

➤ Fluid intelligence





➤ Heartbeat of the just-in-time economy

One of mankind's earliest recorded inventions, pumps have evolved to become one of the most important components of the global economy. Pumps keep the resources that we need the most moving.

When most people think of pumps, the first application that comes to mind is water. But pumps can move an incredibly diverse array of liquids -- and solids. The oil that fuels our lives. The yoghurt you eat at breakfast. The plaster on your living room walls. The waste water from your home. The possibilities are nearly endless.



Your fluid handling partner



PCM keeps it moving

The quality of the pumps, pump systems and other fluid handling components in your mission-critical processes is of the utmost importance. That is why our customers rely on our high-quality solutions to keep their vital fluids moving.

PCM is one of the world's leading manufacturers of positive displacement pumps and fluid-handling equipment. Our specialty is developing solutions for the lifting, transferring and dosing of abrasive, fragile, viscous, corrosive, hot and heavy products in challenging environments in the oil & gas, food and industrial sectors.



Dosing pumps integrated in a dosing skid for water treatment

Progressing cavity pumps and beyond

PCM was co-founded in 1932 by the inventor of the Progressing Cavity Pump (PCP), René Moineau. Because the PCP is among the most efficient of all positive displacement pumps (which are generally more efficient than centrifugal pumps) it was only natural that we capitalized on our leadership in PCP to become experts in a wide range of positive displacement pumps, including peristaltic and lobe pumps. Owned since its creation by the Gevelot group, PCM's strategy is to finance growth internally and expand through partnerships and joint ventures.

Creating cost-effective solutions

Pumps have hidden costs for their owners. According to Europump and the Hydraulic Institute, pumping systems account for nearly 20 per cent of the energy used by industrial plants, and this number can be as high as 50 percent in certain industrial operations. Research also shows that pumps have a significant impact on the environment.

Our 70 years of expertise makes us uniquely qualified to deliver highly effective solutions that offer the most advantageous total cost of ownership while protecting the environment.





➤ See the whole picture

The hidden costs of pump ownership are the result of pumps being purchased as individual components, rather than being seen as an integral part of a larger system.

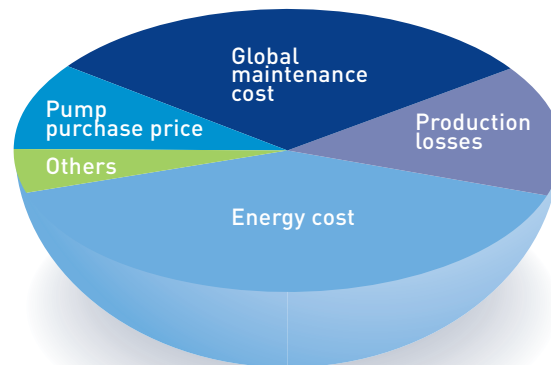
To offer our customers the best total cost of ownership, we use Eco-Design to provide an advanced Life Cycle Cost (LCC) approach to pump selection and pump system design. Our engineers focus their efforts on optimizing three interdependent factors: the fluid's characteristics, the pump design and the system.

The initial purchase price is a small part of the Life Cycle Cost for mission-critical pumps. That is why we take special care to match all three factors to reduce energy, operational and maintenance costs, while providing maximum equipment life. Reducing energy consumption and waste also have important environmental benefits.



Controlling Life Cycle Cost

By determining the Life Cycle Cost of a pump or pumping system, it is possible to compare design alternatives to find the most cost-effective solution that best matches the customers' needs. Our Life Cycle Cost analysis will help you find the solution for your requirements.



Life Cycle Cost is not just for new pump acquisitions. Applying it to existing pump systems can yield dramatic results, because often they have not been optimized since their installation, and pumping tasks change over time. Studies estimate that changing equipment and/or control systems could reduce energy consumption by 30 to 50 per cent.



A global approach minimizes Life Cycle Cost

Power of vertical integration

Once the Life Cycle Cost analysis is complete, our vertically integrated approach to pump design enables you to benefit from efficiencies at every level of the solution, from components to pumps, systems to services. Our wide range of positive displacement pumps, pumping systems and services offers you greater choice and flexibility when trying to meet sophisticated requirements.





Sources of innovation

No matter what the challenge, our goal is to enable you to reach your objectives. Our tradition for innovation drives this ambition.

Since our earliest days we have invested heavily in research and development in order to provide solutions that anticipate your need.



VOC-free paint (Volatile Organic Compounds) reduces atmospheric pollution

Eco-Design: Reducing costs environmentally

Historically, advances in pump technology have ignored the environmental impact of making, operating and disposing of pumps. It has been clear to us for years that this situation is unsustainable. That is why we embraced Eco-Design over half a decade ago as a way of integrating environmental impact into Life Cycle Cost analysis. Today, we have unmatched experience in the field of Eco-Design for pumps and pumping systems.

PCM Eco-Design aims to reduce the environmental impact of a solution during all the stages of its life cycle, from suppliers and manufacturing through to decommissioning. To measure the environmental impact among the factors we look at are:

- Resource consumption
- Emissions
- Waste treatment
- Disturbances (e.g. vibrations, noise)
- Energy consumption

In practice PCM eco-designed products require fewer raw materials to manufacture and are comprised of fewer parts. They are manufactured in our ISO-14001-certified factories. To meet the most stringent anti-pollution requirements, pumps are available with chrome-free rotors and VOC-free paint (Volatile Organic Compounds contribute to atmospheric pollution).

A lighter, more compact pump requires less energy to transport. Because progressing cavity pumps provide a steady flow, they do not require extra equipment to absorb variations in hydraulic pressure. During its operational lifetime the pump has higher energy efficiency, the parts last longer, service times are shorter and production losses are lower.

At the end of its life, a PCM eco-designed pump has fewer parts that require disposal. There are no hazardous materials that need treatment. And we provide a parts recycling service during dismantling.

PCM Vulcain™: Advances in heavy oil thermal recovery

Worldwide reserves of heavy and extra-heavy oils are estimated at 4,600 billion barrels. But these oils are difficult or impossible to produce at reservoir temperature due to their extreme viscosity.

One way to extract them is to assist the recovery with thermal processes (SAGD & CSS). We have developed a revolutionary technology for manufacturing a metallic PCP (Progressing Cavity Pump) with the lowest capital and operating cost, capable of extracting heavy oil and aggressive fluids during thermal recovery.

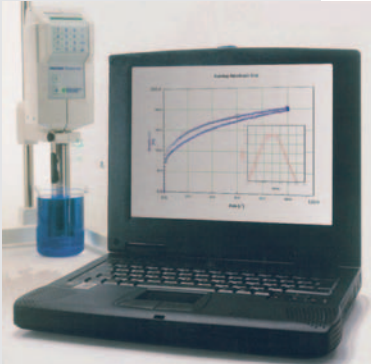
This new PCM generation of pumps can handle temperature limits of 400°C. The lower pump setting and increased drawdown increases production efficiency.





Knowledge in action

To fully unlock all the advantages of positive displacement pumps for you, we rely on our unmatched expertise in hydraulics and elastomer engineering. They play a fundamental role in ensuring the dependability and operational efficiency of our solutions.



To ensure that our pumps always feature the highest quality, most compatible elastomers, we manufacture our own

Flow Technology Center

Our Flow Technology Center exemplifies our customer-centric approach to pump design. Instead of inventing pumps and trying to adapt them to your needs, our Flow Technology Center starts with the fluids to be handled in order to find the best pump design.

The Flow Technology Center provides a full range of fluid testing services. Our experts analyze the rheometric, mechanical and chemical properties of the products to be handled in order to determine the most suitable pump and installation.

Before building a custom pump, the Flow Technology Center performs fluid simulations using our sophisticated hydraulic modeling systems. This enables us to develop the best prototype in the shortest possible time.

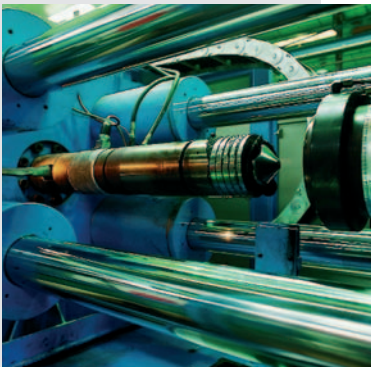
After installation, the Flow Technology Center strives to learn as much as possible about the performance of our solutions throughout their lifetime. The data collected enables us to refine and optimize our simulations, testing and manufacturing processes.

Expertise in elastomers

Elastomer is a very unique material that plays a critical role in the operational efficiency of positive displacement pumps, whether they are PCP, lobe or hose pumps.

Elastomers are dynamic, moving continuously with the action of the pump. The elastomer's ability to withstand the pumping action and the fluids being handled has a direct impact on the Life Cycle Cost of a pumping system. Picking the wrong elastomer can spell disaster for your pump investment and your installation.

To ensure that our pumps always feature the highest quality, most compatible elastomers, we manufacture our own. Many other pump manufacturers use third-party elastomers. Over 70 years of experience developing, mixing and producing our own elastomers have given us an unparalleled expertise in this domain. We have a unique database of elastomer formulas and fluid compatibilities.



Elastomer press





➤ Built for your business

When we design a new pump system or update an existing solution, we start by listening to you and to the needs of your business and your industry. Over the past 70 years this approach has never let us down. It has given us incomparable knowledge in a wide range of industries. It is the source of our expertise in fluid properties and behaviors. It is the backbone of our business model.



Serving three markets



Oil & Gas: Opening new frontiers

PCM Oil & Gas provides systems designed to withstand the harshest working conditions on the planet, both onshore and offshore, in compliance with the highest international oilfield standards. All our systems are eco-designed and conceived to enhance power saving and safe maintenance.

For access to untapped reserves and optimization of mature fields, PCM Oil & Gas offers solutions for higher temperature (400°C / 750°F), higher gas content (90%) and higher fluid pressure processing (260bar/3770psi).



Food: When care is required

Moving high quality foods and beverages through your supply chains depends on your ability to keep vital ingredients moving in the production line. Our pump systems are ideal for transferring, mixing, filling and dosing the delicate and difficult to handle products used in the food and beverage industries.

Built to the highest hygiene standards, they ensure the quality and integrity of the products you handle, while helping to ensure that your products enter your supply chain in a timely, reliable manner.



Industry: Built for life

Bringing high quality products to your customers depends on your ability to keep mission-critical fluids flowing through your industrial systems. This requires the kind of highly reliable pumping solutions that our reputation is built upon. For example, we still make spare parts for PCM pumps in operation today that were installed before the Second World War.

Our solutions are perfectly adapted for use in highly developed industrial sectors with complicated technical requirements, including Chemicals, Energy, Minerals, Paper and the Environment. PCM solutions can handle abrasive, fragile, viscous, corrosive, hot or heavy products in the most cost-effective and environmentally responsible way possible.



➤ Enhancing operational efficiency

To make our unrivaled understanding of pumps and fluids as accessible and relevant as possible to your business challenges, we have combined it with our extensive knowledge in a wide range of sectors and applications.

This enables us to offer more than just pumps. We provide a complete range of systems and services that deliver optimal pumping performance for your most challenging tasks.



Dositruit® system

Made to measure systems

To keep operational and maintenance costs to a minimum, we design, build and install custom turnkey pumping and dosing systems for a wide range of industrial processes. These complete, integrated systems feature pumps, piping, accessories and controls. Fully tested ahead of time and fully operational out of the crate, they are an economical alternative to on-site bespoke installations.

LCC consulting and engineering

To help you reap the full benefits of Life Cycle Cost analysis, our consultants can advise your project team on LCC best practices and methodology. They can help you find the most cost-effective solution when comparing possible design or overhaul alternatives. During installation and operations, our experts can work with you to improve equipment performance and streamline procurement and parts management.

Field services

From testing to installation, commissioning and troubleshooting, field interventions are performed by a worldwide network of PCM engineers, who work closely with operators. They can provide permanent or regular on-site PCM inspection, maintenance and parts stock management.

Training

To accelerate knowledge transfer with our customers, our Field Services Teams provide training services for your personnel. A wide range of subjects are taught, including PCP theory (Moineau principle, PCP design and selection, surface equipment and driving power) and application (engineering, manufacturing, installation, maintenance and troubleshooting). Courses can be provided on-site, at PCM offices or at PCM's main training center.



Field Services Teams provide training services for your personnel

International supply chain

Our supply chain enables us to optimize manufacturing and delivery times, thanks notably to our strategically located facilities in Europe, Asia and North America. Our suppliers are fully integrated into our manufacturing processes to ensure the highest levels of component quality. Each order benefits from the expertise of our account staff, who coordinates every step of the project from order to installation.



Houston plant, USA



PCM at a glance

Founded in 1932, PCM is today one of the world's leading manufacturers of positive displacement pumps and fluid-handling equipment. Our specialty is developing solutions for the lifting, transferring and dosing of abrasive, fragile, viscous, corrosive, hot and heavy products. With more than 350 employees, PCM operates in the Oil & Gas, Food and Industrial sectors.



Global presence

With production facilities in Europe, Asia and America, and sales offices and logistics centers around the world, we are always close to your operations. We also have an extensive network of over 60 distributors in 60 countries.

People power

Made up of many different nationalities from a variety of backgrounds, PCM is a truly multinational company that thrives on diversity. This mixture of skills and talents makes us uniquely qualified to understand your business and your requirements. For example, no matter where you operate, we design pump systems that comply with specific application requirements and local standards and regulations.



History

In 1930, the University of Paris awarded René Moineau a doctorate of science for his thesis on "the new capsulism". His pioneering dissertation laid the groundwork for the progressing cavity pump.

In 1932, Moineau partnered with Robert Bienaimé of the Gévelot Group to found PCM Pompes.

In the 1970s, PCM moved beyond PCP pumps with an investment in Delasco, a leading Peristaltic Hose Pump company, and the acquisition of Preci-Pompe, a specialized maker of diaphragm and plunger dosing pumps.

PCM began expanding overseas in the 1990s with the opening of PCM Pumps UK, an investment in Kudu Industries in Canada, the creation of PCM-Delasco subsidiary in Germany and the opening of offices in China. It strengthened its presence in the Food industry with the acquisition of Dosys in 1993.

In 2006 PCM opened a new factory in Houston, USA, and expanded its offices and plant in China.

Gévelot

Gévelot is a solid industrial group, created in 1820. It is the sole PCM's shareholder since its creation in 1932.

