconta				•				
	Nirolift				•				
	Sanimax				•				
Sanisett				•					

Product types		Oil and gas up- and midstream	Oil and gas downstream	Power generation	Water and wastewater	Mining and construction	Pulp and paper	General industry	Chemical processing
Progressing cavity pumps and macerators	PC transfer pump				•		•	•	•
	PC transfer perform pump				•		•	•	•
	PC cake pump				•		•	•	•
	PC dosing pump				•		•	•	•
	Macerator, in channel series				•			•	
	Macerator, in pipeline series				•			•	
Submersible dewatering pumps	J/XJ				•	•			
	JC/XJC				•	•			
	JS/XJS				•	•			
Two-stage pumps	AHLSTAR LSP/LST						•		•
	BBT/BBT-D	•	•	•					•
Vertical pumps	CVT	•	•	•			•	•	•
	JTS				•		•	•	•
	JVCR	•	•						•
	NKP/WKP	•					•	•	•
	NVP/NVT		•		•		•	•	•
	SJD (API)	•	•	•	•		•	•	•
	SJD (CEP)			•					
	SJM	•	•	•	•		•	•	•
	SJP	•	•		•		•	•	•
	SJS	•	•		•	•	•	•	•
	SJT	•	•	•	•		•	•	•
	SJT/SJM CWP			•					
	SJT Geo			•					
	SJT (VCN)			•					•
Agitators and submersible mixers	SALOMIX® L series Scaba top-mounted				•	•	•	•	•
	SALOMIX® SL/ST series Scaba side-mounted						•	•	•
	SALOMIX® TES, VULCA						•		
	XRW/RW				•		•	•	
	XSB/SB				•		•	•	
Compressors and aerators	Disc Diffuser System				•		•		
	HST			•	•		•	•	•
	Venturi Jet				•				
	XTA and XTAK				•				
	OKI				•				
MC® products	SX chemical mixer						•	•	•
	MC® discharger						•		
	MC® discharge scraper						•		
	KCE™, LCE™, MCE™ pumping systems						•	•	
Monitoring and control	Pump controllers				•				
	Control accessories				•				
	Measuring devices				•				
	Control panels				•				
	Control and monitoring services				•				

Dedicated Solutions for Leading Industries

Thanks to its extensive experience and wide portfolio, Sulzer provides cutting-edge solutions in many industries.

Oil and gas upstream and midstream



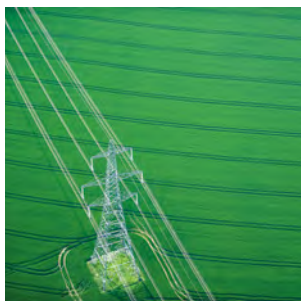
Demands for ever higher pressures, flows and levels of reliability are increasing in the oil and gas industry. World record breaking products coupled with our unique packaging and testing abilities make Sulzer the number one choice for oil and gas upstream applications.

Oil and gas downstream



Sulzer understands the many processes used in the oil and gas downstream processing industry. With leading-edge technology solutions and equipment, we provide state-of-the-art pumping solutions for syn-fuels, refining, gas processing, petrochemical industry and nitrogenous fertilizers.

Power generation



Boiler feed pumps, condensate extraction pumps and cooling water pumps are at the heart of the steam cycle most widely used for power generation. More than pumps, Sulzer provides complete and sustainable pumping systems and services for a greener future.

Water and wastewater



Customer relations have enabled Sulzer to build up strong application expertise in the water and wastewater areas. From water production to transportation as well as wastewater collection and treatment for municipalities and industries, Sulzer takes care of your investment throughout its lifetime.

Pulp and paper



Pumps in the production of pulp and paper products are subject to extreme conditions of operation. Sulzer's extensive knowledge and competitiveness make it the ideal partner of the world's leading pulp and paper producers, machinery suppliers and engineering companies.

General industry



Processes as diverse as metal production, sugar refining, fertilizer manufacture and ethanol refining all have in common highly erosive and corrosive processes. Sulzer's unique knowledge of harsh environment has led to the development of modular pump ranges able to address such challenges.

Chemical process industry



Its long experience in chemical processes, wide product portfolio from pumping solutions to agitators and services for rotating equipment as well as its capability to produce metallic materials for corrosive and abrasive applications make Sulzer a strong partner to safely develop and implement your projects.

Mining and construction

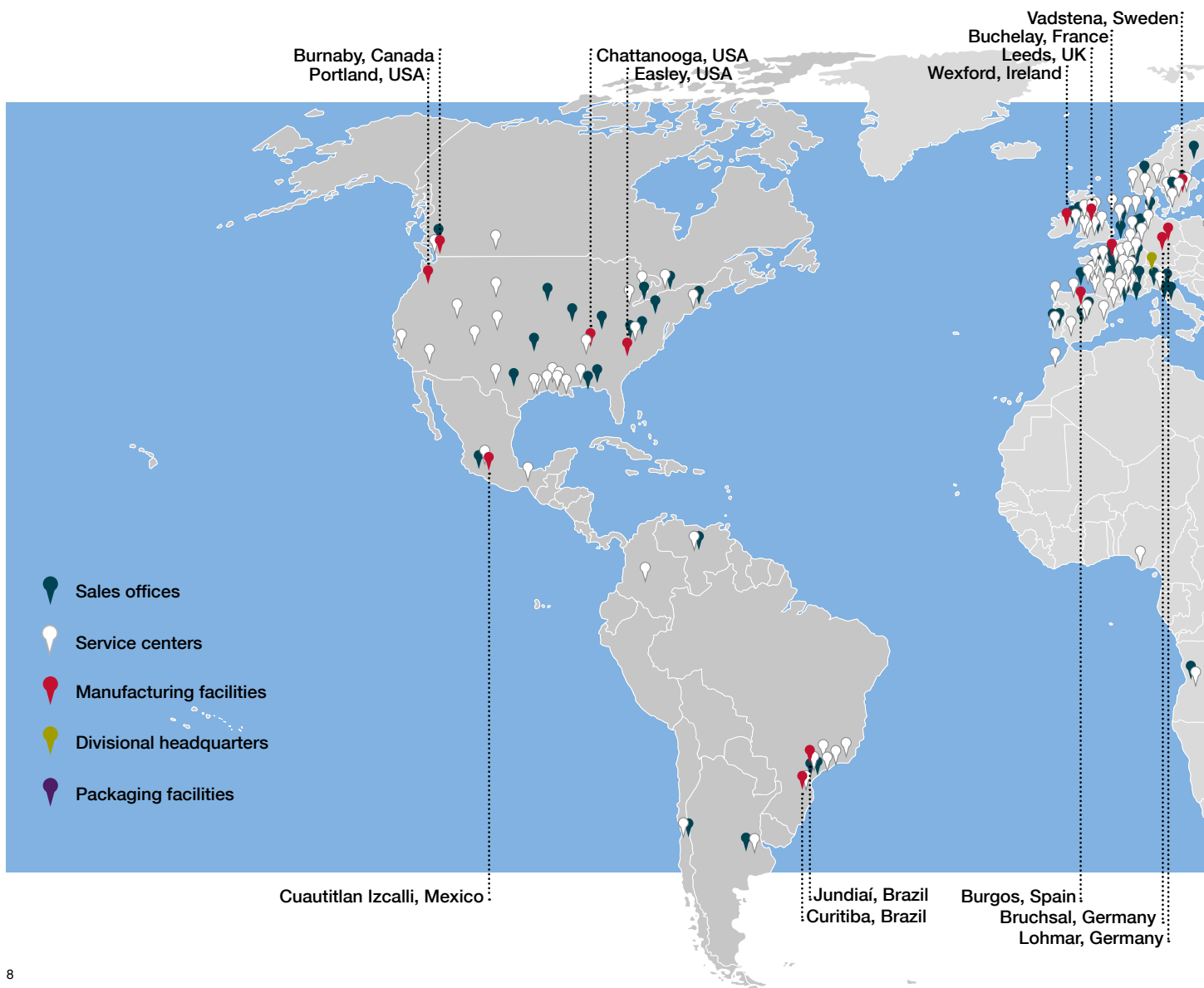


Sulzer has more than 50 years of experience removing water from difficult locations in mines and construction sites. We offer a complete range of submersible pumps with smart fail-safe and maintenance friendly technologies as well as robust high-lift centrifugal pumps.

Our Footprint Spans Across the Globe

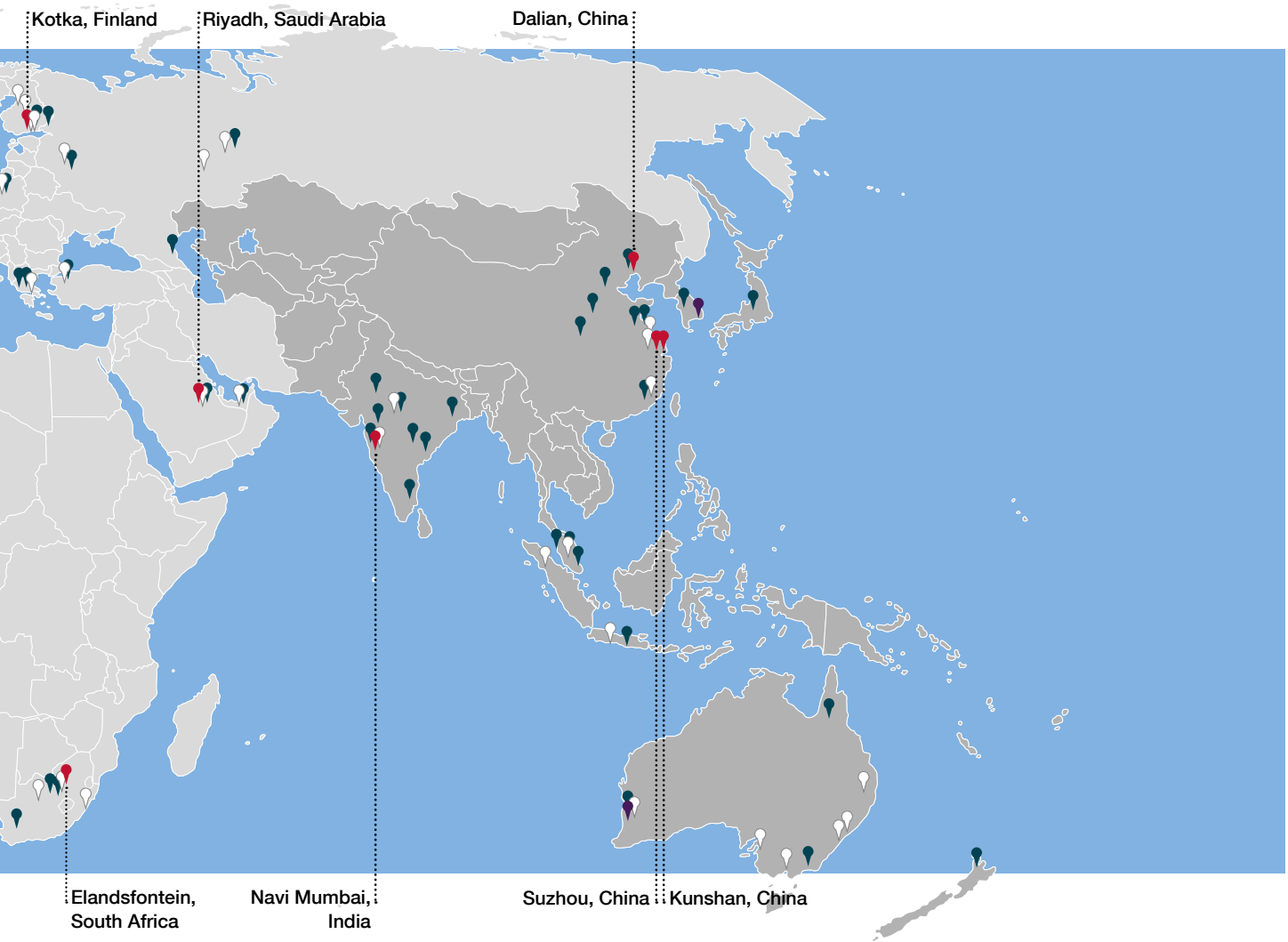
State-of-the-art testing capabilities

All Sulzer manufacturing plants have advanced testing facilities, capable of demonstrating pump performance and proving the ancillary equipment to ensure smooth commissioning and start-up.



Quality and sustainability

We are committed to providing our customers with the best products and services at the highest quality standards in the industry. At all our locations worldwide, we implement certified management systems, according to ISO 9001, ISO 14001 and OHSAS 18001 as an effective way to sustain the continuous improvement of our processes and products. Some of our locations have specific certificates such as ATEX IECEx03.



The Best Production and Test Facilities in the World

Key to the success of Sulzer is its capability to fully test every pump prior to shipping to ensure performance and problem-free commissioning. Sulzer runs test beds all over the world—each dedicated to the needs of specific products and markets.

Bruchsal and Lohmar, Germany



At both German production facilities in Bruchsal and Lohmar, there are full manufacturing capabilities such as machining, tool room, motor production, assembly, control panel assembly, painting and testing up to 10,000 l/s – 1,000 kW 50/60 Hz. Besides, Lohmar is equipped with a mixer test-rig for thrust measurements, aerator tests and an extensive test set-up for rag handling and non-clogging observations. Bruchsal benefits from a state-of-the-art packaging bay handling large aggregates up to 32 tons; it is also equipped with a testing facility for pumps up to 4 MW.

Buchelay, France



The Sulzer facility in Buchelay is designed with full manufacturing and testing capabilities according to Lean principles. The machining and assembly shops are constructed based on the newest energy saving standards. The plant is equipped with a testing facility for vertical and horizontal pumps up to 4 MW. It allows flows up to 15,000 m³/h and a maximum pressure of 250 bar with test pits that are 8 m deep. An extension to test particle loaded fluids is planned. The company structure is adapted for the French market customers and is highly specialized in nuclear market specifications.

Burgos, Spain



The facility in Burgos provides expert know-how in the design and manufacturing of vertical pumps. Typical applications include seawater intake pumps for desalination plants, all kinds of cooling water and condensate extraction services in power plants, and pumps for pumping stations and irrigation plants. Burgos also produces and packages axially split horizontal pumps. With its 1.2 MW test bed facility, this factory is flexible enough to test horizontal and vertical pumping units. A double loop with a suction tank for horizontals and a 6.5 m pump pit depth for verticals allow testing units at nominal running speeds for flows up to 11,000 m³/h and pressure ratings of 25 kg/cm².

Burnaby, Canada



This plant features the latest computerized machining equipment, and includes lifting capabilities of up to 60 tons. Power capacity for testing is up to 15,000 hp (11,190 kW) for 60 Hz power applications and up to 10,000 hp (7,475 kW) with capacity to expand to 15,000 hp (11,190 kW) for 50 Hz. The test area allows flow rates up to 60,000 gallons.

Control rooms are available to perform conventional “pump performance testing” as well as advanced transient or hot testing on centrifugal pumps to exacting standards.

The plant nuclear and environmental quality control systems include CSA N285.0, CSA Z299.1, ISO 9001, ISO 14001 and OHSAS 18001 certifications.

Cuautitlán Izcalli, Mexico



This modern facility produces semi-engineered pumps with a primary focus on the downstream - oil and gas customers not only in the Americas, but also in other parts of the globe. The testing facility includes testing with power rating up to 4 MW over a range of frequencies. The quality control systems are registered and independently audited to the ISO 9001 standard and they also have ISO 14001:2004 certification for the Environmental Management System and OHSAS 18001:2007 OSHA Management System certification.

Easley, Portland and Chattanooga, USA



Sulzer’s three factories in the USA are internationally recognized and experienced manufacturing partners for pre-engineered and engineered pumps. The Portland, OR facility contains state-of-the-art machines for manufacturing and an enviable test facility with 115 kVA power supply and 20,000 hp for testing engineered multistage axially split pumps for the up-, mid- and downstream oil and gas markets. Portland manufactures our full line of vertical pumps and offers a test lab of around 300,000 gallons. Comprehensive in scope, the Easley facility capabilities include engineering, machining, packaging, testing and product repairs all under one roof for configured pumps. Chattanooga, TN provides highly specialized pumps and services for the nuclear market.

Elandsfontein, South Africa



The 22,300 sqm facility specializes in the manufacture of engineered and standard centrifugal pumps, relying upon proven technology for the power generation, general water, oil and gas downstream processing and mining industries. Of particular importance is our role as key supplier of Water Turnkey projects which forms the bulk of our manufacturing operations. Sulzer South Africa also has the infrastructure, size, lifting and testing capability to manufacture and supply large vertical pumps, used in power stations, water transport and flood control.

Jundiaí and Curitiba, Brazil



The Brazilian site in Jundiaí has become one of Sulzer's primary development, manufacturing, and distribution centers. Sulzer's test bed in Brazil is the largest pump test facility in the south hemisphere. With 13,800 V electrical supply installed, a sump depth of 11 m and a motor capacity up to 15,000 kW, this facility is able to test any centrifugal pump type from vertical to horizontal and submersible, single or multistage, within these technical limits. Among other products, the Curitiba plant manufactures pumps certified by MSHA (Mine Safety and Health Administration) and CSA Group.

Karhula, Finland



The manufacturing site in Finland comprises a full scale testing facility and several test beds. A medium-consistency pulp pump loop, with power up to 1.5 MW as well as a general test station for vertical pumps, process pumps and multistage pumps with power up to 500 kW and a test bed for multistage pumps at 2.7 MW power make the factory in Finland well-equipped to test all equipment prior to leaving the site. Karhula factory manufactures also high-speed compressors, compressor accessories and mechanical aerators for municipal and industrial customers around the world.

Leeds, UK



Sulzer has in Leeds one of the world's largest pump test beds for string testing gas turbine driven pump packages with an installed drive power of up to 30 MW. To be able to test subsea processing equipment under realistic conditions, Sulzer invested in a dedicated multiphase subsea test bed in the UK. The facility allows fully submerged subsea pump/motor packages with powers up to 6 MW to be run using both single and multiphase fluids.

Navi Mumbai, India



The facility in India handles stringent quality and testing requirements and supplies complex packaged pumps all over the world. Test bed capacity is 3.5 MW (50Hz/ 60 Hz) and 8 pumps performance testing at a time (depending upon size and motor ratings) is possible. Non-destructive testing such as liquid penetrant/magnetic particle/radiographic testing is also possible. All products manufactured in India comply with the latest internationally recognized standards (ISO, API 610 etc), and the facilities have been independently certified to ISO 9001, ISO 14001 and OHSAS 18001 standards.

Riyadh, Saudi Arabia



The Sulzer manufacturing site in Saudi Arabia is fully equipped to machine, assemble, test and package high-quality pump packages. The site specializes in the manufacture of engineered horizontal and vertical centrifugal pumps to API610 and ASME B73.1 standard, relying upon proven technology for the O&G and Power industries. Sulzer's pump testing facility is among the largest in the Middle East, with 3.3, 6.6 and 11 kV electrical supply installed, motor capacity up to 4.5 MW and a sump depth of 11 meters to allow for vertical pump testing.

Suzhou, Dalian and Kunshan, China



Sulzer operates three pump factories in China. Sulzer Pumps Suzhou Ltd. has obtained ISO 9001 certification by LLOYDS. With a total area of 23,000 sqm, it is equipped with eight test-bed stations and a total power supply of 15 MW. Sulzer Pumps Dalian Ltd. and Sulzer Pump Solutions Kunshan Co.,Ltd. have obtained ISO 9001, ISO14001 and OHSAS18001 certifications. The Dalian factory, with a total area of 14,330 square meters, is equipped with nine test-bed stations for a total power supply of 3.15 MW. The facility in Kunshan is focused on submersible pumps and mixers for wastewater applications with a total workshop area of 9,000 sqm and a capability up to size DN600 and power up to 280 kW.

Vadstena, Sweden



The Vadstena factory has complete pump manufacturing capabilities, from component making to assembly, as well as performance testing, painting and final packaging. The factory has a long history and proven experience in providing engineered and pre-engineered pumps for the pulp and paper industry, general industry and water and wastewater markets. It also designs and manufactures horizontal and vertical mounted agitators for water treatment, industrial and chemical applications. Vadstena has a test bed capacity up to 5,000 l/s and 1.4 MW and has obtained ISO 9001, ISO 14001 and OSHAS 18001 certifications.

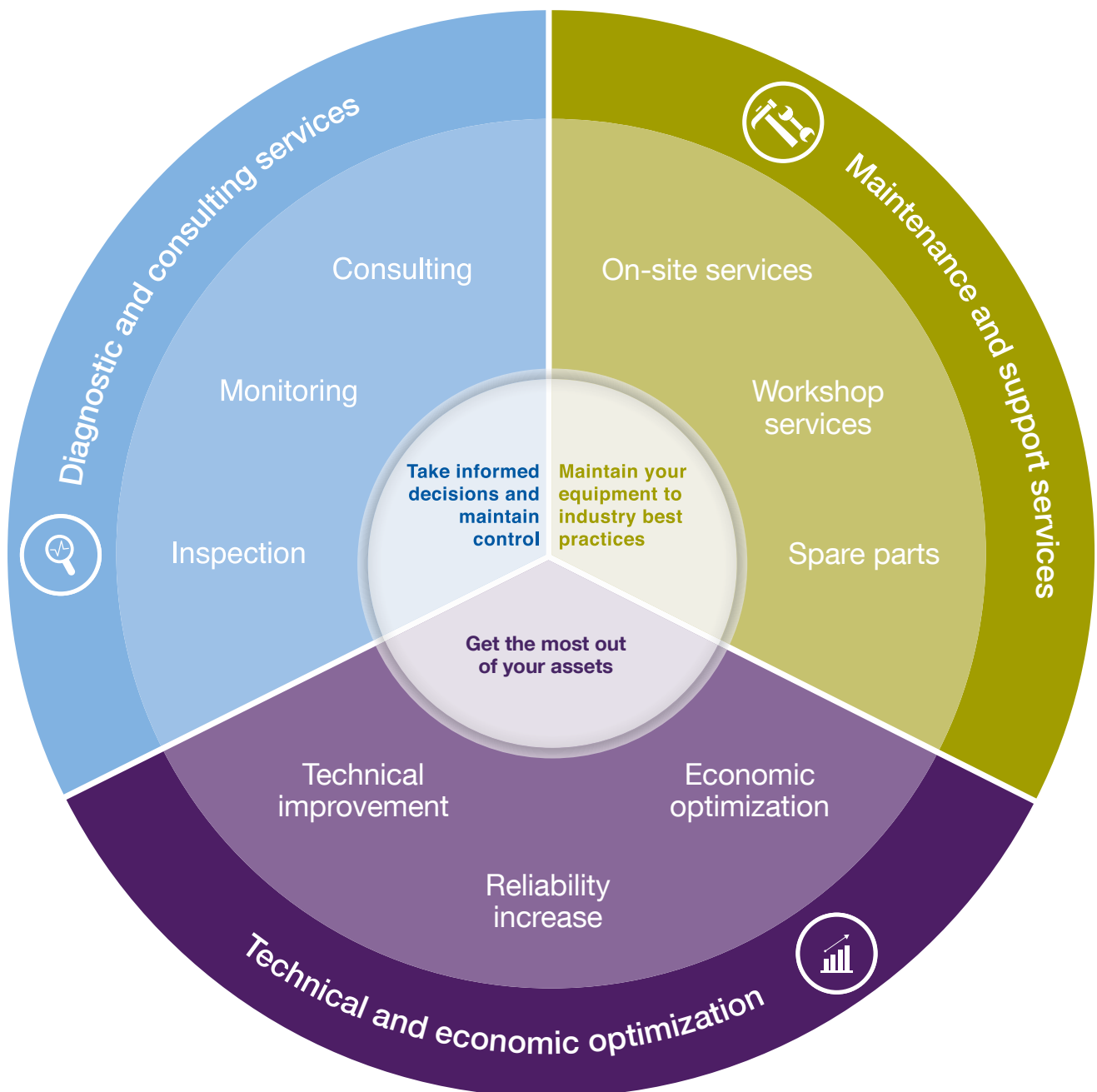
Wexford, Ireland



Wexford has a wide range of manufacturing capabilities including machining, assembly, packaging and shipping of submersible pumps and mixers for domestic and commercial wastewater, municipal wastewater and dewatering. Product research and development is located on site and the plant in Wexford is home to a state-of-the-art product testing facility with CSA accreditation. Wexford has obtained ISO 9001, ISO 14001 and OHSAS 18001 certifications.

Your Ideal Service Partner

Our expertise and commitment always deliver reliability, responsiveness, rapid turn-around and innovative solutions.





Product Overview

Axially split pumps

HPDM AXIALLY SPLIT VOLUTE CASING PUMP

FEATURES AND BENEFITS

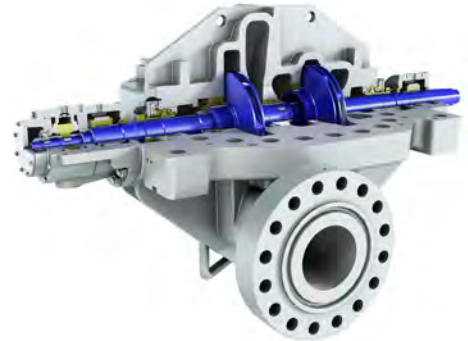
- Optimum technical solution due to a tailor-made design for each application
- Wide range of proven hydraulics allows high efficiency and suction performance
- Sturdy design with generous safety margins for long life of reliable service with minimum maintenance
- Proven experience backed by extensive list of references
- Technical support provided to customers from the early phases of the project design, allowing sound and cost-effective solutions for each application

KEY CHARACTERISTICS

Capacities	up to 20,000 m ³ /h / 88,000 USgpm
Heads	up to 700 m / 2,300 ft
Pressures	up to 175 bar / 2,500 psi
Temperatures	up to 70°C / 160°F

APPLICATIONS

- Water transport
- Transport of crude oil
- Any other high flow, high head application



HSB HORIZONTAL AXIALLY SPLIT SINGLE STAGE BETWEEN BEARING PUMP ISO 13709 / API 610 BB1

FEATURES AND BENEFITS

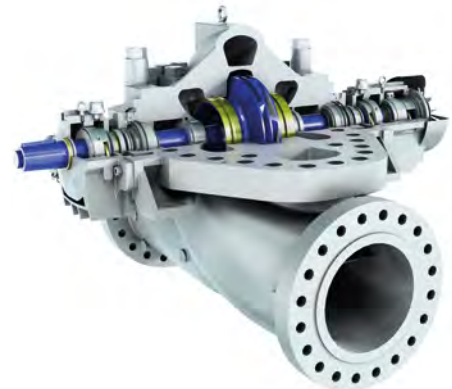
- Staggered vane, double suction impeller on larger sizes for reduced vibration
- Custom hydraulics to meet both current and future requirements with a simple rotor / volute changes
- Ball-ball, sleeve-ball and sleeve-pivot shoe bearings are available
- High-speed designs available for remote gas turbine-driven applications

KEY CHARACTERISTICS

Capacities	up to 10,000 m ³ /h / 45,000 USgpm
Heads	up to 550 m / 1,800 ft
Pressures	up to 150 bar / 2,200 psi
Temperatures	up to 205°C / 400°F

APPLICATIONS

- Crude oil pipelines
- Heavy duty auxiliary applications
- Medium pressure applications in desalination and water transport



MSD AND MSD2 AXIALLY SPLIT MULTISTAGE PUMPS ISO 13709/API 610 BB3

FEATURES AND BENEFITS

- Broadest hydraulic coverage of any BB3 type multistage pump in the market
- Axially split casing means rotor balance is not disturbed when rotor is installed
- Opposed impellers balance axial thrust, saving lube system costs on most applications
- Double suction, first-stage available on most sizes for reduced Net Positive Suction Head (NPSH)
- High speed option for gas turbine drive

KEY CHARACTERISTICS

Capacities	up to 3,200 m ³ /h / 14,000 USgpm
Heads	up to 2,900 m / 9,500 ft
Pressures	up to 300 bar / 4,400 psi
Temperatures	up to 205°C / 400°F

APPLICATIONS

- Refined product pipelines
- Water injection
- CO₂
- Desalination and water transport
- Boiler feedwater
- Nuclear safety services



MSD-RO AXIALLY SPLIT MULTISTAGE PUMP

FEATURES AND BENEFITS

- Hydraulic configuration with two single suction impellers offers a compact design, with extremely low Net Positive Suction Head (NPSH) values and top of its class efficiency
- Special opposed, dynamically balanced impeller design for ideal axial thrust balance, increasing the overall pump efficiency by avoiding the use of balancing line
- Reduced wear parts clearances by using PEEK or honeycomb to increase pump efficiency

KEY CHARACTERISTICS

Capacities	up to 1,600 m ³ /h / 7,000 USgpm
Heads	up to 650 m / 2,150 ft
Pressures	up to 90 bar / 1,305 psi
Temperatures	up to 60°C / 140°F

APPLICATIONS

- High pressure membrane feed pump in Seawater Reverse Osmosis (SWRO)
- Water transport



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 and supply
- Desalination
- Water treatment
- District heating and cooling
- Industrial water applications



SMN AXIALLY SPLIT CASING DOUBLE SUCTION PUMP

FEATURES AND BENEFITS

- Broad hydraulic coverage through over 50 different sizes
- High efficiency
- Robust design for long service life
- Easy maintenance
- Flexible layout enabled by clockwise and counterclockwise rotation / vertical and horizontal arrangements

KEY CHARACTERISTICS

Capacities	up to 10,000 m ³ /h / 44,000 USgpm
Heads	up to 200 m / 650 ft
Pressures	up to 30 bar / 435 psi
Temperatures	up to 50°C / 120°F

APPLICATIONS

- Water intake, transport and supply
- Desalination
- Water treatment
- District heating and cooling
- Industrial water applications



SMH AXIALLY SPLIT SINGLE STAGE PUMP ISO 13709 / API 610 BB1

FEATURES AND BENEFITS

- Between bearing design for reliability at high flow rates
- Broad hydraulic coverage at 50 and 60 Hz speeds
- Axially split casing for ease of repair
- Vertical shaft (SMHv) for limited deck space applications

KEY CHARACTERISTICS

Capacities	up to 11,000 m ³ /h / 50,000 USgpm
Heads	up to 200 m / 650 ft
Pressures	15 to 26 bar / 220 to 380 psi
Temperatures	up to 150°C / 300°F

APPLICATIONS

- Onshore boosting
- Onshore cooling water
- FPSO seawater



SZM AXIALLY SPLIT DOUBLE SUCTION PUMP

FEATURES AND BENEFITS

- Double suction impeller for improved suction capability
- Axial split casing design to allow easy maintenance by removing the upper casing without disassembling suction and discharge nozzle
- Vertical arrangement available (SZMV) to enable adaptability to customer layout requirements
- Casing wear rings with optional impeller wear rings for a proper maintenance and longer pump life cycle

KEY CHARACTERISTICS

Capacities	up to 3,500 m ³ /h / 15,000 USgpm
Heads	up to 200 m / 330 ft
Pressures	up to 25 bar / 362 psi
Temperatures	up to 150°C / 302°F

APPLICATIONS

- Water treatment
- Desalination
- Water transport and supply
- Irrigation
- Power plants (cooling water auxiliary services)
- HPI (cooling water auxiliary services)
- General industry



ZPP DOUBLE SUCTION AXIALLY SPLIT SINGLE STAGE PUMP

FEATURES AND BENEFITS

- Exceeds requirements of international ISO 5199 standard
- Unique, patented and superior design features minimize life cycle costs
- Quick and easy installation, reliable operation, easy maintenance and service

KEY CHARACTERISTICS

Capacities	up to 30,000 m ³ /h / 132,000 USgpm
Heads	up to 160 m / 525 ft
Pressures	up to 25 bar / 362 psi
Temperatures	up to 120°C / 250°F

APPLICATIONS

- Clean and lightly contaminated liquids
- Viscous liquids
- Low-consistency fibrous slurries
- Low-pressure pulsation pumping applications



Z22 DOUBLE SUCTION AXIALLY SPLIT SINGLE STAGE PUMP

FEATURES AND BENEFITS

- Long and trusted experience in all industrial segments
- Unique, patented and superior design features minimize life cycle costs
- Quick and easy installation, reliable operation, easy maintenance and service

KEY CHARACTERISTICS

Capacities	up to 17,000 m ³ /h / 75,000 USgpm
Heads	up to 220 m / 720 ft
Pressures	up to 25 bar / 362 psi
Temperatures	up to 140°C / 280°F

APPLICATIONS

- Clean and lightly contaminated liquids
- Viscous liquids
- Low-consistency fibrous slurries
- Low pressure pulsation pumping applications



Barrel casing pumps

CP VOLUTE STYLE BARREL PUMP ISO 13709 / API 610 BB5

FEATURES AND BENEFITS

- Opposed impellers balance axial thrust, with no lube system needed on smaller pumps
- Axially split inner case means rotor balance is not disturbed when installed in the pump
- Dual volute inner case balances radial loads for longer service life
- Twistlock barrel closure reduces maintenance time on lower temperature services
- Cartridge design on larger pumps can speed up pump repair time
- Volute inner case with lower erosion wear on abrasive services

KEY CHARACTERISTICS

Capacities	up to 1,000 m ³ /h / 4,400 USgpm
Heads	up to 7,000 m / 23,000 ft
Pressures	up to 425 bar / 6,250 psi
Temperatures	up to 425°C / 800°F

APPLICATIONS

- Onshore water injection
- Offshore crude oil shipping
- Refinery charge
- Boiler feedwater
- Nuclear safety services



GSG DIFFUSER STYLE BARREL PUMP ISO 13709 / API 610 BB5

FEATURES AND BENEFITS

- Least costly form of ISO 13709 / API 610 type BB5 high-pressure barrel pumps
- Direct drive options to 6 MW
- Back-to-back rotor stack allows up to 16 stages on low-density fluids
- Multiple sizes cover a broad hydraulic range
- Low-pressure, high-pressure, twistlock, and high-temperature designs suit many applications

KEY CHARACTERISTICS

Capacities	up to 900 m ³ /h / 4,600 USgpm
Heads	up to 2,600 m / 10,000 ft
Pressures	up to 300 bar / 4,500 psi
Temperatures	up to 425°C / 800°F

APPLICATIONS

- Onshore or offshore water injection
- Offshore crude oil shipping
- Refinery charge
- Boiler feedwater
- Nuclear safety services



GVG DIFFUSOR STYLE BARREL PUMP

FEATURES AND BENEFITS

- Low thrust bearing loads due to opposed impellers (even with worn clearances)
- Excellent rotordynamic behavior because of center bushing
- Forged barrel in chromium steel/austenitic stainless steel
- Full cartridge design to reduce downtime during maintenance
- Double suction impeller at first stage (optional)

KEY CHARACTERISTICS

Capacities	up to 65 m ³ /h / 285 USgpm
Heads	up to 1,900 m / 6,230 ft
Pressures	up to 200 bar / 2,900 psi
Temperatures	up to 100°C / 212°F

APPLICATIONS

- Control rod drive pump
- High pressure charging pump
- Make up water pump



HPT HIGH PRESSURE BARREL CASING PUMP

FEATURES AND BENEFITS

- Maximum safety due to double casing design; pipework connections remain undisturbed during disassembly
- High strength barrel material to accept thermal shock
- Full cartridge pull out for rapid changeover
- Design features to eliminate the need for pre-warming in most installations
- Long operating life regardless of the operating mode

KEY CHARACTERISTICS

Capacities	up to 4,000 m ³ /h / 17,600 USgpm
Heads	up to 4,200 m / 13,800 ft
Pressures	up to 450 bar / 6,530 psi
Temperatures	up to 220°C / 430°F

APPLICATIONS

- Boiler feedwater



HPcp DIFFUSER STYLE HIGH ENERGY PUMP ISO 13709 / API 610 BB5

FEATURES AND BENEFITS

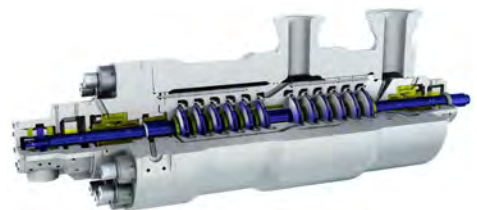
- Inline or back-to-back rotor stack designs for rotordynamic stability
- Forged Carbon steel, Duplex SS, HIP's and overlaid barrel construction
- Twistlock or bolted barrel closure with Superbolts™
- Sleeve, pocketed, or tilt pad bearings
- Grouted, ungrouted and offshore 3- or 4-point support baseplates

KEY CHARACTERISTICS

Capacities	up to 4,000 m ³ /h / 20,000 USgpm
Heads	up to 8,000 m / 26,300 ft
Pressures	up to 1,100 bar / 16,000 psi
Temperatures	up to 200°C / 400°F

APPLICATIONS

- Water injection
- Offshore crude oil shipping
- Remote pipeline services



Multiphase pumps

MPP HIGH PERFORMANCE MULTIPHASE PUMP

FEATURES AND BENEFITS

- Helicoaxial stages axially compress the effluent to avoid separation and gas binding
- Stage design changes to compensate for gas compression through the pump
- Horizontal or vertical configurations to fit the application
- Variety of sizes available from 1 to 6 MW to suit the field development, production and decline

KEY CHARACTERISTICS

Capacities	up to 4,500 m ³ / 700,000 BPD
Heads	up to 180 bar dP / 2,600 psi dP
Pressures	up to 1,100 bar / 16,000 psi
Temperatures	1 to 250°C / 34 to 480°F

APPLICATIONS

- Onshore topside multiphase or hybrid pressure boosting and transport
- Offshore topside multiphase or hybrid pressure boosting
- Subsea multiphase or hybrid pressure boosting, water injection and transport



Ring section pumps

HPH AND HPL HIGH-LIFT CENTRIFUGAL PUMPS

FEATURES AND BENEFITS

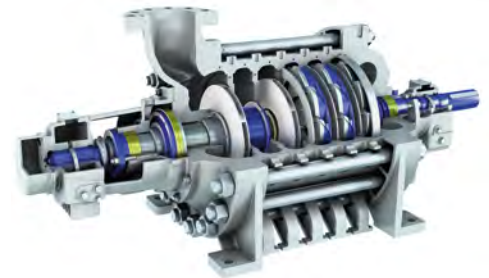
- Split bearing housing for ease of maintenance
- Robust construction suitable for harsh mining conditions
- Condition monitoring capabilities for effective scheduling of maintenance
- High velocity areas protected by replaceable plates to avoid need for expensive remachining of high cost casings

KEY CHARACTERISTICS

Capacities	130 to 1,000 m ³ /h / 680 to 5,000 USgpm
Heads	120 to 1,800 m / 600 to 5,000 ft
Pressures	180 bar / 2,610 psi
Temperatures	up to 105°C / 220°F

APPLICATIONS

- Mine dewatering
- Water transport
- Energy recovery capabilities (reverse running as a turbine)



MBN MEDIUM PRESSURE STAGE CASING PUMP

FEATURES AND BENEFITS

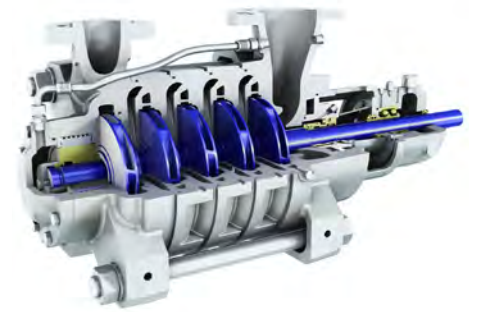
- Simple construction to minimize dimensions and reduce investment and maintenance costs
- High quality investment cast impellers and diffusers for better efficiency
- Fast and easy impeller mounting
- Bearing unit can be serviced without disassembling the pumps
- Wide range of materials including duplex stainless steel grades

KEY CHARACTERISTICS

Capacities	up to 700 m ³ /h / 3,080 USgpm
Heads	up to 900 m / 2,950 ft
Pressures	up to 100 bar / 1,450 psi
Temperatures	up to 180°C / 355°F

APPLICATIONS

- Boiler feedwater
- Desalination
- Auxiliary services



MBN-RO MULTISTAGE STAGE CASING PUMP

FEATURES AND BENEFITS

- Top of its class efficiency to ensure lowest specific power consumption per produced cubic meter of water in desalination applications
- Different hydraulics can be fitted in the same pump frame, allowing flexibility, modularity and future retrofiting
- All parts typically subject to maintenance both Drive End (DE) and Non-Drive End (NDE) bearings, balancing disc, mechanical seal) are accessible and can be replaced on site, without removal of suction and discharge piping

KEY CHARACTERISTICS

Capacities	up to 1,100 m ³ /h / 4,800 USgpm
Heads	up to 900 m / 2,950 ft
Pressures	up to 100 bar / 1,450 psi
Temperatures	up to 90°C / 194°F

APPLICATIONS

- High pressure membrane feed in Seawater Reverse Osmosis (SWRO) applications
- Clean water pumping stations
- Any other high pressure application with clean liquids and low temperature



MC HIGH PRESSURE STAGE CASING PUMP

FEATURES AND BENEFITS

- Modular hydraulics for high efficiency in a wide range of operating conditions
- Large branch sizes for optimized inlet flow, low noise level and higher allowable forces and moments
- Unaffected by rapid temperature variations
- Easy access for cleaning to the seal cooling chambers
- Stiff shaft design for critical speeds above the maximum operating speed

KEY CHARACTERISTICS

Capacities	up to 1,000 m ³ /h / 5,000 USgpm
Heads	up to 1,750 m / 5,500 ft
Pressures	up to 180 bar / 2,610 psi
Temperatures	up to 180°C / 355°F

APPLICATIONS

- Boiler feedwater
- Fuel injection and NOx abatement



MD HIGH PRESSURE STAGE CASING PUMP

FEATURES AND BENEFITS

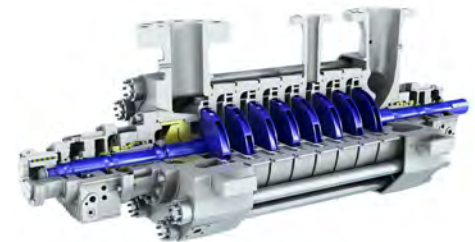
- Modular hydraulics for high efficiency in a wide range of operating conditions
- Centerline mounted with large branch sizes for optimized inlet flow, low noise level and higher allowable forces and moments
- Unaffected by rapid temperature variations
- Stiff shaft design for critical speeds above the maximum operating speed
- Multiple screws mechanical tensioners are used on large sizes to allow simpler tightening and loosening

KEY CHARACTERISTICS

Capacities	up to 1,000 m ³ /h / 5,000 USgpm
Heads	up to 2,400 m / 8,200 ft
Pressures	up to 350 bar / 5,080 psi
Temperatures	up to 210°C / 410°F

APPLICATIONS

- Boiler feedwater



ME HIGH PRESSURE STAGE CASING PUMP

FEATURES AND BENEFITS

- Optimized labyrinth design for high efficiency and good rotordynamic behavior
- Shaft forged with low L/D ratio for stable operation without critical speed problems and reduced vibration levels
- Radial grooves providing increased radial stiffness, reduced effect on rotor tilting and good rotordynamic behavior
- Swirl break at balancing piston to maintain rotor stability even when internal clearances are worn
- Optimized shaft sealing design with jacket cooling and mechanical seal: pre-warming not required

KEY CHARACTERISTICS

Capacities	up to 1,750 m ³ /h / 7,700 USgpm
Heads	up to 4,000 m / 13,120 ft
Pressures	up to 430 bar / 6,240 psi
Temperatures	up to 220°C / 430°F

APPLICATIONS

- Boiler feedwater



Single stage pumps

DRY INSTALLED SEWAGE PUMP TYPE ABS AFC

FEATURES AND BENEFITS

- Compliant with the EN 12050-1 standard
- No risk of contamination during operation
- No need for entry into dangerous pump sumps
- Pull-out design allows for easy removal of the motor without disconnecting the pump from the pipework
- Used with standard IEC air-cooled motors
- Based on the tried-and-tested Contrablock and vortex range of hydraulics

KEY CHARACTERISTICS

Discharge sizes	DN50-DN200
Motor range	3-22 kW
Bearing life	100,000 h

APPLICATIONS

- Commercial, industrial, and municipal applications requiring reliable and economical pumping of:
 - Clear water
 - Polluted water
 - Heavily-polluted sewage containing solids, fecal slurry and sludge



AHLSTAR

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

AHLSTAR A

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
- Viscous liquids
- Fibrous slurries
- Large solids containing liquids
- Gas containing liquids and self-priming applications
- Desalination



AHLSTAR N

KEY CHARACTERISTICS

Capacities	2,000 m ³ /h / 8,800 USgpm
Heads	90 m / 295 ft
Pressures	16 / 25 bar, 230 psi, depending on material and size
Temperatures	180°C / 355°F

APPLICATIONS

- Large solids containing liquids
- Large solids containing fibrous slurries
- Large solids and gas containing liquids and slurries
- Large solids containing liquids and slurries in self-priming applications



AHLSTAR W

KEY CHARACTERISTICS

Capacities	7,000 m ³ /h / 31,000 USgpm
Heads	110 m / 360 ft
Pressures	16 / 25 bar, 230 / 360 psi, depending on material and size
Temperatures	180°C / 355°F

APPLICATIONS

- Abrasive and viscous liquids
- Abrasive fibrous and non-fibrous slurries
- Abrasive large solids and gas containing liquids and slurries
- Gas containing slurries in self-priming applications



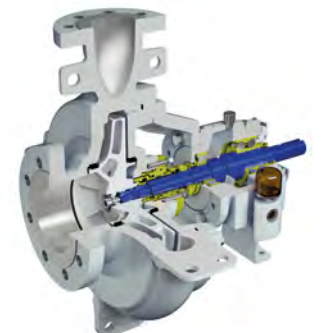
AHLSTAR E

KEY CHARACTERISTICS

Capacities	6,100 m ³ /h / 26,680 USgpm
Heads	160 m / 525 ft
Pressures	25 bar / 360 psi, depending on material and size
Temperatures	210°C / 410°F

APPLICATIONS

- High temperature liquids
- Clean and lightly contaminated liquids
- Viscous liquids
- Fibrous slurries



AHLSTAR CLOSE COUPLED

FEATURES AND BENEFITS

- The close coupled design with standard flange or flange/feet type electric motors
 - needs less space
 - makes installation quick and easy, thus reducing the total installation cost

KEY CHARACTERISTICS

Capacities	600 m ³ /h / 2,600 USgpm
Heads	160 m / 525 ft
Pressures	16 / 25 bar, 230 / 360 psi, depending on material and size
Temperatures	130°C / 266°F

APPLICATIONS

- Clean and lightly contaminated liquids
- Viscous liquids
- Fibrous slurries
- Large solids containing liquids
- Gas containing liquids and self-priming applications



BBS AND CD BETWEEN BEARINGS SINGLE STAGE PUMPS ISO 13709 / API 610 BB2

FEATURES AND BENEFITS

- Centerline support for reduced thermally induced misalignment
- Double suction impeller for low Net Positive Suction Head Required (NPSHR)
- First critical speed is well above operating speed range for smooth operation
- Casing designed for 2 times API 610 nozzle loads for freedom from piping distortions
- Grouted or ungrouted, 1x or 2x nozzle load baseplates for reduced installation cost

KEY CHARACTERISTICS

Capacities	up to 5,000 m ³ /h / 22,000 USgpm
Heads	up to 450 m / 1,500 ft
Pressures	up to 50 bar / 740 psi
Temperatures	up to 425°C / 800°F

APPLICATIONS

- Crude oil shipping
- Various refinery and petrochemical services
- HTF oil circulation



CPT END SUCTION SINGLE STAGE CENTRIFUGAL PUMP ANSI B73.1

FEATURES AND BENEFITS

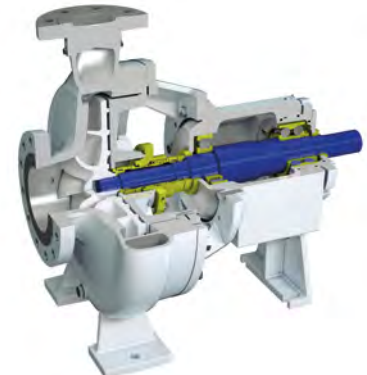
- Exceeds standard requirements of ANSI/ASME B73.1 standards
- Suitable for the most demanding industrial applications
- Unique, patented and superior design features minimize life cycle costs
- Quick and easy installation, safe operation, easy maintenance and service

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
- Viscous liquids
- Fibrous slurries
- Large solids containing liquids



DRY INSTALLED SEWAGE PUMP TYPE ABS FR

FEATURES AND BENEFITS

- Very service-friendly due to back pull-out design using standard electrical motors
- Ample space inside the impeller and volute, making them less prone to clogging
- Dry running capability possible with a double seal arrangement
- Can be supplied with optional equipment where self-priming is required

KEY CHARACTERISTICS

Discharge sizes DN150-DN700 / 6-28"
Motor range up to 700 kW / up to 950 hp
Bearing life 100,000 h

APPLICATIONS

- Clear water
- Polluted water
- Heavily-polluted sewage containing solids, fecal slurry, and sludge in commercial, industrial and municipal applications



HPTd SINGLE STAGE DOUBLE SUCTION PUMP

FEATURES AND BENEFITS

- Robust design to accept high piping loads
- Single cover design to reduce overhaul times
- Radial split design does not require pre-warming
- Split bearing housings allow for bearing inspection without pump disassembly
- Single mechanical seal provides higher efficiency

KEY CHARACTERISTICS

Capacities up to 4,000 m³/h / 17,600 USgpm
Heads up to 1,000 m / 3,280 ft
Pressures up to 140 bar / 2,030 psi
Temperatures up to 230°C / 450°F

APPLICATIONS

- Feedwater in nuclear power plants



HZB DOUBLE SUCTION VOLUTE PUMP

FEATURES AND BENEFITS

- Centerline mounting to allow free thermal expansion and high nozzle loads
- Minimum bearing span to minimize shaft deflection
- Single cover casing design to reduce overhaul times
- Chrome steel casing with good corrosion resistance and excellent mechanical properties is standard
- Single mechanical seal provides higher efficiency

KEY CHARACTERISTICS

Capacities up to 5,500 m³/h / 29,000 USgpm
Heads up to 340 m / 1,115 ft
Pressures up to 48 bar / 700 psi
Temperatures up to 220°C / 428°F

APPLICATIONS

- Boiler feedwater booster
- HTF oil circulation
- Nuclear safety services



OHH AND OHHL OVERHUNG SINGLE STAGE PUMPS ISO 13709 / API 610 OH2

FEATURES AND BENEFITS

- Finned bearing housing and fan cooling for long bearing life
- Broadest range map in the industry for ISO 13709 (API 610) type OH2 pumps
- Heavy duty baseplates with 2x ISO 13709 (API 610) nozzle load option
- ISO 21049 (API 682) cartridge type mechanical seals for reduced emissions
- Electric motor, Variable Frequency Drive (VFD), engine and steam turbine drivers

KEY CHARACTERISTICS

Capacities	up to 2,250 m ³ /h / 10,000 USgpm
Heads	up to 400 m / 1,500 ft
Pressures	up to 75 bar / 1,110 psi
Temperatures	up to 425°C / 800°F

APPLICATIONS

- Offshore Boosting
- Refinery and petrochemical process applications
- HTF oil circulation



OHV AND OHVL OVERHUNG VERTICAL INLINE PUMPS ISO 13709 / API 610 OH3

FEATURES AND BENEFITS

- Finned bearing housing and fan cooling for long bearing life
- Broad range map for hydraulic coverage
- Heavy-duty pump and driver stand for reduced vibration
- ISO 21049 (API 682) cartridge type mechanical seals for reduced emissions
- OHH/OHHL shaft and bearings for reduced deflection and long seal life

KEY CHARACTERISTICS

Capacities	up to 1,450 m ³ /h / 6,800 USgpm
Heads	up to 450 m / 1,500 ft
Pressures	up to 51 bar / 740 psi
Temperatures	-160 to +340°C / -256 to +650°F

APPLICATIONS

- Seawater booster
- Light hydrocarbon boosting
- Low-pressure unit charge
- Pump around services
- Tank farm boosting



REL HORIZONTAL DIFFUSER STYLE SINGLE STAGE PUMP

FEATURES AND BENEFITS

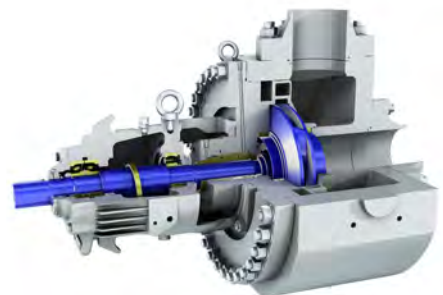
- Casing designed for higher nozzle loads to comply with nuclear requirements
- Proven hydraulic design from our API 610 pump range ZE/ZF
- Enlarged shaft diameter compared to API 610 to match nuclear requirements
- Low rotor bending
- High dry running critical speed
- Designs according to RCC-M available

KEY CHARACTERISTICS

Capacities	up to 2,600 m ³ /h / 11,440 USgpm
Heads	up to 300 m / 1,000 ft
Pressures	up to 100 bar / 1,450 psi
Temperatures	up to 425°C / 800°F

APPLICATIONS

- Safety related services



VMOA TRANSFORMER OIL CIRCULATION PUMP

FEATURES AND BENEFITS

- Reliable leak-proof, sealless design
- Integrated motor with high thermal margin
- Cooled and lubricated by the transformer oil
- Reliable ball bearing design superior to other bearing types
- Low sound and vibration level
- Quick and easy installation, safe operation, extremely long lifetime, maintenance free

KEY CHARACTERISTICS

Capacities	up to 216 m ³ /h / 951 USgpm
Heads	up to 130 kPa / 50 ft
Pressures	up to 10 bar / 145 psi
Temperatures	-40°C up to 100°C / -40°F up to 212°F

APPLICATIONS

- Transformer oil



ZE AND ZF END SUCTION PUMPS ISO 13709 / API 610 TYPE BB2

FEATURES AND BENEFITS

- Designed for hot and cold process applications
- Modular construction to provide maximum interchangeability

KEY CHARACTERISTICS

Capacities	up to 2,600 m ³ /h / 11,440 USgpm
Heads	up to 300 m / 1,000 ft
Pressures	up to 100 bar / 1,450 psi
Temperatures	up to 425°C / 800°F

APPLICATIONS

- Boosting
- Refinery, petrochemical and chemical process applications
- Desalination
- Boiler feedwater booster
- Condensate extraction
- HTF oil circulation



ZFn HORIZONTAL VOLUTE TYPE PROCESS PUMP

FEATURES AND BENEFITS

- Basic design according API 610 latest edition
- Casing designed for higher nozzle loads to comply with nuclear requirements
- Proven hydraulic design from our API 610 pump range ZE/ZF
- Enlarged shaft diameter compared to API 610 to match nuclear requirements
- Low rotor bending
- High dry running critical speed
- Designs according to RCC-M available

KEY CHARACTERISTICS

Capacities	up to 2,600 m ³ /h / 11,440 USgpm
Heads	up to 300 m / 1,000 ft
Pressures	up to 100 bar / 1,450 psi
Temperatures	up to 425°C / 800°F

APPLICATIONS

- Safety related services



Submersible pumps

LIGHT DRAINAGE PUMP TYPE ABS ROBUSTA

FEATURES AND BENEFITS

- Fitted with automatic level control
- Supplied with built-in check valve
- 10 m / 33 ft cable with plug
- Suitable for small sumps from 300 x 300 mm / 11.8 x 11.8 in
- Detachable suction ring. When fitted into the screen, enables pumping down to 3 mm / 0.12 in

KEY CHARACTERISTICS

Capacities	up to 14 m ³ /h / 58 USgpm
Heads	up to 8.8 m / 30 ft
Temperatures	40°C up to 60°C (max. 5 minutes) / 104°F up to 140°F (max. 5 minutes)
Motor power	0,36–0,50 kW / 1/4–1/3–1/2 hp

APPLICATIONS

- Pumping clear and wastewater from house, garden or yard



LIGHT DRAINAGE PUMP TYPE ABS CORONADA

FEATURES AND BENEFITS

- Fitted with automatic level control
- Supplied with built-in check valve
- Coronada SX available with a high-grade stainless steel shaft, Viton seals, and PVC cable

KEY CHARACTERISTICS

Capacities	up to 9 m ³ /h
Heads	up to 7 m
Temperatures	40°C up to 60°C (max. 5 minutes)
Motor power	0.3 kW

APPLICATIONS

- Wastewater without toilet waste
- Drainage of pits, swimming pools, and flooded cellars
- Removal of nuisance water from gullies or pedestrian underpasses
- Coronada SX for aggressive wastewater



LIGHT WASTEWATER PUMP TYPE ABS MF

FEATURES AND BENEFITS

- With or without automatic level control
- Passage of solids from 20 to 60 mm
- Compact shape, fittings for easy mounting, and small sump requirements enable a quick and cost-effective installation

KEY CHARACTERISTICS

Capacities	up to 56 m ³ /h
Heads	up to 16 m
Temperatures	40°C up to 60°C (max. 5 minutes)
Motor power	0.42–1.8 kW

APPLICATIONS

- Removal of wastewater without toilet waste and rainwater
- Pumping of flooded cellars
- Removal of nuisance water from gullies or pedestrian underpasses
- Pumping of fluids containing gaseous or abrasive particles, thanks to vortex hydraulics



LIGHT WASTEWATER PUMP TYPE ABS MF 154 HW

FEATURES AND BENEFITS

- Compact shape, fittings for easy mounting, and small sump requirements enable a quick and cost-effective installation
- Designed to cover a wide range of internal and external dewatering applications
- Primarily for usage when the temperature of the medium exceeds the standard upper limit

KEY CHARACTERISTICS

Capacities	9 m ³ /h
Heads	7.8 m
Temperatures	80°C
Motor power	0.42–1.8 kW

APPLICATIONS

- Pumping of high temperature discharge water from laundries, commercial washing machines etc.
- Filling and emptying of containers, drainage of flooded cellars and removal of rainwater
- Suitable for pumping of fluids containing gaseous or abrasive particles



LIGHT DRAINAGE PUMP TYPE ABS IP

FEATURES AND BENEFITS

- Fitted with automatic level control
- Stainless steel pump for corrosive media with vortex hydraulics
- Passage of solids 30 mm
- Standard version with high grade stainless steel, Viton seals and PVC cable

KEY CHARACTERISTICS

Capacities	up to 18 m ³ /h
Heads	up to 11 m
Temperatures	40°C up to 60°C (max. 5 minutes)
Motor power	1.1 kW

APPLICATIONS

- Pumping of aggressive media, as well as clear and rain water
- Blockage-free pumping of liquids containing a high proportion of solid or fibrous matter
- Dewatering of buildings and sites
- Emptying or filling of containers
- Suitable for use in septic tanks, for emptying flooded cellars, and for drainage



SUBMERSIBLE WASTEWATER PUMP TYPE ABS AS

FEATURES AND BENEFITS

- Hydraulic design with Contrablock system or vortex impellers
- Two- and four-pole design
- Passage of solids from 40 to 80 mm
- Automatic coupling system

KEY CHARACTERISTICS

Capacities	up to 110 m ³ /h / 520 USgpm
Heads	up to 28 m / 115 ft
Temperatures	40°C up to 60°C (max. 5 minutes) / 104°F up to 140°F (max. 5 minutes)
Motor power	1.2–3.0 kW / 1.8–3.5 kW 1.61–4.02 hp / 2.41–4.69 hp

APPLICATIONS

- Sewage and wastewater with toilet waste
- Two-inch version especially suitable for pumping wastewater from underground garages
- Vortex hydraulics
- Particularly suitable for fluids containing fibrous or abrasive matter
- Contrablock hydraulic system for larger proportions of solid or fibrous matter



SUBMERSIBLE GRINDER PUMPS TYPE ABS PIRANHA

FEATURES AND BENEFITS

- Unique Piranha shredding system
- Automatic coupling system
- Piranha PE with Premium Efficiency IE3 motor
- Two- and four-pole design

KEY CHARACTERISTICS

Capacities	up to 21 m ³ /h / 122 USgpm
Heads	up to 71 m / 265 ft
Temperatures	40°C up to 60°C (max. 5 minutes) / 104°F up to 140°F (max. 5 minutes)
Motor power	1.0–11.0 kW / 1.34–16.8 kW 1.34–14.74 hp / 1.80–22.52 hp

APPLICATIONS

- Sewage removal from living units and houses in remote settlements where:
 - The laying of a conventional sewer would be too expensive
 - Large ground undulations are present
 - It is only possible to lay small-diameter pipe lines



SUBMERSIBLE SEWAGE PUMPS TYPE ABS XFP

FEATURES AND BENEFITS

- Premium Efficiency IE3 motor in accordance with IEC 60034-30
- Excellent rag handling
- Specially designed impellers for reliable delivery of wastewater containing solids and fibrous material
- Hazardous locations: Approval for ATEX (Ex II 2G k Ex d IIB T4), FM and CSA available
- Quick and easy installation, safe operation, easy maintenance and service

KEY CHARACTERISTICS

Capacities	up to 2,000 l/s (50 Hz) / 1400 l/s / 22,220 USgpm (60 Hz)
Heads	up to 70 m (50 Hz) / 110 m / 360 ft (60 Hz)
Temperatures	up to 40°C / 104°F
Motor power	up to 650 kW (50 Hz) / up to 700 kW / 940 hp (60 Hz)

APPLICATIONS

- Clean water and wastewater
- Sewage with sludge and high contain of rags
- Sewage containing solids and fibrous material
- Industrial raw water
- Municipal combined sewage and storm water systems



SUBMERSIBLE SEWAGE PUMP TYPE ABS AFP

FEATURES AND BENEFITS

- Excellent rag handling
- Specially designed impellers for reliable delivery of wastewater containing solids and fibrous material
- Hazardous locations: Approval for ATEX (Ex II 2G k Ex d IIB T4), FM and CSA available
- Quick and easy installation, safe operation, easy maintenance and service

KEY CHARACTERISTICS

Capacities	up to 2,470 l/s (50 Hz) / 2,800 l/s / 44,400 USgpm (60 Hz)
Heads	up to 67 m (50 Hz) / 94 m / 308 ft (60 Hz)
Temperatures	up to 40°C / 104°F
Motor power	650 kW (50 Hz) / 700 kW / 940 hp (60 Hz)

APPLICATIONS

- Clean water and wastewater
- Sewage with sludge and high contain of rags
- Sewage containing solids and fibrous material
- Industrial raw water
- Municipal combined sewage and storm water systems



SUBMERSIBLE PROPELLER PUMP TYPE ABS VUPX

FEATURES AND BENEFITS

- Premium Efficiency IE3 motor in accordance with IEC 60034-30
- Versatile range of axial-flow propellers
 - Low-vibration design and Low-NPSH design
 - Automatic self-centering of the pump and column pipe by means of a conical coupling ring
- Hazardous locations: Certification for ATEX (EX II 2G k Ex d IIB T4), FM and CSA available as an option

KEY CHARACTERISTICS

Capacities	up to 7,000 l/s (50 Hz) / 8,500 l/s / 134,700 USgpm (60 Hz)
Heads	up to 10 m / 33 ft
Temperatures	up to 40°C / 104°F
Motor power	up to 650 kW (50 Hz) / up to 750 kW / 1,005 hp (60 Hz)

APPLICATIONS

- Storm water protection, irrigation and aquaculture
- Industrial raw water and process water
- Combined sewage and surface water
- Return sludge or return activated sludge (RAS)
- Hazardous locations



SUBMERSIBLE MIXED FLOW COLUMN PUMP TYPE ABS AFLX

FEATURES AND BENEFITS

- Premium Efficiency IE3 motor in accordance with IEC 60034-30
- Highly efficient three-to five-blade open-type mixedflow impellers
 - Low-vibration design and Low-NPSH design
 - Automatic self-centering of the pump and column pipe by means of a conical coupling ring
- Hazardous locations: Certification for ATEX (EX II 2G k Ex d IIB T4), FM and CSA available as an option

KEY CHARACTERISTICS

Capacities	up to 3,100 l/s / 49,000 USgpm
Heads	up to 35 m (50 Hz) / 33 m / 108 ft (60 Hz)
Temperatures	up to 40°C / 104°F
Motor power	up to 650 kW (50 Hz) / up to 750 kW / 1,005 hp (60 Hz)

APPLICATIONS

- Storm water protection, irrigation and aquaculture
- Industrial raw water and process water
- Combined sewage and surface water
- Return sludge or return activated sludge (RAS)
- Hazardous locations



SUBMERSIBLE RECIRCULATION PUMP TYPE ABS RCP

FEATURES AND BENEFITS

- Compact design
- Maintenance friendly
- High hydraulic efficiencies
- High operation reliability
- Simple installation

KEY CHARACTERISTICS

Capacities	1.25 m³/s (50 Hz) / 1.25 m³/s / 19,800 USgpm (60 Hz)
Heads	up to 1.8 m / 6 ft
Temperatures	up to 40°C / 104°F
Motor power	22 kW (50 Hz) / 25 kW / 33.5 hp (60 Hz)

APPLICATIONS

- Pumping and recirculation of activated sludge in sewage treatment plants
- Pumping of storm water
- Pumping of surface and river water
- Hazardous locations: Certification for ATEX (Ex II 2G k Ex d IIB T4), FM and CSA as option



SUBMERSIBLE RECIRCULATION PUMP TYPE ABS XRCP

FEATURES AND BENEFITS

- Strongly designed for high reliability
- Premium Efficiency motor ensures lowest possible energy consumption
- No maintenance – lubricated for life
- Hydraulic-optimized stainless steel propeller ensures highest possible mixing performance

KEY CHARACTERISTICS

Capacities	up to 1.25 m ³ /s (50 Hz) / 1.25 m ³ /s / 19,800 USgpm (60 Hz)
Heads	up to 2.4 m / 7.8 ft
Temperatures	up to 40°C / 104°F
Motor power	30 kW (50 Hz) / 35 kW / 47 hp (60 Hz)

APPLICATIONS

- Pumping and recirculation of activated sludge in sewage treatment plants
- Pumping of storm water
- Pumping of surface and river water
- Hazard locations: Certification for ATEX (Ex II 2G k Ex d IIB T4), FM and CSA as option



Lifting stations

LIFTING STATION TYPE ABS PIRANHAMAT

FEATURES AND BENEFITS

- Ready for installation; robust, compact tank for buildings
- Easily transported and installed
- Fitted with Piranha submersible grinder pumps for problem-free pumping of sewage containing toilet waste

KEY CHARACTERISTICS

Capacities	up to 9.8 m ³ /h / 43 USgpm
Heads	up to 30 m / 110 ft
Temperatures	40°C up to 60°C (max. 5 minutes) 104°F up to 140°F (max. 5 minutes)
Motor power	0.40–1.7 kW / 0.9- 2.4 hp

APPLICATIONS

- Sewage and wastewater containing toilet waste
- Locations where the diameter of the discharge line is restricted



LIFTING STATION TYPE ABS SANIMAT

FEATURES AND BENEFITS

- Ready for installation
- Robust, compact tank
- Easily transported and fitted. Compact dimensions allow passage through a standard door opening
- Problem-free pumping of sewage and wastewater
- Dynamic pressure level sensor on the tank, with separate sensors for inflow level and high water alarm

KEY CHARACTERISTICS

Capacities	up to 165 m ³ /h
Heads	up to 18 m
Temperatures	40°C up to 60°C (max. 5 minutes)
Motor power	1.3–6.0 kW

APPLICATIONS

- Sewage and wastewater containing toilet waste
- Apartment blocks, hospitals, hotels, and large commercial developments



LIFTING STATION TYPE ABS SYNCONTA

FEATURES AND BENEFITS

- Simple pump installation and maintenance — no need to enter the sump
- Pump seals automatically onto the discharge line when lowered into the high level coupling, irrespective of the inflow or direction of the discharge lines
- For fitting with pumps from the Piranha and AS ranges

KEY CHARACTERISTICS

Capacities	up to 38 m ³ /h
Heads	up to 37 m
Temperatures	40°C up to 60°C (max. 5 minutes)
Motor power	1.3–2.6 kW

APPLICATIONS

- Sewage and wastewater containing toilet waste



LIFTING STATION TYPE ABS NIROLIFT

FEATURES AND BENEFITS

- Globular shape for extra strength
- Easily transported and fitted. Compact dimensions allow passage through a standard door opening
- Kit available as an accessory for sealing the top of the tank to a damp-proof course
- Universally adjustable in height and can be swiveled: easy to align with floor levels and tiling patterns

KEY CHARACTERISTICS

Capacities	up to 16 m ³ /h
Heads	up to 11 m
Temperatures	40°C up to 60°C (max. 5 minutes)
Motor power	0.16–0.56 kW

APPLICATIONS

- Pumping wastewater without toilet waste
- Washing machines, sinks, dishwashers, showers, and bathtubs



LIFTING STATION TYPE ABS SANIMAX

FEATURES AND BENEFITS

- Supplied as standard with pump, automatic level control and non-return valve
- Compact lifting station suitable for installation at floor level near the wastewater source below the sewer backwash level
- Flood-proof, with and odour preventing vent system
- Alarm float switch available as accessory

KEY CHARACTERISTICS

Capacities	up to 16 m ³ /h
Heads	up to 11 m
Temperatures	40°C up to 60°C (max. 5 minutes)
Motor power	0.16–0.56 kW

APPLICATIONS

- Pumping of wastewater without toilet waste
- Sinks
- Showers and bathtubs
- Domestic washing machines
- Domestic dishwashers, showers, and bathtubs



LIFTING STATION TYPE ABS SANISETT

FEATURES AND BENEFITS

- Synthetic, single or twin pumping station for wastewater without toilet waste
- Easily transported and fitted. Compact dimensions allow passage through a standard door opening
- Kit available as an accessory for sealing top of tank to damp proof course
- Universally adjustable in height and can be swiveled: easy to align with floor levels and tiling patterns

KEY CHARACTERISTICS

Capacities	up to 22 m ³ /h
Heads	up to 21 m
Temperatures	40°C up to 60°C (max. 5 minutes)
Motor power	0.16–2.0 kW

APPLICATIONS

- Pumping of wastewater without toilet waste
- Washing machines, sinks, dishwashers, showers, and bathtubs
- For pumping of sewage with toilet waste outside of areas covered by EN when using Piranha pump(s)



Progressing cavity pumps and macerators

PC TRANSFER PUMP

FEATURES AND BENEFITS

- Designed to deliver constant capacity with viscous fluids and shear thinning non-Newtonian fluids
- Selected drives and gearboxes with many low speed options are available, to reduce pump wear
- Compact for space saving, can be installed vertically or horizontally and run in either direction
- Competitively priced process pump with integral direct drive and gearbox, baseplate optional

KEY CHARACTERISTICS

Capacities	up to 440 m ³ /h / 1,900 USgpm
Pressures	up to 24 bar / 350 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



PC TRANSFER PERFORM PUMP

FEATURES AND BENEFITS

- Saves time with maintain in place (MIP) 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 (MIP)
- Municipal and industrial effluent (MIP)
- Shear sensitive processes (MIP)
- Shear thinning slurries (MIP)



PC CAKE PUMP

FEATURES AND BENEFITS

- A large auger inlet and screw conveyor to deliver consistent pumping and push the cake to pump
- Saves time with maintain in place features, easy to disassemble, no need to disconnect the pipework
- Feed chamber easily disconnects allowing access for removal of the rotor and screw conveyor assembly
- Designed for use in Sludge plants, where high reliability is essential and downtime is kept to a minimum

KEY CHARACTERISTICS

Capacities up to 49 m³/h / 216 USgpm
Pressures up to 24 bar / 350 psi
Temperatures -10 up to 100°C / 14 up to 212°F

APPLICATIONS

- Thickened sludge cake (>30% DS)
- Dewatered sludge transfer
- Sludge blending
- Industrial process sludge's with high % DS



PC DOSING PUMP

FEATURES AND BENEFITS

- For low flow, metering and dosing applications, with continuous and accurate capacity demands
- Gentle pumping action, minimises shear and crush damage to the pumped product
- Dosing pump parts are interchangeable with the PC transfer range, with stock standardization benefits
- An enhanced coupling rod design, gives higher pressure capabilities, up to 72 bar

KEY CHARACTERISTICS

Capacities 5 to 1,250 l/h / 0.02 to 5.50 USgpm
Pressures up to 72 bar / 1,044 psi
Temperatures up to 120°C / up to 248°F

APPLICATIONS

- Sludge dewatering
- Controlled flocculent pumping
- General industry and chemical processing



MACERATOR, IN CHANNEL SERIES

FEATURES AND BENEFITS

- Prevents clogging and blockages downstream of the Macerator, reducing unplanned maintenance
- Supplied with a PLC to protect against damage from unexpected materials and overloads
- Industrial bulk waste reduction and savings realized through waste recycling

KEY CHARACTERISTICS

Capacities up to 1,150 m³/h / 5,000 USgpm

APPLICATIONS

- Protection of pumps and systems
- Imported sludge transfer applications
- Industrial wet waste grinding and maceration



MACERATOR, IN PIPELINE SERIES

FEATURES AND BENEFITS

- Twin shafts, slow speed and high torque, the grinders provide positive displacement solids grinding
- Protects pumps and sludge treatment process, filters, digesters and equipment
- Maintain in place, quick removal of rotating wear items, with no electrical disconnection required

KEY CHARACTERISTICS

Capacities up to 330 m³/h / 1,400 USgpm
Pressures up to 0.4 bar / 5.8 psi

APPLICATIONS

- Protection of pumps and systems
- Fine grading of sludge for digestion plant
- In Pipeline applications



Submersible dewatering pumps

SUBMERSIBLE DRAINAGE PUMP J AND XJ

FEATURES AND BENEFITS

- Easy to start with built-in contactor
- Abrasive-resistant impellers provide extended pump life in tough applications
- Double outer casing and good heat convection enable the pump to operate continuously at low levels – or even run dry without damaging the motor
- External inspection ports for the oil and motor chambers enable quick and easy evaluation of the shaft seal during service
- Conversion between high-volume and high head hydraulics is managed with only a few parts, ensuring the right performance for the application

KEY CHARACTERISTICS

Capacities up to 330 l/s / 5,440 USgpm
Heads up to 90 m / 331 ft
Motor power up to 56 kW / 94 hp

APPLICATIONS

- Suitable for pumping water and dirty water mixed with light abrasives



SUBMERSIBLE DRAINAGE CENTER-LINE PUMP JC AND XJC

FEATURES AND BENEFITS

- Easy and fail-safe starting with optional AquaTronic
- An impeller and wear ring in white cast iron, as well as diffusers coated in oil-resistant nitrile rubber, provide high abrasion resistance
- Double outer casing and good heat convection enable the pump to operate continuously at low levels – or even run dry without damaging the motor
- Due to the modular design, the same parts can be used for different pumps, which lowers the overall service costs
- The high-efficiency motor and new hydraulics combine with low-friction bearings to reduce power losses
- Conversion between high-volume and high-head hydraulics is managed with only a few parts, ensuring the right performance for the application

KEY CHARACTERISTICS

Capacities up to 54 l/s / 865 USgpm
Heads up to 76 m / 308 ft
Motor power up to 11.8 kW / 18 hp

APPLICATIONS

- Suitable for pumping water and dirty water mixed with light abrasives



SUBMERSIBLE SLUDGE PUMP JS AND XJS

FEATURES AND BENEFITS

- Easy and fail-safe starting with optional AquaTronic
- A free-flow vortex impeller and pump volute make the pump ideal for pumping water mixed with solids
- Both the impeller and volute are made from heavy-duty ductile iron for maximum durability
- The top cover and motor housing are made of lightweight aluminum, which creates a pump that is very easy to handle and install
- Due to the modular design, the same parts can be used for different pumps, which lowers the overall service costs
- The high-efficiency motor and hydraulics combine with low-friction bearings to reduce power losses

KEY CHARACTERISTICS

Capacities	up to 31 l/s / 475 USgpm
Heads	up to 36 m / 131 ft
Motor power	up to 11.8 kW / 18 hp

APPLICATIONS

- Suitable for pumping dirty water and water mixed with solids



Two-stage pumps

LSP/LST TWO-STAGE LOW SPEED HIGH PRESSURE PUMP

FEATURES AND BENEFITS

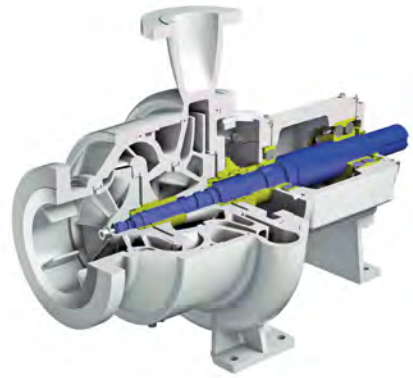
- A two-stage pump with back pull-out design for easy maintenance
- Special hydraulics with low Net Positive Suction Head Required (NPSHR) value

KEY CHARACTERISTICS

Capacities	1,100 m ³ /h / 4,760 USgpm
Heads	230 m / 750 ft
Pressures	25 bar / 360 psi
Temperatures	180°C / 355°F

APPLICATIONS

- Clean and lightly contaminated liquids
- Viscose liquids



BBT AND BBT-D 2 STAGE RADially SPLIT PUMPS ISO 13709 / API 610 BB2

FEATURES AND BENEFITS

- Centerline support for reduced thermally induced misalignment
- BBT-D double-suction impeller for low Net Positive Suction Head (NPSH)
- First critical speed is well above operating speed range for smooth operation
- Casing designed for 2x API 610 nozzle loads for freedom from piping distortions
- Grouted or ungrouted, 1x or 2x nozzle load baseplates for reduced installation cost

KEY CHARACTERISTICS

Capacities	up to 2,300 m ³ /h / 10,000 USgpm
Heads	up to 760 m / 2,500 ft
Pressures	up to 100 bar / 1,440 psi
Temperatures	up to 425°C / 800°F

APPLICATIONS

- Seawater and crude oil boosting applications
- Refinery and petrochemical process



Vertical pumps

CVT VERTICALLY SUSPENDED SUMP PUMP VS4

FEATURES AND BENEFITS

- Exceeds requirements of international ISO 5199 standard and fulfills many API 610 features
- Suitable for the most demanding industrial sump pump 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 750 m ³ /h / 3,200 USgpm
Heads	up to 120 m / 550 ft
Pressures	up to 26 bar / 375 psi
Temperatures	up to 205°C / 400°F

APPLICATIONS

- All sump applications with moderate solid content



JTS STANDARD VERTICAL TURBINE PUMP

FEATURES AND BENEFITS

- Highly engineered, reliable 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

- Municipal water and irrigation supply
- Water intake



JVCR HIGH PRESSURE CANNED LNG LOADING PUMP ISO 13709 / API 610 VS6

FEATURES AND BENEFITS

- Ease of maintenance
- Accessibility
- No inducer required
- High pump and motor efficiency
- Proven reliability

KEY CHARACTERISTICS

Capacities	up to 1,130 m ³ /h / 5,000 USgpm
Heads	up to 2,450 m / 8,000 ft
Pressures	up to 100 bar / 1,440 psi
Temperatures	up to 200°C / 400°F

APPLICATIONS

- Liquefied Natural Gas (LNG)



NKP/NKT AND WKP/WKT NON-CLOGGING CANTILEVER PUMPS

FEATURES AND BENEFITS

- Exceeds requirements of international ISO 5199 standard
- Unique, patented and superior design features minimize life cycle costs
- Suitable for all types of severe applications in seal pits and floor channels

KEY CHARACTERISTICS

Capacities	430 m ³ /h / 1,900 USgpm
Heads	60 m / 200 ft
Pressures	10 bar / 150 psi, depending on material and size
Temperatures	95°C / 205°F

APPLICATIONS

- Abrasive and/or large solids containing liquids
- Abrasive and/or large solids containing fibrous slurries
- Abrasive and/or large solids containing non-fibrous slurries



NVP/NVT NON-CLOGGING VERTICAL PUMP

FEATURES AND BENEFITS

- Exceeds requirements of international ISO 5199 standard
- Unique, patented and superior design features minimize life cycle costs
- Suitable for all types of severe applications in seal pits and floor channels

KEY CHARACTERISTICS

Capacities	1,200 m ³ /h / 5,400 USgpm
Heads	85 m / 280 ft
Pressures	10 bar / 150 psi, depending on material and size
Temperatures	95°C / 205°F

APPLICATIONS

- Large solids containing liquids in deep sump pump applications
- Large solids containing fibrous slurries in deep sump pump applications



SJD (API) VERTICALLY SUSPENDED PROCESS PUMP

ISO 13709 / API 610 TYPE VS1 AND VS6

FEATURES AND BENEFITS

- Reduced number of stages results in shorter and more reliable pumps
- Double suction or high suction specific speed (Nss) single suction 1st stage impeller designs available to reduce overall pump length
- High efficiency with reduced power consumption
- Modular construction to fit project nozzle location requirements
- High head per stage means process conditions can be reached with slower speeds

KEY CHARACTERISTICS

Capacities	up to 3,800 m ³ /h / 20,000 USgpm
Heads	up to 700 m / 3,000 ft
Pressures	up to 75 bar / 1,100 psi
Temperatures	up to 205°C / 400°F

APPLICATIONS

- LPG
- Low Net Positive Suction Head Available (NPSHA) applications
- Pipeline / tank farm boosting



SJD (CEP) VERTICAL CAN MOUNTED TURBINE TYPE PUMP

FEATURES AND BENEFITS

- Carbon graphite product lubricated bearing in bowls and columns for long maintenance-free periods
- Removable seal housing allows servicing throttle bushing without removing the head
- Separate fabricated driver stand allows using one suction and discharge head per pump size
- Spacer coupling allows servicing the mechanical seal and thrust bearing as needed
- Can is provided with lateral and anti-rotational ribs uniform inlet velocity along the can length
- Double suction or high suction specific speed (Nss) single suction 1st stage impeller designs available to reduce overall pump length

KEY CHARACTERISTICS

Capacities	up to 4,900 m ³ /h / 21,560 USgpm
Heads	up to 400 m / 1,300 ft
Pressures	up to 94 bar / 1,360 psi
Temperatures	up to 100°C / 212°F

APPLICATIONS

- Condensate extraction
- Heater drain



SJM VERTICAL MIXED FLOW PUMP

FEATURES AND BENEFITS

- Optimized hydraulics for high efficiency
- 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 possible
- Spacer coupling allows servicing the seal and thrust bearing as needed

KEY CHARACTERISTICS

Capacities	up to 58,000 m ³ /h / 250,000 USgpm
Heads	up to 30 m per stage / 100 ft
Pressures	up to 18 bar / 260 psi
Temperatures	up to 50°C / 122°F

APPLICATIONS

- Cooling water
- Nuclear safety services
- Auxiliary services
- Water intake and irrigation



SJP VERTICAL PROPELLER PUMP

FEATURES AND BENEFITS

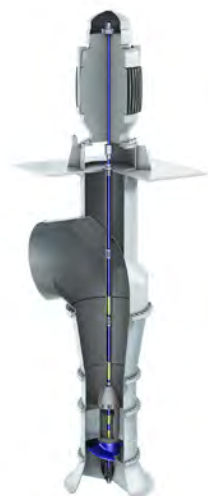
- Wide flow coverage
- Propeller pitch positions for maximum capacity handling
- Easily modified for changing hydraulic conditions
- Versatile and adaptable
- Wide choice of materials available depending on the pumped water quality

KEY CHARACTERISTICS

Capacities	up to 54,500 m ³ /h / 240,000 USgpm
Heads	up to 12 m / 40 ft
Pressures	up to 2 bar / 30 psi
Temperatures	up to 50°C / 120°F

APPLICATIONS

- Municipal water supply
- Irrigation
- Drainage and flood control
- Power plant services
- Wherever large flows over low heads are required



SJS SUBMERSIBLE PUMP VS0

FEATURES AND BENEFITS

- No lineshaft couplings or bearings to maintain
- Low, medium and high voltage submersible motors available to 2 MW (2,700 hp)
- Water/glycol filled environmentally friendly motor for improved efficiency
- Variety of materials available from stainless steel to super duplex steel
- Two configurations available: standard (motor below pump) and inverted for low Net Positive Suction Head Required (NPSHR) applications (pump below motor)

KEY CHARACTERISTICS

Capacities	up to 10,000 m ³ /h / 44,000 USgpm
Heads	up to 230 m / 750 ft
Pressures	up to 40 bar / 600 psi
Temperatures	up to 80°C / 180°F

APPLICATIONS

- Offshore seawater lift
- Offshore diesel genset firewater
- Offshore ballast water
- Onshore municipal pressure boosting



SJT VERTICAL TURBINE PUMP

FEATURES AND BENEFITS

- Optimized hydraulics for high efficiency
- 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
- Can be built to ISO 13709 / API 610 requirements

KEY CHARACTERISTICS

Capacities	up to 62,000 m ³ /h / 270,000 USgpm
Heads	up to 110 m per stage / 350 ft per stage
Pressures	up to 64 bar / 930 psi
Temperatures	up to 50°C / 122°F

APPLICATIONS

- Cooling water
- Nuclear safety services
- Auxiliary services
- Water intake and irrigation



SJT/SJM CWP VERTICAL PUMP

FEATURES AND BENEFITS

- Modern fabricated suction bell and bowl casing incorporating swirl break for stable pump performance curve
- Semi-open cast impeller design for best fitting and optimum efficiency
- Segmented elbow to reduce the internal losses
- Optional full pull-out construction to reduce lifting crane capacity and ease maintenance

KEY CHARACTERISTICS

Capacities	up to 80,000 m ³ /h / 349,000 USgpm
Heads	up to 38 m / 125 ft
Pressures	up to 6 bar / 125 psi
Temperatures	up to 50°C / 122°F

APPLICATIONS

- Cooling water



SJT GEO PRODUCTION HOT WATER PUMP

FEATURES AND BENEFITS

- Increased flow for higher geothermal hot water production capacity of 13 3/8" wells
- Increased power transmission capacity
- Increased temperature for high enthalpy geothermal resources
- Oil recovery system to protect environment or water lubricated column bearings
- Up to 5.5" end-play axial float for shaft adaptation to shallow geothermal wells

KEY CHARACTERISTICS

Capacities	up to 680 m ³ /h / 3,000 USgpm
Heads	up to 700 m / 2,300 ft
Pressures	up to 100 bar / 1,450 psi
Temperatures	up to 220°C / 428°F

APPLICATIONS

- Production hot water for geothermal power plants



SJT-VCN MOLTEN SALT CIRCULATION PUMP

FEATURES AND BENEFITS

- Umbrella incorporated to the suction bell for reduced submergence
- High suction specific speed (N_{ss}) first stage for reduced Net Positive Suction Head Required (NPSHR)
- Segmented lineshaft bearings for better shaft alignment and adaptation to the thermal expansion
- Main shaft sealing by single or double throttle bushing
- Top shaft heat radiators and fans provide thrust bearing temperature protection

KEY CHARACTERISTICS

Capacities	up to 4,000 m ³ /h / 17,600 USgpm
Heads	up to 350 m / 1,150 ft
Pressures	up to 70 bar / 1,015 psi
Temperatures	up to 600°C / 1,100°F

APPLICATIONS

- Molten salt circulation



Agitators

SALOMIX® SIDE-MOUNTED GEAR OR BELT DRIVEN PROPELLER AGITATORS

FEATURES AND BENEFITS

- High efficiency results in energy savings and improved agitation
- Cast, four-bladed, adjustable propeller blades give accurate power control
- Conical body shape supports the propeller and ensures vibration free operation
- Unique solutions

SALOMIX® SLF/STF GEAR DRIVE

KEY CHARACTERISTICS

Maximum agitated consistency	up to 6%
Propeller diameters	800, 1,000 and 1,250 mm / 30, 40 and 50 in
Power	7.5 to 55 kW / 10 to 75 hp

APPLICATIONS

- Mixing in tank
- Clean and lightly contaminated liquids
- Viscous liquids
- Fibrous slurries
- Non-fibrous slurries
- Large solids containing liquids
- Liquids with high gas content



SALOMIX® SLG/SLT GEAR DRIVE

KEY CHARACTERISTICS

Maximum agitated consistency	up to 6%
Propeller diameters	500 to 1,700 mm / 20 to 65 in
Power	5.5 to 90 kW / 7.5 to 120 hp

APPLICATIONS

- Mixing in tank
- Clean and lightly contaminated liquids
- Viscous liquids
- Fibrous slurries
- Non-fibrous slurries
- Large solids containing liquids
- Liquids with high gas content



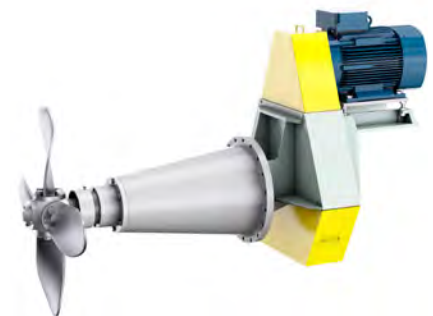
SALOMIX® SLB /SLH, STB BELT DRIVE

KEY CHARACTERISTICS

Maximum agitated consistency	up to 6%
Propeller diameters	500 to 1,700 mm / 20 to 65 in
Power	5.5 to 90 kW / 7.5 to 120 hp

APPLICATIONS

- Mixing in tank
- Clean and lightly contaminated liquids
- Viscous liquids
- Fibrous slurries
- Non-fibrous slurries
- Large solids containing liquids
- Liquids with high gas content



SALOMIX® SLR/STR

KEY CHARACTERISTICS

Maximum agitated consistency	up to 6%
Propeller diameters	315 to 800 mm / 12 to 30 in
Power	2.2 to 11 kW / 3 to 15 hp

APPLICATIONS

- Mixing in tank
- Clean and lightly contaminated liquids
- Viscous liquids
- Fibrous slurries
- Non-fibrous slurries
- Large solids containing liquids
- Liquids with high gas content



SCABA SIDE-MOUNTED BELT DRIVEN PROPELLER AGITATOR

FEATURES AND BENEFITS

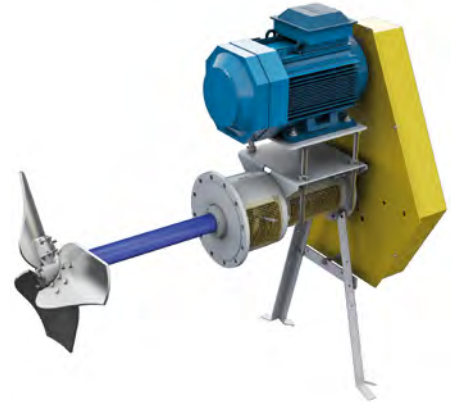
- Sturdy construction with rigid shaft and bearings
- High efficiency results in energy savings and improved agitation
- High flow SHP1 and SHP18 propellers are used to generate good axial flow
- Both mechanical seals and stuffing box alternatives
- Possibility to change seal without emptying the tank with stuffing box

KEY CHARACTERISTICS

Stock consistency	up to 6%
Agitated volume	735 up to 1,450 mm / 29 up to 57 in
Power	2.2 up to 200 kW / 3 up to 270 hp

APPLICATIONS

- Mixing in tank
- Clean and lightly contaminated liquids
- Viscous liquids
- Fibrous slurries
- Non-fibrous slurries
- Large solids containing liquids
- Liquids with high gas content



SALOMIX® L TOP-MOUNTED GEAR OR BELT DRIVEN AGITATOR

The L series covers gear or belt driven agitators mounted vertically on the tank top or bottom flange.

FEATURES AND BENEFITS

- Versatile impeller options meet any process needs in compliance with the rheology of the mixed fluid
- Maximum modular component flexibility
- Applicable for tanks from 1 to 2,500 m³ / 88,285 ft³

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
- Viscous liquids
- Fibrous slurries
- Non-fibrous slurries
- Large solids containing liquids
- Liquids with high gas content



SCABA TOP-MOUNTED GEAR OR BELT DRIVEN AGITATOR

The top-mounted series covers gear or belt driven agitators mounted vertically on the tank top or bottom flange.

FEATURES AND BENEFITS

- 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
- Viscous liquids
- Fibrous slurries
- Non-fibrous slurries
- Large solids containing liquids
- Liquids with high gas content



SUBMERSIBLE MIXER TYPE ABS XRW

FEATURES AND BENEFITS

- Lowest energy consumption
- Easy upgrade of existing installations supported by a wide range of brackets and adapters
- Operational flexibility with variable speed to match the real mixing task and to manage changes throughout the year
- The robust design and the Premium Efficiency motor give superior reliability and long operating life

KEY CHARACTERISTICS

Capacities	up to 1.79 m ³ /s / 28,300 USgpm
Diameters	up to 900 mm / 35 in
Temperatures	up to 40°C / 104°F
Motor powers	22 kW (50 Hz) 25 kW / 33.5 hp (60 Hz)

APPLICATIONS

- Mixing and stirring applications in sewage treatment plants and industrial areas
- Homogenization of highly-concentrated sewage sludge



SUBMERSIBLE MIXER TYPE ABS RW

FEATURES AND BENEFITS

- Compact, water pressure-tight design
- Easy to replace existing installations using a wide range of brackets and adapters
- Shorter mixing times
- Reliable with a minimal risk of motor overloading

KEY CHARACTERISTICS

Capacities	up to 6,300 m ³ /h / 28,000 USgpm
Diameters	up to 900 mm / 35 in
Temperatures	up to 40°C / 104°F
Motor powers	22 kW (50 Hz) 25 kW / 33.5 hp (60 Hz)

APPLICATIONS

- Prevention of deposits and floating crusts in pump sumps
- Mixing and stirring applications in sewage treatment plants and industrial areas
- Homogenization of highly-concentrated sewage sludge



FLOW BOOSTER TYPE ABS XSB

FEATURES AND BENEFITS

- Premium Efficiency motor gives total efficiency improvement of up to 25% compared to other conventional mixer designs
- Compact, water pressure-tight design
- Provides high thrust and high flow capacity
- Self-cleaning propellers provides vibration-free operation
- Increased performance variations with an extended and wide duty range
- Superior reliability and long operating life

KEY CHARACTERISTICS

Capacities	up to 6.2 m ³ /s (50 Hz) / 6.0 m ³ /s / 95,200 USgpm (60 Hz)
Diameters	up to 2,750 mm / 108 in
Temperatures	up to 40°C / 104°F
Motor powers	up to 7.5 kW / 10.1 hp

APPLICATIONS

- Gentle circulation and mixing in:
 - Sewage treatment plants
 - Industrial areas
- Low-speed wastewater mixing and stirring applications, including:
 - Equalization of sewage
 - Biological processes
 - Selector (contact zone)
 - Hazardous locations ATEX Ex II 2G k Ex d IIB T4



FLOW BOOSTER TYPE ABS SB

FEATURES AND BENEFITS

- Robust compact design
- Can be used in tanks of all shapes
- Hydrodynamic shape for optimum flow formation
- Drive unit optimized for mixing application
- Long operating life

KEY CHARACTERISTICS

Capacities	up to 3.9 m ³ /s (50 Hz) / 4.2 m ³ /s / 62,000 USgpm (60 Hz)
Diameters	up to 2,500 mm / 98 in
Temperatures	up to 40°C / 104°F
Motor powers	up to 4.5 kW (50 Hz) / 4.6 kW / 6.2 hp (60 Hz)

APPLICATIONS

- Suspension of activated sludge
- Flow generation in oxidation ditches



Compressors and aerators

DISC DIFFUSER SYSTEM TYPE ABS

FEATURES AND BENEFITS

- Reliable and long-lasting
- Low pressure drop and high aeration efficiency
- Possibility of future increase in aeration capacity
- Quick and easy installation with flexible layout design
- High temperature endurance

KEY CHARACTERISTICS

Air flow	0.5–15 m ³ /h per diffuser
Max water depth	0.5 -15 m

APPLICATIONS

- Aeration of municipal wastewater
- Aeration of industrial wastewater



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

- Aeration for treatment of municipal and industrial wastewater
- Industrial applications



AERATOR TYPE ABS VENTURI JET

FEATURES AND BENEFITS

- Easily installed, stand-alone or portable with optional fixed installation
- Reduces odors and septic conditions
- Cost-effective installation
- Self-aspirating—no need for compressed air
- Operates irrespective of water level variation
- Very low noise level, no aerosol formation, and no sedimentation on the bottom, thus minimizing environmental effects

KEY CHARACTERISTICS

Air flow 50–550 m³/h / 60–650 CFM
Max water depth 2–6 m / 6.6–19.7 ft
Motor power 1.3–18.5 kW / 1.7–24.8 hp

APPLICATIONS

- Activated sludge basins and Sequencing Batch Reactors (SBR), providing aeration and mixing in one unit
- Mixing and equalization basins
- Sludge storage and stabilization
- Flotation of oil and grease
- Additional aeration



SUBMERSIBLE AERATOR TYPE ABS XTA AND XTAK

FEATURES AND BENEFITS

- Easy to install and freestanding on the bottom of the basin—no need to empty the basin for installation
- Wear-resistant and long lifetime
- Very low noise level, no aerosol formation, and no sedimentation on the bottom, thereby minimizing environmental effects
- Self-cleaning
- High aeration efficiency
- Excellent solids suspension capability

KEY CHARACTERISTICS

Oxygen transfer up to 70 kg O₂/h @ 6 m
Max water depth 2–6 m / 6.6–19.7 ft
Motor power 3–75 kW / 4–100 hp

APPLICATIONS

- Activated sludge basins and Sequencing Batch Reactors (SBR)
- Sludge storage and stabilization
- Flotation of oil and grease
- Additional aeration
- Neutralization of alkaline wastewater with CO₂ or flue gas



SUBMERSIBLE AERATOR TYPE ABS OKI

FEATURES AND BENEFITS

- Lifiable and selfstanding, making it easy to change the plant configuration—no need to empty the tank
- Suitable for all usual tank depths, especially deep tanks
- Designed for non-clogging operation
- Suitable for both continuous and intermittent process operation
- Can run as an aerator and/or mixer according to process requirements
- High aeration efficiency

KEY CHARACTERISTICS

Oxygen transfer up to 270 kg O₂/h @ 8 m
Air flow up to 3,600 m³/h / 2,100 CFM
Max water depth 4–12 m / 13–39 ft
Motor power 3–37 kW / 4–49.6 hp

APPLICATIONS

- Activated sludge basins and Sequence Batch Reactors (SBR), Membrane Bio Reactors (MBR), and Moving Bed Bio Reactors (MBBR)
- Sludge storage and stabilization
- Flotation of oil and grease
- Additional aeration



Medium Consistency (MC™) products

THE FLUIDER™ TECHNOLOGY INCLUDE PROVEN PATENTED STOCK PUMPING RANGES:

- MCE™ Pumping Systems
- LCE™ Pumping Systems
- KCE™ Pumping Systems

FEATURES AND BENEFITS

- Highest efficiency, reducing power consumption and installation costs
- Correct fluidization prevents fiber over-treatment
- Degassing alternatives include a built-in degassing system, a separate external MDS degassing system, and degassing without a vacuum pump
- High-temperature pumping
- Low and high inlet level pumping
- One-drive unit system in most applications
- Proven long-life mechanical design

KEY CHARACTERISTICS

Heads up to 250 m / 820 ft
From 20 to 7,000 ADMT/d
Consistency range 6–18%

MCE™ PUMPING SYSTEM



APPLICATIONS

- For demanding medium-consistency fibrous slurry applications up to 18% consistency

LCE™ PUMPING SYSTEM



APPLICATIONS

- For demanding semi-medium consistency, fibrous slurry applications from 6 to 10% consistency

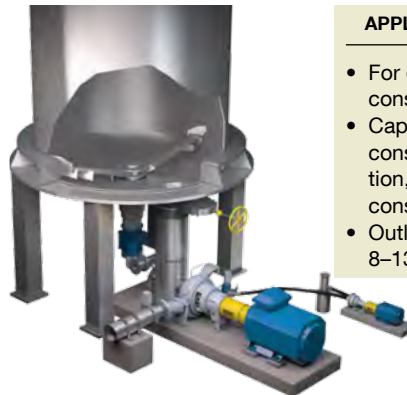
KCE™ PUMPING SYSTEM



APPLICATIONS

- For demanding semi-medium consistency fibrous slurry applications up to 12% consistency

MC® DISCHARGE SCRAPER AND THE TOWER DISCHARGE PUMPING



APPLICATIONS

- For discharging high consistency towers.
- Capability to 13% tower consistency without dilution, and to 20–35% tower consistency with dilution
- Outlet consistency typically 8–13%

SX CHEMICAL MIXER



APPLICATIONS

- For mixing gases or chemicals in process pipe to clean and lightly contaminated liquids, viscous liquids, fibrous and non-fibrous slurries

MC® DISCHARGER



APPLICATIONS

- For dividing and controlling high-consistency fibrous slurry flows and for fibrous slurry towers or reactors
- For removing gas from the process

Controllers

PUMP CONTROLLER TYPE ABS PC 111 AND 211

FEATURES AND BENEFITS

- Easy-to-use single (PC 111) and dual-pump controllers
- Improves the functionality and reliability of the pumping station throughout its life-cycle
- Start / Stop based on floats or level sensor
- Easy setting via turn-knob
- Built-in current transformer
- Built-in moisture and temperature monitoring
- Built-in battery charger & buzzer

APPLICATIONS

- Mainly for use in either gravitation or pressurized municipal wastewater pumping stations



PUMP CONTROLLER TYPE ABS PC 242

FEATURES AND BENEFITS

- Two-pump controller
- Advanced features to minimize costs in the pumping station throughout its life-cycle
- Reduced energy-, tankering- and maintenance costs
- Reduced risk for overflows
- More even flow to treatment plant
- Reduced electrical and hydraulic peak load on the network
- Supports data logging and communication

APPLICATIONS

- Mainly for use in either gravitation or pressurized municipal wastewater pumping stations



PUMP CONTROLLER TYPE ABS PC 441

FEATURES AND BENEFITS

- Monitor and controller for one to four pumps
- Advanced features to minimize costs in the pumping station throughout its life-cycle
- Lower energy costs
- Reduced risk of overflow
- Reduced risk of blockage
- Reduced maintenance need
- Supports data logging and communication

APPLICATIONS

- Mainly for use in municipal wastewater pumping stations



CONTROL SYSTEM TYPE ABS PCx

FEATURES AND BENEFITS

- Powerful, technically-advanced control system enabling scalable, flexible, and modular system buildup
- For up to 16 pumps divided over 4 pits
- Many pre-defined control functions
- Advanced flow calculations
- Advanced communication capabilities
- Modular and expandable IO system

APPLICATIONS

- Small and medium-sized sewage treatment plants, water treatment plants, booster pressure stations, and sewage pumping stations



Measuring devices

Sulzer offers a wide range of measuring devices. For information about the full range, visit www.sulzer.com.

SUBMERSIBLE PRESSURE SENSOR TYPE ABS MD 126 AND 127

FEATURES AND BENEFITS

- High-accuracy submersible hydrostatic level sensor
- Encapsulated in stainless steel and resistant to sewage water
- Designed to measure levels in liquids

APPLICATIONS

- Measure levels of liquids such as storm water and wastewater in pump sumps



SUBMERSIBLE PRESSURE SENSOR TYPE ABS MD 131

FEATURES AND BENEFITS

- Conductive level switch
- The sensor head is made of PTFE to reduce risk of clogging and therefore improving overall availability

APPLICATIONS

- Primarily used as overflow switch in sewage pumping pits



Control panels

Sulzer offers a wide range of control panels for one or two pumps. For information about the full range, visit www.sulzer.com.

CONTROL PANEL TYPE ABS CP 112 AND 212

FEATURES AND BENEFITS

- Easy-to-use, compact control panel used with either one (CP 112) or two pumps (CP 212) conforming to ATEX
- Direct connection to pumps up to 5.5 kW (10 A) and provides LED indication of power, pump run and alarm
- Choice of water level control includes float switches, an analog sensor and built-in pressure sensor for closed or open air systems

APPLICATIONS

- For use in municipal wastewater pumping stations



CONTROL PANEL TYPE ABS CP 116 AND 216

FEATURES AND BENEFITS

- Easy-to-use, compact control panel used with either one (CP 116) or two pumps (CP 216) conforming to ATEX
- Complete surveillance of pumps and station with transfer of alarms to central system over telemetry
- Measures and records the performance of station and equipment for a more reliable operation

APPLICATIONS

- For use in municipal wastewater pumping stations



Monitoring

Sulzer offers a wide range of monitoring equipment for advanced monitoring of pumping stations. For information about the full range, visit www.sulzer.com.

LEAKAGE RELAY TYPE ABS CA 461

FEATURES AND BENEFITS

- Designed to spy and detect leakage in pumps and mixers
- Minimizes the risk of false alarms

APPLICATIONS

- For use in municipal wastewater pumping stations



TEMPERATURE AND LEAKAGE RELAY TYPE ABS CA 462

FEATURES AND BENEFITS

- Designed to spy and detect temperature and leakage in pumps and mixers
- Minimizes the risk of false alarms

APPLICATIONS

- For use in municipal wastewater pumping stations



Accessories

TYPE ABS AQUAAPP

FEATURES AND BENEFITS

- Local Wi-Fi, Bluetooth or Internet based connection to ABS Control and Monitoring equipment
- Graphical pump and pit status indication for 1-4 pumps
- View Events and Alarms including acknowledgement

APPLICATIONS

- Designed specifically for wastewater collection pumping stations



TYPE ABS AQUAPROG

FEATURES AND BENEFITS

- Window based software specifically developed for configuration and software upgrade of Sulzer substations
- Configures Sulzer controllers & panels
- Checks and acknowledges alarms
- Shows the status of specific stations
- Shows and acknowledges alarms
- Collects and sends configuration data for each substation
- Local / remote substation software upgrade
- Shows the status of the in- and outputs of the substation

APPLICATIONS

- Designed specifically for wastewater collection pumping stations



TYPE ABS AQUAWEB

FEATURES AND BENEFITS

- Web based monitoring and surveillance system with as well remote control and alarm handling capabilities
- Shows the status of the entire collection network on a map
- Shows the status of specific stations
- Advanced alarm handling and routing
- Categorization of alarms and reason
- Collects and presents events
- Collects and presents log data



For information about the full range of Monitoring and Control equipment, visit www.sulzer.com.



www.sulzer.com



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