SULZER

Sulzer Pumps Sales Program

The Heart of Your Process

Sulzer Pumps

Sulzer Pumps combines more than 145 years of experience in pump development and manufacturing with a deep commitment to fully understanding the needs of our customers.

Our detailed process and application knowledge has allowed us to develop innovative pumping solutions for our focus segments including tailor made systems if required. Our active research & development supports this customer oriented approach.

Sulzer Pumps has sales and service facilities in all the major markets of the world to provide fast and flexible response and support.

Global Manufacturing

With 14 manufacturing facilities across the globe (including two foundries) Sulzer Pumps combines the advantages of being a global company with the ability to be your local partner. Control of the entire manufacturing process allows us to maintain the highest quality standards.

Our centrally administered quality program ensures that, regardless of where the individual component is produced, Sulzer Pumps quality is consistently excellent. The ability to transfer manufacturing of either parts or complete pumps between plants guarantees the most efficient utilization of our facilities.

The result of this approach is that the users of our products benefit from class leading levels of performance and reliability no matter what the application. Industries ranging from offshore oil production to paper manufacturing depend on the reliable operation of Sulzer Pumps products to keep their facilities running smoothly.

Pump Segment Matrix

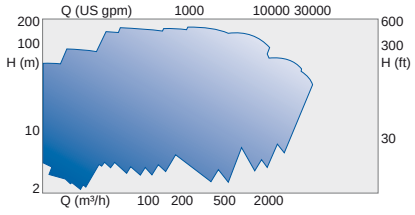
Product Types		Oil & Gas	Hydrocarbon Processing	Pulp & Paper	Power Generation	Water & Wastewater	Food, Metals & Fertilizers
Single Stage Pumps	AHLSTAR^{UP} A Series		●	●	●	●	●
	AHLSTAR^{UP} N Series		●	●			●
	AHLSTAR^{UP} W Series		●	●	●		●
	AHLSTAR^{UP} E Series		●	●	●		●
	CPT		●	●	●		●
	ZE/F Series		●	●	●	●	●
	OHH/OHHL	●	●				
	OHM/OHC	●	●				
	BBS	●	●				
	HLTE		●				
	HZB				●		
Two Stage Pumps	BBT/BBT-D		●				
	LSP/LST			●			
Barrel Pumps	GSG	●	●		●		●
	HPT				●		
	HPcp/HPcpV	●					
	CP	●	●		●		
	MPP	●					
Ring Section Pumps	M Series			●	●	●	●
	MBN			●	●	●	●
	HPH/HPL					●	●
	TUP					●	
Axial Split Pumps	MSD	●	●		●		
	SM/SMN/SMH Series	●	●	●	●	●	●
	HSB	●	●				
	ZPP			●	●		
	HPDM	●				●	
Vertical Pumps	AHLSTAR™ NVP/NVT		●	●	●	●	●
	AHLSTAR™ NKP/T,WKP/T			●			●
	B Series	●	●		●	●	
	JD	●	●	●	●	●	●
	JF	●	●	●	●		●
	JM		●	●	●	●	●
	JP		●	●	●	●	●
	JS	●	●	●	●	●	●
	JT	●	●	●	●	●	●
	OHV/OHVL	●	●				
	VCR	●	●				
	APV/NPV				●	●	
MC® Products	MC® Pumping System			●			
	AHLMIX™ Chemical Mixer			●			
	MC® Discharger Scraper			●			
	MC® Flow Discharger			●			
Agitators	SALOMIX® SL/ST			●			●
	SALOMIX® L Series			●			●
	SALOMIX® TES, VULCA			●			
Service	Service products available for all segments.						

Single Stage Pumps

AHLSTAR^{UP} A Series

AHLSTAR^{UP} A pumps are designed for pumping clean, abrasive or corrosive liquids as well as stocks of various kinds. If the liquid contains gas or air the pump can be modified with either internal or external gas removal construction which stabilizes the operation. The Sulzer Dynamic Seal is specially designed for difficult liquids offering reliable operation and low total sealing costs.

Performance Range

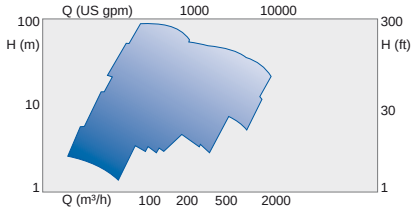


Pressure	16 bar / 230 psi
Temperature	180° C / 355° F

AHLSTAR^{UP} N Series

AHLSTAR^{UP} N pumps are designed for pumping abrasive or corrosive liquids, sludges and slurries containing large particles or long fibers. Special hydraulic design prevents plugging and lets big particles pass. Gas removal systems broaden the scope of applications to include those containing air or gas.

Performance Range

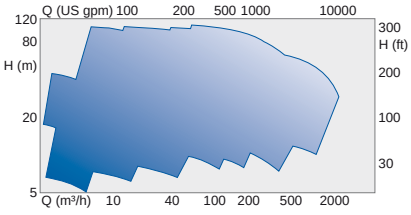


Pressure	16 bar / 230 psi
Temperature	180° C / 355° F

AHLSTAR^{UP} W Series

AHLSTAR^{UP} W pumps are intended for corrosive and abrasive applications where durability is essential. The special hydraulic design reduces erosion while careful selection of parts materials to make them compatible with corrosive conditions, gives extended working life and reliability. Gas removal construction is also offered.

Performance Range

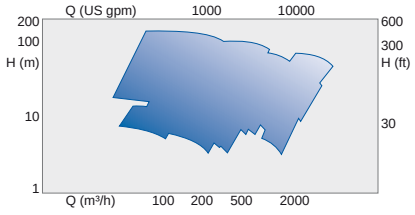


Pressure	16 bar / 230 psi
Temperature	180° C / 355° F

AHLSTAR^{UP} E Series

AHLSTAR^{UP} E pumps provide continuous operation in industrial processes. Typical applications include the pumping of hot clean, abrasive or corrosive liquids and liquors. These pumps are particularly effective where system pressure is high and pressure/temperature shocks occur.

Performance Range

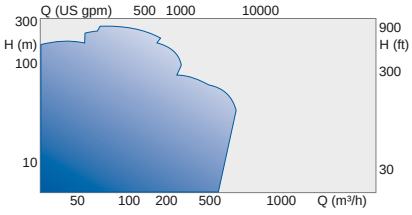


Pressure	25 bar / 360 psi
Temperature	210° C / 410° F

CPT

The CPT chemical process pump is designed for continous operation in process industries for pumping clean, abrasive or corrosive liquids. This pump is designed to exceed ANSI (ASME B73.1M) pump standards.

Performance Range

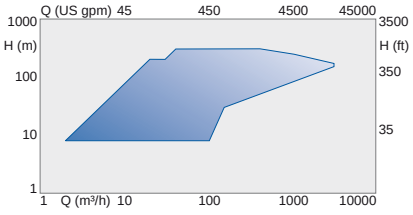


Pressure	16 bar / 230 psi
Temperature	180° C / 355° F

ZE/F Series

The ZE/F end suction industrial process pumps use modular construction to provide maximum interchangeability of spares. Manufactured in two casing pressure ranges with over 50 sizes and 6 bearing frames, ZE/F pumps are ideal for arduous applications in a wide range of industrial processes.

Performance Range

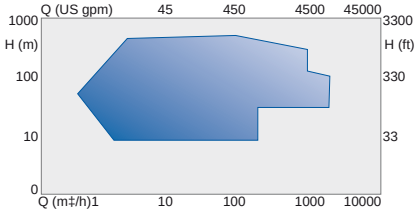


Pressure	150 bar / 2175 psi
Temperature	450° C / 840° F

OHH/OHHL

The OHH horizontal overhung process pump is designed for use in heavy duty refinery services, petrochemical plants, and offshore services. It's designed according to ISO 13709 (API 610) and ISO 21049 (API 682). The OHHL is the same rugged design with low flow hydraulics for improved hydraulic fit—even at low flow conditions.

Performance Range



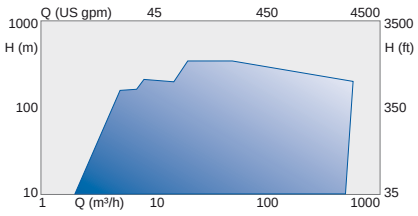
Pressure	50 bar / 725 psi
Temperature	425° C / 800° F

OHM/OHC

These pumps use the modular casing and impeller assemblies of the OHH attached to either a unique magnetic drive bearing assembly (OHM) or a canned motor (OHC).

A key element of OHM is a secondary containment chamber rated at the full discharge pressure of the pump. The OHC features a rugged electric motor drive rated for full discharge pressure and complying with ASME and API 685 standards.

Performance Range

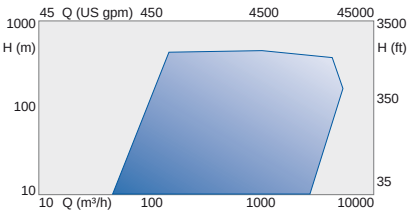


Pressure	52 bar / 740 psi
Temperature	250° C / 480° F (OHM) 425° C / 800° F (OHC)

BBS

BBS ISO 13709 (API 610) pumps are primarily used in process applications in refineries and petrochemical plants. The broad pressure and temperature capabilities of this design allow it to be used in the most arduous applications while still providing long and trouble free service. The double entry impeller is particularly suited to low NPSHA applications.

Performance Range

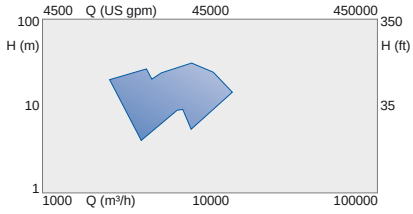


Pressure	100 bar / 1450 psi
Temperature	425° C / 800° F

HLTE

HLTE elbow pumps are specifically designed for reactor circulation duties in polypropylene and polyethylene plants. Mounted on sprung base-plates, the pumps effectively become part of the reactor circuit. A sophisticated triple mechanical seal system prevents leakage of the pumped fluid whilst highly polished pump internals minimize damage to the forming polymer chains.

Performance Range

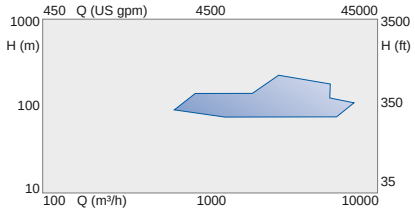


Pressure	200 bar / 1450 psi
Temperature	180° C / 355° F

HZB

HZB pumps are designed as hot water boosters for high energy boiler feed pumps in thermal power plants. Their design is optimized for pumping hot water with relatively low NPSH available. The rugged design ensures the long term reliable operation that is critical in this application.

Performance Range



Pressure	25 bar / 360 psi
Temperature	220° C / 430° F

Two Stage Pumps

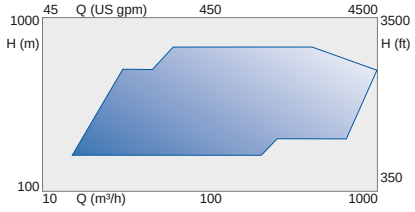
BBT/BBT-D

These API 610 BB2 back-to-back two stage pumps are designed for process applications in refineries and petro-chemical plants. The design features large seal chambers able to accom-modate API 682 seals. Standard opt-ions include coke crusher inserts to provide extended service life in abr-asive applications and a double entry suction in the BBT-D.

LSP/LST

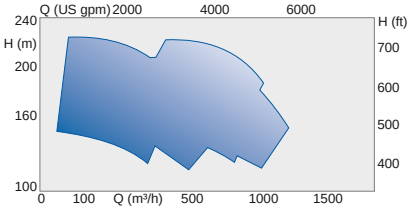
These low speed high pressure pumps are especially designed for continuous digester feed in the pulp and paper industry. The pump has a two-stage, end suction, horizontally mounted back pull-out design for hot, abrasive and corrosive liquids.

Performance Range

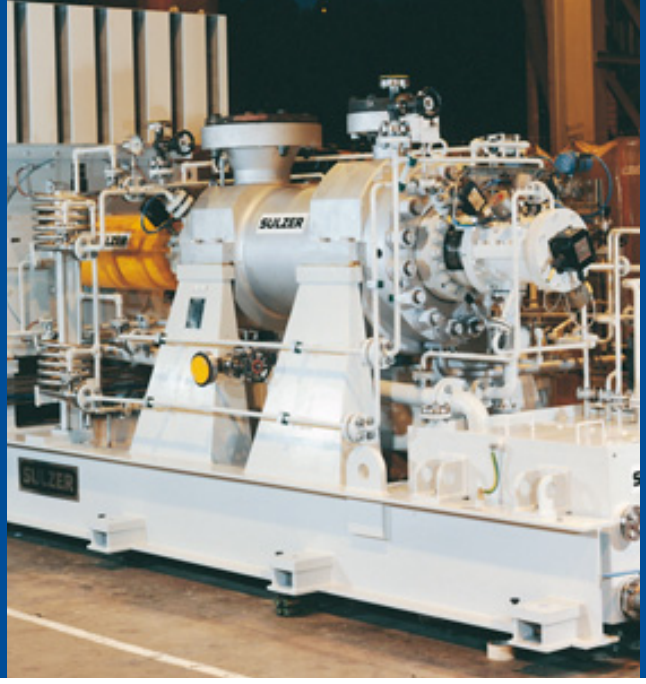


Pressure	100 bar / 1450 psi
Temperature	450° C / 840° F

Performance Range



Pressure	25 bar / 360 psi
Temperature	180° C / 355° F

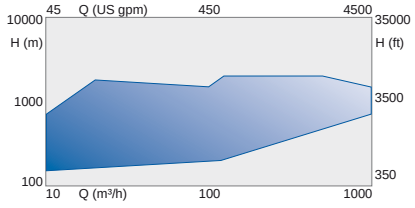


Barrel Pumps

GSG

GSG API 610 BB5 radially split barrel casing pumps are used in oil production, refining and boiler feed applications. Their design is optimized for synchronous speed direct drive applications thus avoiding unnecessary and expensive construction features. Their full cartridge design makes the most of the compact Sulzer Twistlock system of barrel closure. A back-to-back option is also available.

Performance Range

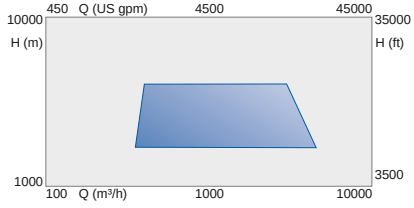


Pressure	250 bar / 3625 psi
Temperature	425° C / 800° F

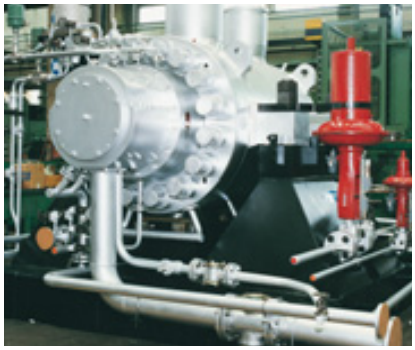
HPT

HPT radially split barrel casing pumps are specifically designed for boiler feed applications in thermal power stations. The pumps are optimized to provide high efficiency operation over an extended period of time thus reducing operating and maintenance costs.

Performance Range



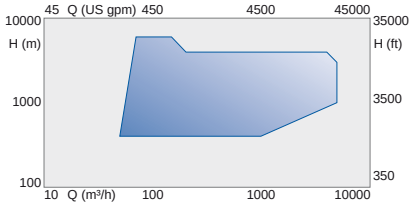
Pressure	450 bar / 6525 psi
Temperature	250° C / 480° F



HPcp/HPcpV

HPcp API 610 BB5 radially split barrel pumps are used for injection and main oil line services. Using the Sulzer Twistlock system of barrel closure to minimize weight, these pumps represent the state-of-the-art for high energy pumps. They are available in both horizontal and vertical configuration. The world's largest onshore, offshore and vertical injection pumps are all HPcp designs.

Performance Range



Pressure	600 bar / 8700 psi
Temperature	90° C / 195° F

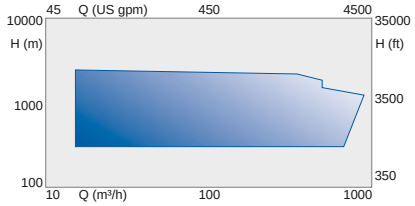
CP

CP API 610 BB5 axially split barrel casing pumps are used in both oil production and refinery applications. They are particularly suited to low specific gravity applications where the back-to-back design and center bush provide natural axial balance and additional shaft support. These pumps also utilize the Sulzer high temperature Twistlock design.

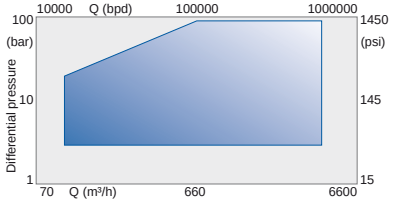
MPP

MPP helico-axial multiphase pumps are spearheading a revolution in oil and gas production. The pumps are able to operate with high gas fractions thus removing the need for separation systems. The world's largest onshore and offshore multiphase installations are Sulzer MPP designs.

Performance Range



Pressure	410 bar / 6000 psi
Temperature	425° C / 800° F



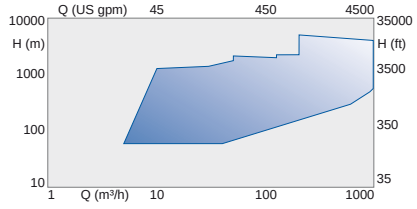
Pressure	150 bar / 2175 psi
Temperature	175° C / 350° F

Ring Section Pumps

M Series

This modular series of ring section multistage pumps consists of MC, MD and ME ranges. A wide range of common hydraulic components and bearing assemblies are used within the three standard pressure ranges. This flexibility minimizes the overall number of parts required.

Performance Range

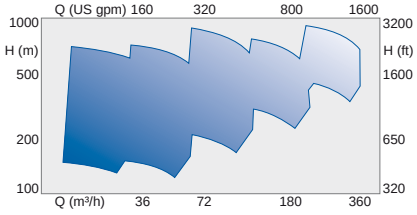


Pressure	450 bar / 6500 psi
Temperature	210° C / 410° F

MBN

Covering the performance range below the MC, the new MBN ring section multistage pump is the ideal choice for medium pressure pumping applications. The pump is offered in a wide range of materials including duplex stainless steel grades. The pump utilizes integrated diffusers and a product lubricated NDE bearing to simplify construction, minimize dimensions and reduce cost.

Performance Range

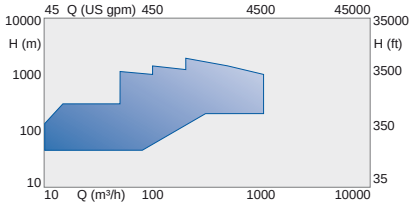


Pressure	100 bar / 1450 psi
Temperature	180° C / 355° F

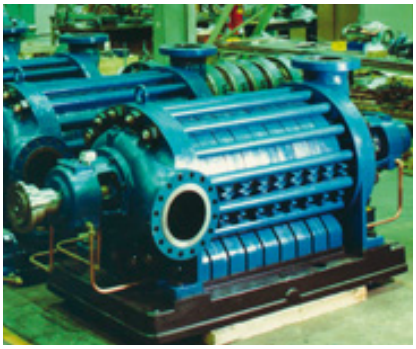
HPH/HPL

These multistage pumps are specifically designed for mine dewatering applications. Their robust construction is designed to combat the highly abrasive environment in which they operate. Extensive use of replaceable wear surfaces ensures the pumps can be rapidly refurbished to as-new condition without extensive replacement of core parts.

Performance Range



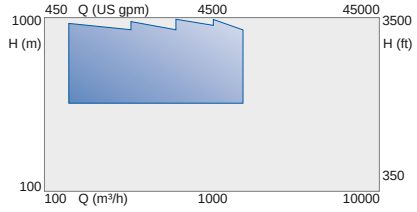
Pressure	170 bar / 2500 psi
Temperature	105° C / 220° F



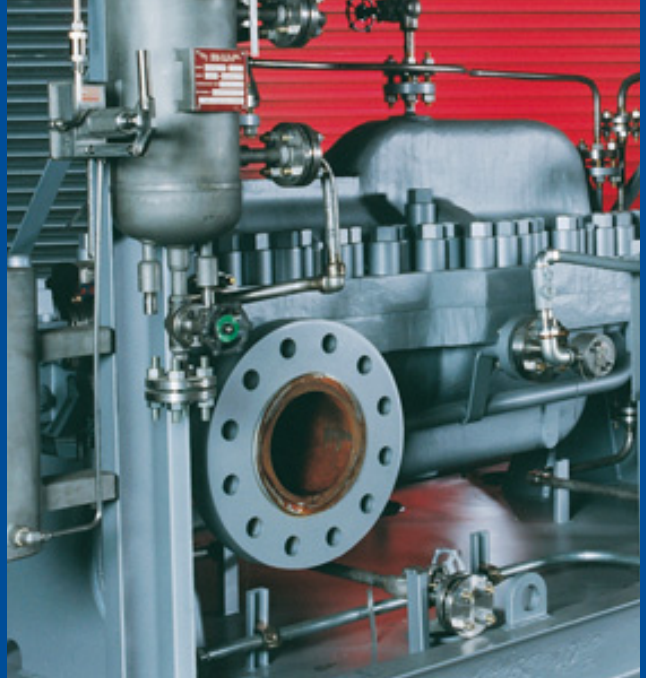
TUP

This unique design combines the hydraulic components from the M range together with a pelton wheel for energy recovery in a single unit. Specifically designed for desalination applications these pumps provide a compact and commercially attractive option to traditional solutions.

Performance Range



Pressure	100 bar / 1500 psi
Temperature	90° C / 190° F

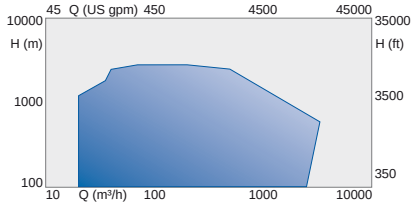


Axially Split Pumps

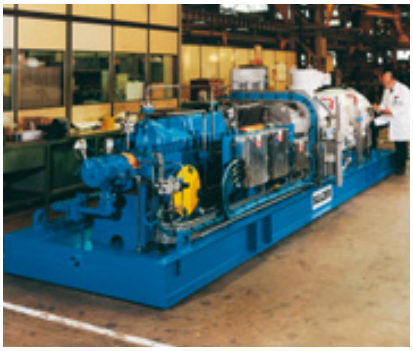
MSD

MSD API 610 BB3 multistage pumps are widely used in refineries, petrochemical plants, pipelines, water injection and power generation applications. The broad range of standard hydraulics and mechanical design options ensure optimum fit to customers duty requirements, using proven pre-engineered solutions.

Performance Range



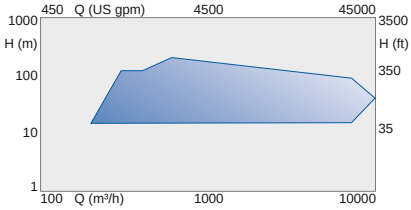
Pressure	310 bar / 4500 psi
Temperature	200° C / 400° F



SM/SMN/SMH Series

The SM family of single stage double entry pumps is used across a broad range of industries in liquid transport and transfer applications. Pre-engineered standard versions include the SMH API 610 9th Edition BB1 compliant design and the SMN standard industrial pump with vertical configuration options.

Performance Range

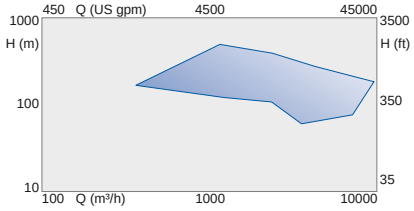


Pressure	30 bar / 435 psi
Temperature	160° C / 320° F

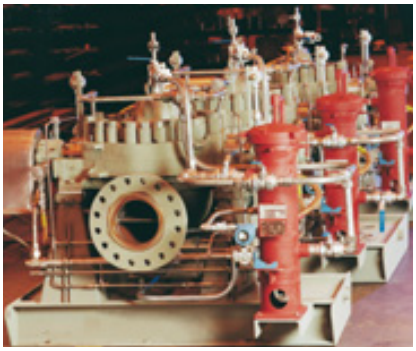
HSB

HSB API 610 BB1 double suction axial split pumps are designed for use in both pipeline and general refinery applications. Their heavy duty design is suitable for both synchronous and high speed operation.

Performance Range



Pressure	125 bar / 1800 psi
Temperature	205° C / 400° F



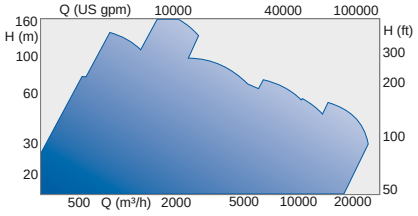
ZPP

ZPP double suction pumps are especially designed for today's high speed paper machines requiring low pulsation and high efficiencies. Other applications include cooling and circulating water pumping.

HPDM

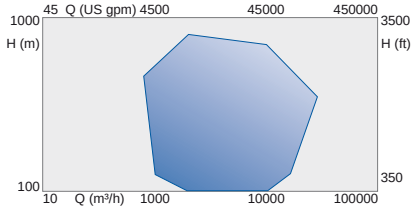
HPDM multistage axially split pumps are designed for high volume, high pressure water transport applications. HPDM pumps are individually designed to provide class leading efficiency and are used to supply water for many major cities throughout the world.

Performance Range



Pressure	10 bar / 150 psi*
Temperature	120° C / 250° F

Performance Range



Pressure	150 bar / 2200 psi
Temperature	90° C / 195° F

* Depending on pump size and material

Vertical Pumps

AHLSTAR™ NVP/NVT

NVP/NVT non-clogging vertical pumps are intended for all kinds of hard applications with waste water, slurries or waste stock.

Non-clogging pumps are available with closed or vortex impellers to meet the requirements of different applications.

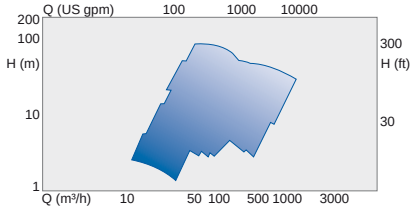
AHLSTAR™ NKP/NKT, WKP/WKT

Non-clogging (NKP/NKT) and wear resistant (WKP/WKT) vertical cantilever pumps are used in applications with liquids containing solids or abrasive slurries and when no support bearing inside the liquid is allowed. Cantilever pumps are available with closed, open or vortex impellers to meet the requirements of different applications.

B Series

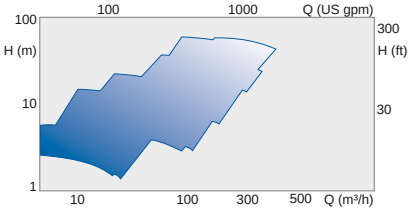
The BK, BS and BP range of vertical line shaft pumps is primarily used in water lift, transfer and cooling water applications. A double suction variant, the BD, is available where NPSH is limited. When fitted with a can the BDC may also be used for condensate extraction applications. API 610 VSI, VS2, VS3 and VS6 versions are available.

Performance Range



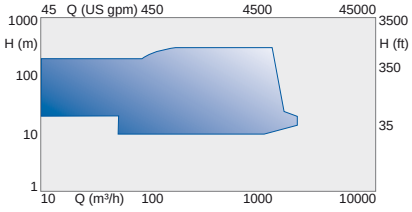
Pressure	10 bar / 150 psi
Temperature	95° C / 205° F

Performance Range



Pressure	10 bar / 150 psi
Temperature	95° C / 205° F

Performance Range

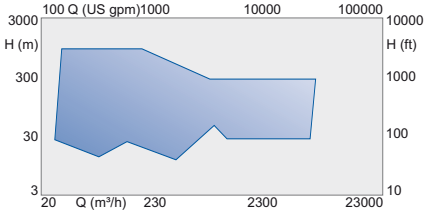


Pressure	40 bar / 580 psi
Temperature	100° C / 210° F

JD

The JD range of vertical can pumps is ideal for applications where NPSHA is limited. The pumps are used in a wide range of applications ranging from simple industrial booster pumps to high pressure condensate return and heater drain pumps in power plants. Their robust construction and wide hydraulic range make them ideally suited to process critical applications.

Performance Range

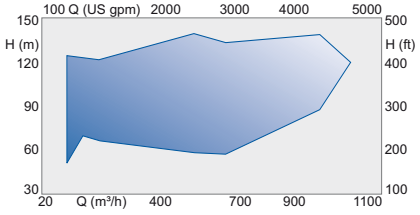


Pressure	90 bar / 1300 psi
Temperature	135° C / 275° F

JF

Built to meet NFPA specifications, JF vertical fire pumps require no priming so are continually ready for instant operation. Taking water from wells, reservoirs or other reliable sources, pre packaged JF pump sets provide round the clock protection for people, possessions, inventory and assets around the globe. The standard materials of construction have been carefully chosen to resist the corrosive effects aggressive liquids such as seawater.

Performance Range

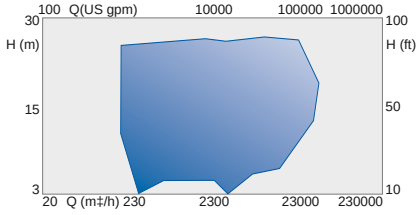


Pressure	48 bar / 700 psi
Temperature	135° C / 275° F

JM

JM mixed flow pumps are ruggedly designed for years of trouble free operation in a wide variety of applications. The basic components of head, column pipe and bowl assembly are combined and customized to perfectly match individual duty needs. In addition the standard range of material options ensures the materials of construction can be matched to individual installation needs.

Performance Range

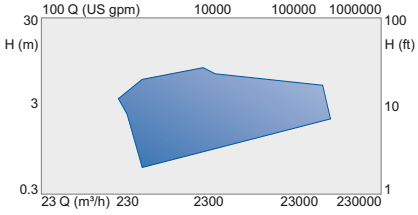


Pressure	17 bar / 250 psi
Temperature	135° C / 275° F

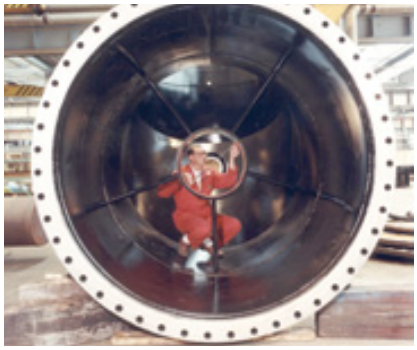
JP

The JP range of axial flow (propeller) pumps is specifically designed for high flow low head duties. Widely used in irrigation, flood control, drainage and condenser circulation applications, JP pumps are designed for continuous service for extended periods of time. The pumps are available in a range of metallurgies to match individual application needs.

Performance Range



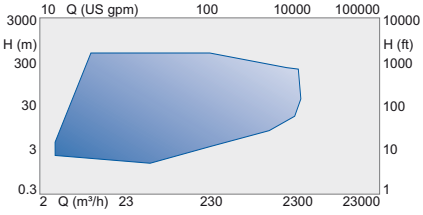
Pressure	17 bar / 250 psi
Temperature	135° C / 275° F



JS

JS pumps use the well proven hydraulics of the J family but coupled to a submersible electric motor. This makes them ideally suited to deep well applications where traditional shaft drive solutions would be impractical. Used in applications ranging from general drainage duties to offshore sea water lift, these versatile pumps are available in a wide range of materials to suit every application.

Performance Range

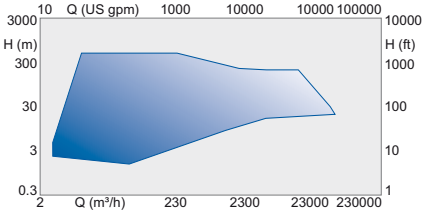


Pressure	48 bar / 700 psi
Temperature	135° C / 275° F

JT

The JT vertical turbine range offers incredible flexibility due to an extensive range of standard features. These include oil, grease, product or flushed bearing lubrication, sealing plans for all liquids, above or below ground discharge and a wide rage of materials of construction. In addition JT pumps can be supplied to conform with ASME, ANSI, NRC and API standards.

Performance Range



Pressure	48 bar / 700 psi
Temperature	135° C / 275° F

OHV/OHVL

The OHV ISO 13709/API 610 OH3 range is used in refineries, oil and gas production, pipeline boosting and offshore applications where space is confined. The pump makes extensive use of common parts with other OH products.

The OHVL is a low flow, high head design using the same hydraulics as the OHHL but in a vertical configuration.

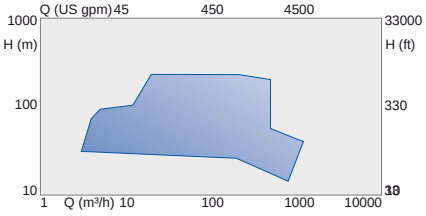
VCR

These API 610 VS7 design multistage canned pumps are used where NPSH available is limited. A wide range of hydraulics, discharge headgear and pressure ratings may be supplied depending on individual application requirements. For cryogenic applications a low temperature seal system (J unit) is also available.

APV/NPV

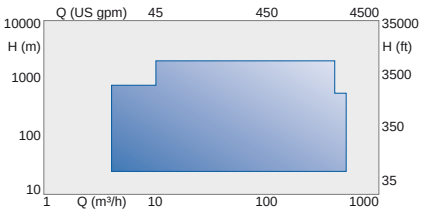
APV/NPV vertical volute pumps are primarily used in water transport and cooling water applications. Design variants are also available for pumping untreated sewage and other effluents.

Performance Range



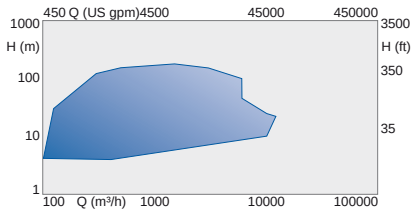
Pressure	51 bar / 740 psi
Temperature	230° C / 450° F

Performance Range



Pressure	100 bar / 1500 psi
Temperature	205° C / 400° F

Performance Range



Pressure	16 bar / 230 psi
Temperature	80° C / 175° F

Agitators

SALOMIX® SL/ST

SL/ST agitators are side-mounted gear or belt driven propeller agitators specially designed for fibrous stocks in all process conditions. They are characterized by low power need and high efficiency. By combining four bladed cast, adjustable propeller blades with the conical body shape inside the tank, the stock flow to the propeller is streamlined. Rigid design makes these agitators reliable and provides extended operational life. The product range includes propeller diameters from 315 mm to 1600 mm while the power range is from 2,2 kW up to 90 kW. These side mounted agitators are mainly used in the pulp and paper industry.

SALOMIX® L Series

The L-series covers gear or belt driven agitators mounted either vertically (on the tank top flange or through the tank bottom) or horizontally to the side wall flange of the reactor. The power range covers agitators with 0,5 kW motors up to 450 kW motors. Versatile impeller options with single or multilevel paddles, propellers, turbines, dissolver discs, anchor etc. makes it possible to control many different kinds of agitation operations and process needs in compliance with the rheology of the mixed fluid.

SALOMIX® TES, VULCA

Particularly in big storage tanks or towers, the outpumping stock quality is difficult to control – especially when the stock is diluted in the bottom zone of the tank. To control the flow in the high density area in the upper part of the tank the TES is used to spread the stock evenly on the top surface and to create a uniform downflow. The TES with variable rotating speed ensures that an even, fresh layer of stock is spread always topmost regardless of the surface level in the tower.

VULCA together with DILCO dilution water feed system is used to prevent the channelling and air entrainment into the stock and to save pumping energy costs when filling the tower.

MC® Products

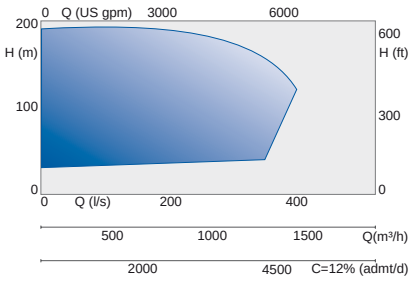
MC® Pumping System

MCE™ medium consistency pumps are designed for pumping stocks at up to 18 % consistency.

The most common application of MC® pumping is to pump stock from washers, thickeners and filters.

The MCE™ pump can be provided with a separate external degassing system or with a built-in degassing system. Both alternatives incorporate the same benefits of Sulzer Pumps' new 3rd generation centrifugal MC® Pumps.

Performance Range



AHLMIX™ Chemical Mixer

is a medium consistency (MC®) chemical mixer for mixing both gaseous and liquid bleaching chemicals and also steam into paper stock.

The rotor of the mixer fluidizes the stock together with the casing turbulence generators, thus disrupting the fiber network and resulting in the optimum mixing result. Perpendicular positioning of the rotor and the unique three dimensional turbulence zone prevent the separation of gas.

MC® Discharge Scraper

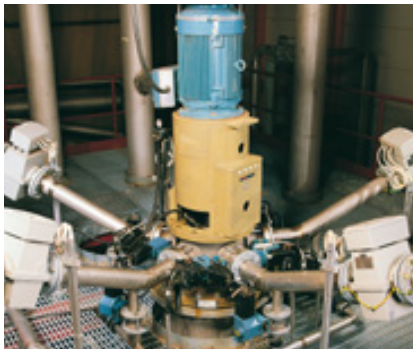
operates in connection with a medium consistency tower discharge pump. Maximum stock consistency in the tower is 25-30%.

The Discharge Scraper scrapes the stock over the complete bottom area of the tower and leads it into the feeding chute of the MCE™ pump, thus enabling an even discharge and simultaneously preventing channeling of the stock in the tower.

MC® Flow Discharger

is designed for dividing and controlling high consistency stock flow and for discharging towers and bleaching reactors.

The Flow Discharger operates so that the stock entering the chamber of the discharger is fluidized by the rotor. The outlets are constructed directly to this same chamber. The discharger itself does not generate pressure, so an MCE™ pump is required in the process to pump the stock through the discharger.



Performance Through People

If pumps and rotating equipment are critical to your operations, you seek specific qualities when selecting external service support:

- A service partner you can trust
- Reliability
- Responsiveness
- Rapid turn around
- Innovative solutions

Our service professionals deliver these qualities and more to customers from all industry sectors around the globe. With services ranging from spare parts to trouble shooting, we can maintain your rotating equipment and improve your processes.

Service Partner

Our goal is to be your business partner who delivers customized service solutions that improve your operations. Our measure of success is the loyalty of our customers year after year, decade after decade.

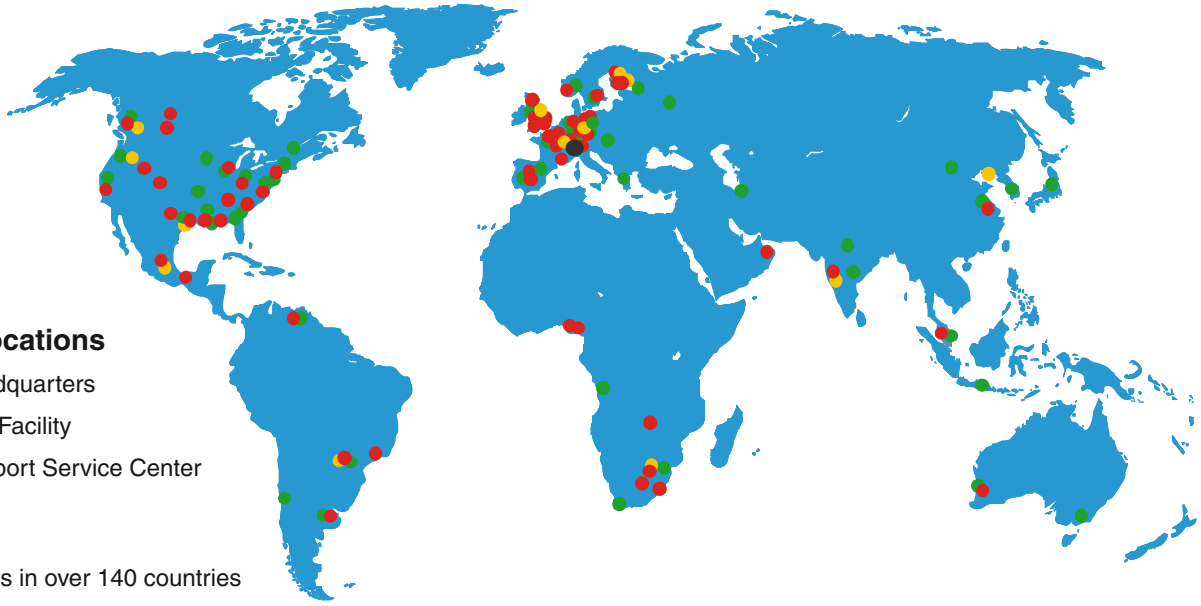
Reliability

Reliability depends on the longevity of replacement parts and the quality of repair of damaged or worn equipment. You can count on our expertise to deliver and on our commitment to do the job right first time, every time.

Our teams are known in the industry for their extreme dedication. You can rely on us to stand by you if unexpected problems occur.

Responsiveness

You have specific needs, expectations and priorities – we are responsive to them and define with you the best possible solutions for your business. You need us urgently? we are present 24/7, 365 days per year.



Network of Locations

- Divisional Headquarters
- Manufacturing Facility
- Customer Support Service Center (CSS)
- Sales Office

Representatives in over 140 countries

Rapid Turn Around

You expect to receive quotations quickly and have your equipment repaired rapidly to minimize disruption and costs. We aim to exceed your expectations through our continuous investment in more effective shopfloor and administrative processes.

Innovative Solutions

Sulzer Pumps is renowned in the industry for its innovative technology and application know-how. We are able to make the best diagnostic of your installation and optimize its performance. We can achieve increased throughput, lift efficiency and improve reliability in most pumps by replacing existing hydraulics with state of the art Sulzer Pumps designs.

Global Reach

With over 60 service facilities around the world, we operate one of the largest service networks in the industry and are close to your operations. Each facility is staffed by specialists dedicated to supporting customers and their equipment.

Service centers are equipped with machine tools, balancing equipment and inspection facilities. Naturally, all service centres have access to the drawings of all Sulzer Pumps for seamless parts delivery.

Quality, Health and Safety

Our globally recognized Quality Management System complies with national and international standards using ISO 9001:2000 as its basis. It covers our internal service operations as well as our relationship with customers.

We monitor health and safety in all service locations and are committed to continuous improvement.

Sulzer Pumps
Sulzer Pumps Ltd.
Zürcherstrasse 12
P.O.Box 414
CH-8401 Winterthur
Switzerland
Tel. +41 (0)52 262 11 55
Fax +41 (0)52 262 00 40
E-mail info.pumps@sulzer.com
Internet www.sulzerpumps.com

E00543 (6) en 6.2006 (5000), Copyright © Sulzer Pumps

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