

Pumps to process



70 years after its creation by Rene Moineau and Robert Bienaimé, PCM has established itself as one of the leading manufacturers of positive-displacement pumps, present in the transferring of liquids as well as the mixing and dosing of fluids with Moineau®, Delasco®, Précipompe®, Dosys® and Foodys® product lines.

These solutions respond to the most diverse applications in industries such as food, water treatment and more generally paper, chemical, materials and other industries.

PCM also proposes original solutions for the oil industry and has won major acclaim as one of the principal players among suppliers of oil-operating equipment.

PCM Pompes strives to create satisfaction and loyalty among its customers, shareholders and co-workers. The team at PCM are devoted to the values of Service, Quality and Innovation: over and above the development of its pump ranges, PCM creates and realises, in partnership with its customers, global innovative solutions integrated in their processes.

Because efforts are fully committed to this new approach, and because the women and men at PCM are dedicated to a common belief, PCM proudly affirms its profession : Your partner from "Pumps to Process".



JACQUES FAY
CHAIRMAN

jfay@pcmpompes.com



Our Business

CUSTOMER SATISFACTION IS PRIORITY

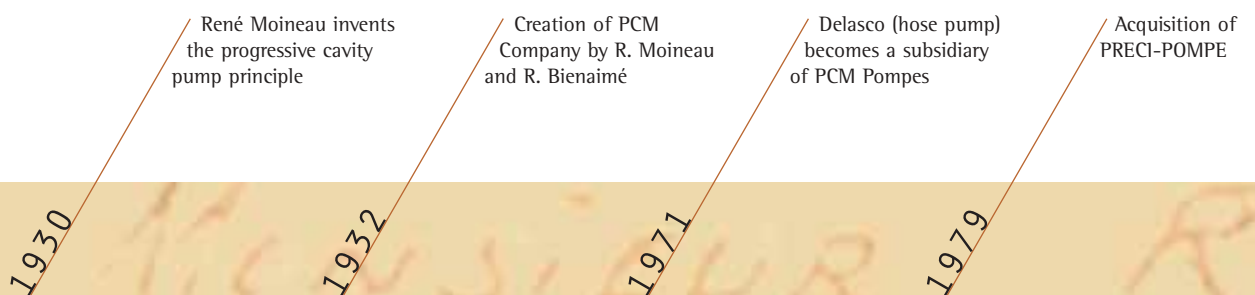


Partner from “pumps to process”, PCM is committed to providing technical solutions and services to customers, adapted to their needs, from the simple supply of pumps to elaborate turnkey solutions.

Focused on markets, PCM is among the world’s leading manufacturers of volumetric pumps. Our profession: to conceive and manufacture solutions for the transfer and dosing of fluids, in perfect harmony with customers needs.

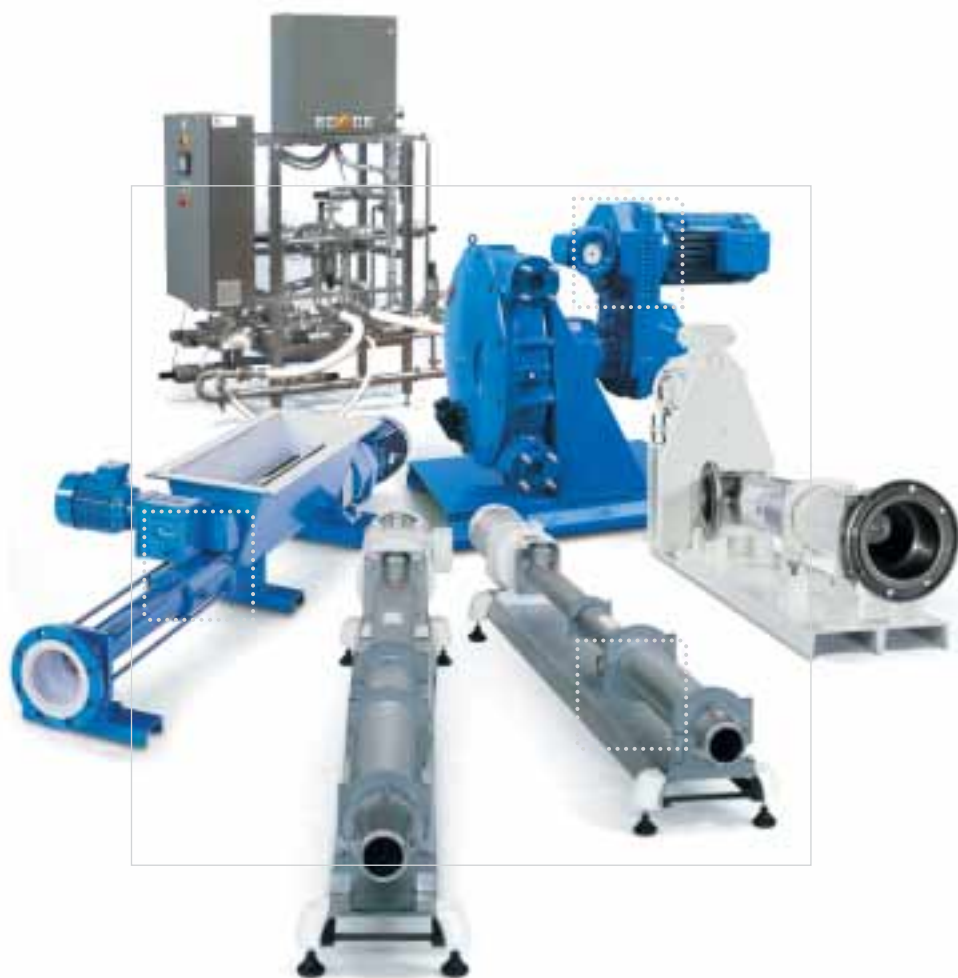
Technical expertise and know-how founded on 70 years of experience, René Moineau invented the progressive cavity pump principle, which carries his name, and founded the company PCM in 1932 based on capital invested by the Gevelot Group. Today, the company finances all growth and development internally.

OUR MAIN MARKETS :



A COMPLETE OFFER OFFER

OF PUMPS AND SYSTEMS:



- > Progressive Cavity Pumps, PCM Moineau®
- > Hose pumps, PCM Delasco®
- > Filling and dosing systems, PCM Foodys®
- > Progressive cavity pumps for oil production, PCM Moineau® Oilfield
- > Dosing pumps, PCM Précî-Pompe®
- > Macerators, PCM Equipment
- > Dosing and mixing systems of our subsidiary, PCM Dosys®



1992
Creation of a subsidiary
PCM PUMPS (UK)
Creation of a common
German subsidiary
DELASCO- PCM GmbH

1993
Investment in the Canadian
company KUDU Industries (Oil)
DOSYS (dosing and mixing
systems) becomes a subsidiary of
PCM Pompes

1996
PCM opens an
office in Asia

1997
PCM obtains the ISO
9001 certification

1992

1993

1996

1997

Food & Personal Care Industry

GUARANTEE OF A PERFECT HYGIENE



PCM MOINEAU Accepts fragile, abrasive and viscous products. High suction capabilities. Constant non-pulsating flow.

PCM DELASCO Accepts abrasive and fragile products. Easy and inexpensive maintenance. Seal-less design.

PCM DOSYS Modular systems adapted to customer process. Productivity improvement. Respects product integrity.

PCM FOODYS Feeding systems improving suction capabilities. Adapted to CIP requirements. Simplified work methods through integrated functions.

PCM PRECI-POMPE Control and precision of flow rate. Reduced footprint. Robust.

PCM advises its customers on the selection of pumps best adapted to their process, taking into consideration the pumped product and operating conditions. Un-questionable hygiene and product integrity are the principal qualities requested in food & personal care industries.

Zoom on key products



H SERIES

Most hygienic progressive cavity pump. Sealing easy to dismount. Respects shear sensitive products.

F SERIES

Reduced footprint. Non-pulsating dosing. Excellent quality/price ratio.



DL SERIES

Respects product integrity. Easy to dismount connections. Long hose lifespan.

Z SERIES

Polyvalent use. Quick and easy maintenance. Robust.



PCM MOINEAU

PCM DELASCO

PCM PRECI-POMPE

| | H Series | I Series | F Series | DL Series | DSC Series | Z Series | Lagoa-LG Series | P3 Series |
|---------------|----------------------|-----------------------|-----------------------|----------------------|----------------------|----------------------|-------------------------|-----------|
| Max. Flow | 40 m ³ /h | 500 m ³ /h | 3,4 m ³ /h | 20 m ³ /h | 65 m ³ /h | 18 m ³ /h | 350 l/h per dosing head | 2000 l/h |
| Max. Pressure | 24 bar | 200 bar | 10 bar | 15 bar | 15 bar | 2 bar | 12 bar | 350 bar |

TYPICAL CUSTOMER APPLICATIONS

APPLICATIONS

DAIRY PRODUCTS

- Transfer of yoghurt, cream cheese, cream, butter and melted cheese
- Dosing of fruit pulp in yoghurts, ferment in pasteurised milk, sugar syrup in drinking yoghurts, crème fraiche and caramel
- Dosing and injecting of lactic ferments, flavours and colorants

DRINKS

- Dosing of aromas, colorants, sweeteners and yeast
- Transfer of beer, fermented wort, concentrated fruit juice and wine for filtration
- Transfer of diatom earth
- Dosing and injecting of sulphuric anhydride

BISCUITS & CAKES

- Transfer of jam
- Transfer of pastry
- Dosing and injection of additives

SUGAR, STARCH & DERIVATIVES

- Transfer of molasses, gluten and starch
- Transfer of glucose syrup
- Injection of formol, anti-foam and carbonated flocculents

MEAT & PET FOOD

- Transfer and dosing of meat and eggs
- Transfer of meat juices and emulsions
- Transfer and dosing of palm oil, acids and molasses

FRUIT & VEGETABLES

- Transfer and dosing of tomato sauce, fig paste and compote
- Transfer of vegetables and sweetened fruit
- Transfer of mashed potatoes and vegetable puree

READY-MADE PRODUCTS, CONSERVATIVES & OTHER PRODUCTS

- Transfer and dosing of mustard, mayonnaise and soup
- Transfer and dosing of baby food and chocolate
- Dosing of colorants, flavours and sauces

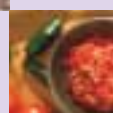
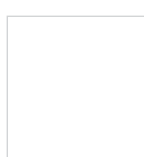
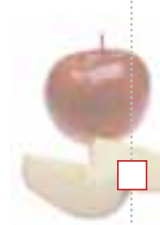
COSMETICS & PHARMACEUTICAL PRODUCTS

- Transfer and dosing of toothpaste, lotions and creams
- Transfer of essential oils and sterile solutions



OUR CUSTOMERS

- DANONE
- YOPLAIT
- LACTALIS
- MAC CAIN
- BONDUELLE
- HARRY'S
- UNILEVER
- NATIONAL FOODS
- SHANGAI BRIGHT DAIRY AND FOOD
- LEE KUM KEE
- COCA-COLA
- NESTLE
- L'OREAL
- BEIERSDORF
- SANOFI



Materials, Chemicals & Paper Industries

CAPACITY TO ADJUST TO CUSTOMER REQUIREMENTS

PCM MOINEAU Accepts fragile, abrasive and viscous products. High suction capabilities. Constant non-pulsating flow.

PCM DELASCO Accepts abrasive and fragile products. Easy and inexpensive maintenance. Seal-less design.

PCM PRECI-POMPE Control and precision of flow rate. Reduced footprint. Robust.



In industries such as chemicals, paper and board and materials, reliability, quality and low maintenance costs are primordial and need to be respected. In order to respond to these needs, PCM offer polyvalent, simple and robust technical solutions.

Zoom on key products



F SERIES

Reduced footprint.
Non-pulsating dosing.
Excellent quality/price ratio.



Z SERIES

Polyvalent use.
Quick and easy maintenance.
Robust.

DL/DSC SERIES

Transfer over long distances.
Easy to dismount connections.
Long hose lifespan.



I SERIES

Variety of models.
Excellent dosing capacity.
Robust.



PCM MOINEAU

PCM DELASCO

PCM PRECI-POMPE

| | F Series | 1 Series | IVA Series | DL Series | DSC Series | Z Series | PMA Series | Lagoa-LG Series | P3 Series |
|---------------|-----------------------|-----------------------|-----------------------|----------------------|----------------------|----------------------|-----------------------|-------------------------|-----------|
| Max. Flow | 3,4 m ³ /h | 500 m ³ /h | 300 m ³ /h | 20 m ³ /h | 65 m ³ /h | 18 m ³ /h | 0,2 m ³ /h | 350 l/h per dosing head | 2000 l/h |
| Max. Pressure | 10 bar | 200 bar | 200 bar | 15 bar | 15 bar | 2 bar | 1,5 bar | 12 bar | 350 bar |

TYPICAL CUSTOMER APPLICATIONS APPLICATIONS

MECHANICAL

- Dosing of acid, feeding of surface treatment baths and draining of baths for chemical sample treatment
- Transfer of spent oil and lubrication of machines

CHEMICAL

- Dosing of organic solvents, ammonia, polymers, glycols and alcohols
- Transfer of silica phosphate slurries, titanium dioxide and pigments
- Transfer of shear sensitive emulsions
- Transfer of toxic fluids, concentrated acids and bases

PAPER & BOARD

- Transfer and dosing of aluminates and pigments, kaolin, latex, carbonate emulsions, white satin, coating, starch in pulp preparation and paper sizing
- Dosing of acids and bases
- Draining of retention tanks

MATERIALS FOR PUBLIC WORKS

- Transfer of ceramic slip for the manufacture of tiles and sanitary blocks
- Transfer of cement, mortar, concrete, kaolin, hydrocarbons and bitumen emulsion
- Transfer of additives, foaming agents and fluidifiers
- Transfer of resin and glue
- Dosing of flocculants

FOUNDRY & SURFACE TREATMENT

- Dosing of resin and catalysers
- Transfer of baths
- Transfer of chromic acid



OUR CUSTOMERS

VILLEROY & BOCH

LAFARGE

AIR LIQUIDE

HENKEL

RHODIA

BASF

PHILIPS

CELLIER

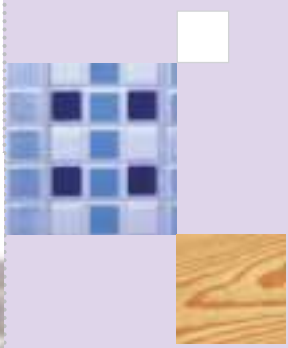
ARJO-WIGGINS

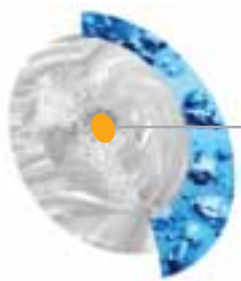
FORMOSA PLASTICS CORPORATION

FELDA RUBBER INDUSTRIES SDN BHD

OJI PAPER LTD

ROYAL COPENHAGEN





Environment

ULTIMATE TECHNOLOGY FOR THE ENVIRONMENT

PCM MOINEAU Accepts abrasive, viscous and fragile products. High suction capabilities. Constant non-pulsating flow.

PCM DELASCO Accepts abrasive, corrosive and fragile products. Easy and inexpensive maintenance. Seal-less design.

PCM PRECI-POMPE Control and precision of flow rate. Reduced footprint. Robust.



The protection of the environment is a fundamental concern in today's society. PCM participates in this effort by proposing more advanced pump technologies taking into consideration both pumped products and operating conditions.

Zoom on key products



GBB SERIES

Adapts to process evolution.
Reduced investment and operating costs.
Simplified integration.



DL/DSC SERIES

Accepts abrasive and corrosive products.
Easy to dismount connections.
Long hose lifespan.



LAGOA-LG SERIES

Control and precision of flow rate. Reduced footprint.
Robust.

F SERIES

Reduced footprint. Non-pulsating dosing.
Excellent quality/price ratio.



Z SERIES

Polyvalent use.
Quick and easy maintenance.
Robust.



PCM MOINEAU

PCM DELASCO

PCM EQUIPMENT

PCM PRECI-POMPE

| | PCM MOINEAU | | | | PCM DELASCO | | | PCM EQUIPMENT | PCM PRECI-POMPE | |
|---------------|----------------------|-----------------------|-----------------------|-----------------------|----------------------|----------------------|----------------------|-----------------------|-------------------------|-----------|
| | GBB Series | F Series | I Series | IVA Series | DL Series | DSC Series | Z Series | Pipeliners | Lagoa-LG Series | P3 Series |
| Max. Flow | 30 m ³ /h | 3,4 m ³ /h | 500 m ³ /h | 300 m ³ /h | 20 m ³ /h | 65 m ³ /h | 18 m ³ /h | 200 m ³ /h | 350 l/h per dosing head | 2000 l/h |
| Max. Pressure | 24 bar | 10 bar | 200 bar | 200 bar | 15 bar | 15 bar | 2 bar | 4 bar | 12 bar | 350 bar |

ACTIVITY SECTORS

MUNICIPAL WASTE WATER TREATMENT PLANTS

- Sludge treatment.
- Odour control system.
- Chemical stabilisation of sludge.

INDUSTRIAL WASTE WATER TREATMENT PLANTS

- Physical/Chemical treatment
 - surface treatment and mechanical industries
 - chemical and para-petrol industries
- Biological treatment
 - food industry
 - paper and board/slaughter houses

DRINKING WATER PRODUCTION

- Pumping Stations in rural areas
 - injection of chlorine
 - injection of different coagulants
- Drinking water treatment plant
 - injection of reactive
 - sludge treatment

OTHER TREATMENTS

- Treatment of discharged lixiviates.
- Treatment of incineration smoke.
- Lime decarbonation for process water production.

DECONTAMINATION OF POLLUTED SITES

- Treatment of accidental pollution.
- Decontamination of oil sites.

TYPICAL APPLICATIONS

PUMPED PRODUCTS

- Polymers and different reagents.
- Lime milk and activated carbon slip.
- Liquid sludge.
- Scum, grease and floating material.

MACHINE FEEDING OF DEHYDRATED SLUDGE

- Draining table
- Centrifuge
- Belt filter press
- Chamber filter press

TRANSFER OF CONCENTRATED SLUDGE

- Recuperation and transfer of dewatered sludge with or without lime over long distances.
- Feeding of incineration plants.
- Transfer to trucks and storage areas.

PROCESS SYSTEMS

- Lime injection to dewatered sludge in cake pumps by means of complete control integrated in customers process.
- Feeding of filter press due to turnkey solutions incorporating both pump and control systems.

OTHER APPLICATIONS

- Pump protection from fibres and long particles at water treatment plants.
- Pumping of resins in treatment through ion exchange.



OUR CUSTOMERS

ONDEO DEGREMONT

LYONNAISE DES EAUX

VIVENDI WATER

OTV

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PERRIER STI

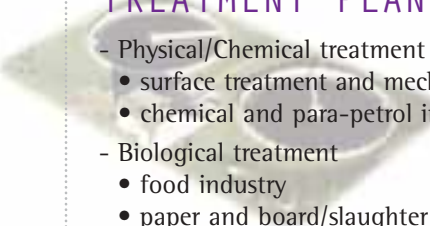
GUINARD CENTRIFUGATION

CHOQUENET

EMO

STEREAU

SAUR





Oil & Gas Industry

CONSIDERABLE BENEFITS IN PRODUCTIVITY



DOWNHOLE APPLICATIONS

Highest production capacity on the market. Solution for oil wells producing sand and gas. Production of deviated wells.

TRANSFER APPLICATIONS

Manufacture of production line pumps and tailor-made pumps. Pumping solutions offering a high degree of security. Follow-up of engineering oil projects.



PCM Moineau Oilfield confirms its position as one of the world's specialists in pumping solutions for Exploration/Production. Downhole and transfer pumps are designed in partnership with customers and are perfectly adapted to difficult operating conditions onshore as well as offshore.

Zoom on key products

Downhole applications:

TP SERIES SINGLE LOBE
 Reduced investment and operating costs.
 High global return on investment.
 Easy installation and maintenance.



Transfer applications :

I SERIES
 High suction capacity.
 Avoids water/oil emulsion.
 Non-pulsating flow.



DL SERIES

Self-priming.
 Quick and economical maintenance.
 Reversibility.



PCM MOINEAU OILFIELD

PCM MOINEAU

PCM DELASCO

| | PCM MOINEAU OILFIELD | PCM MOINEAU | PCM DELASCO | | | |
|---------------|-------------------------------|-----------------------|---------------------|---------------------|---------------------|------------|
| | TP Series Single & Multi Lobe | I Series | DL Series | DSC Series | Z Series | PMA Series |
| Max. Flow | 1000 m ³ /day | 500 m ³ /h | 20m ³ /h | 65m ³ /h | 18m ³ /h | 200l/h |
| Max. Pressure | 3000 m deep | 200 bar | 15 bar | 15 bar | 2 bar | 1 bar |



TYPICAL CUSTOMER APPLICATIONS APPLICATIONS

□ DOWNHOLE OIL PRODUCTION

- Hottest of crude: 127°c in Argentina
- Heaviest and lightest of crude: 42° API in Texas and 8° API Venezuela
- Longest lifespan: 99 months without intervention in Canada
- Deepest of wells: 2400m in Argentina

□ TRANSFER AT EXPLORATION & PRODUCTION SITES

- OFFSHORE :
 - Transfer of crude and oily water in congested conditions : production platforms and barges at sea .
 - Recuperation of oily effluent at tank bottom by vertical pumps.
 - Feeding of water/oil separators before disposal in sea.
 - Recuperation of oil well mud.
- ONSHORE :
 - Pre-production well tests.
 - Transfer of acidic fluids for well intervention.
 - Incineration feeding .



OUR CUSTOMERS

TOTALFINAELF

CONOCO

CNPC

TALISMAN ENERGY INC

ESSO IMPERIAL OIL

SHELL CANADA

GULF RESSOURCES

KVAERNER OIL & GAS

BOUYGUES OFFSHORE

TECHNIP

SCHLUMBERGER

GEOSERVICES





Service

RESPOND TO ALL CUSTOMER REQUIREMENTS



A RELATIONSHIP OF TRUST BASED UPON EXPERTISE

For several years, PCM has been dedicated to working in partnership with customers. Throughout the project phase, PCM advises its customers, so that the best decision is taken and also accompanies them throughout the installation process.

Due to the diversity of PCM's offer, notably combining Moineau and Delasco technologies, the customer is permanently assured that the proposed solution is adapted to the specifics of his installation.

PCM relies on a sales force, in proximity to the customer, to guarantee this relationship of trust. Whether it be regional sales teams in France or our partners abroad, they understand the customers market and also benefit from continuous training and support from our in-house experts, specialised per activity.



SERVICE CHART

Due to the steady partnerships between PCM and customers, technical support is an essential. PCM supplies effective and reassuring pre-sales and post sales services.



> PUMP EXPRESS :

Pump express, a service available to PCM customers, proposes PCM Moineau®, PCM Delasco®, and PCM Précipompe® on stock. Available on request, within 48 hours, by telephone, fax or Internet, this service responds to customer's urgent requests.

> SPARE PARTS :

PCM disposes of a permanent stock of spare parts and accessories available for all urgent requests.

> TRY & BUY :

Customers can benefit from a trial period where the pump can be tested to ensure the choice of the correct material, best adapted to their needs.

> TECHNICAL ASSISTANCE :

PCM's team of technicians are available to take calls and offer assistance with installation or operating problems with pumps and pump systems.

> TRAINING :

PCM disposes of a training centre for customers offering 3-day courses. These training sessions allow better understanding and optimisation of volumetric pumps in their environment.

> MAINTENANCE :

PCM offers maintenance contracts adapted to the different needs and exploitation conditions of each production unit. For punctual requirements, our technical team assure pump repairs and renovations at the customer's request.





Innovation

A CONTINUOUS OFFER OF ADDED VALUE



PCM Moineau® Oilfield, PCM Oil Division, has introduced the TP 5" series pump, which offers a down-hole pump with the highest production capacity available on today's market. PCM is equally innovative in surface pumps, with pumps developed for perfect adaptation in difficult operating conditions.



PCM has continued to develop the PCM Delasco® range with the DL Series, used in numerous activity sectors. It innovates due to its liaison of rollers and hose guides that allow resistance to high flow pressures.

Aimed at the environmental market, the GBB Series Cake Pump, part of the PCM Moineau® line is an integrated solution for pumping concentrated sludge over long distances at water treatment plants. This also guarantees the installation of turnkey solutions incorporating the pump and its operating situation.



For the Food & Personal Care Industry, PCM has introduced the PCM Moineau® H Series pump, specially designed for



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applications with strict hygiene requirements. The integrated technical solutions guarantee a high level of hygiene and facilitate maintenance.

Also for the food industry, PCM Dosys® develops a complete offer based on several skills: decanting, dosing, mixing and removal.



In order to respond to observed requirements in the Food Industry, PCM Foodys® develops activities revolving around feeding and mixing, with the objective of developing these and associated activities. PCM Foodys® proposes an innovative solution to simplify production methods in the food industry.

Due to a friendly and interactive website, PCM ensures a close contact with its customers. Customers, based on their activity sector, can find information on products and markets and can also request commercial information online.





Quality

QUALITY WITHOUT COMPROMISE



For many years, quality has been an important factor within PCM. This can be seen in all aspects of PCM, from control management to rigorous processes. PCM is one of the first pump manufacturers to be certified ISO 9001. This certification serves as the official recognition of the valuable internal organisation, but most of all is a gauge of the quality and seriousness of PCM.

PCM has retained complete control of the manufacturing of strategic parts, in order to guarantee the level of quality of its production. This results in the company remaining master of all formulations, mixing and moulding of elastomers.

A production unit of over 11 300 m², boasting modern production lines : numeric machining centres, degreasing and painting lines, specialised machines such as robotized injection presses for in house development of elastomers, serve as further proof of the commitment to quality.

Through this qualitative approach, PCM does not limit itself to simple conformity of ISO norms, but also looks to go beyond this to instil genuine efficiency, measured by customer satisfaction.





PCM INDUSTRIES

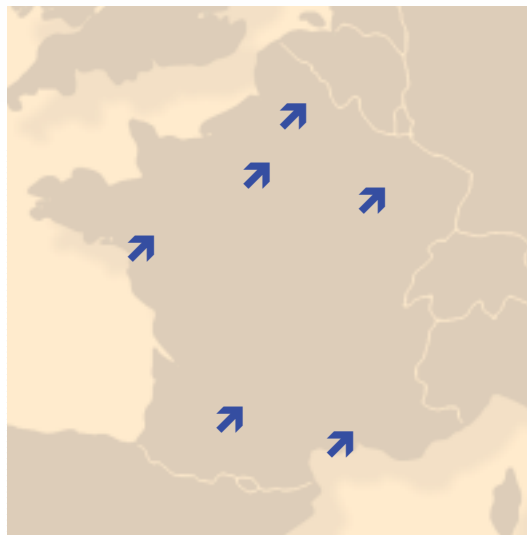
- DELASCO-PCM GmbH
- PCM POMPES SA
- PCM PUMPS Ltd
- PCM ASIA PACIFIC
- PCM DELASCO INC

PCM MOINEAU OILFIELD

- KUDU INDUSTRIES Inc.

PCM DOSYS

- PCM Dosys SA
- DOSYS Inc



PCM POMPES FRANCE

- PCM ILE DE FRANCE
- PCM NORD
- PCM EST
- PCM SUD-EST
- PCM OUEST
- PCM SUD-OUEST





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