





# **ECOMOINEAU™** C

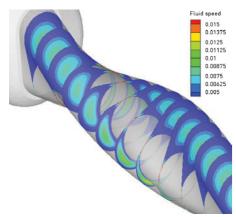
# THE SHORTEST STAINLESS-STEEL PROGRESSING CAVITY PUMP IN THE MARKET

PCM EcoMoineau<sup>TM</sup> C: the smart choice for a wide range of applications.

## **)** MOINEAU™ TECHNOLOGY

## The Moineau™ progressing cavity pump technology

- Handles both fragile and viscous products
- High suction and self-priming capabilities
- Constant non-pulsating flow
- Easy to maintain
- Reversible
- Flow rate proportional to running speed



Fluid speed inside the PCP modeling Simulated in PCM Flow Technology Center

## ) OPERATION PRINCIPLE

A Moineau $^{\text{TM}}$  pump consists of a helical rotor turning inside a helical stator. The stainless steel rotor is machined to a high degree of precision, and the stator is molded in a resilient elastomer.

The geometry and the dimensions of these parts are such that when the rotor is inserted into the stator, a double chain of watertight cavities [honeycombed-shaped] is created. 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.



## ) MAIN FEATURES

The EcoMoineau $^{\text{TM}}$  C is the shortest stainless steel Progressing Cavity Pump in the market. This new Eco-designed and compact pump is dedicated for food and industry markets. Very easy and quick to dismantle.

- Available with 3 rotor and 7 stator materials to fit with a wide range of industrial applications
- Multi standard flange connection
- Explosion proof and ATEX constructions available
- Packing gland, single or double mechanical seal

## > VERSATILE CONSTRUCTION

## Integrated construction

- Cost-effective solution including single bellow mechanical seal (self positionning)
- Shortest and lightest design
- Ideal for non sticky and low abrasive fluids



## Monobloc or bearing construction

- Five sealing solutions available
- Spacer with improved access to the sealing system
- Rubber deflector: protecting the drive and bearing therefore





BEARING

#### ) PERFORMANCES

TEN ON ARCES	
ECOMOINEAU ™ C	I SERIES
Maximum Flow rate	
240 m³/hr / 1055 US GPM	500 m³/hr / 2200 US GPM
Maximum pressure	
24 Bar / 350 PSI	45 Bar / 650 PSI - 200 Bar / 2900 PSI upon request
Maximum temperature in continuous operation	
120°C / 248°F	120°C / 248°F

Figures are given as a general guide. For higher values, please contact us.

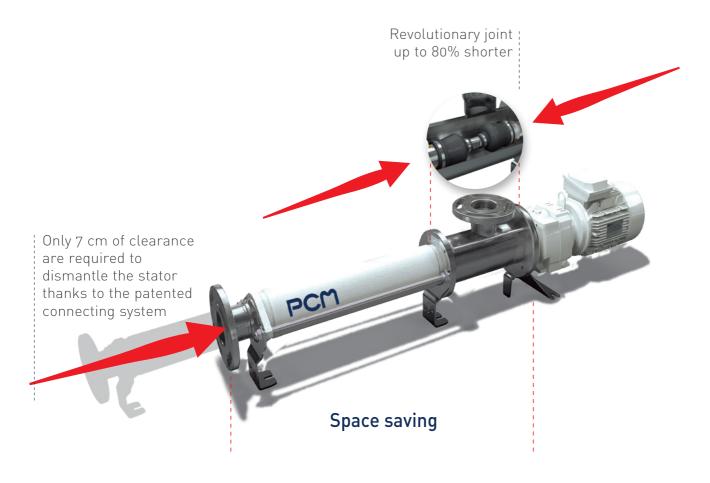
3

## **ADVANTAGES**

## **) SPACE SAVING**

## Up to 42% shorter - 57% lighter

Its revolutionary design combines the legendary performance and reliability of PCM Progressing Cavity Pump technology with a highly modular, eco-friendly design. The EcoMoineau™C pump requires less space for installation which reduces costs and facilitates its integration.



## **)** ECODESIGN PUMP

## 10% less power consumption

The EcoMoineau<sup>TM</sup> C pump is lighter (less raw materials) and uses 10% less power than most Progressing Cavity Pump's on the market. The energy used to manufacture, transport and operate the EcoMoineau<sup>TM</sup> C pump is therefore optimized.

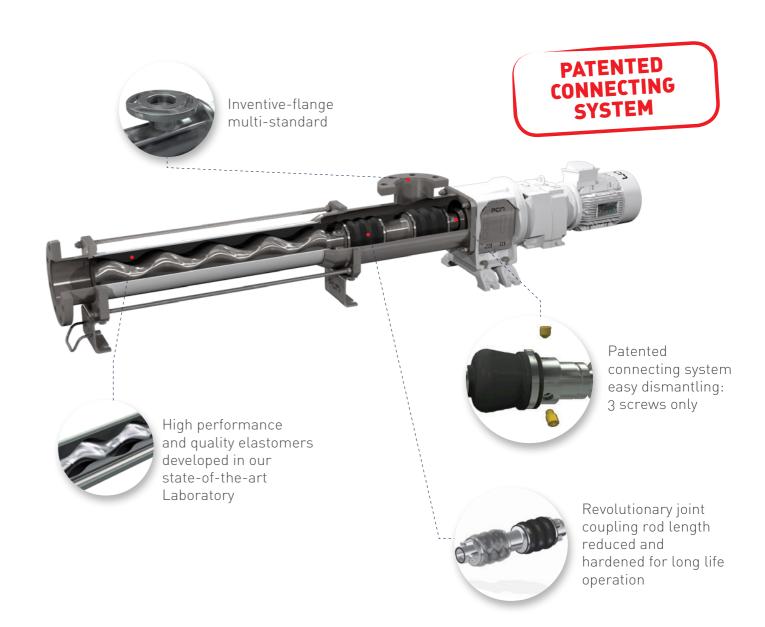
## **)** EASY & QUICK DISMANTLING

## 23% maintenance time saving

The EcoMoineau™ C pump is made with fewer parts compared to competitors models. This new stainless steel pump has a multiple of design features that make installation, operation and servicing easier than ever before.

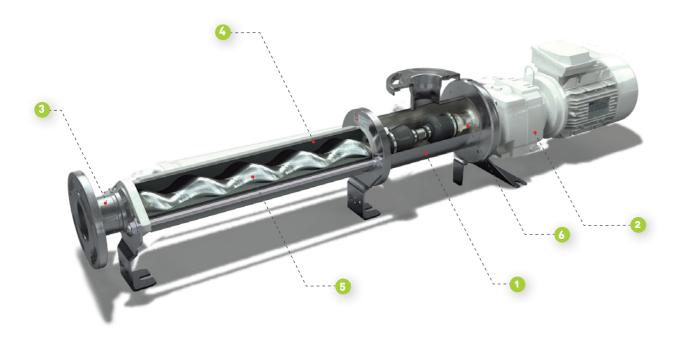
#### For example:

- The seal can be changed by simply disconnecting the drive.
- The shaft line (rotor, coupling rod, driving shaft) can be removed without disconnecting the pipes.
- The integrated version comes with a smaller diameter, self-positioning mechanical seal.
- The patented connecting rod has fewer parts and can be supplied in a complete shaft line as one spare part in order to reduce maintenance downtime.



## **ECOMOINEAU™ C CONSTRUCTION**

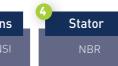














Options



## Options

Monobloc construction

Bearing construction

# **Options**EPDM

Duplex stainless steel 329LN (food or corrosion) Mechanical seal-Single stainless steel/ carbon EPDM FDA (flush possible)

Mechanical seal-

Single carbide/ carbide EPDM FDA

(flush possible)

Options

FKM

CR

IR

NR

CSM

Hard Chromed stainless steel 420 C10 (abrasion)

Hard Chromed stainless steel 420 C40 (very abrasion)

Cartridge mechanical seal– Double carbide/ carbide - Carbon/ carbide FPM FDA (flush possible)

Gland Packing (no flush)

> Gland Packing (with flush)

## 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

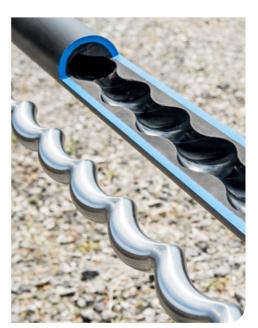
## ) Installation audits

Delivering lowest operationg costs

#### Spare parts

Rapid worldwide distribution

# PCM SPARE PARTS ORGINAL PARTS, ORIGINAL QUALITY



Thanks to our worldwide network, 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 until their end of life.

- Rapid worldwide distribution
- Delivery time
- Unmatched component quality
- ) Expertise in elastomers

PCM GENUINE SPARE PARTS

7

## **INDUSTRIES AND APPLICATIONS**



## **) CHEMICALS**

Polymer, sizing, resins and hardeners, acids and alkalines, oils, water based paint...



## **MINERALS**

Slurries, explosive preparation, coloring agent, miscellaneous agents (grinding)...



## **PAPER**

Coating colour, dyes, starch, kaolin, talc, bentonite, calcium carbonate, titanium dioxide...



## MEAT INDUSTRY

Pet food, fatty products, grease, fat or oil (tallow, lard, colza, olive, palm, ...) enzymes...



## **SUGAR INDUSTRY**

Molasses, glucose, saccharose, syrup, starch, honey, liquor, ...



## **)** CONVENIENCE FOOD

Puree, soups, cooked food, seasoning (chilli, ketchups, soya sauces, ...)



#### BEVERAGE INDUSTRY

Juices, wine-making, ingredients, additives, beers, syrups, ...

Ref. B- 000296-F - December 2016 - Non contractual pictures