

*improving your process*



# PCM:

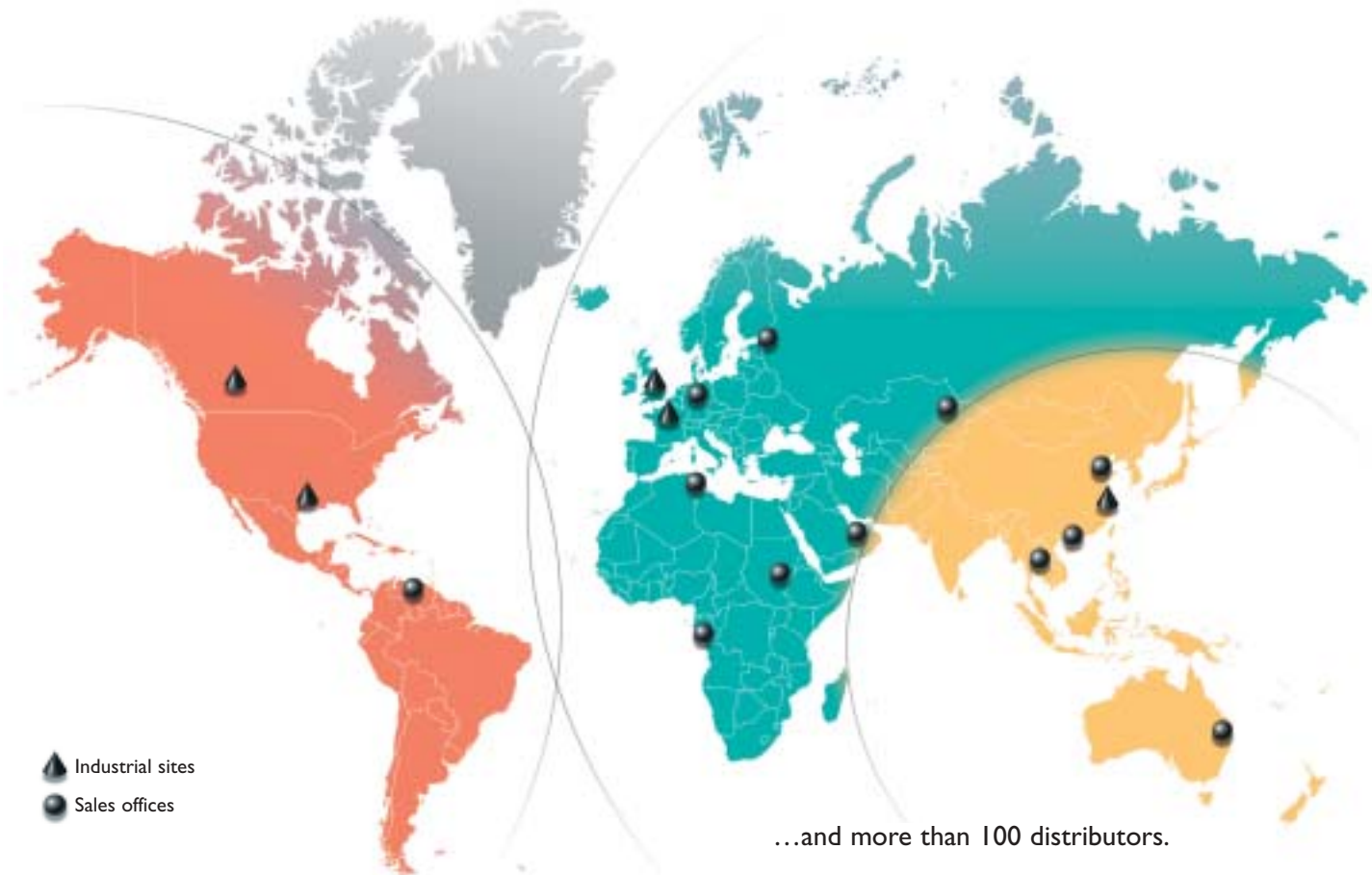
## THE PROGRESSIVE CAVITY PUMP INVENTOR

Specialist of positive displacement pumps, PCM is a market leader with world-renowned expertise in fluid technology. Since its creation in 1932 by René Moineau and Robert Bienaimé, PCM has made the partner-customer relationship a priority on which to build its basic values: quality, manufacturing expertise, innovation and services.

### → Our business: fluid technology.

From the supply of components to the creation of turnkey systems, our aim is to design and build the technical solutions best suited to your applications.

### → Worldwide presence:



### → Services: a relationship of trust based on expertise.

PCM Services is available to help you get the best performance out of your equipment:

PCM Services can provide you with research, start-up assistance or audit of your installations, training, maintenance contracts, repairs and express delivery of spare parts.

# A COMPLETE OFFER OFFER

A COMPLETE OFFER  
OF PUMPS AND SYSTEMS:



- > Progressive Cavity Pumps, PCM Moineau®
- > Hose pumps, PCM Delasco®
- > Progressive cavity pumps for oil production, PCM Moineau® Oilfield
- > Macerators, PCM Equipment

PCM Inc is located in Houston Texas in a 23,000 sq ft manufacturing facility.



# 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.

Standards according to API 676 and API 682 for mechanical seals, on request: traceability 3.1.B certificates on wetted parts, non destructive tests & examination reports, ASME compliant construction (WPQR/WPS), NACE certificates, NORSOK standard material data sheet, ATEX certificates.

## Zoom on key products

### Downhole applications:

#### TP SERIES SINGLE LOBE

Reduced investment and operating costs.  
High global return on investment.  
Easy installation and maintenance.

### High pressure transfer applications:

#### THP SERIES

High pressure.  
Low NPSHr.  
Reduced investment and operating costs.

### Other 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 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.**

	PCM MOINEAU OILFIELD	PCM MOINEAU	PCM DELASCO		
	<b>THP</b>	<b>I</b>	<b>DL/DSC</b>	<b>Z</b>	<b>PMA</b>
Max. Flow	1700 gpm	2200 gpm	200 gpm	100 gpm	0.9 gpm
Max. Pressure	3700 psi	580 psi	220 psi	45 psi	20 psi

# TYPICAL CUSTOMER APPLICATIONS

## APPLICATIONS

### □ DOWNHOLE OIL PRODUCTION

- Hottest of crude: 261°F 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: 7874 ft 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 effluents at tank bottom by vertical pumps.
- Feeding of water/oil separators before disposal into the sea.
- Recuperation of oil well mud.

#### ONSHORE:

- Pre-production well tests.
- Transfer of acidic fluids for well intervention.
- Incineration feeding.

### □ PCM MOINEAU OILFIELD SERVICES

With our dedicated and highly trained Field Service Team, experienced in carrying out a wide range of field services worldwide, we are determined to serve our clients the best way possible. Our experience and expertise combined with advanced technologies enable us to deliver effective solutions. Our range of services can be described as follows:

- On-site field production optimisation
- Installation, commissioning and preventive maintenance campaign
- Intensive and advanced training session



## OUR CUSTOMERS

BOUYGUES  
OFFSHORE

CNPC

CONOCO

ESSO IMPERIAL  
OIL

GEOSERVICES

GULF RESSOURCES

KVAERNER  
OIL & GAS

SCHLUMBERGER

SHELL CANADA

TALISMAN ENERGY  
INC

TECHNIP

TOTAL



# Materials, Paper & Chemical 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.

## 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.



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.

### PCM MOINEAU

### PCM DELASCO

	<b>F</b>	<b>I</b>	<b>IVA</b>	<b>DL/DSC</b>	<b>Z</b>	<b>PMA</b>
Max. Flow	15 gpm	2200 gpm	1900 gpm	200 gpm	100 gpm	0.9 gpm
Max. Pressure	145 psi	580 psi	580 psi	220 psi	45 psi	20 psi

# 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

### FOUNDRY & SURFACE TREATMENT

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

### CHEMICAL

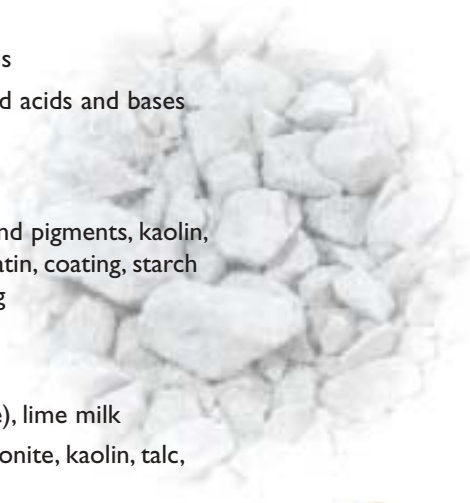
- Dosing of organic solvents, ammonia, polymers, glycols and alcohols
- Transfer of silica phosphate slurries, titanium dioxide and pigments
- Transfer of shear sensitive emulsions
- Transfer of toxic fluids, concentrated acids and bases

### 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
- Transfer of pulp, liquor (black, white), lime milk
- Dosing of fillers and pigments: bentonite, kaolin, talc, PCC, GCC, titanium dioxide
- Dosing of sizing and coating products : Rosin, AKD, ASA, starch and other polymers (PAM), latex
- Waste water

### MATERIALS FOR PUBLIC WORKS

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



### OUR CUSTOMERS

ABB CELLIER

AIR LIQUIDE

ARJO-WIGGINS

BASF

FELDA RUBBER INDUSTRIES SDN BHD

FORMOSA PLASTICS CORPORATION

HENKEL

LAFARGE

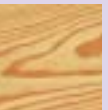
OJI PAPER LTD

PHILIPS

RHODIA

ROYAL COPENHAGEN

VILLEROY & BOCH





# 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.



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



**GAVO SERIES (GTA, GCA, GVA, GBB)**  
Accepts high dry contents ratio (40%).  
Reduced investment. Reduced energy consumption.



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



**DL/DSC SERIES**  
Accepts abrasive and corrosive products.  
Easy to dismount connections.  
Long hose lifespan.



**Z SERIES**  
Polyvalent use.  
Quick and easy maintenance.  
Robust.

#### PCM MOINEAU

#### PCM DELASCO

	<b>GBB</b>	<b>F</b>	<b>I</b>	<b>IVA</b>	<b>DL/DSC</b>	<b>Z</b>	<b>PMA</b>
Max. Flow	130 gpm	15 gpm	2200 gpm	1900 gpm	200 gpm	100 gpm	0.9 gpm
Max. Pressure	350 psi	145 psi	580 psi	580 psi	220 psi	45 psi	20 psi

## 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 TREATMENT

- 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 (FPF system)

### □ 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 through 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

CGE

CHOQUENET

EMO

GUINARD  
CENTRIFUGATION

LYONNAISE  
DES EAUX

ONDEO DEGREMONT

OTV

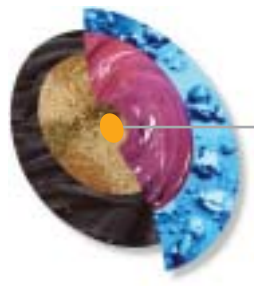
PERRIER STI

SAUR

STEREAU

VIVENDI WATER





# APPLICATIONS

## Oil and gas



Onshore pre-commissioning of High Pressure Oil re-injection pump : 900THP100 model with API 53 plan (4'000 bfpd @ 100 bar)

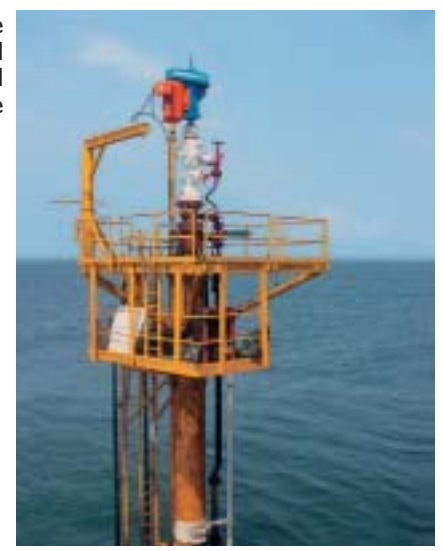


Commissioning a PCP in Libya (Drivehead VS 60 HP with moto-reducer)



Booster pump using a large capacity progressing cavity with high pressure design

PCM Downhole PCP installed on a monopod offshore



# Materials, Paper & Chemicals



DL pump for titanium dioxide slurry transfer



I pump for filter press feeding in minerals application

DSC pump for enamel transfer in a can coating factory



IVA pump for transfer of silica



# Environment



GBB pump for recovery of sticky sludge with belt filter and lubrication



Feeding of dehydration equipment

I pump for lime milk dosing



DL pump for recovery of spume and floating matter on decanter





*improving your process*

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