

Flow Equipment

Sales program





Tomorrow's solutions today

Sulzer is the leading pump original equipment manufacturer (OEM) with a rich heritage of nearly 200 years. We are dedicated to providing highly innovative pumps, agitators, mixers, turbocompressors and treatment equipment, all aimed at enhancing the efficiency, reliability, and profitability of fluid processes worldwide.



In various industries, Sulzer pumps have set the benchmark for performance. Our advanced technologies empower operators to achieve new levels of process efficiency. From creative design to precision manufacturing, rigorous testing to seamless installation, our tailored approach ensures a perfect solution even for the most demanding applications.



With an extensive network of manufacturing facilities and service centers, we offer comprehensive local engineering support across the globe. Our dedicated in-house experts and field service teams collaborate seamlessly across borders, leveraging Sulzer's wide-ranging capabilities from any facility.



At Sulzer, sustainability is at the core of our values. Our pumps support numerous renewable energy applications and drive energy efficiencies in power-intensive processes. By utilizing our pumps, operators can effectively reduce energy consumption and carbon emissions, improving the sustainability of their operations.



Stay ahead of the curve with our cutting-edge solutions like BLUE BOX™, which places Sulzer at the forefront of digital analytics for pumps. BLUE BOX™ provides actionable insights into pump performance, allowing users to optimize reliability and minimize operational costs, achieving new levels of process optimization.

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Contact us today to explore how Sulzer's top-of-the-line solutions can transform your fluid processes. Together, let's pave the way for a more efficient, sustainable, and digitally-driven future.

Dedicated innovations for modern industry



Sulzer is the go-to supplier of pumps for upstream, mid-stream and downstream oil and gas applications. From seawater injection and CO₂ pumping to pipeline and refinery applications – Sulzer high performance pumps deliver unmatched efficiency, reliability and safety.



As power stations adapt to the energy transition, Sulzer pumps enable all types of facilities to efficiently meet changing duty points and reach new environmental standards. Furthermore, exceptional reliability and efficiency ensure cost-effective power generation.



Sulzer solutions ensure that the delivery of clean water and the treatment of wastewater are achieved in the most energy efficient and reliable manner. By minimizing operational costs and boosting performance, utilities can improve the resilience of any water process.



Even when pumping the most aggressive chemicals, Sulzer pumps offer exceptional performance and service life in these challenging applications. With customized solutions designed to meet the needs of specific chemical production processes, Sulzer application knowhow is unmatched.



Delivering high-efficiency pumps for wasteto-energy, geothermal, hydropower and solar applications – Sulzer supports clean energy globally. Products with extended service lives and market-leading efficiency allow sites to capitalize on renewable power generation.



Sulzer pumping, agitation and mixing solutions offer the ability to reliably move chemicals and fluids in the harsh application environments of the sector. Long service lives and low energy consumption ensure a competitive edge for producers.



Sulzer excels in an industry where reliability and hygiene are key, offering specialized pumps for challenging applications involving sugars and starches. Tailored designs for specific processes offer the utmost efficiency for food and beverage production.



The first choice for mine dewatering pumps, Sulzer has proven its expertise through decades of successful mine water management. Furthermore, its durable designs ensure excellent reliability in challenging metal processing applications.



Exceptional experience in chemical processing means that Sulzer offers dedicated solutions for optimized production of ammonia, urea, NPK, phosphate and potash fertilizers. Durable products are ready-made to withstand corrosive and abrasive liquids.



Choose sustainability

At the forefront of pump design and the rapidly growing renewables sector, Sulzer is delivering solutions for a sustainable future. Our customers can achieve new environmental and energy saving standards, reducing emissions and adding value to operations.

Energy efficiency

Sulzer pumps offer superior efficiency due to tailored designs, exceptional hydraulics, tight internal tolerances and innovative impellers. This delivers increased power per stage and an inherent efficiency improvement across all modes of operation. Agitators, mixers, grinders, aerators, and turbo compressors all offer the utmost mechanical and electrical efficiency. As a result, operators can reduce the energy consumption of any fluid process.

Renewables

As the renewable power sector grows exponentially, Sulzer is providing proven high-efficiency pump solutions specialized for a multitude of applications. Offering boiler infeed pumps for waste-to-energy plants, brine reinjection pumps for geothermal applications, molten salt pumps for concentrated solar power (CSP) facilities, pumped storage for hydropower installations and more – Sulzer's durable, efficient solutions help operators maximize output.

Energy transition

With the growth of renewables, traditional power plants are adapting. Grid supply shortfalls from wind or solar power mean that other sites need to meet fluctuating loads, pushing existing equipment beyond its best efficiency point. Sulzer retrofits offer a solution, with tailored designs ready to seamlessly integrate with plant infrastructure. Therefore, the energy transition can be achieved while securing pump efficiency.

Carbon capture

World renowned for its technical knowhow regarding CO₂ pumping, Sulzer is a leading provider of products for carbon capture and storage. Delivering the high pressures and mechanical specializations needed to achieve capture, transport, and injection – Sulzer pumps are used in industrial carbon capture projects and in the reinjection of supercritical CO₂ into oil reservoirs, helping to reduce environmental impact.

Operational impact

Every Sulzer facility is committed to reducing its own environmental impact. Constantly working to reduce waste, water consumption and greenhouse gas emissions – all sites evaluate operations and continually work to meet environmental goals. By partnering with Sulzer, customers not only reduce their environmental footprint, but can trust that any solution provided is built with the planet in mind.

Sulzer's global footprint

As a global pump OEM, Sulzer operates first-inclass facilities, encompassing over 180 production sites, sales offices and service centers in more than 50 countries. All of our manufacturing plants have local testing capabilities to demonstrate product performance.

Production sites

Ambernath, Navi Mumbai, India

- Workshop area 5'000 m²
- ISO 9001, ISO 14001 and OHSAS 18001 certification
- Focus on oil and gas, petrochemicals, alternate fuels, CO₂, power generation, water including desalination and industries applications
- Test bed with capacity to test pumps up to 8 MW (50/60 Hz). Remote inspection facility available through Teams.
- Custom-engineered and pre-engineered pumps with main focus on multi-stage pumps



Bruchsal, Germany

- Workshop area 8'091 m²
- ISO 9001, ISO 14001 and ISO 45001 certification
- Focus on oil and gas and power generation industries
- The different test beds allow up to 15'000 m³/h 4.5 MW at all required industrial voltage levels for bare pumps or complex units
- · Remote witness testing is installed
- Custom-engineered and pre-engineered pumps



Buchelay, France

- Workshop 4'500 m²
- Certification of ISO 9001, ISO 14001, ISO 45001 and ISO 19443 (nuclear-specific quality management)
- Focus on power generation industry, especially nuclear
- Test bed up to 5.8 MW (on demand 12.5 MW) and 13'000 m³/h, temperature testing up to 200°C, high temperature gradient, tests with abrasive particles, low NPSH (<1m)
- Custom-engineered pumps



Burgos, Spain

- Workshop area 4'000 m²
- ISO 9001, ISO 14001 and ISO 45001 certification
- Focus on power generation, energy storage, oil and gas, desalination and water pumping stations
- Up to 2.2 MW, LV/MV testing capability, double loop with a suction tank for horizontals and 10 m pump pit depth for verticals to test units at normal running speeds for flows up to 25'000 m³/h and pressure ratings of 40 kg/ cm²
- Custom-engineered pumps with main focus on vertical pumps



Cuautitlán Izcalli, Mexico

- Workshop area 8'000 m²
- ISO 9001, ISO 14001 and ISO 45001 certification
- Focus on oil and gas, power generation, water and industry applications
- Six loops for testing capability up to 5.0 MW for horizontal and vertical pumps, the vertical test bed 11 meters depth – 25'000 m³/h
- Custom-engineered and pre-engineered pumps



Dalian, China

- Workshop area 14'330 m²
- ISO 9001, ISO 14001 and ISO 45001 certification
- General and chemical process industry, water
- Seven test beds including four open loops and three closed loops
- Configured dry-installed process pumps and agitators, axial flow pumps, multi-stage pumps, and mechanical seals



Digha, Navi Mumbai, India

- Workshop area 7'345 m²
- ISO 9001, ISO 14001 and OHSAS 18001 certification
- Focus on oil and gas, petrochemicals, CO₂, alternate fuel, water, industry and power markets
- Test bed with capacity to test pumps up to 3.5 MW (50/60 Hz) and can handle up to eight pumps being performance tested in parallel. Remote inspection facility available through Teams.
- Custom-engineered, pre-engineered and standard pumps



Easley, USA

- Workshop area 8'100 m²
- ISO 9001. ISO 14001 and OHSAS 18001 certification
- General and chemical process industry, water
- Four test rigs including a 5'600 m³/h and 650 kW test pit
- Configured and standard process pumps, submersible pumps



Hanhals - Gothenburg, Sweden

- Warehouse and manufacturing area 1'200 m²
- ISO 9001, ISO 14001 certification
- Water and wastewater
- Zickert and Lamella



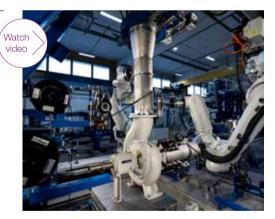
Jundiaí, Brazil

- Workshop area 7'900 m²
- ISO 9001, ISO 14001 and OHSAS 18001 certification, CSA, and CNEN-NN 1:16 for the nuclear segment
- Focus on oil and gas, hydrocarbon processing, power generation, general industry applications, water and wastewater
- The testing capability with 13'800 V electrical supply installed, a sump depth of 11.5 m and a power capacity up to 15'000 kW
- Custom-engineered, pre-engineered and standard pumps, Muffin Monster grinders, submersible pumps and mixers



Karhula, Finland

- Workshop area 16'785 m²
- ISO 9001, ISO 14001 and ISO 45001 certification
- General and chemical process industry, water
- Research center and test beds allowing full scale testing of all pumps and compressors
- New, highly automated and digitized pump production line and logistics center
- Configured and pre-engineered pumps, agitators, and compressors



Kunshan, China

- Workshop area 8'000 m²
- ISO 9001, ISO 14001 and ISO 45001 certification
- Water and wastewater
- Four test beds
- Submersible pumps, submersible mixers, Muffin Monster grinders and Monster Band Screens (MBS)



Leeds, UK

- Workshop area 14'000 m²
- ISO 9001, ISO 14001, ISO45001 and ISO 50001 certification
- Focus on oil and gas industries
- one of the world's largest pump test beds for string testing gas turbine driven pump packages with installed drive power of up to 30 MW. Subsea test bed to test pump/motor packages with powers up to 6 MW under realistic submerged conditions
- Custom-engineered pumps



Mariestad, Sweden

- Warehouse and manufacturing area 3'800 m²
- ISO 9001, ISO 14001 certification
- Water and wastewater
- Central aftermarket and service center
- Engineered MEVA screening system



Portland, USA

- Workshop area 2'285 m² (24'600 sq ft.)
- ISO and NSF certification
- Engineering supports on the pumps for oil and gas, power generation, and water applications. Special at large vertical pumps production
- Testing capability is 23 ft deept fit for vertical pump test capability, and 8 ft tower (centered over pit) for vertical testing up to 30 ft lg. Maximum flow range up to 250'000 gpm.
- Vertical turbine pumps



Riyadh, Saudi Arabia

- Workshop area 13'125 m²
- ISO 9001, ISO 14001, and ISO 45001 certification
- Focus on oil, gas and chemicals, water and power industries
- Testing capability is up to 3.7 MW. 460V, 4.16KV and 13.2 KV electrical supply. 2 separate pits of 10 m and 7 m depth for vertical pump testing. Two separate closed loops testbeds for horizontal pump testing.
- Engineered horizontal and vertical centrifugal pumps



Santa Ana, USA

- Workshop area 7'300 m²
- ISO 9001 certification
- Municipal and industrial wastewater, Industrial processing
- Three grinder testing stations fitted with motor controllers that can handle up to 480V AC
- Waste shredders, screening systems, Muffin Monster and Channel Monster grinders



Saint-Quentin, France

- Workshop area 10'000 m²
- ISO 9001 and ISO 50001 certification
- General and chemical process industry
- Five test beds with pressures up to 20 bars
- Horizontal ISO and slurry pumps, verticalized and vertical turbine pumps, axial flow pumps



Suzhou, China

- Workshop area 13'600 m²
- ISO 9001, ISO 14001, and ISO 45001 certification
- Focus on oil and gas, power generation, renewable energy and engineered water market
- Pump test power supply limit to 13 MW and variable frequency drive ability, pump flow up to 65'000 m³/h and pressure up to 630 bar either with bare shaft pump test or string test
- A wide range of custom-engineered pumps and preengineered pumps



Thimister-Clermont, Belgium

- ~ 50 people
- ISO 9001 certification
- · Focus on oil, gas and industry market
- Sales and tendering for Ensival-Moret products, wood patten production



Vadstena, Sweden

- Workshop area 14'500 m²
- ISO 9001, ISO 14001 and OSHAS 18001 certification
- Water, wastewater, process industry
- Test beds and research facilities
- Engineered and pre-engineered pumps, horizontally and vertically-mounted agitators



Wexford, Ireland

- Workshop area 11'500 m²
- ISO 9001, ISO 14001 and OHSAS 18001 certification
- Water, wastewater and dewatering
- Testing facility with CSA accreditation and research facilities
- Submersible pumps, submersible mixers and Muffin Monster grinders





Add value to pump operations with digitalization

Sulzer's award-winning, cloud-based solution BLUE BOX™ combines the Internet of Things (IoT) and advanced analytics to optimize any pump system and process. Designed to maximize asset reliability while reducing operational risk, BLUE BOX uses real-word data and artificial intelligence (AI) to deliver operational insights for pumping equipment.

By preventing failures and informing predictive maintenance, the platform enhances pump uptime, performance and availability. Consequently, operators can add value to their pump operations.

BLUE BOX by Sulzer consists of the following three modules:

- Data acquisition to evaluate actual efficiency and reliability
- · Analytics to quickly identify poorly performing pumps
- Actionable insights to optimize customers' pump operations

All data analytics components including modeling, real-time predictive analytics and machine learning are performed in the Sulzer secure cloud platform. This cloud-based solution simplifies regulatory compliance, while offering minimal IT footprint and easy scalability.



Features and benefits

- Build your own data acquisition system by adding variables
- Easily integrated into existing processes
- Secure data handling and customer access
- User-friendly panel with a complete overview of all relevant data
- Real-time identification of bad actors
- Efficiency and reliability visibility to optimize operations and maintenance
- Suitable for Sulzer OEM and non-OEM pump equipment

Applications

- Liquid pipelines
- Refinery, petrochemical and chemical process applications
- Power plants
- Desalination and water transport
- Mining

go.sulzer.com/bluebox

Let Sense take care of your pump 24/7

Sulzer Sense condition monitoring is a unique solution that, in combination with our Sulzer Sense online service, allows you to remotely view the operating status of all the pumps and other rotating equipment at your facility. Wireless sensors attached to the pump measure temperature and vibration in three axes and allow operators to optimize preventive maintenance and enable troubleshooting.





Save time and money

- Accurate online measurement eliminates manual measurement
- Enables troubleshooting of pumping and process problems
- Helps and enables optimized preventive maintenance
- Minimized risk for unplanned shutdowns
- Easy to install and use
- Wireless, no cabling work

Easy, safe and convenient

- Results, trends and analysis available anywhere, anytime in Sulzer's online service via laptop, mobile phone or tablet
- Easy and safe thanks to an alert in the cloud service when adjusted temperature or vibration limits are exceeded
- Secure cloud-based solution, no software installation required

Wide range of applications

Sulzer Sense condition monitoring is suitable for all rotating equipment, such as pumps, agitators, mixers and motors, regardless of type or brand. Since nearly every production site has this kind of equipment, the suitable applications are numerous.



Watch Sulzer Sense video

sulzer.com/loT-monitoring

Product segment matrix

Product classification	Product types	Oil and gas	Power generation	Renewable energy	Municipal wastewater	Municipal clean water and desalination	Con- struction, tunneling and mining dewatering	Pulp, paper and board	General industry	Fertilizers and chemical process industry
loT and advanced	BLUE BOX™	•	•							
analytics	Sulzer Sense online services	•	•	•	•	•	•	•	•	•
Axial flow pumps	AH	•			-					
	CAHR, CAHR-V	•			•	•		•	•	•
Axially-split pumps	HPDM	•	•	•		•				
	HSA	•	•	•		•				•
	HSB	•	•	•		•				
	MSD	•	•	•		•				•
	MSD-RO					•				
	MSN-RO				-	•				
	SMD		•	•		•	•		•	•
	ZPP	•	•	•	•	•		•	•	•
Multiphase pumps	MPP/MPP-OHH	•								
Radially-split, multi- stage, barrel pumps	CP	•	•	•						
stage, barrel pumps	GSG/GSGLF	•	•	•					•	-
	GSG-BFP		•	•						
	GVG		•		-					
	HPT		•							
	HPcp/HPcpV	•	•	•						
Radially-split, multi-	MBN	•	•	•	•	•	•	•	•	•
stage, ring section pumps	MBN-RO		•			•				
	MC		•	•		•	•	•	•	•
	MD		•	•			•	•	•	•
	ME	•	•	•						
	VMS		•	•		•	•		•	•
Radially-split, one/ two stage, pumps	BBS/CD	•	•	•						
	BBT/BBTD	•	•	•						
	HPTd		•							
	HZB		•							
	HZB-HTF		•	•						

Product classification	Product types	Oil and gas	Power generation	Renewable energy	Municipal wastewater	Municipal clean water and desalina- tion	Con- struction, tunneling and mining dewatering	Pulp, paper and board	General industry	Fertilizers and chemical process industry
Single stage, end suction/overhung pumps	AHLSTAR	•	•	•	•	•	•	•	•	•
	AHLSTAR NPP/T, WPP/T, EPP/T	•	•	•	•		•	•	•	•
	A-RO					•				
	CPE	•	•	•	•	•	•	•	•	•
	EMTECH	•	•	•	•	•		•	•	•
	FR				•				•	
	NRN	•	•	•		•	•	•	•	•
	OHH/OHHL	•	•	•						•
	OHV/OHVL	•	•	•						•
	PRE/PRELF	•	•	•						•
	PRER/PRETR	•	•	•		•				•
	PRF		•			•			•	
	REL		•							
	SES/SKS		•	•		•	•	•	•	•
	SIL	•			•	•	•	•	•	•
	SNS	•	•	•	•	•	•	•	•	•
	ZA/ZE/ZF	•	•	•		•				
	ZFn		•							
Submersible	XFP				•	•	•	•	•	•
pumps	AFLX				•	•		•	•	•
	VUPX					•		•	•	•
	AFP				•	•	•	•	•	•
	AS				•					
	Coronada				•					
	ĪP				•		•			
	MF				•		•			-
	Piranha				•					-
	Robusta				•		•			
	XRCP/RCP				•					
Lifting stations	Nirolift				•					
	Piranhamat				•					
	Sanimat				•					
	Sanimax				•					
	Sanisett				•	-				
	Synconta				•					
Progressing	PC transfer pump				•	•		•	•	•
cavity pumps	PC transfer perform pump				•	•		•	•	•
	PC cake pump				•			•	•	•
	PC dosing pump				•			•	•	•

Product classification	Product types	Oil and gas	Power generation	Renewable energy	Municipal wastewater	Municipal clean water and desalination	Con- struction, tunneling and mining dewatering	Pulp, paper and board	General industry	Fertilizers and chemical process industry
Grinders	Muffin Monster™ open channel				•			•	•	•
	Muffin Monster™ inline	•	•	•	•	·	•	•	•	•
	Channel Monster™				•					
Submersible	J/XJ		-				•			
dewatering pumps	JC/XJC						•			-
	JS/XJS						•			-
Vertical pumps	JTS		•	•		•	•		•	•
	SJD-API	•	•	•						
	SJD-CEP		•	•		•				
	SJM		•						•	•
	SJS									
	SJT-API		-		•					
	SJT									
	SJT-GEO									
	SJT-CWP								_	
	VAS								_	
	VEY/VNY									
Vertical sump pumps	OCV/OCVL									
vortical camp pamps	OCVSF		-							
	VA and VAP									
	VM									
Authorous and	VSF									
Agitators and submersible mixers	SALOMIX™ side-mounted horizontal agitators (SSA, SSF)		•	•	•			•	•	•
	SALOMIX TM top-mounted vertical agitators		•	•	•			•	•	•
	Scaba top-mounted agitator		•	•	•	•		•	•	•
	XRW/RW				•		•	•	•	•
	XSB/SB				•					
Compressors and aeration	Disc diffuser system				•				•	•
	HSR						•	•	•	•
	HST™		•		•		•	•	•	•
	OKI				•			•	•	•
	Venturi Jet				•			•	•	•
	XTA/XTAK									

Product classification	Product types	Oil and gas	Power generation	Renewable energy	Municipal wastewater	Municipal clean water and desalination	Con- struction, tunneling and mining dewatering	Pulp, paper and board	General industry	Fertilizers and chemical process industry
Medium consistency products	MCE™, LCE™ and KCE™ pumping systems							•	•	
	MC discharge scraper							•	•	
	MC discharger							•	•	-
	SX chemical mixer							•	•	
Tower management systems	SALOMIX™ TES, VULCA, GLI							•		
Slurry pumps	EMW-M, EMW-R		•				•	•	•	•
	PLR						•	•	•	•
Vacuum pumps	VRN							•	•	•
Control and	Control accessories				•					-
monitoring equipment	Control and monitoring software solutions				•					
	Control panels				•					
	Measuring devices				•					
	Pump controllers				•				-	
	Pump monitoring				•		•			
Screening,	DynaCloth				•				•	•
sedimentation and filtration solutions	DynaDisc			•	•	•		•	•	•
	DynaDrum			•	•	•		•	•	•
	DynaSand			•	•	•	•	•	•	•
	DynaBelt				•				•	
	Lamella			•	•	•	•	•	•	•
	Zickert				•	•			-	
	MevaGrit				•				•	
	MevaPress				•				•	
	MevaSpiral				•				•	
	MevaScreen				•				•	

Product overview

Axial flow pumps

AH high pressure axial flow pump

Features and benefits

- High pressure design, casing designed to ASME section VIII division 1
- Double or triple mechanical seal for 5-year service life target
- Pump design and construction according to API 610 / ISO 13709 principles
- · Hand polished internals for superior surface finish
- Suspended pump or sprung baseplate to allow for thermal expansion

Key characteristics

Capacities up to 18'000 m³/h / 80'000 USgpm

Heads up to 45 m / 150 ft.

Pressures up to 100 bar / 1'500 psi
Temperatures up to 200°C / 400°F

Applications

- Polymer slurries
- Reactor circulation in PE/PP plants CAHR, CAHR-V



CAHR axial flow pump

Features and benefits

- High efficiency in high flow and low head applications
- High durability due to its heavy-duty construction
- Maximum reliability
- Low maintenance cost

Key characteristics

Capacities up to 40'000 m 3 /h / 176'000 USgpm

Heads up to 9 m / 29 ft.
Pressures up to 10 bar / 145 psi

Temperatures from -40°C to 180° C / -202°F to 356° F

- Corrosive and abrasive liquids
- Solid-contaminated liquids
- Chemicals
- Evaporation
- Crystallization
- Mining/minerals



CAHR-V vertical axial flow pump

Features and benefits

- Tailor-made design as per project requirements
- High efficiency in high flow and low head applications
- High durability due to its heavy-duty construction
- Maximum reliability

Key characteristics

Capacities up to 40'000 m³/h / 176'000 USgpm

Heads up to 9 m / 29 ft.
Pressures up to 10 bar / 145 psi

Temperatures from -40°C to 180°C / -202°F to 356°F

Applications

- Mainly used as a forced-feed circulator or closed loop under a vacuum circulator
- Corrosive slurries in low-level flash cooler and phosphoric acid slurry circulation



Axially-split pumps

HPDM axially-split, between bearing, single or multistage 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 m³/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

- Water transport
- Large crude oil pipelines
- Any other high flow, high head application



HSA axially-split, single stage pump ISO 13709 / API 610 type BB1

Features and benefits

- · Between bearing design for reliability at high flow rates
- Double suction impeller for low NPSH3
- First critical speed is well above operating speed range for smooth operation
- · Shared bearing design and components with HSB pump

Key characteristics

Capacities up to 18'000 m³/h / 80'000 USgpm

Heads up to 260 m / 850 ft.

Pressures up to 34 bar / 490 psi
Temperatures up to 150°C / 300°F

Applications

- · Cooling water
- Tank farm
- Booster applications
- Export/loading pumps



HSB axially-split, between bearing, single stage pump ISO 13709 / API 610 type 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 m³/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

n pole rotor /

MSD axially-split, multistage pumps ISO 13709 / API 610 type 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 m³/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

- Refined product pipelines
- Water injection
- CO₂ pipeline and injection
- Crude oil export
- Industrial boiler feedwater
- Lean amine circulation



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 m3/h / 7'000 USgpm

Heads up to 650 m / 2'150 ft.
Pressures up to 110 bar / 1'305 psi
Temperatures up to 60°C / 140°F

Applications

• High pressure membrane feed pump in Seawater Reverse Osmosis (SWRO)

Water transport

MSN-RO axial split multistage membrane feed pump

Features and benefits

 A proven, robust design that has been fine-tuned over years of operating in the desalination sector

• Optimized pump efficiency and reduced energy consumption

 A combination of hydraulic design, optimum efficiency and proven reliability gives lowest operational costs

Key characteristics

Capacities up to 1'450 m³/h / 7'680 USgpm

Heads up to 840 m / 2'940 ft.
Pressures up to 100 bar / 1'450 psi
Temperatures up to 50°C / 122°F

Applications

• Purpose-designed for RO applications

SMD axially-split, 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
- Suitable for drinking water with ACS and NSF61/372 certification

Key characteristics

Capacities up to 24'000 m³/h / 106'000 USgpm

Heads up to 260 m / 850 ft.

Pressures up to 34 bar / 490 psi
Temperatures up to 140°C / 280°F

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





ZPP axially-split, double suction, single stage pump

Features and benefits

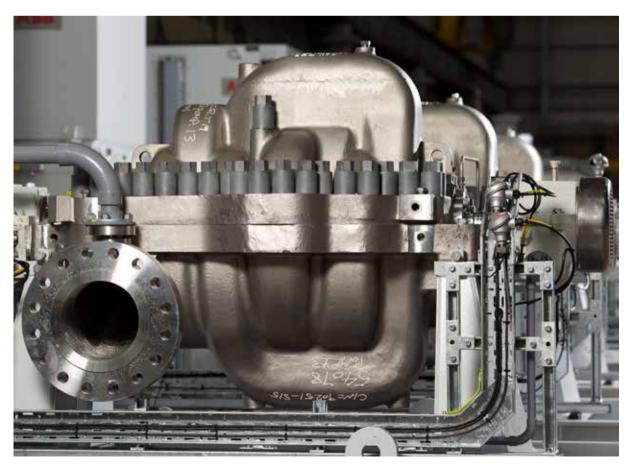
- Long and trusted experience in all industrial segments
- Low pressure-pulsation pump
- Excellent performance
- Suitable for the most demanding industrial requirements
- Exceeds requirements of international ISO 5199 standard
- Unique and superior design features minimize life cycle costs
- Quick and easy installation, safe operation, easy maintenance and service

Key characteristics
Capacities up to up to 25'000 m³/h / 110'000 USgpm

Heads up to 160 m / 525 ft. Pressures up to 20 bar / 290 psi Temperatures up to 120°C / 250°F

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





Multiphase pumps

MPP high performance multiphase pump

Features and benefits

- Helico-axial impeller designed for any Gas Volume Fraction (GVF) from 0 to 100%
- · Helico-axial stages axially compress the pumped product 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 feld development, production and decline

Key characteristics

Capacities up to 4'500 m³ / 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 multiphase or hybrid pressure boosting and transport
- Offshore topside multiphase or hybrid pressure boosting
- · Subsea multiphase or hybrid pressure boosting, water injection and transport
- Revive dead wells or increase total recovery

MPP-OHH single stage multiphase pump

Features and benefits

- Helico-axial impeller designed for any Gas Volume Fraction (GVF) from 0 to 100%
- Helico-axial easily handles robust to solid particles (specific coating can be applied depending on the process)
- Standard bearing frame the OHH bearing range designed for long bearing life
- API 682 cartridge seal type, single or dual mechanical seals

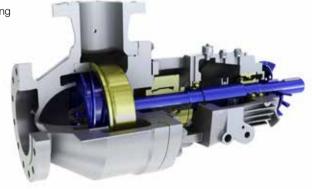
Key characteristics

Capacities up to 1'000 m³ / 4'400 US gpm Heads up to 7 bar dP / 100 psi dP Pressures up to 51 bar / 740 psi

Power up to 400 kW

Maximum speed of rotation up to 3600 rpm

- Shell Omega process (monoethylene glycol process plant)
- Petrochemical processes near liquid-vapor saturation line
- Circulation pumps in fermentation process
- DAF waste water applications



Radially-split, multistage, barrel pumps

CP radially-split, multistage barrel pump ISO 13709 / API 610 type 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 m³/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

- · Water injection
- Offshore crude oil shipping
- · Refinery charge
- · Boiler feedwater
- · Nuclear safety services



GSG diffuser style barrel pump ISO 13709 / API 610 type BB5

Features and benefits

- Low-pressure, high-pressure, twistlock, and high-temperature designs suit many applications
- Direct drive options up to 6 MW
- Back-to-back rotor stack allows up to 16 stages on low-density fluids
- Multiple sizes cover a broad hydraulic range

Key characteristics

Capacities up to $900 \text{ m}^3/\text{h} / 4'600 \text{ USgpm}$ Heads up to 2'600 m / 10'000 ft.Pressures up to 300 bar / 4'500 psiTemperatures up to $425^{\circ}\text{C} / 800^{\circ}\text{F}$

Applications

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

r-density fluids

GSG-BFP diffuser style barrel pump

Features and benefits

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

Key characteristics

Capacities up to 1'000 m³/h / 5'300 USgpm Heads up to 2'800 m / 10'500 ft. Pressures up to 350 bar / 5'080 psi Temperatures up to 210°C / 410°F

- Feedwater pump
- Nuclear safety services



GVG diffuser 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/austenic stainless steel
- Full cartridge design to reduce downtime during maintenance
- Double suction impeller at first stage (optional)

Key characteristics

Capacities up to 65 m³/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
- Safety related services for NPP



HPT high pressure barrel 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 5'500 m³/h / 24'200 USgpm Heads up to 5'000 m / 16'400 ft. Pressures up to 650 bar / 9'430 psi Temperatures up to 260°C / 500°F

Applications

Boiler feedwater



HPcp high pressure, radially-split, multistage barrel pump ISO 13709 / API 610 type 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 m³/h / 20'000 USgpm
Heads up to 10'200 m / 33'500 ft.
Pressures up to 1'100 bar / 16'000 psi
Temperatures up to 200°C / 400°F

- Ultra high pressure water injection
- · Offshore crude oil shipping
- Remote pipeline services
- High pressure waterflood



Radially-split, multistage, ring section pumps

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 m³/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

- Feedwater pump
- Desalination
- Auxiliary services
- · District heating



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 retrofitting
- All parts typically subject to maintenance (both drive end (DE) and nondrive end (NDE)bearings, balancing disk, mechanical seal) are accessible and can be replaced on site, without removal of suction and discharge piping

Key characteristics

Capacities up to 1'100 m³/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

- High pressure membrane feed in seawater reverse osmosis (SWRO)
- 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

• Low pressure version with dedicated large sizes for condensate extraction service

Key characteristics

Capacities up to 1'700 m³/h / 8'500 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

- Feedwater pump
- Fuel injection and NOx abatement
- Condensate extraction



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 1'200 m³/h / 5'300 USgpm Heads up to 2'800 m / 9'200 ft. Pressures up to 350 bar / 5'080 psi Temperatures up to 210°C / 410°F

(higher temperatures upon request)

Applications

Feedwater pump



ME high pressure stage casing pump

Features and benefits

- Optimized labyrinth design for high efficiency and good rotordynamic behavior
- Shaft forged with low lift-to-drag (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 m³/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



VMS vertical multistage pump

Features and benefits

- Unique hydraulic design gives an efficiency of up to 80%
- Low NPSHr for vibration-free operation and extended life span
- Durable solution with high quality materials
- · Suitable for drinking water with ACS, WRAS and NSF certification

Key characteristics

Capacities up to 162 m³/h / 850 USgpm Heads up to 400 m / 1'350 ft. Pressures up to 40 bar / 580 psi

Temperatures from -20°C to 140°C / -4°F to 284°F

Applications

- Municipal water supply and distribution
- · Domestic water supply
- · Cooling water transport
- Hot water applications
- Fire fighting



Radially-split, one/two stage, pumps

BBS and CD radially-split, single stage pumps ISO 13709 / API 610 type BB2

Features and benefits

- Centerline support for reduced, thermally induced misalignment
- Double suction impeller for low Net Positive Suction Head Required (NPSH3)
- Casing designed for two times API 610 nozzle loads for freedom from piping distortions
- Optional inline side/side or side suction/top discharge configuration
- Engineered CD design for special applications

Key characteristics

Capacities up to 7'000 m³/h / 30'000 USgpm

Heads up to 450 m / 1'500 ft.
Pressures up to 51 bar / 740 psi
Temperatures up to 425°C / 800°F

- Medium pressure pipeline
- · Refinery pump around
- Refinery bottoms
- · Petrochemical quench water



BBT and BBTD radially-split, two stage pumps ISO 13709 / API 610 type BB2

Features and benefits

- Two stage configuration for higher heads
- Option of single or double suction first stage impeller to suit NPSHa
- First critical speed is well above operating speed range for smooth operation
- Casing designed for two times API 610 nozzle loads for freedom from piping distortions
- Special low flow high head hydraulics

Key characteristics

Capacities up to 2'300 m³/h / 10'000 USgpm

Heads up to 760 m / 2'500 ft.
Pressures up to 100 bar / 1'450 psi
Temperatures up to 425°C / 800°F

Applications

- Refinery vacuum bottoms
- · Refinery coker heater charge
- Offshore WIP boosting



HPTd double suction, single stage pump

Features and benefits

- Robust design to accept high piping loads
- Single cover design to reduce overhaul times
- Split bearing housings allow for bearing inspection without pump disassembly
- Single mechanical seal provides higher efficiency

Key characteristics

Capacities up to 5'000 m³/h / 22'000 USgpm

Heads up to 800 m / 2'625 ft.

Pressures up to 150 bar / 2'175 psi
Temperatures up to 220°C / 428°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

- Feedwater booster
- Nuclear safety services
- District heating



HZB-HTF 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
- Carbon steel or chrome steel casing with excellent mechanical properties
- Double mechanical seal provides safer operation

Key characteristics

Capacities up to 4'400 m³/h / 17'600 USgpm

up to 400 m / 1'310 ft. up to 48 bar / 700 psi Heads Pressures up to 425°C / 800°F Temperatures

Applications

• HTF oil pump for CSP





Single-stage, end-suction/overhung pumps

AHLSTAR pumps

Features and benefits

- AHLSTAR pumps save energy, sealing water and the 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
- · ACS drinking water certification
- Food contact materials certificate (EC) 1935

AHLSTAR A, APT

Key characteristics

Capacities up to 11'000 m³/h / 48'400 USgpm

Heads up to 160 m / 525 ft.

Pressures up to 16 / 25 bar, 230 / 360 psi, depending on material and size

Temperatures up to 180°C / 356°F

Applications

- · Clean and slightly contaminated liquids
- Viscous liquids
- Fibrous slurries
- Solids containing liquids
- Gas containing liquids and self-priming applications
- · Various demanding applications



AHLSTAR NPP/T

Key characteristics

Capacities up to 2'000 m³/h / 8'800 USgpm

Heads up to 90 m / 295 ft.

Pressures up to 16 bar / 230 psi, depending on material and size

Temperatures up to 180°C / 356°F

Applications

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



AHLSTAR WPP/T

Key characteristics

Capacities up to 7'000 m³/h / 31'000 USgpm

Heads up to 110 m / 360 ft.

Pressures up to 16 bar / 230 psi, depending on material and size

Temperatures up to 180°C / 356°F

- Abrasive and viscous liquids, fibrous and non-fibrous slurries
- Abrasive solids and gas containing liquids and slurries including self-priming applications



AHLSTAR EPP/T

Key characteristics

Capacities up to 6'100 m³/h / 26'860 USgpm

Heads up to 160 m / 525 ft.

Pressures up to 25 bar / 360 psi, depending on material and size

Temperatures up to 210°C / 410°F

Applications

- High temperature liquids
- · Clean and slightly contaminated liquids
- Viscous liquids
- · Fibrous slurries



A-RO end-suction pump

Features and benefits

- Industry-leading efficiency for reduced operating costs
- High-quality materials for enhanced durability
- Tailored design for desalination applications
- Suitable for 50 Hz and 60 Hz grid frequency

Key characteristics

Capacities up to 6'000 m³/h / 26'415 USgpm

Heads up to 200 m / 600 ft.

Pressures up to 25 bar / 360 psi
Temperatures up to 39°C / 102°F

Applications

- Low-pressure booster pump to RO high-pressure membrane feed
- RO second pass membrane feed
- · Process applications in desalination plants



CPE ANSI process pumps range ANSI / ASME B73.1

Features and benefits

- The highest available efficiency on the ANSI process pump market providing clear savings in energy consumption
- Exceeds the requirements of all environmental (ECO) directives and the global energy efficiency targets for pumps
- · Maximized reliability thanks to shaft sealing conditions and heavy-duty bearing unit
- · High standardization, easy installation and robust construction equate to reduced maintenance and operating costs
- The CPE pump uses NSF61 and NSF372 certified materials

Key characteristics

Capacities up to 1'650 m³/h / 7'000 USgpm

Heads up to 275 m / 900 ft.

Pressures up to 27.5 bar / 400 psi

Temperatures up to 260°C / 500°F

- · Clean and slightly contaminated liquids
- Viscous liquids
- Fibrous slurries



EMTECH pump

Features and benefits

 Designed to meet the EN ISO 5199 standard, these pumps also comply with EN 22858 (ISO 2858) standard for Chemical industry applications

- · High efficiency
- Low net positive suction head (NPSH)
- Reliable and flexible design to ensure maximum installation availability
- Low energy consumption, high standardization, easy installation and unique design reduce maintenance and operating costs
- Heating / cooling jacket
- Available in special materials such as hastelloy, nickel, titanium, etc., upon request

Key characteristics

Capacities up to 350 m³/h / 1'540 USgpm

Heads up to 160 m / 525 ft.
Pressures up to 20 bar / 290 psi
Temperatures up to 180°C / 356°F

Applications

- · Clean and slightly contaminated liquids
- · Viscous liquids, sticky liquids
- Fibrous slurries



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

NRN high-pressure process pump

Features and benefits

- Designed for heavy-duty applications in various industries
- Exceeds the requirements of ISO 5199, type OH1
- Tailor-made for your process needs
- High reliability and maximum efficiency

Key characteristics

Capacities up to 4'500 m³/h / 19'800 USgpm

Heads up to 320 m / 1'050 ft.

Pressures up to 50 bar / 1'100 psi

Temperatures from -90 to 180°C / from -130 to 356°F

- · Clean and slightly contaminated liquids
- Corrosive and abrasive liquids
- Slurry applications





OHH and OHHL overhung, single stage pumps ISO 13709 / API 610 type 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 m³/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 type 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 m³/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

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



PRE and PRELF end suction, single stage process pumps ISO 13709 / API 610 type OH2

Features and benefits

- Heavy duty shaft with short overhang dimensions for robust design
- Closed, semi-open and open impeller design options to suit process fluid
- ISO 21049 (API 682) cartridge type mechanical seals for reduced emissions
- Inducer option for low NPSH applications
- Available in special alloys such as S-9, 625, 825, hastelloy and titanium

Key characteristics

Capacities up to 4'500 m³/h / 19'800 USgpm

Heads up to 320 m / 1'050 ft.

Pressures up to 51 bar / 740 psi,

special high pressure 250 bar upon request

Temperatures up to 400°C / 750°F

Applications

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

PRER and PRETR high pressure pumps

Features and benefits

- High pressure casing design with special reinforcement to suite challenging high-pressure services
- Closed impeller for clean liquids
- Extra heavy duty, large diameter shaft
- Taper roller bearing for very high suction pressures
- Robust bearing housing with low noise fan for high temperatures

Key characteristics

Capacities up to 2'200 m³/h / 8'800 USgpm

Heads up to 320 m / 1'050 ft.

Pressures up to 200 bar / 2'900 psi

Temperatures up to 400°C / 752°F

Applications

- Boiler circulation pump
- Hot water circulation pump

PRF high-pressure booster pump

Features and benefits

- Specifically designed to manage clear liquids with high suction pressure
- Optimized design ensures maximum pressure resistance and extended lifetime
- · Cost effective and highly reliable
- Efficient solution as ERS booster pumps in SWRO desalination applications

Key characteristics

Capacities up to 1'350 m³/h / 7'250 USgpm

Heads up to 95 m / 445 ft.

Pressures up to 75 bar / 1'090 psi

Temperatures up to 200°C / 392°F

- Reverse osmosis process
- · Boiler circulation
- Any high-pressure process application





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 m³/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



End-suction EN733 centrifugal pumps SES and SKS

Features and benefits

- Suitable for drinking water with ACS certification
- Reliable operation even in high-pressure applications
- Easy maintenance with "back pull-out" design
- Heavy-duty construction for continuous operation
- Maintenance-free bearings for increased service life
- Free position of SKS with horizontal, sloping or vertical axis to meet any installation needs

Key characteristics

Capacities SES up to 2'000 m³/h / 2'700 USgpm

SKS up to 825 m³/h / 3'522 USgpm

Heads SES up to 130 m / 394 ft.

SKS up to 129 m / 374 ft.

Temperatures SES/SKS -15°C / +90°C / +5°F / +194°F

- Water supply facilities
- Water distribution networks
- Irrigation
- · Heating and cooling systems
- · General industry applications





SIL inline pump range

Features and benefits

- Premium efficiency over a wide operation range
- Exceeds ErP (energy-related products) minimum efficiency index (MEI 0.4)
- Low installation and maintenance costs due to easy installation and unique design
- Low spare parts costs due to high standardization

Key characteristics

Capacities up to 720 m³/h / 3'200 USgpm

Heads up to 100 m / 328 ft.
Pressures up to 16 bar / 230 psi
Temperatures up to 180°C / 356°F

Applications

- · Clean and slightly contaminated liquids
- Clean viscous liquids
- Clean fibrous slurries



SNS range

Features and benefits

- Designed to meet the design requirements of EN 5199 international standard
- Exceeding EU's (European Union) requirements for energy-related products (ErP)
- Highest efficiency across the whole pump range, exceeding the benchmark efficiency index MEI 0.7 (minimum efficiency index)
- State-of-the-art hydraulics ensure optimum capacity with low net positive suction head required (NPSHr)
- Low energy consumption, high standardization, easy installation and unique construction also equate to lower maintenance and operating costs
- · ACS drinking water certification
- Food contact materials certificate (EC) 1935

Key characteristics

Capacities up to 1'400 m³/h / 6'000 USgpm

Heads up to 160 m / 525 ft.

Pressures up to 16 bar / 230 psi,

Temperatures up to 120°C / 250°F

- Clean and slightly contaminated liquids
- Viscous liquids
- Fibrous slurries



ZA / ZE and ZF end suction pumps ISO 13709 / API 610 type OH2

Features and benefits

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

Key characteristics

Capacities up to 2'600 m³/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

- Refinery, petrochemical and chemical process applications
- Desalination
- Boiler feedwater booster
- Condensate extraction
- HTF oil circulation
- · Auxiliary services
- District heating



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 m³/h / 11'440 USgpm

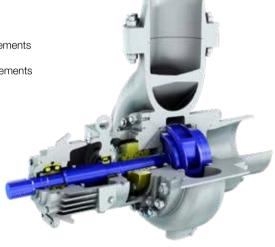
Heads up to 300 m / 1'000 ft.

Pressures up to 100 bar / 1'450 psi

Temperatures up to 425°C / 800°F

Applications

Safety related services



Submersible pumps

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 Ex h db IIB T4 Gb), FM and CSA available
- Quick and easy installation, safe operation, easy maintenance and service

Key characteristics

Capacities up to 2'700 l/s (50 Hz) / 3'000 l/s / 47'560 USgpm (60 Hz)

Heads up to 80 m (50 Hz) / 95 m / 310 ft. (60 Hz)

Temperatures up to 40°C / 104°F

Motor power up to 550 kW (50 Hz) / up to 620 kW / 830 hp (60 Hz)

Applications

- Clean water and wastewater
- Sewage with sludge and rag content
- · Sewage containing solids and fibrous material
- Industrial raw water
- Municipal combined sewage and storm water systems



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 mixed flow impellers
- Low-vibration design and low-NPSH design
- Automatic self-centering of the pump and column pipe with a conical coupling ring
- Hazardous locations: Certification for ATEX (Ex II 2G Ex h db IIB T4 Gb), 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 500 kW (50 Hz) / up to 468 kW / 628 hp (60 Hz)

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



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 with a conical coupling ring
- Hazardous locations: certification for ATEX (Ex II 2G Ex h db IIB T4 Gb), 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
- Recirculation sludge or return activated sludge (RAS)
- Hazardous locations



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 Ex h db IIB T4 Gb), 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 550 kW (50 Hz) / 600 kW / 805 hp (60 Hz)

- Clean water and wastewater
- Sewage with sludge and rag content
- Sewage containing solids and fibrous material
- Industrial raw water
- Municipal combined sewage and storm water systems



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 m³/h / 528 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 to 3.0 kW / 1.8 to 3.5 kW / 1.61 to 4.02 hp / 2.41 to 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



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 m³/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 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 m³/h Heads up to 11 m

Temperatures 40°C up to 60°C (max. 5 minutes)

Motor power 1.1 kW

- 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



Light wastewater pump type ABS MF 154-804

Features and benefits

- With or without automatic level control
- Compact shape, fittings for easy mounting, and small sump requirements enable a quick and cost-effective installation

Key characteristics

Capacities up to 58 m³/h Heads up to 16 m

Temperatures 40°C up to 60°C (max. 5 minutes)

Motor power 0.42 to 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

Key characteristics

Capacities 9 m³/h Heads 8 m Temperatures 80°C Motor power 0.42 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



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
- Multi-stage high head 60 Hz version with shredding system available

Key characteristics

Capacities up to 22 m³/h / 119 USgpm

Heads up to 70 m / 269 ft.

Temperatures 40°C up to 60°C (max. 5 minutes) /

10.4°F up to 140°F (max. 5 minutes) 1.0 to 11.0 kW / 1.34 to 16.8 kW / 1.34 to 14.74 hp / 1.80 to 22.52 hp

Applications

Motor power

- 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



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 13 m³/h / 57 USgpm Heads up to 8.8 m / 30 ft.

Temperatures $\stackrel{\cdot}{40}^{\circ}\text{C}$ up to 60°C (max. 5 minutes) / 104°F up to 140°F (max. 5 minutes)

Motor power 0.36 to 0.50 kW / 1/4 to 1/3 to 1/2 hp

Applications

• Pumping clear and wastewater from house, garden or yard



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 1.68 $\,{\rm m}^3/{\rm s}$ (50 Hz) / 1.68 $\,{\rm m}^3/{\rm s}$ / 25'680 USgpm (60 Hz)

Heads up to 1.63 m / 4.7 ft.Temperatures up to $40^{\circ}\text{C} / 104^{\circ}\text{F}$

Motor power 25 kW (50 Hz) / 25 kW / 33.5 hp (60 Hz)

Applications

- Pumping and recirculation of activated sludge in sewage treatment plants
- · 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 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)

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



Lifting stations

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 18 m³/h Heads up to 11 m

Temperatures 40°C up to 60°C (max. 5 minutes)

Motor power 0.16 to 0.56 kW

Applications

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



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 m³/h / 40 USgpm Heads up to 30 m / 98 ft.

Temperatures 40°C up to 60°C (max. 5 minutes) /

104°F up to 140°F (max. 5 minutes)

Motor power 0.40 to 1.7 kW / 0.9 to 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 m³/h Heads up to 18 m

Temperatures 40°C up to 60°C (max. 5 minutes)

Motor power 1.3 to 6.0 kW

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



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 odor preventing vent system
- · Alarm float switch available as accessory

Key characteristics

Capacities up to 4 m³/h Heads up to 11 m

Temperatures 40°C up to 60°C (max. 5 minutes)

Motor power 0.16 to 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
- $\bullet\,$ 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 34 m³/h Heads up to 21 m

Temperatures 40°C up to 60°C (max. 5 minutes)

Motor power 0.16 to 2.0 kW

Applications

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

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
- The Synconta family is available in three different models (700 / 800 / 900)

Key characteristics

Capacities up to 38 m³/h Heads up to 37 m

Temperatures 40°C up to 60°C (max. 5 minutes)

Motor power 1.3 to 2.6 kW

Applications

· Sewage and wastewater containing toilet waste





Progressing cavity pumps

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 m³/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 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 m³/h / 990 USgpm Pressures up to 12 bar / 170 psi

Temperatures -10 up to 100°C / 14 up to 212°F

Applications

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



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

- Thickened sludge cake (>30% DS)
- Dewatered sludge transfer
- Sludge blending
- Industrial process sludges 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, minimizes 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 / 248°F

Applications

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



Grinders

Muffin Monster™, open channel

Features and benefits

- Dual-shafted, slow-speed, high-torque design grinds tough solids
- Protects pumps and other critical equipment from clogs and damage caused by large debris
- Grinding separates organic from inorganic materials for more efficient wastewater treatment processes
- Cutter stack heights up to 1'500 mm

Key characteristics

Capacities up to 1'277 m³/h / 5'620 USgpm

Applications

- Pump station protection
- Wastewater treatment headworks protection
- Private facility discharge to municipal sewer system compliance



Muffin Monster™, inline

Features and benefits

- Dual-shafted, slow-speed, high-torque design grinds tough solids
- Protects pumps, centrifuges and other sensitive downstream equipment from large debris
- Easy to remove cutter cartridge in 30K Muffin Monster
- Pipe flange diameters from 100 to 500 mm

Key characteristics

Capacities up to 1'558 m³/h / 6'860 USgpm Pressures up to 10.3 bar / 150 psi

- Sludge line protection
- Pump station protection
- Wastewater treatment headworks protection
- Private facility discharge to municipal sewer system compliance



Channel Monster™

Features and benefits

- High-flow, single or dual screening drums
- Dual-shafted, slow-speed, high-torque design grinds tough solids
- Protects pumps and other critical equipment from clogs and damage caused by large debris
- Grinding separates organic from inorganic materials for more efficient wastewater treatment processes
- Cutter stack heights up to 2'250 mm

Key characteristics

Capacities up to 9'306 m³/h / 59 mgd

- Pump station protection
- Wastewater treatment headworks protection





Submersible dewatering pumps

Submersible drainage pump J and XJ

Features and benefits

- Easy and fail-safe starting with optional AquaTronic
- Impeller in white cast iron and 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
- 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 200 m / 754 ft. Motor power up to 90 kW / 145 hp

Applications

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
- · A slim design allows the pumps to fit in boreholes or other applications with limited installation space

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

• 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 up to 48x60 mm
- 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
- 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

• Dirty water and water mixed with solids





Vertical pumps

JTS standard vertical turbine pump

Features and benefits

- Reliable pump with standard configurations for short lead time
- · 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 m³/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

SJD-API vertically suspended API 610 type VS6/VS7

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 diffuser hydraulics for low flow applications

Key characteristics

Capacities up to 5'000 m³/h / 22'000 USgpm

Heads up to 900 m / 3'000 ft.

Pressures up to 78 bar / 1'130 psi
Temperatures up to 205°C / 400°F

Applications

- LPG and LNG with J-unit for cryogenic services
- 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
- Various options available for the first stage impeller hydraulics, including double suction impeller allowing optimum sizing of pump

Key characteristics

Capacities up to 4'900 m³/h / 21'560 USgpm

Heads up to 470 m / 1'540 ft.
Pressures up to 47 bar / 680 psi
Temperatures up to 100°C / 212°F

- 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
- Optional spacer coupling allows servicing the seal and thrust bearing as needed

Key characteristics

Capacities up to 58'000 m³/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



SJS submersible pump

Features and benefits

- No line-shaft couplings or bearings to maintain
- Low, medium and high voltage submersible motors
- 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 m³/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

4 400

SJT-API vertically suspended API 610 type VS1/VS2

Features and benefits

- High head per stage / reduced number of stages results in shorter, more reliable pumps
- Double suction on larger sizes can reduce pump length
- High efficiency with reduced power consumption
- Modular construction to fit project nozzle location requirements

Key characteristics

Capacities up to 5'000 m³/h / 22'000 USgpm

Heads up to 900 m / 3'000 ft.

Pressures up to 78 bar / 1'130 psi

Temperatures up to 205°C / 400°F

- Water circulation pumps
- Seawater lift pumps
- Stormwater pumps



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
- Optional spacer coupling allows servicing of seal and thrust bearing as required

Key characteristics

Capacities up to 62'000 m³/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-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
- · Product lubricated bearings
- Up to 5.5" end-play axial float for shaft adaptation to shallow geothermal wells

Key characteristics

Capacities up to 680 m³/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-CWP vertical pumps

Features and benefits

- Modern fabricated suction bell and bowl casing incorporating swirl break for stable pump performance curve
- Semi-open or closed 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 90'000 m³/h/ 396'000 USgpm

Heads up to 60 m / 200 ft.

Pressures up to 8.6 bar / 125 psi
Temperatures up to 50°C / 122°F

- · Cooling water
- Water intake
- Water supply and irrigation
- Flood control and drainage



VAS vertical sulfuric acid pump

Features and benefits

- High corrosion resistance due to compact and unique design
- Wide range of highly corrosive-resistant materials guarantees high durability
- Reliable design ensures longer maintenance-free operation
- Easy assembly and maintenance

Key characteristics

Capacities up to 4'000 m³/h / 17'500 USgpm

Heads up to 45 m / 148 ft.
Pressures up to 20 bar / 290 psi
Temperatures up to 150°C / 291°F

up to 250°C / 480°F (heat recovery)

Applications

- Absorption tower
- Drying tower
- Heat recovery system



VEY and VNY molten salt pump

Features and benefits

- Engineered suction design for optimized submergence
- Engineered bearing bushings for better shaft alignment and adaptation to the thermal expansion
- · Main shaft sealing by throttle bushing for permanent leak-off recirculation to the molten salt tank
- · Auxiliary shaft sealing deflector preventing leakage of molten salt to the atmosphere
- Efficient thermal barrier between hot/cold sections
- Muff coupling to ease dismantling
- Special design to allow thermal expansions: extended wear ring zone and clearances calculated considering all the relative expansions

Key characteristics

Capacities up to 4'000 m³/h / 17'600 USgpm

Heads up to 380 m / 1'250 ft.

Pressures up to 100 bar / 1'450 psi

Temperatures up to 600°C / 1'100°F

- Molten salt pump
- · Thermal storage



Vertical sump pumps

OCV and OCVL sump pumps ISO 13709 / API 610 type VS4

Features and benefits

- API 682 cartridge type mechanical including gas seal options
- Oil lubricated 7300 series BECBM thrust bearing
- Keyed impeller and API 610 Fig. 37 bearing spacing
- Buttwelded and hydrotested discharge pipe and elbow

Key characteristics

Capacities up to 750 m³/h / 2'200 USgpm

Heads up to 280 m / 880 ft.
Pressures up to 40 bar / 580 psi
Temperatures up to 205°C / 400°F

Applications

- All sump applications with moderate solid content
- Oilv water transfer
- Lube oil



OCVSF ISO 13709 / API 610 type VS4

Features and benefits

- Column and discharge pipe fully jacketed to maintain sulfur in molten state
- Special open impeller with free draining features for handing molten sulfur
- Full compliance to API 610 latest edition
- API 682 mechanical seal or packed gland option

Key characteristics

Capacities up to 500 m³/h / 2'200 USgpm

Heads up to 280 m / 880 ft.

Pressures up to 40 bar / 580 psi
Temperatures up to 205°C / 400°F

Applications

- Refinery sulfur pit or tank transfer
- · Refinery granulator feed pump
- Molten sulfur filter feed pump
- Molten sulfur furnace feed pump

VA cantilever sump pump

Features and benefits

- Simple and robust design with ease of maintenance
- All types of hydraulics available: semi-open, open, closed or vortex impellers
- · No sealing required
- No intermediate bearing
- Dry running is allowed on certain sizes

Key characteristics

Capacities up to 1'500 m³/h / 6'600 USgpm

Heads up to 100 m / 328 ft.
Pressures up to 20 bar / 290 psi
Temperatures up to 120°C / 248°F

- Clear and contaminated sump
- · Corrosive, encrusting liquids and slurries



VAP heavy-duty cantilever sump pump

Features and benefits

- Heavy-duty construction
- All types of hydraulics available: semi-open, open, closed or vortex impellers
- No sealing required
- · No intermediate bearing
- Dry running is allowed on certain sizes

Key characteristics

Capacities up to 3'500 m³/h / 15'400 USgpm

Heads up to 150 m / 500 ft.

Pressures up to 20 bar / 290 psi
Temperatures up to 900°C / 1'652°F

Applications

- Highly corrosive, abrasive, encrusting liquids and slurries
- High-temperature pumping
- · Molten metal pumping



VM vertically suspended sump pump

Features and benefits

- Simple and robust design with ease of maintenance
- All types of hydraulics available: semi-open, open, closed or vortex impellers
- No sealing required for clear liquids
- Single and dual seal design available for contaminated liquids

Key characteristics

Capacities up to 3'500 m³/h / 15'500 USgpm

Heads up to 100 m / 330 ft.

Pressures up to 20 bar / 290 psi
Temperatures up to 120°C / 250°F

Applications

- Clear and contaminated sump
- Corrosive, encrusting liquids and slurries



VSF cantilever sump pump

Features and benefits

- Specifically designed for molten sulfur applications
- High-quality materials and, highly reliable and efficient design ensure longer mean time between maintenance and minimized total cost of ownership

Key characteristics

Capacities up to 300 m³/h / 1'300 USgpm

Heads up to 160 m / 500 ft.
Pressures up to 20 bar / 290 psi
Temperatures up to 180°C / 356°F

- · Clean or dirty molten sulfur
- Constant temperature applications in various industries



Agitators and submersible mixers

SALOMIX™ SSF side-mounted horizontal agitators

Features and benefits

- · Heavy-duty gear-driven agitator
- Suitable for the most severe industrial applications
- High efficiency EX3 propellers results in energy savings and improved agitation
- · Conical body shape with in-tank bearing supports the propeller and ensures vibration free operation
- Comprehensive hydraulic coverage enabling the use in all mixing applications
- Low total cost of ownership through smart design and energy efficient propeller
- Quick and easy installation, safe operation, easy maintenance and service

Key characteristics

Stock consistency up to 6%

Propeller diameters 800 to 1'700 mm / 32 to 67 in. Power 7.5 to 160 kW / 10 to 200 hp

Applications

- Mixing in tanks and storage towers
- · Clean and slightly contaminated liquids
- Viscous liquids
- Fibrous slurries, slurries



SALOMIX™ SSA side-mounted agitators belt drive

Features and benefits

- A robust belt-driven cantilever agitator
- Suitable for the most demanding industrial applications
- High-efficiency EX3 propellers results in energy savings and improved agitation
- Heavy-duty design with a bearing lifetime of minimum 200'000 hours
- Comprehensive hydraulic coverage enabling the use in all mixing applications
- Low total cost of ownership through smart design and energy efficient propeller
- Quick and easy installation, safe operation, easy maintenance and service
- Optional SOD shut-off device enables servicing the agitator without emptying the tank

Key characteristics

Stock consistency up to 6%

Propeller diameters 800 to 1'300 mm / 32 to 52 in. Power 7.5 to 75 kW / 10 to 100 hp

- Mixing in tanks and storage towers
- · Clean and slightly contaminated liquids
- Viscous liquids
- Fibrous slurries, slurries



SALOMIX™ SLR/STR gear drive

Features and benefits

- A gear-driven cantilever agitator for industrial use
- Suitable for various type of industries
- High-efficiency SHP propellers with good mixing result at low power
- · Robust and compact gear
- Low total cost of ownership through smart design and energy efficient propeller
- · Quick and easy installation, safe operation, easy maintenance and service

Key characteristics

Stock 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 tanks and storage towers
- · Clean and slightly contaminated liquids
- · Viscous liquids, solid-containing liquids
- Fibrous slurries, slurries



SALOMIX™ SLH belt drive

Features and benefits

- Specially developed for green liquor dissolving tanks
- Cone construction with an in-tank bearing. This will give lower vibrations and more reliable operation.
- · Oversized agitator
- Rigid belt drive to handle pressure shocks
- Double mechanical seals plus additional flushing for long seal lifetime
- Propeller blades in duplex steel for highest strength
- Strong agitation with energy-efficient MX4 propellers
- Sulzer's dilution cone DILCO

Key characteristics

Propeller diameters 800 to 1700 mm / 32 to 67 in. Power 22 to 110 kW / 30 to 150 hp

Applications

• Green liquor dissolving tanks



SALOMIX™ L, LV, LA and LM top-mounted vertical agitators

Features and benefits

- The L series covers gear or belt-driven agitators mounted vertically on the tank top or bottom flange
- · 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
- The large hydraulic coverage satisfies the most demanding requirements of industrial agitation applications

Key characteristics

Propeller diameter
Shaft length

Power

up to 8'000 mm / 316 in.

up to 30 m / 100 ft.

up to 450 kW / 600 hp

Temperatures

up to 180°C / 356°F

- Mixing in tank
- Clean and slightly contaminated liquids
- · Viscous liquids and liquids with high gas content
- Fibrous slurries, slurries
- Solids containing liquids



Scaba top-mounted agitators

Features and benefits

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

Key characteristics

Propeller diameter Shaft length up to 30 m / 100 ft.

Power up to 450 kW / 600 hp
Temperatures up to 180°C / 356°F

Applications

- Mixing in tanks
- Clean and slightly contaminated liquids
- · Viscous liquids and liquids with high gas content
- Fibrous slurries, slurries
- Solids-containing liquids

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 m³/s / 28'300 USgpm

Diameters up to 900 mm / 35 in.

Temperatures up to 40°C / 104°F

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 m³/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)

- 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 m³/s (50 Hz) / 6.0 m³/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 and 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 and 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 m³/s (50 Hz) / 4.2 m³/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)

- Suspension of activated sludge
- Flow generation in oxidation ditches



Compressors and aeration

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 to 15 m³/h per diffuser

Max water depth 0.5 to 15 m

Applications

- Aeration of municipal wastewater
- Aeration of industrial wastewater



HSR turbocompressor

Features and benefits

- 100% oil-free, environmentally friendly and safe
- Premium efficiency, low life cycle costs
- · Wear-free, low maintenance costs
- Real-time monitoring secures the trouble-free operation
- Vibration-free, low machine noise
- Advanced liquid cooling system enables energy recovery

Key characteristics

Flow up to 56 m³/min / 1'980 CFM
Pressure 2 to 9 bar (g) / 30 to 130 psig
Motor power 115 to 325 kW / 154 to 436 hp

Applications

• Suitable for providing oil-free compressed air for all industries



HST™ turbocompressor

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 Nm³/h / 10'200 SCFM

Pressure rise up to 130 kPa / 18.9 psi
Motor power 75 to 400 kW / 100 to 500 hp

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



Submersible aerator mixer OKI

Features and benefits

- · High aeration efficiency
- Can run as an aerator and/or mixer according to process requirements
- Designed for non-clogging operation
- Suitable for both, continuous and intermittent process operation
- Suitable for all usual tank depths, especially deep tanks

Key characteristics

Oxygen transfer up to 410 kg O_2 / h @ 12 m up to 3'600 m 3 /h / 2'100 CFM Water depth 4 to 12 m / 13 to 39 ft. Motor power 5 to 37 kW / 7 to 50 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



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 to 550 m³/h / 60 to 650 CFM Max water depth 2 to 6 m / 6.6 to 19.7 ft. Motor power 1.3 to 18.5 kW / 1.7 to 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 $\rm O_2/h$ @ 6 m Max water depth 2 to 6 m / 6.6 to 19.7 ft. Motor power 3 to 75 kW / 4 to 100 hp

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





Medium consistency products

Features and benefits

- The Fluider™ technology includes proven innovative stock pumping ranges: MCE™, LCE™ and KCE™ pumping systems
- 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

Capacities 20 to 9'000 ADMT/d Heads up to 240 m / 787 ft.

Consistencies 6 to 18%

MCE™ pumping system

Applications

- Medium-consistency fibrous slurries up to 18%
- Medium-consistency fibrous slurries containing large solids
- Medium-consistency fibrous slurries with high gas content
- All pulp, paper and board medium consistency applications
- For related biomass and biofuel applications





LCE™ pumping system

Applications

- Semi-medium consistency fibrous slurries up to 10%
- Semi-medium consistency fibrous slurries containing solids
- Semi-medium consistency fibrous slurries with high gas content
- All pulp, paper and board medium-consistency fibrous slurry applications, including especially recycled fiber and mechanical fiber applications

KCE™ pumping system

- Semi-medium consistency fibrous slurries up to 8%
- Semi-medium consistency fibrous slurries containing solids
- Semi-medium consistency fibrous slurries with high gas content
- All pulp, paper and board semi-consistency fibrous slurry applications and biomass and biofuels applications



MC discharge scraper and the tower discharge pumping

Applications

- Discharging high-consistency fibrous slurry towers up to 13%
- Up to 20 to 35% consistency when using diluting scrapers
- Outlet consistency typically 8 to 13%



MC discharger

Applications

- Dividing and controlling high-consistency fibrous slurry flows discharging high-consistency and fibrous slurry reactors
- Gas removal option
- Chemical mixing



SX chemical mixer

- Mixing gases, steam or chemicals in-line to
- Fibrous slurries
- Clean and slightly contaminated liquids
- Viscous liquids
- Non-fibrous slurries



Tower management systems

SALOMIX™ TES top entry spreader

Features and benefits

- Spreads stock evenly on the top surface to control the flow in the upper, high-consistency part
 of the tower, and the quality of the discharged stock remains good
- Creates a uniform continuous downflow, with no stagnant zones
- Variable rotating speed always spreads a fresh top layer of stock, regardless of the surface level
- Prevents channeling and air entrainment into the stock

Key characteristics

Capacities up to 600 l/s / 9'500 USgpm

Pressures up to 3 bar / 43 psi as standard, for higher pressures as special

Temperatures up to 180°C / 356°F

Applications

- Medium and high consistency storage and bleaching towers
- Tanks and towers to reduce channeling and reduce air content



SALOMIX™ VULCA

Features and benefits

- VULCA is a tower bottom center fillet pillar
- Filling and pumping stock through VULCA saves pumping energy, boosts bottom zone mixing, and prevents the mixing of air into the stock at low stock levels

Key characteristics

Capacities tower bottoms of up to 12 m / 40 ft. in diameter

Applications

- Pumping to pulp mill blow tanks
- Pumping to broke towers
- Pumping to towers, that operate on low pulp levels
- Pumping of fibrous slurry into the fibrous slurry towers



SALOMIX™ GLI

Features and benefits

- GLI is a special center fillet located at the bottom of the storage tower
- Enables trouble-free operation of high-consistency storage and bleaching towers with a large bottom zone using several agitators
- Ensures effective mixing, and dilution is intensified by baffles
- Creates a well-controlled mixing/dilution zone to the tower bottom
- Separates effectively the storage zone and the active mixing and dilution zone of the tower, thus ensuring even discharge consistency and good operation of the tower

Key characteristics

Capacities tower bottoms of up to 12 m / 40 ft. in diameter

- Stable dilution and mixing process for high-consistency, fibrous slurry towers
- Large scale medium consistency storage and bleaching towers
- High-consistency bleaching towers
- Fiberline blow tanks



Slurry pumps

EMW-M heavy-duty metal slurry pump

Features and benefits

- · Extra high durability
- Minimized total cost of ownership
- Low energy consumption due to high efficiency
- Easy and quick installation and maintenance
- Low spare cost due to high standardization

Key characteristics

Capacities up to 4'000 m³/h / 17'600 USgpm

Heads up to 95 m / 312 ft.
Pressures up to 16 bar / 232 psi
Temperatures up to 110°C / 230°F

Applications

- · Mining and mineral processing
- Aggregates (sand and gravel)
- Chemical slurries



EMW-R heavy-duty rubber lined slurry pump

Features and benefits

- Extra high durability
- · Minimized total cost of ownership
- Low energy consumption due to high efficiency
- Easy and quick installation and maintenance
- Low spare cost due to high standardization

Key characteristics

Capacities up to 1'450 m³/h / 6'385 USgpm

Heads up to 55 m / 180 ft.
Pressures up to 14 bar / 203 psi
Temperatures up to 110°C / 230°F

Applications

- · Mining and mineral processing
- Aggregates (sand and gravel)
- Chemical slurries

PLR slurry pumps

Features and benefits

- Maximum abrasion and corrosion resistance
- Extended pump and spare parts lifetime
- · High reliability and durability
- · Low spare part costs due to high interchangeability
- Maximum adaptability for specific duties

Key characteristics

Capacities up to 3'900 m³/h / 17'200 USgpm

Heads up to 80 m / 262 ft.
Pressures up to 50 bar / 735 psi
Temperatures up to 150°C / 300°F

- · Abrasive and corrosive slurries
- Ammonium nitrate
- Froth pumping and self-regulating application



Vacuum pumps

VRN liquid ring vacuum pump

Features and benefits

- Heavy-duty design
- Suitable for contaminated/corrosive gas
- Low maintenance
- Silent running

A wide selection of highly corrosion-resistant materials
Austenitic stainless-steel

- Super austenitic stainless-steel
- Duplex stainless-steel
- Super duplex stainless-steel
- Separator tank available with fiberglas reinforced plastics (FRP)

Key characteristics

Capacities up to 23'000 m³/h / 101'200 USgpm Absolute suction pressure down to 50 mmHg

- Filtration under vacuum
- Vacuum condensers
- Crystallization
- Concentration





Control and monitoring equipment

Pump controller type ABS PC 111 and 211

Features and benefits

- Easy-to-use single (PC 111) and dual-pump controllers (PC 211)
- Improves the functionality and reliability of the pumping station throughout its lifecycle
- 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 and buzzer

Applications

• Gravitation or pressurized municipal wastewater pumping stations



Equipment controller EC 531

Features and benefits

- Operates as a standalone control and monitoring unit
- Minimizes operating costs and energy consumption
- · Increases pumping station availability
- Easy to use and configure with built-in operator panel
- Supports all aspects of the LCC (life cycle cost) calculations

Applications

- Monitor and control of municipal wastewater pumping stations
- View alarms, pump status and trends
- · Advanced monitoring including crash log functionality
- Manually control pumps and change settings



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



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

Municipal wastewater pumping stations



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

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

• Municipal wastewater pumping stations



Screening, sedimentation and filtration solutions by Nordic Water

DynaCloth fiber disc filter

Features and benefits

- Provide high quality filtration performance using pile cloth technique
- Particular suitable where high quality effluent is required
- Resistant to high inlet TSS (Total Suspended Solids) loads
- High operation reliability at low cost
- · High flow rate capacity
- Continuous filtration during backwash and discharge -no need for standby units Automatic

Key characteristics

Flow capacity 10 to 50'000 m³/h Submerged effective filter area up to 258 m² in a single unit Typical reject water volumes 1-3%

Applications

- Various filtration applications in municipal and industrial sewage treatment plants
- Tertiary filtration, phosphorus removal etc



Features and benefits

- Well proven system for high filtration efficiencies
- Patented filter cassette for easy maintenance
- Integrated level tank increases lifetime of the filter cloths
- Already filtered water is used by the backwash system to protect the filter cloths
- Oscillating spray nozzles ensure
- an even and efficient cleaning and increases the lifetime of the filter cloth

Key characteristics

Flow capacity 10 to 50'000 m³/h Filter area up to 251 m² in a single unit Filter cloth 10 µm and upwards

Applications

- Filtration applications in municipal & industrial sewage treatment plants
- Tertiary filtration

DynaDrum self-cleaning drum filter

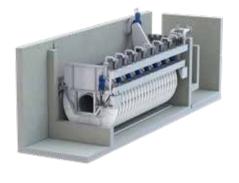
Features and benefits

- Rotating micro-screen designed for reliable and efficient removal of Suspended solids
- Simple and reliable design with low investment and maintenance costs
- Automatic control system for backwash and high pressure cleaning
- High efficiency spray nozzle design with minimized risk for clogging and to protect the filter cloths
- Innovative design for drum and inlet sealing for quick service and easy maintenance
- Primary treatment design features with remarkably low life cycle costs

Key characteristics

Flow capacity 2 to 10'000 m³/h Filter area up to 20 m² in a single unit Filter cloth 10 µm and upwards

- Filtration applications in municipal and industrial sewage treatment plants
- Specially designed for primary filtration of municipal wastewater







DynaSand™ continuous sand filter

Features and benefits

- Continuous filtration builds up secondary filter bed layer for better removal rates
- "Contact filtration", in-line dosing and precipitation with coagulation and separation inside the filter
- · Possibilities for mechanical, chemical and biological processes within the same filter unit
- Save up to 75% of energy and wash water usage with DynaSand wash water reduction
- Continuous operation sand filters higher flows and loading capacities per unit than backwash operating filters

Key characteristics

- Flow capacity 3 to 50'000 m³/h
- Filter area from 0.7 to 7 m² for a single free-standing / tank version unit
- · Concrete basin design as high as requested
- Contact filtration saves up to 70% of footprint and 40% coagulation chemicals compared to conventional designs

Applications

- Filtration applications in municipal and industrial sewage treatment plants
- Nitrogen, SS & P-removal in tertiary filtration



DynaBelt automatic belt filter

Features and benefits

- Efficient removal of solids and particles trough the rotating filter belt
- Filter belt in automatically cleaned mechanically and by high pressure water, which is better and more cost efficient then air or an ordinary brush
- Exceptionally high filtration capacity in relation to its small footprint
- Smart belt filter design for easy maintenance and repair
- Primary treatment design features with remarkably low life cycle costs

Key characteristics

Flow capacity 5 to 5'000 m³/h

Filter area up to 2.7 m² in a single unit Filter cloth 200 µm and upwards

Applications

- Filtration and screenings applications in municipal and industrial treatment plants
- Specially designed for primary filtration of municipal wastewater



Lamella settler

Features and benefits

- Maximized settling efficiency with a reduced footprint at 10% of a traditional sedimentation tank
- Unique flow control system
- Inlet openings on the sides for uninterrupted settling
- Efficient separation of solids with basically no energy consumption
- Cleaning of lamella plates without water by the use of automatic cleaning robot CleanBot

Key characteristics

Flow capacity 3 to 50'000 m³/h

Sedimentation area Free-standing versions up to 165 m²,

plate pack design for concrete basin to meet request

Applications

 Primary, secondary and tertiary sedimentation in municipal and industrial sewage treatment plants



Zickert sludge scrapers

Features and benefits

- Designed for continuous sludge transport in rectangular or circular shaped sedimentation tanks
- Hydrodynamically designed profiles provides sludge thickening effect
- Lowest part of sludge layer is removed while the more diluted sludge above remains, provides a dryer sludge which will facilitate dewatering, leading to efficiency improvement and energy savings
- Flexible design facilitating adaption to tanks with pillars or other obstructions inside

Key characteristics

- Bottom tank dimensions: Rectangular tanks max 100 m in length, max 12 m in width per scraper, parallel scrapers for wider tanks
- Circular tanks up to Ø 50 m

Applications

· Bottom and surface scraper applications in municipal and industrial sewage treatment plants



MevaGrit grit washers and classifiers

Features and benefits

- Efficient removal and separation of sand and mineral particles on a low footprint
- Wide range of sizes and models for energy efficient grit recycling
- $\bullet\,$ Low organic content in effluent sand, <5% ignition loss
- Designed for long life with self-supporting spirals, with fewer parts to maintain and low wear
- Reduced disposal costs

Key characteristics

Flow capacity up to 30 l/s Dry solids content >90%

Applications

• Treatment of sand and grit from wastewater treatment plants



MevaPress screw wash press and counter pressure screw

Features and benefits

- Superior dewatering, with approx. 50% less screenings compared to conventional design
- Major volume and weight reduction for low disposal costs and savings of CO,
- Shredded screenings
- High finish guarantees a long lifetime

Key characteristics

Flow capacity up to 88 m³/h per unit @20 rpm

Dry solids content 50 to 60%

Applications

• Screenings press and wash from wastewater treatment plants



MevaSpiral press and screw conveyor

Features and benefits

- Transportation and dewatering in the most compact and cost-efficient way
- Robust and flexible design with easy replacements of wear liners etc
- Handles wet, stringy and sticky materials without maintenance
- · Very tolerant of varying flow volumes
- Fully capsulated with bolt-on supports and inlets

Key characteristics

Volume reduction of screenings 75%

Conveyor length up to 30 m

Diameter up to 500 mm

Applications

- Screenings transport and handling from wastewater treatment plants
- · Compaction and dewatering of screenings



MevaScreen coarse and fine screens

Features and benefits

- Among the highest separation degree of screenings and solids on the market
- Heavy duty, and extremely robust bar coarse screens with low head loss
- High-capacity fine screens with a fully covering screenings mat
- Fine screens with the lowest energy usage due to lack of brush etc
- No water consumption as the design has excluded the wash water requirement in other screens
- Unique automatic controls with puls-operation, gives fully screenings mat benefits
- Very tolerant of varying flow volumes

Key characteristics

Slot width 1 to 50 mm
Discharge height 0.7 to 25 m
Channel width 300 to 3'000 mm

- Screenings separation of industrial and municipal wastewater treatment plants
- Headworks equipment



Your ideal service partner

Sulzer is a worldwide provider of high-quality, technology-based repair and upgrade solutions for rotating equipment from any brand, including pumps, turbines, compressors, motors, generators and more. Acting as your local 24/7 service partner, we maintain the industry's most comprehensive service center network. Global expertise provided by our competence centers is available through every local service center.







Original spare parts

Original spare parts are often more than a simple 'new for old' replacement and can substantially improve the performance of your equipment. Sulzer original spare parts maintain equipment performance by:

- Restoring high operational efficiency
- Optimizing energy consumption
- Minimizing unexpected failures

Sulzer has acquired many companies over the years, but you can trust us to serve your installed base with our original spare parts for the following brands:

ABS Pump Industry Ahlström **Pumpex** API Salomix Deplechin Scaba **Ensival Moret** Scanpump **Enso** Serlachius Gothia Swedmeter **JMW** Tartek Johnston Pump Company Warren JWC Environmental Virax

Kestner Nopon Nordic Water

sulzer.com

The Sulzer Flow Equipment division keeps your processes flowing. Wherever fluids are treated, pumped, or mixed, we deliver highly innovative and reliable solutions for the most demanding applications.

The Flow Equipment division specializes in pumping solutions specifically engineered for the processes of our customers. We provide pumps, agitators, compressors, grinders, screens and filters developed through intensive research and development in fluid dynamics and advanced materials. We are a market leader in pumping solutions for water, oil and gas, power, chemicals and most industrial segments.

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