

Expert Solutions for Critical Applications



Where Innovation Flows

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ECCENTRIC DISC PUMPS ROTARY VANE PUMPS VANE & SCREW COMPRESSORS LOBE PUMPS PERISTALTIC (HOSE) PUMPS HYDRAULIC COOLERS



mouvex.com



PSG®, a Dover company, is a global leader in positive displacement pump and supporting technologies, delivers value-added pumps and systems that serve customers requiring the safe and efficient transfer of critical and valuable materials. PSG features world-class pump brands and has multiple facilities on three continents (North America, Europe and Asia) that are ISO certified. We are passionately committed to innovative technologies that will positively impact the world. Our priority is providing the market expertise you need by delivering tomorrow's innovative fluid and material transfer solutions today.

Where Innovation Flows

POSITIVE DISPLACEMENT PUMPS



PUMPS & SYSTEMS TECHNOLOGIES

System One [®] Ebsray [®] Neptune [™] Blackmer [®] Fluid Dynamics [™] Griswold [™] Quattroflow [™] Mouvex [®] Neptune [™] Mouvex [®]	CENTRIFUGAL	REGEN TURBINE	MIXERS	COMPRESSORS	SYSTEMS
Griswold [™] Quattroflow [™] Mouvex [®] Neptune [™]	Svstem One®	Ebsrav®	Neptune™	Blackmer®	Fluid Dvnamics™
				Mauway®	
Mouvex®	Griswold		Quattionow	Mouvex	Neptune
					Mouvex®

Who We Are

ECCENTRIC DISC PUMPS ROTARY VANE PUMPS

VANE & SCREW COMPRESSORS

LOBE PUMPS

PERISTALTIC (HOSE) PUMPS HYDRAULIC COOLERS Mouvex[®] is the leading global provider of positive displacement pumps and compressors for the transfer of liquids or dry bulk products. Mouvex is a brand within PSG, a Dover Company – located in Oakbrook Terrace, IL, USA.



Auxerre, France – Mouvex's world headquarters are located in Auxerre, France in a state-of-the-art, 100,000 square-foot (9,300 m²) complex. Mouvex also has operations and customer support centers around the world to assist with immediate needs, regardless of location.

Over 100 Years Of Innovation

Engineer Andre Petit, inspired by the principle of eccentric movement, established Mouvex in 1906. His son Albert followed in his footsteps, assuming leadership of the French eccentric disc pumping leader in 1938. Today, Mouvex is a global powerhouse with operations on five continents, developing innovative products and penetrating new markets, which ensures a bright future for decades to come.

Core Values: Key to Success

Mouvex's success can be attributed to adhering to PSG core values: Safety, Quality, Schedule, Cost, and Community. Many successful businesses have a passion for consumer-driven partnerships, and Mouvex takes great pride in their consumer relationships. Mouvex is not only committed to the quality of the products they produce, but also to how they conduct business with their partners and consumers. Mouvex is committed to over-delivering to customers and actively participating in their future global performance and growth, giving constant focus to improving the quality and innovation behind their service and products.

MARKETS SERVED

ENERGY

Mouvex pumps are widely used to load, transfer and unload petroleum.

Typical Applications Handled:

- Fuel Oil
- Gasoline
- Diesel
- Biofuels
- Feedstock

 Ethanol • Oil & Gas

Methanol

Processing

PROCESS

Chemical companies around the world rely on Mouvex for their fluid transfer needs. Mouvex transfers raw products from storage containers to loading of product onto transport vehicles.

Typical Applications Handled:

Acids

- Paper Glue
- Carbon Dioxide
- Paints, Inks & Coatings
- Solvents
- Soap & Detergents
- Isocyanate Polyols
- Polyurethane

MILITARY & MARINE

Mouvex is proud to support the military with our leading-edge pumps and compressors.

Typical Applications Handled:

 Fuel Oil Gasoline Kerosene • Lube Oil

Asphalt

Liquid Waste

TRANSPORT

Mouvex Pumps and compressors move raw product from rail and transport vehicles to bulk storage tanks and facilities.

Typical Applications Handled:

- Oils
- Fuels Chemicals
- Liquid Foods
- Bio-lube
- Liquid Fertilizers Dry Bulk

HYGIENIC

Mouvex is a leader in the food, beverage and pharmaceutical industries with its innovative Eccentric Disc Pumps that improve productivity and efficiency.

Typical Applications Handled:

- Dairy
- Beverages
- Confectionery
- Sauces & Dressings
- Animal Food Cosmetics
- Pharmaceutical



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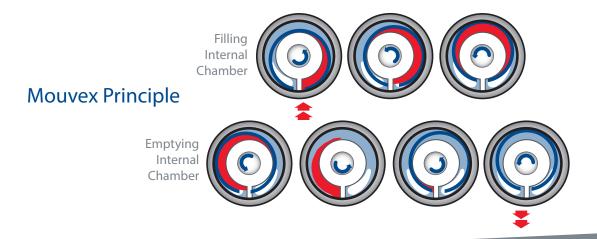


Eccentric Disc How It Works

Eccentric movement technology is at the core of Mouvex. Mouvex founder Andre Petit identified the challenges that gear and lobe pump users were facing in optimizing their process and invented the eccentric disc pump as a result. Mr. Petit specifically placed a disk inside the pump cylinder so the eccentric disk would be more user-friendly. This disc is driven by an eccentric bearing that is installed on the pump shaft, thus creating four distinct pumping chambers that increase and decrease in volume as the disc is rotated by the eccentric bearing. The four chambers produce both suction and discharge pressures as the chambers move in pairs that are 180 degrees apart. This ensures that the fluid passes through the pump at a constant and regular flow rate.

Mouvex Technology

Eccentric disc pumps consist of a cylinder and pumping element mounted on an eccentric shaft. As the eccentric shaft is rotated, the pumping element forms chambers within the cylinder, which increase in size at the intake port, drawing fluid into the pumping chamber. The fluid is transported to the discharge port where the pumping chamber size is decreased. This action squeezes the fluid out into the discharge piping.



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TECHNOLOGY: ECCENTRIC DISC Micro C Series Eccentric Disc Pumps

The Micro C Series Seal-less Eccentric Disc Pumps are designed for continuous transfer and low-flow metering. They deliver consistent performance and are minimally affected by fluctuations in pressure and viscosity.

Applications

- Dairy
- Sauces & Dressings
- Beverages, Wines and Beers
- Cereals
- Cakes and baked goods
- Confectionery
- Cosmetics

Features and Benefits:

- · Seal less design eliminates leakage
- Drainability
- Eliminates maintenance
- Small footprint
- · Self-priming with strong suction lift
- Low shear

Technical Data:

- Body, bellows and cylinder: 316 stainless steel
- Disc: CY5SnBiM (anti-galling alloy)

Performance Data:

- Max. flow rate: up to 800 L/hr (3.5 gpm)
- Max. differential pressure: up to 15 bar (217 psi)
- Max. temperature: 100°C (212°F)

Certifications & Associations:



- Pharmaceutical
- Animal food & pet food
- Laboratory
- Chemical
- Biofuel
- Paints & Coating
- Paper
- More efficient
- · Ability to run dry
- Saves costs
- Ability to clear pipes Maintains consistent
- performance over time Easy integration



Micro C Series: C125

Eccentric Disc Pump









time, resulting in productivity gains and energy savings. Used in multiple fluid handling applications within the food and processing industries, Mouvex eccentric disc pumps can be flushed and cleaned in place without disassembly while completely maintaining gentle fluid-handling characteristics. Applications

- Dairy
- Sauces & dressing

TECHNOLOGY: ECCENTRIC DISC

C & SLC Series Eccentric Disc Pumps

The seal-less C & SLC Series eccentric disc pumps feature superior volumetric performance. Unlike gear and lobe pumps that lose efficiency as they wear, Mouvex eccentric disc pumps sustains high efficiency levels over

- Beverages, wines and beers
- Cereals
- Cakes and baked goods
- Confectionery
- Cosmetics

Features and Benefits:

- Highly efficient Mouvex
 principle design
- Seal-less design
- Self-priming with strong
- suction power
- Line stripping capabilities
- Dry-run capabilities
- · Ideal for low and high viscosities
- Ideal for shear sensitive fluids

Technical Data:

- · C series : Body, disc and cylinder: Ductile Iron
- SLC series:
 - Body, bellows and cylinder: 316 stainless steel
 Disc: CY5SnBiM (anti-galling alloy)
- Shaft sealing by double stainless steel bellow
- Optional heating jacket

Performance Data:

- Max. flow rate: up to 36 m³/h (158.5 gpm)
- Max. differential pressure: up to 16 bar (232 psi)
- Max. temperature: 100°C (212°F) or 160°C (320°F) on high temperature versions.

Certifications & Associations:





Pharmaceutical

- Animal & pet food
- Laboratory
- Chemical
- Biofuel
- Paints & coatings
- Paper
- Clean-in-Place (CIP) and Sterilize-in-Place (SIP) capabilities
- Eliminates leakage
- Outstanding volumetric efficiency
- Reduces maintenance
- Low linear speed

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TECHNOLOGY: ECCENTRIC DISC **S & SLS Series** Eccentric Disc Pumps Designed specifically for hygienic applications, the S &

Designed specifically for hygienic applications, the S & SLS Series Eccentric Disc Pumps feature CIP and SIP capabilities, but can also be cleaned by hand due to their quick and easy opening. The seal-less pumps feature a transmission mechanism protected by a tasteless, high-resistance elastomer sleeve.

Applications

- Dairy
- Beverages
- Confectionery

Features and Benefits:

- Eliminates leakage
- Pump product constantly renewed
- Low shearing
- Ability to drain pipes
- Dry-run capabilities
- Precise dosing
- Outstanding volumetric efficiency

Technical Data:

- Body and cylinder: 316 stainless steel
- Shaft sealing:
 - SLS: by double stainless steel bellows
 - S: by FKM sleeve
- Disc: CY5SnBiM (anti-galling alloy)
- Optional heating jacket

Performance Data:

- Max. flow rate: up to 36 m³/h (158.5 gpm)
- Max. differential pressure: up to 16 bar (232 psi)
- Max. temperature : 100°C (212°F)

Certifications & Associations:



SLS 8

Eccentric Disc Pump



- Maintains performance
 over time
- Accurate volume metering
- Self-priming with strong
- sell-priming with s suction power

Cosmetics

Laboratory

- Reduced maintenance
- Low linear speed



S Series: S6

Eccentric Disc Pump

SLS 1 Eccentric Disc Pump



SLS 12 Eccentric Disc Pump





A Series: A31 Eccentric Disc Pump



The A Series Eccentric Disc Pumps have been designed to easily adapt to liquids that are viscous, non-lubricating, volatile or delicate. A Series pumps can meet these challenges through their eccentric disc design, which results in exceptional self-priming and pipe-clearing capabilities, even when running dry.

Applications

- Detergents
- Tallow
- Glues
- Asphalt
- Inks
- Emulsions
- Thermal fluids

Features and Benefits:

- · Highly efficient
- Exceptional self-priming capabilities
- Maintain initial performance levels over time
- No adjustments required
- Constant output flows independent of delivery pressure

Technical Data:

- Ductile iron construction
- Optional jacketed head available
- Capable of operating in either direction of rotation

Performance Data:

- Max. flow rate: up to 55 m³/hr (242 gpm)
- Max. differential pressure: up to 10 bar (145 psig)
- Max. temperature: 150° C / (302 °F)

Certifications & Associations:

Ex C E

- Paint
- Fuel
- Molasses
- Heavy fuel oil
- Oils
- Fatty substances
- Solvents
- Excellent efficiency
- Durable
- Maintains constant output
- Transfers viscous, non-lubricating, volatile or delicate fluids
- Smooth transfer
- · Maintains initial performance

TECHNOLOGY: ECCENTRIC DISC CC20 Tank Truck Series Eccentric Disc Pumps

The CC20 Pump is an ideal solution for filling and emptying road tankers, due to it's vehicle-mounted design. This multi-purpose application also enables it to be used as a stationary unit.

Applications

- Waste oil
- Resins
- Fuels
- Soda
- Solvents
- Petrol
- Silicates

Features and Benefits:

- Total draining of hoses
- Simple installation
- Compact

Technical Data:

- Cast iron, steel and bronze construction
- Special "solvents" construction
- Safety bypass integrated

Performance Data:

Ex CE

- Max. flow rate: 30 m³/hr (132 gpm)
- Max. viscosity: 750 cSt
- Max. rotation speed: 750 rpm

Certifications & Associations:

- Crude oilSyrup
- Emulsions
- Paraffin
- Lubricants
- Inks
- Adhesives
- Reduced weight
- Excellent self-priming capacity
- Constant and smooth delivery



dry

CC20 Series Eccentric Disc Pump



Sliding Vane Pumps

Sliding vane pumps have a number of vanes that are free to slide into or out of slots in the pump rotor. When the pump driver turns the rotor, centrifugal force, rods and/ or pressurized fluid causes the vanes to move outward in their slots and bear against the inner bore of the pump casing forming pumping chambers. As the rotor revolves, fluid flows into the area between the vanes (pumping chambers) when they pass the suction port. The fluid is transported around the pump casing until the discharge port is reached. At this point, the fluid is squeezed out into the discharge piping.

Vane Pump Principle



Suction

Transfer



Discharge

TECHNOLOGY: SLIDING VANE

Vane

P Series Rotary Vane Pumps

Technology How It Works

The P Series Vane Pumps are designed for highly viscous products. This ATEXcertified pump handles non-lubricating, abrasive and corrosive products, and can be dismantled without disconnecting the suction and discharge lines.

Food

Pulp & paper

Applications

- Energy
- Chemical

- Biofuels
- Bitumen

· Ideal for thin or non-lubricating,

Line stripping capabilities

Dry-run capabilities

corrosive fluids

viscous, abrasive and

Features and Benefits:

- Highly efficient sliding vane technology
- · Self-adjusting vanes sustain performance
- Self-priming
- **Technical Data:**
 - · Cast iron and stainless steel models available
 - Multiple sizes are available
 - · Capable of operating in either direction of rotation

Performance Data:

- Max. flow rate: 110 m³/hr (484 gpm)
- Max. differential pressure:
- 12 bar (175 psi)
- Max. temperature: 250°C (482°F)
- Max. viscosity: 200,000 cSt (900,000 ssu)

Certifications & Associations:





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CC8 Series Rotary Vane Pumps

The CC8 Tank Truck Vane Pump is the ideal solution for petroleum product transfer on tankers. The pump features robust construction, while allowing high performance in heavy-duty road transport applications.

Applications

- Diesel
- Kerosene
- Heating oil
- Oil heavy fuel

Features and Benefits:

- Quiet operation
- Compact
- Increased safety

Technical Data:

• Max. temperature (heavy fuel): 170°C (338°F)

Performance Data:

- Max. flow rate: 100m³/h (440 gpm)
- Max. viscosity (heavy fuel): 900 cSt

Certifications & Associations:





- Biodiesel paraffin
- Broad flow range

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- Constant flow rate
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CC8 Series: CC8 40 Rotary Vane Pump



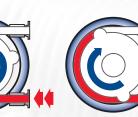


ABAQUE[™] Series How It Works

ABAQUE[™] Series Peristaltic Hose Pumps

The principle of the peristaltic hose pump is based on the alternating contraction and relaxation of the hose forcing the contents through the pump and into the discharge piping. A smooth wall, flexible hose is fitted in the pump casing and is completely squeezed between two shoes on the rotor and the inside of the pump casing. The rotating action moves the product through the hose at a constant rate of displacement without slippage. The hose restitution after the squeeze, produces an almost full vacuum that draws the product into the hose from the intake piping. The pump casing is half-full with lubricant to cool the pump and lengthen the service life of the shoes and hose. Since the product only contacts the hose and not the internal pump components, this pumping technology is very suitable for abrasive and corrosive applications.

Peristaltic Pump Principle







TECHNOLOGY: PERISTALTIC ABAQUE[™] Series Peristaltic Hose Pumps

The Mouvex ABAQUE Series pump can handle the toughest pumping challenges, including abrasive and aggressive fluids, as well as shearsensitive and viscous materials. Its seal-free design eliminates leaks and contamination. The fluids are contained within the hose, and the hose is the primary maintenance component.

Applications

- Chemical processing
- Food
- Industrial water treatment
- Paints and coatings

Features and Benefits:

- Seal-less design
- Reversible pump

Technical Data:

- Sizes: 10mm (3/8 in.) to 125mm (5 in.)
- ANSI, DIN or barbed connections
- Hose options: Natural rubber, Buna-N, EPDM, NBR-FDA
- Ductile iron non-wetted components

Performance Data:

- Max. flow: 77 m³/hr (339 gpm)
- · Max. discharge pressure: 16 bar (232 psig)
- Max. suction lift: 9 m (29.5 ft) of water
- Max. viscosity: 40,000 cSt (185,000 ssu)

Certifications & Associations:



- Municipal water treatment
- Ceramics
- Mining
- Filter press equipment
- Dry-run capabilities
- Self-priming capabilities

ABAQUE Series











Screw Compressors How It Works

Within the compressor body there are two screws with matching profiles: a female and a male screw. The female screw has concave inlets and the male screw has convex helical inlets. The screws rotate in opposite directions with the female screw receiving the driving power and transmitting this power to the male screw through a set of synchronization gears. Screw Compressors have three phases that they must go through in order to work properly. The first is the Intake phase, the second is the Compression phase, and the last is the Exhaust phase.

INTAKE PHASE

As the screws rotate, the air is drawn into the inlet port and fills up the space between the screws.

COMPRESSION PHASE

The second phase begins when the end of a male thread blocks the end of a female thread. The volume available between the compressor body and these two threads then progressively decrease during rotation.

EXHAUST PHASE

The last phase is when this volume merges into the delivery outlet of the compressor

Throughout the process, the female screw and male screw do not come into contact with each other. This means no wear, total reliability and nonpulsating air delivery. These compressor/blowers can be used in either a mobile or stationary application, and can be driven by a PTO, electric motor or hydraulic power system. A complete range of dedicated ancillary products are available to support this line.

Dry bulk unloading

Applications

- **Features and Benefits:**
 - Mouvex / Optional drive systems included pulley (V-belt) driven, hydraulic drive, electrical motor or engine drive

can be easily installed onto all truck manufacturer's chassis.

- Complete modular systems (Direct gear box mounted / Direct PTO mounted / PTO shaft drive)
- Lightest and smallest direct drive system
- Complete assembled package (plug in system)

Technical Data:

- Cast iron construction
- Cooled or non-cooled systems (packages)

Performance Data:

- Flow rate (air): 120-1,550 m³/h (70-912 cfm)
- Max. discharge pressure: 2.5 bar (36 psig)

• 70 percent weight reduction possible (MH6)

Liquid transport

- Increased turnover
- Euro 6 legislation compliant (MH6)
- Reduced maintenance
- · Compatibility with all trucks
- All driving systems possible
- · Full options and accessories available
- Multiple sizes available

Certifications & Associations:



Mouvex has developed modular systems (cooled and non-cooled) fitted with common accessories for PTO direct drive systems that can be mounted inside the truck frame regardless of the compressor type. These screw compressor packages

Liquids unloading

(with B200)

Screw Compressor

B200 Flow Control

transport tankers or liquids unloading. The MH6 is the world's first combination screw compressor/ power take off unit for the dry bulk transport market. It combines Hydrocar PTO technology and the Mouvex screw compressor principal as a solution for dry bulk unloading.

B200 - B600 - Mistral - Typhon II - B1500 - MH6

Applications

- Cement
- Flour
- Lime
- Cereals

- Calcareous Sand
- Plastic Granulate

TECHNOLOGY: SCREW COMPRESSOR **Screw Compressors**

Mouvex is one of the leading global suppliers of oil -free screw compressors for dry bulk

Gravel

- **Features and Benefits:**
 - Oil-free compressors
 - Lightweight
 - Maximum flow rate

Technical Data:

- Cast iron construction
- Cooled or non-cooled systems (packages)
- · Full options and accessories available
- Multiple sizes available

Performance Data:

Flow rate (air): 120-1,550 m³/hr (70-912 cfm)

Screw Compressor Packages

Max. discharge pressure: 2.5 bar (36 psig)

Certifications & Associations:

TECHNOLOGY: SCREW COMPRESSOR

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· Compatibility with all trucks All driving systems possible

MH6

Screw Compressor

Reduced maintenance

· Animal's food

 Liquids products (with B200)





Enterprise Series: E 140 Vane Compressor

TECHNOLOGY: VANE COMPRESSOR

Enterprise Vane Compressor

Enterprise Compressors are designed for oil-free discharge of fluids that can cause problems for cargo pumps. The compressors are constructed of corrosion-resistant, hard-coated cast iron to withstand harsh environmental and operating conditions.

Applications

- Chemicals
- Food

Features and Benefits:

- Oil-free rotary compressor
- Constructed of corrosionresistant, hard-coated iron to withstand harsh environmental and operating conditions
- Blade can be inspected without disassembly of the compressor

Technical Data:

- Cast iron construction
- Sizes: Inlet 1-1/2"; Outlet 1-1/2"
- Two sizes available
- Full options and accessories available

Performance Data:

CE

- Max. flow rate (air): 128-173 m³/hr (75-102 cfm)
- Max. discharge pressure: 2.5 bar (36 psig)

Certifications & Associations:



• Bitumen/Asphalt

- Evacuation of residual product
- Improved containment
- Easy disassembly and reassembly

HYDRIVE[®] Hydraulic Cooler

At the heart of a hydraulic drive system, the self-contained Mouvex Hydrive hydraulic coolers are designed for easy truck mounting. Their compact size allows for easy installation for trucks with minimal space on chassis rails.

Applications

Oil cooler

Features and Benefits:

- Maintenance friendly
- Compact
- Durable
- Stainless steel construction protects against corrosion

Certifications & Associations:



- Maximum performance and heat dissipation up to 20 kW (26 hp)
- Lower in weight and volume than standard tank
- Quiet operation



HYDRIVE Series: 2010 A Hydraulic Cooler

BLK 4-T Rotary Lobe Tank Truck Pump

BLK 4-T Positive Displacement Lobe Pumps set a new standard for rotary lobe pumps. Designed to be more compact to easily fit in narrow areas, the BLK Series is the best ally to satisfy ever-increasing transport requirements.

Applications

- Food Transport
- Chemical

Beverage processing

Built-in heater

Features and Benefits:

- Compact and easy to fit in
 - narrow areas
- Reversible

Technical Data:

- Unique shaft sealing design which doesn't require any maintenance
- 316 L stainless steel (wetted components)
- Sizes: Inlet –100 mm (4 in.); Outlet 80 mm (3 in.)
- Facing horizontally or vertically
- Connection type: DIN or SMS
- Max. temperature: 120°C (248°F)

Performance Data:

- Max. flow: 42 m³/hr (184 gpm)
- Max. pressure: 7 bar (101 psi)

Certifications & Associations:





BLK 4-T Rotary Lobe Tank Truck Pump



Where Innovation Flows



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