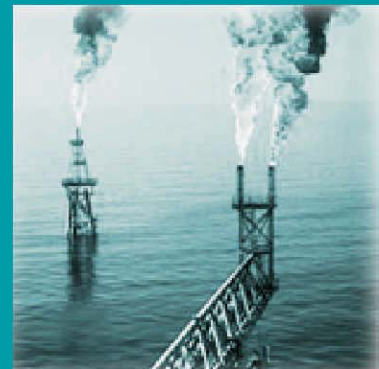


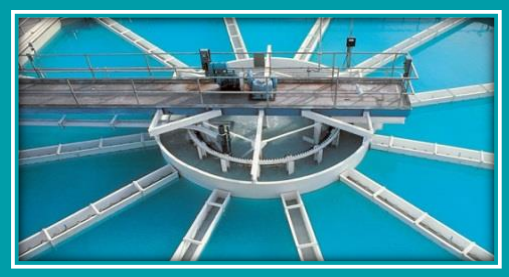
K Range Pumps



Quality through Service



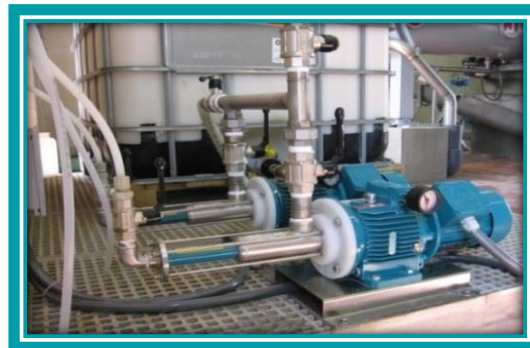
Abrasive? Viscous? Shear Sensitive? High Solids Content? High Air Content? Chemically Aggressive?



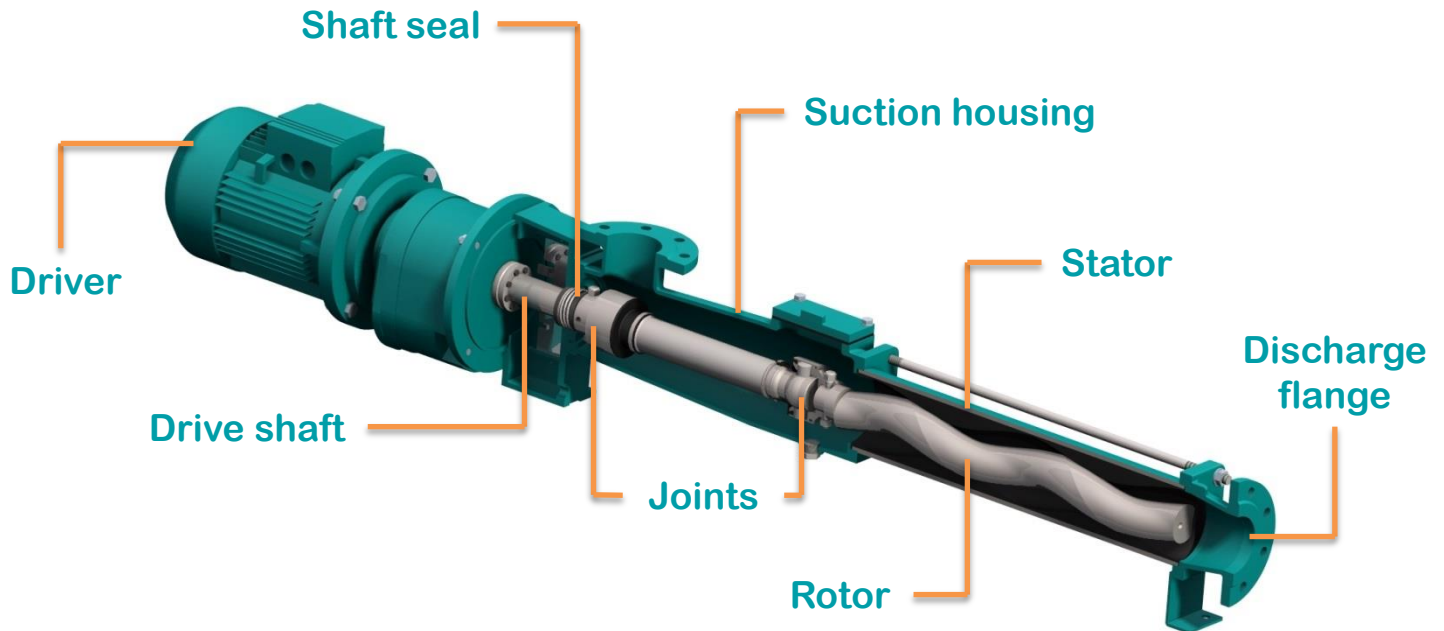
Sydex has a Solution

Sydex Progressing Cavity (PC) Pumps are rugged, high quality and efficient. They offer solutions to the special pumping problems of municipal and industrial wastewater, and waste processing operations. Sydex PC pumps are equally well suited in industries such as chemical, petrochemical, pulp & paper, construction, mining, cosmetics, and food.

Whatever your pumping needs, Sydex has a solution.



Design and Construction Features



Rotor

High quality rotating element available in many materials and geometries for optimum performance in the most demanding applications. Available in hardened tool steel, several grades of stainless steel, and hard chrome plated.

Stator

Molded rubber in a variety of materials to suit any application. Available in NBR, EPDM, Viton, and many more. Gaskets are molded into each end preventing fluid leakage between the stator and the pump housings.

Joints and Connecting Rod

High strength pin joints for the eccentric motion of the rotor. Joint is covered with elastomeric sleeve and filled with lubricating oil for maximum life. Sanitary pumps have open pin joints to facilitate thorough cleaning. Connecting rod available in many materials for any application.

Drive Shaft

Sized for the efficient transmission of torque from the driver to the rotor and designed for the use of standard seal sizes.

Shaft Sealing

Shaft sealing is accomplished by either mechanical seals or soft packing. Mechanical seals can be provided in a wide variety of designs and materials. Soft packing is available with lantern rings for cooling and lubrication.

Suction Housing

The suction housing is where the fluid enters the pump and where the joints and connecting rod are located. It is available in many different materials and can be rotated in 90 degree increments to fit the piping scheme. Cleanout ports, drains and pressure taps are standard on most sizes.

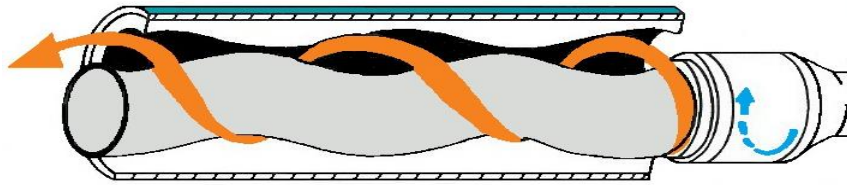
Pipe Connections

Sized for the flow characteristics of the pump, the flanges are available in ANSI, DIN, or NPT (on smaller pumps). Sanitary pumps with tri-clamp connections as standard.

Driver

Sydex pumps are available as either close-coupled or long-coupled (with bearing frame). This allows for the use of any type of drive configuration including belts and pulleys.

Operating Principle



A single external helix or “rotor” rotates within a stationary double internal helix known as a “stator”. This forms a series of cavities 180 degrees apart. As the rotor rotates, these cavities gently convey liquid from the low pressure suction end to the high pressure discharge end. Pressure is maintained by the contact point between the rotor and stator which is referred to the “seal line”. By doubling the length of the rotor and stator [2 stages] the seal line is increased as is the pump’s pressure capability. Typically, a 1-stage pump will be rated for 90 psig and a 2-stage pump 180 psig. The flow rate of the pump is determined by rotational speed and the diameter of the rotor and stator.

Features and Benefits

- Self-priming, Positive Displacement:**.....Suction lifts up to 28 feet. Pumping action results from the progressing cavities that are formed as the rotor turns within the stator.
- Metered Uniform Flow:**.....Capacity proportional to the pump rotation speed. Pressure is independent of the pump speed.
- Gentle Pumping Action:**.....Uniform flow with very little pulsation, turbulence or shearing of the product.
- Simple Design:**.....Pump incorporates a single element rotating in a stator.
- Reversible:**.....Pumps equally well in either direction.
- Construction:**.....Available in a wide variety of materials.
- Versatile:**.....Capable of pumping a wide variety of products.

Configurations

Close-coupled design for space saving installations.



Long-coupled design features heavy duty bearing frame for rigorous 24/7 applications.

Materials of Construction

Casing:

Cast iron (GG25)
304 Stainless steel
316L Stainless steel

Other grades upon request

Rotor:

316 Stainless steel
304 Stainless steel
420B Stainless steel
4140 Alloy steel
Hard chrome plated
Other grades upon request

Stator:

Buna
H-NBR
EPDM
Viton
Hypalon

Joints:

Enclosed pin joints
Open pin joints

Sealing:

Gland packing
Single mechanical seal
Double mechanical seal
API plans

Baseplates:

Carbon steel
Stainless steel
API
Mobile

Our Pump Products



K Range
General purpose



W Range
Open throated hopper



H Range
Hygienic



FM Range
Free-molded



E Range
Vertical



M Range
Metering



G Range
Extra large hopper

K Range

' &0 A' #F, (, '6 Uf

Horizontal heavy-duty pumps with flanged connections designed for industrial and municipal wastewater applications to handle sludges, slurries, viscous and fibrous materials. Pump wetted parts are available in a variety of materials. The **K Range** pumps can be used with any type of driver.

W Range

&+\$'A' #F, (, '6 Uf

Open throat auger feed pumps designed to pump materials with heavy solids concentrations, high viscosities and/or virtually no flow characteristics. The inlet connection size and shape can be varied to meet nearly any requirements, especially when pumping discharges from centrifuges and filter presses.

H Range

, '\$'M' #F, (, '6 Uf

Sanitary, CIP-able pumps in a wide variety of materials, including several varieties of stainless steel, for the sterile conditions found in the food, pharmaceutical, paint, and cosmetic industries. They are commonly used for pumping food stuffs such as jams, baby food, yogurt, fruit sauces, etc.

FM Range

%'\$'A' #F, ('6 Uf

Compact pump with the advantages of a progressing cavity pump, the **FM Range** has a floating stator inside the pump body. Available in many materials, the **FM Range** pump is used for wastewater, chemical feeds, slurries, drainage applications, and even foods.

E Range

%'\$'A' #F, &('6 Uf

Vertically mounted pumps designed for deep pit applications. The **E Range** pumps can be used where NPSHa is an issue, such as in pits, barrel emptying, or in tanks. Available in cast iron, stainless steels, and duplex stainless steel.

M Range

' '\$-&\$\$' @F, ' * '6 Uf

High accuracy (+/- 1%) metering pumps in a modular design. Three rotor/stator combinations, for higher or lower flow rates, with the same pump housing. All wetted parts are 316 stainless steel with a variety of stator materials available.

G Range

-\$'A' #F, (, '6 Uf

Open throat auger feed pumps with enlarged hopper designed to handle materials with very high solid content like sludge cake from centrifuges and belt presses or other de-watered liquid.

NOTE: Sydex pumps are available as either a close-coupled version or a long-coupled version with a separate bearing housing

Our Other Products



 **Torqueflow Eliminator™**

Hcfei YZck !Eliminator® Macerator Pump

Self priming progressing cavity screw pump capable of suction lift applications. The Bi-hammer macerator reduces particle size before entering the pumping elements. Macerated waste is then transferred to the final destination. Capable of flows up to 1' @ 97" and pressures up to * 6 Uf.

Shaft-less Screw Conveyor

Developed and designed for the efficient transportation of materials with minimal maintenance and maximum reliability. The shaft-less screw conveyor rotates inside a trough with inclinations up to 30°. The trough has bolted covers for simplified maintenance. In order to reduce maintenance costs, the gearbox is directly connected to the shaft-less spiral above the discharge point, thus the only moving part in contact with the material is the screw itself, eliminating expensive bearings and mechanical seals.



WL Range Pumps

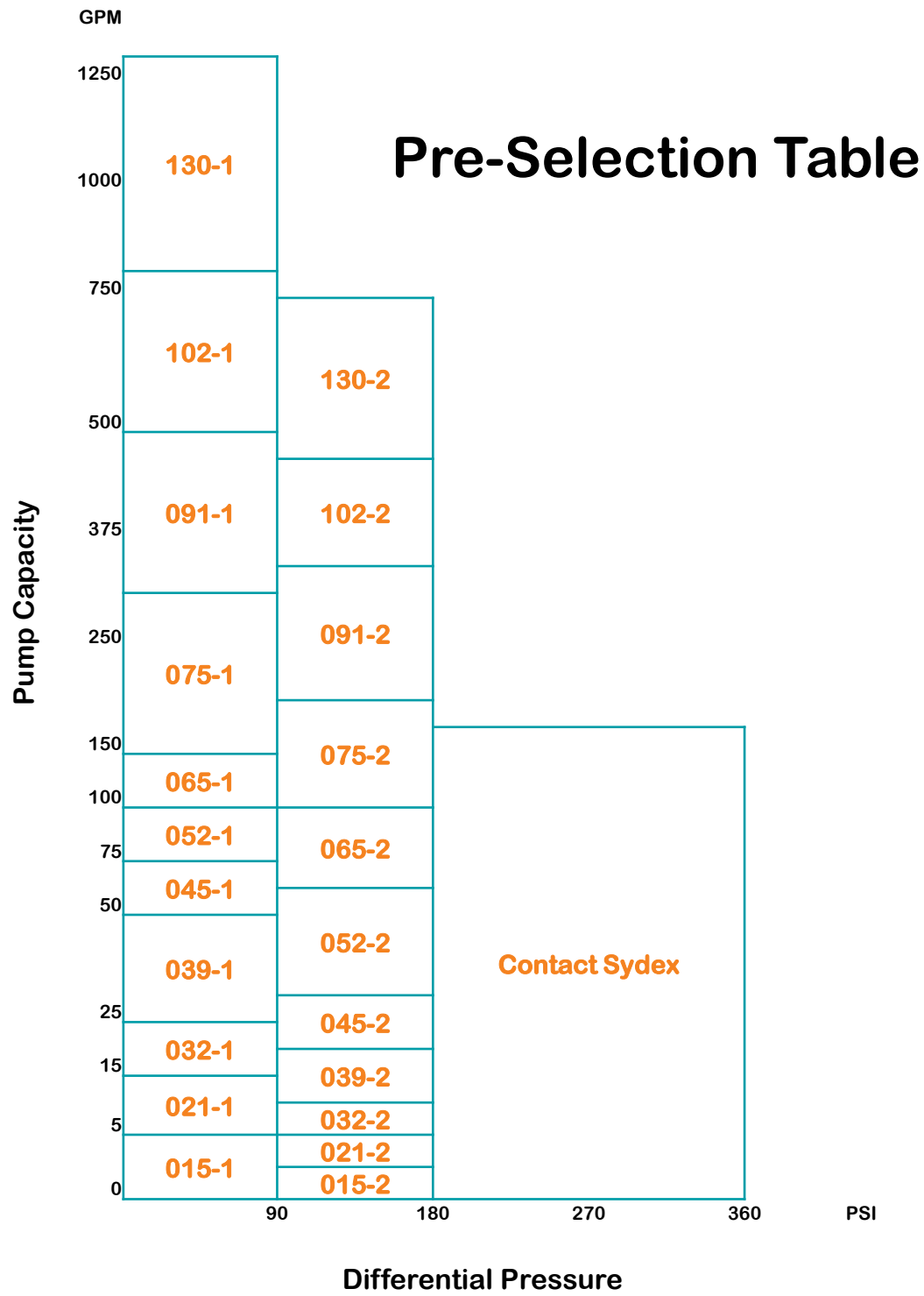
Progressing cavity pump system which has an oversized hopper and control panel built onto a mobile cart. Ideal for pumping fruit pieces, fruit waste, jams and marmalades, tomato paste, etc.

Spare Parts

Hcfei YZck !Sydex' provides a comprehensive spare parts service. We can provide parts to fit all major manufacturers saving you substantial amounts of time and money



Sydex Progressing Cavity Pumps



Markets Served



Petrochemical

- Refineries
- Drilling mud
- Multi-phase pumping
- Waste runoff
- Additives



Environmental

- Wastewater
- Sludge & Slurry
- Dewatering
- Flocculants
- Polymers & Chemicals
- Polymers



Food & Beverage

- Fruits & Vegetables
- Breweries
- Dairies
- Rendering
- Wineries



Pulp & Paper

- Liquors
- Pulp slurries
- Chemical additives
- Waste runoff
- Cellulose



Chemical

- Paint & Varnish
- Adhesives
- Chemicals
- Additives
- Wastewater



Other Industrial

- Agriculture
- Construction
- Biofuels
- Mining
- Explosives

Accessories



Drivers

Our pumps are compatible with any type of driver. Electric gear motor, VFDs, belts & pulleys, direct drive, manually variable speed drives.



Pressure gauges

Monitor your system with suction and discharge pressure gauges.



Dry Run Protection

Protect your stator with dry run protection.. The temperature between the rotor and stator is continuously monitored by the system. When the pump runs dry, the friction raises the temperature causing the system to shut down the motor, protecting the stator from dry run damage.



High pressure/Low pressure Protection

Diaphragm contact pressure gauge with open measuring flange switches a floating contact when the adjustable permissible pump pressure has been exceeded.



Base plates

Inline, over/under, side-by-side, API, custom built , and mobile bases in carbon steel and stainless steel.



Seal Systems

From simple soft packing to the most elaborate seal systems. Including API plans and associated piping.

Torqueflow Sydex

Fluid Management

Torqueflow-Sydex was established in 2007 working closely with its sister company Sydex Srl. With over 20 years of experience in the pump industry, our purpose is to offer unrivalled levels of service and expertise. Founded in 1999, Sydex Srl. has developed an extensive range of high quality and cost effective progressing cavity pumps, which are today used extensively all over the world. By being able to provide state-of-the-art market-driven products, flexibility in providing customer-focused solutions, and unparalleled levels of service, we are experiencing rapid growth throughout the world, this growth has led to the establishment of Torqueflow-Sydex, UK in 2007, Sydex-Singapore in 2009, Sydex-Portugal in 2011, and now Sydex USA in 2012.

Our products are available in Europe, The Americas, Oceania and Asia.
Please contact us for more details.



Sydex srl, Lonigo, (above) is QA certified to ISO 9001:2008

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Quality Through Service