

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

Applications

- Municipal water and irrigation supply
- Water intake



SJD (API) vertically-suspended process pump ISO 13709 / API 610 type VS1 and VS6

Features and benefits

- Reduced number of stages results in shorter and more reliable pumps
- Double suction or high suction specific speed (Nss) single suction 1st stage impeller designs available to reduce overall pump length
- High efficiency with reduced power consumption
- Modular construction to fit project nozzle location requirements
- High head per stage diffuser hydraulics for low flow applications

Key characteristics

| | |
|--------------|--|
| Capacities | up to 3'800 m ³ /h / 20'000 USgpm |
| Heads | up to 900 m / 3'000 ft. |
| Pressures | up to 75 bar / 1'100 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 m ³ /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 |

Applications

- Condensate extraction
- Heater drain



SJM vertical mixed flow pump

Features and benefits

- Optimized hydraulics for high efficiency
- Packed stuffing box for reliable sealing and simple maintenance; mechanical seal is optional
- Rubber lined product lubricated bearing in bowls and columns for long maintenance-free periods; other bearing materials are also possible
- Optional spacer coupling allows servicing the seal and thrust bearing as needed

Key characteristics

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

Applications

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



SJP vertical propeller pump

Features and benefits

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

Key characteristics

| | |
|--------------|--|
| Capacities | up to 54'500 m ³ /h / 240'000 USgpm |
| Heads | up to 12 m / 40 ft. |
| Pressures | up to 2 bar / 30 psi |
| Temperatures | up to 50°C / 122°F |

Applications

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



SJS submersible pump

Features and benefits

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

Key characteristics

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

Applications

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



SJT vertical turbine pump

Features and benefits

- Optimized hydraulics for high efficiency
- Packed stuffing box for reliable sealing and simple maintenance; mechanical seal is optional
- Rubber-lined product-lubricated bearing in bowls and columns for long maintenance-free periods; other bearing materials are also available
- Optional spacer coupling allows servicing of seal and thrust bearing as required

Key characteristics

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

Applications

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



SJT (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 m ³ /h / 3'000 USgpm |
| Heads | up to 700 m / 2'300 ft. |
| Pressures | up to 100 bar / 1'450 psi |
| Temperatures | up to 220°C / 428°F |

Applications

- Production hot water for geothermal power plants



SJT and SJM 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 m ³ /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 |

Applications

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



STR vertical turbine pump

Features and benefits

- Bowl and impeller removable wear rings ensure longer pump lifecycle
- Oversized integrally mounted bearing housing with axial and radial bearings for trouble free operation
- Shaft sleeves at all pump rotor wear parts for wear protection
- Line shaft connections with robust muff coupling

Key characteristics

| | |
|--------------|---|
| Capacities | up to 22'000 m ³ /h / up to 97'000 USgpm |
| Heads | up to 200 m / up to 420 ft. |
| Pressure | up to 25 bar / up to 362 psi |
| Temperatures | up to 65°C / 149°F |

Applications

- Water transport, intake and treatment
- Desalination (sea water intake, brine backwash, etc.)
- Circulation and cooling water services in power plants
- Irrigation



SVE vertical ebullator pump ISO 13709 / API 610 / ISO 15783 / API 685

Features and benefits

- API 685 complaint canned-motor drive with isolated stator chamber to prevent contact with process stream, no requirement for expensive dielectric oil
- No mechanical seal reducing risk leakage and maintenance
- Multiple layer hard coating on pump casing internal surface for maximum service life
- Reduced OPEX compared to competitor designs
- Proven hydraulic and mechanical construction

Key characteristics

| | |
|--------------|--|
| Capacities | up to 3'500 m ³ /h / 15'400 USgpm |
| Heads | up to 50 m / 160 ft. |
| Pressures | up to 272 bar / 3'945 psi |
| Temperatures | up to 430°C / 806°F |

Applications

- Axens H-Oil^{FC} process
- Vacuum residue upgrading
- Heavy oil upgrading
- Synfuels



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 m ³ /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 m ³ /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 |

Applications

- Molten salt pump



> Vertical sump pumps

AHLSTAR NK and WK ranges

Features and benefits

- Exceeds requirements of international ISO 5199 standard
- Unique, patented and superior design features minimize life cycle costs
- Suitable for the all types of severe applications in seal pits and floor channels
- Excellent performance
- Quick and easy installation, safe operation, easy maintenance and service

Key characteristics

| | |
|--------------|---|
| Capacities | up to 430 m ³ /h / 1'900 USgpm |
| Heads | up to 60 m / 200 ft. |
| Pressures | up to 10 bar / 145 psi depending on material and size |
| Temperatures | up to 95°C / 205°F |

Applications

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



AHLSTAR NV range

Features and benefits

- Exceeds requirements of international ISO 5199 standard
- Unique, patented and superior design features minimize life cycle costs
- Suitable for the all types of severe applications in seal pits and floor channels
- Excellent performance
- Quick and easy installation, safe operation, easy maintenance and service

Key characteristics

| | |
|--------------|---|
| Capacities | up to 1'200 m ³ /h / 5'400 USgpm |
| Heads | up to 85 m / 280 ft. |
| Pressures | up to 10 bar / 145 psi depending on material and size |
| Temperatures | up to 95°C / 205°F |

Applications

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



CVT vertically suspended sump pump VS4

Features and benefits

- Exceeds requirements of ANSI/ASME B73.1 standard and fulfills many API 610 features
- Suitable for demanding industrial sump pump applications
- Unique, patented and superior design features minimize life cycle costs
- Quick and easy installation, safe operation, easy maintenance and service

Key characteristics

| | |
|--------------|---|
| Capacities | up to 750 m ³ /h / 3'200 USgpm |
| Heads | up to 120 m / 550 ft. |
| Pressures | up to 26 bar / 375 psi |
| Temperatures | up to 205°C / 400°F |

Applications

- Drainage sumps
- Oily water sumps
- Lube oil supply
- Tank transfer



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 m ³ /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
- Oily water transfer
- Lube oil



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 allowed

Key characteristics

| | |
|--------------|---|
| Capacities | up to 1'500 m ³ /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 |

Applications

- 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 allowed

Key characteristics

| | |
|--------------|--|
| Capacities | up to 3'500 m ³ /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 1'500 m ³ /h / 6'600 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, high reliable and efficient design ensure longer mean time between maintenance and minimized total cost of ownership

Key characteristics

| | |
|--------------|---|
| Capacities | up to 300 m ³ /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 |

Applications

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

