# PCM RANGE OF FOOD PUMPS AND SYSTEMS

www.pcm.eu

**PCM** keep it moving

# PROGRESSING CAVITY PUMPS

# PCM Moineau<sup>™</sup>



### Performances

- Pressure: 232 psi
- Flowrate: 220 USGPM
- Particles size: 1.26 inch
- Range: 22 models

### **Benefits**

- Protection of products quality and texture
- Hygienic design including a flexible Duraflex shaftline
- Reduced maintenance

### **PCM ECOMOINEAU™ C** with fixed stator Low LCC





### Performances

- Pressure: 232 psi
- Flowrate: 792 USGPM
- Particles size: 1.5 inch
- Range: 35 models

### **Benefits**

- Respect of fragile and viscous products
- The shortest progressing cavity pump on the market
- Easy maintenance through its revolutionary joint and its patented connecting system

### PCM VISCOFEEDER

Transfer and dosing of very viscous products



### **Benefits**

- Transfer and dosing of hyper-viscous and/or sticky products
- Respect of products
- Continuous and accurate dosing
- High level of hygiene

### **PCM ECOMOINEAU™ C** with FLOATING STATOR Space and time saving





- Pressure: 58 psi
- Flowrate: 264 USGPM
- Particles size: 1/4 inch

### **Benefits**

- Compact, easy integration
- Low life cycle costs

### **PCM IVA/LVA/GVA**

### Transfer of viscous products



### Performances

- Pressure: 580 psi
- Flowrate: 1321 USGPM
- Hopper: from 20 to 59 inch

### **Benefits**

• Versatility: pumping of high viscosity, heterogeneous or sticky products through its feed screw

### MOINEAU<sup>™</sup> TECHNOLOGY PRINCIPLE From the name of the inventor and PCM co-founder: René Moineau

A Moineau<sup>™</sup> pump consists of a helical rotor turning into a helical stator. When the rotor turns inside the stator, the honeycomb progresses spirally along the axis of the pump without changing either shape or volume. This action transfers the product from the pump intake to the pump discharge without degrading the product.





FDA 7

- Range: 7 models

- Simplified maintenance





IVA model





# PERISTALTIC PUMPS

### **PCM DL SERIES**

Versatility: abrasive, corrosive and fragile fluids



### Performances

- Pressure: 220 psi
- Flowrate: 88 USGPM
- Viscosity: 40 000 cPo

### Benefits

- Self-priming
- Reversibility
- Robustness
- Seal-less design

### DELASCO™ TECHNOLOGY PRINCIPLE The ideal choice to reduce maintenance costs

The peristaltic principle is based on the capacity of a soft elastomer hose to accept a deformation and subsequently draw fluids as it recovers its initial shape. The optimum hose occlusion prevents back flow, preserving fragile products integrity as well as providing unbeatable volumetric efficiency and accuracy. With only the hose in contact with the fluids, peristaltic pumps are ideal for a large variety of fluids while always keeping maintenance costs to a minimum.







**INLINE MIXERS** 

### PCM DOSYMIX™

Dynamic mixer



### Performances

- Pressure: 145 psi
- Flowrate: 26 USGPM
- Particles size: 1 inch
- Range: 5 models

### Benefits

- Mixing of non-homogeneous and sensitive
- products without shearing
- Hygienic design
- Cleanable in place
- Option: hopper function

### > PCM DOSTAM Static mixer



### Performances

- Flowrate: 132 USGPM
- Range: 5 models

### **Benefits**

- Mixing of homogeneous fluids
- Easy to install
- Operation without energy (static without drive)

# **DIAPHRAGM DOSING PUMPS**

### PCM LAGOA™

### Diaphragm dosing pump



# PerformancesPressure: 175 psi

- Flowrate: 92 gph / pumphead
- Accuracy: +/- 1%

### Benefits

- Simple and robust
  - TODUSI

FDA

- Reliable Versatile
- Reduced maintenance

### ► LAGOA<sup>TM</sup> TECHNOLOGY PRINCIPLE Accuracy and reliability: ingredients of a successful dosing

The Lagoa™ pump is composed of a membrane connected to a piston which alternating movement successively fills and empties the pumphead.

1- The backward movement of the membrane opens the bottom check valve and allows the entry of fluid, which fills the pumphead.

2- The forward movement of the membrane closes the bottom check valve, opens the top check valve and expels the dose.







# **DOSING, FILLING AND INJECTION SYSTEMS** PCM Dosys<sup>™</sup>

# FILLING, CONDITIONING, INJECTION SYSTEMS

### Performances

- Pressure: 73 psi
- **Speed:** 40 to 60 strokes/min • **Accuracy**: +/- 0.5%





### Filling System

Nozzle plate with 6 to 24 heads, 1/2 inch to 3/4 inch diameter, 40 strokes/min, 10 to 55 cc/head, hygienic barrier



### Conditioning system

6 to 24 heads system, 40 strokes/min, 10 to 500 cc/head, 1.89 inch pieces, common drive, cleanable in place



Multi-injection System Injection system of liquid or viscous products in breads, croissants and similar products, 6 to 24 needles, 60 strokes/min, cleanable in place

### DOSING SYSTEMS FOR VISCOUS PRODUCTS WITH PIECES

### Performances

- Pressure: 294 psi
- Speed: 40 strokes/min
- Accuracy: +/- 0.5%
- Particles size: 1.89 inch





### Dosing Unit

Semi-automatic, single or twoingredients station



**Hopper station** Semi-automatic, single or multiingredients, cleanable in place station



**Dosyfruit™** Fully automatic, hygienic and multiingredients station, with automatic containers changeover

## DOSING SYSTEMS FOR AROMAS AND OTHER ADDITIVES

### Performances

- Pressure: 294 psi
- Speed: 60 strokes/min
- Accuracy: +/- 0.5%
- Particles size: 1.89 inch





Additive station Semi-automatic, single or twoingredients station, for in-vein injection



**Aromas dosing system** Fully automatic multi-ingredients station for dosage in cups, with end-of-can detection and cleaning-in-place

### DOSYS<sup>™</sup> TECHNOLOGY PRINCIPLE The keys of a perfect dosing and filling

Dosys<sup>™</sup> pump automatically synchronizes dosing volumes with the filling station for optimal performance. It also meters the ingredients with precision, thanks to the servo-driven piston and a patented flow-control valve. Dosys<sup>™</sup> pumps are designed to handle liquids, semi-solids and viscous products without degrading their texture.





CLEANING IN PLACE (CIP)

(Ex

# **AT YOUR SERVICE**



All of our services are designed with one goal in mind: optimizing the performance of PCM pumps and systems. From preventive maintenance to spare parts management, from equipment upgrading to training, we strive to best contribute to the productivity of our customers.

In order to provide the best use of our pumps and pumping systems, we offer a wide range of pre and post sales services:

### Tests

Making the right choice

**) Installation, Commissioning, Training** Ensuring trouble-free operation

**) Maintenance** Guaranteeing efficiency **Equipment upgrading** Extending lifespan

) Installation audits Delivering lowest operating costs

**) Spare parts** Rapid worldwide distribution

# **SPARE PARTS**

### A rapid worldwide distribution

Operating in more than 90 countries, you can obtain genuine PCM spare parts quickly. Using PCM spare parts ensures that PCM products last as long as possible, benefit from warranty protection and maintain their CE conformity.

### Delivery time and responsiveness

Standard spare parts are dispatched within 24 hours. The orders received before 4:00 pm are processed the same day. A dedicated spare part expert is at your disposal for any information or order request.

### Unmatched component quality

Using genuine PCM spare parts is the smart choice. It is the only way to ensure that our products remain covered by our warranty and maintain their CE conformity until their end of life.

### Expertise in elastomers

We formulate and manufacture our own elastomers. Because we know elastomers play a critical role in our products' life cycle costs, we have developed hundreds of formulas to adapt to the most difficult fluids, while other pumps manufacturers use third-party elastomers.

# **ABOUT PCM**



Founded in 1932 by René Moineau, the inventor of the Progressing Cavity Pump, and Robert Bienaimé, from Gevelot Group, PCM is today one of the world's leading manufacturer of positive displacement pumps and fluid-handling equipments.

Our specialty is developing solutions for the lifting, transfer, dosing, mixing and filling of abrasive, fragile, viscous, corrosive, hot or heavy products. **Present around the world**, we provide solutions to three main sectors: **Oil & Gas, Food and Industry**.