

ECOMOINEAU™ M

› THE FIRST ECO-DESIGN
PROGRESSING CAVITY PUMP

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ECOMOINEAU™ M

REDUCED SIZE - INCREASED PERFORMANCES

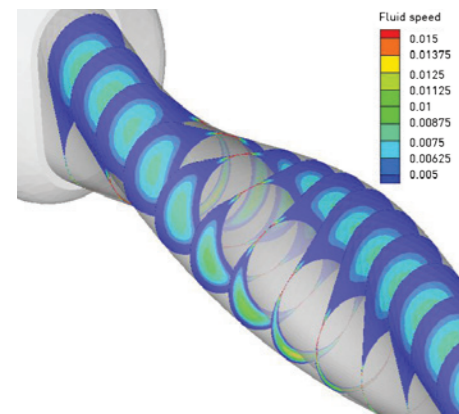


PCM EcoMoineau™ M is the most compact progressing cavity pump (PCP) available on the market today. Its revolutionary design combines the legendary performance and reliability of PCM PCP technology with a highly modular, eco-friendly design.

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



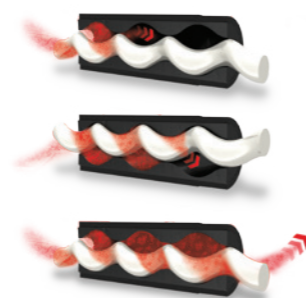
Fluid speed inside the PCP modeling
Simulated in PCM Flow Technology Center

OPERATION PRINCIPLE

A Moineau™ 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.



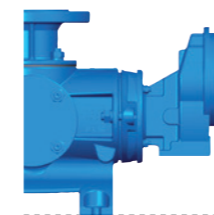
MAIN FEATURES

The EcoMoineau™ M is the shortest Progressing Cavity Pump in the market. This new Eco-designed and compact pump is dedicated for industry markets. Very easy and quick to dismantle.

- Available with 5 rotor and 7 stator materials to fit with a wide range of industrial applications
- Multi standard flange connection
- Standard handholes for pump cleaning
- Explosion proof and ATEX constructions available
- Sealing maintenance by removing pipe connections

VERSATILE CONSTRUCTION

Integrated design

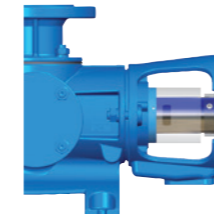


INTEGRATED CONSTRUCTION

The choice of simplicity

- Shortest design
- Fewer parts, no drive shaft
- Self-positioning mechanical seal
- Standard mechanical seals eliminate leaking, tightening and adjustment
- Reduced mechanical seal diameter lowers spare part costs
- Ideal for non sticky and low abrasive fluids

Monobloc design

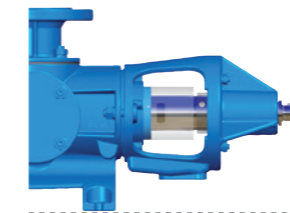


MONOBLOC OR BEARING CONSTRUCTION

For a maximum versatility

- Reduced dimensions
- Built-in drip tray
- Versatile configuration (seals and stators)
- Spacer with improved access to the sealing system
- Rubber deflector: protects the drive and bearing therefore reducing maintenance

Bearing design



PERFORMANCES

ECOMOINEAU™ M	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.

ADVANTAGES

REDUCED SPACE REQUIREMENTS

Up to 42% shorter - 57% lighter

Because the EcoMoineau™ M pump is more compact than comparable progressing cavity pumps, it requires less space for installation and servicing, which speeds up maintenance, reduces civil engineering costs and eases integration systems. Most progressing cavity pumps require clearance of nearly a stator length maintenance operations; the EcoMoineau™ M pump requires just 70 mm. It can be installed in smaller premises and can be hoisted using lighter lifting gear.



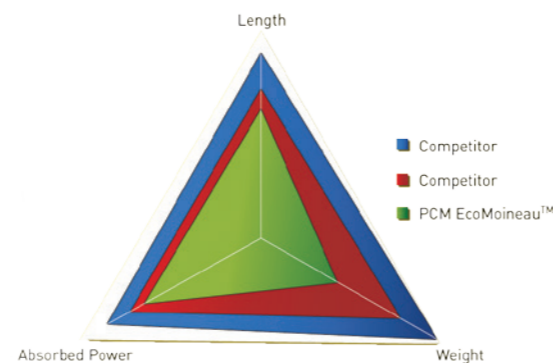
Thanks to the reduction of the connecting rod, the pump size has been considerably reduced.



REDUCED LIFE CYCLE COSTS

10% less power consumption

The EcoMoineau™ M pumps comply with the European Energy-using Products (EuP) directive. Their new design uses less raw materials and 10% less power than previous generation Moineau pumps. This makes EcoMoineau™ M pumps more energy efficient to manufacture, transport and operate.



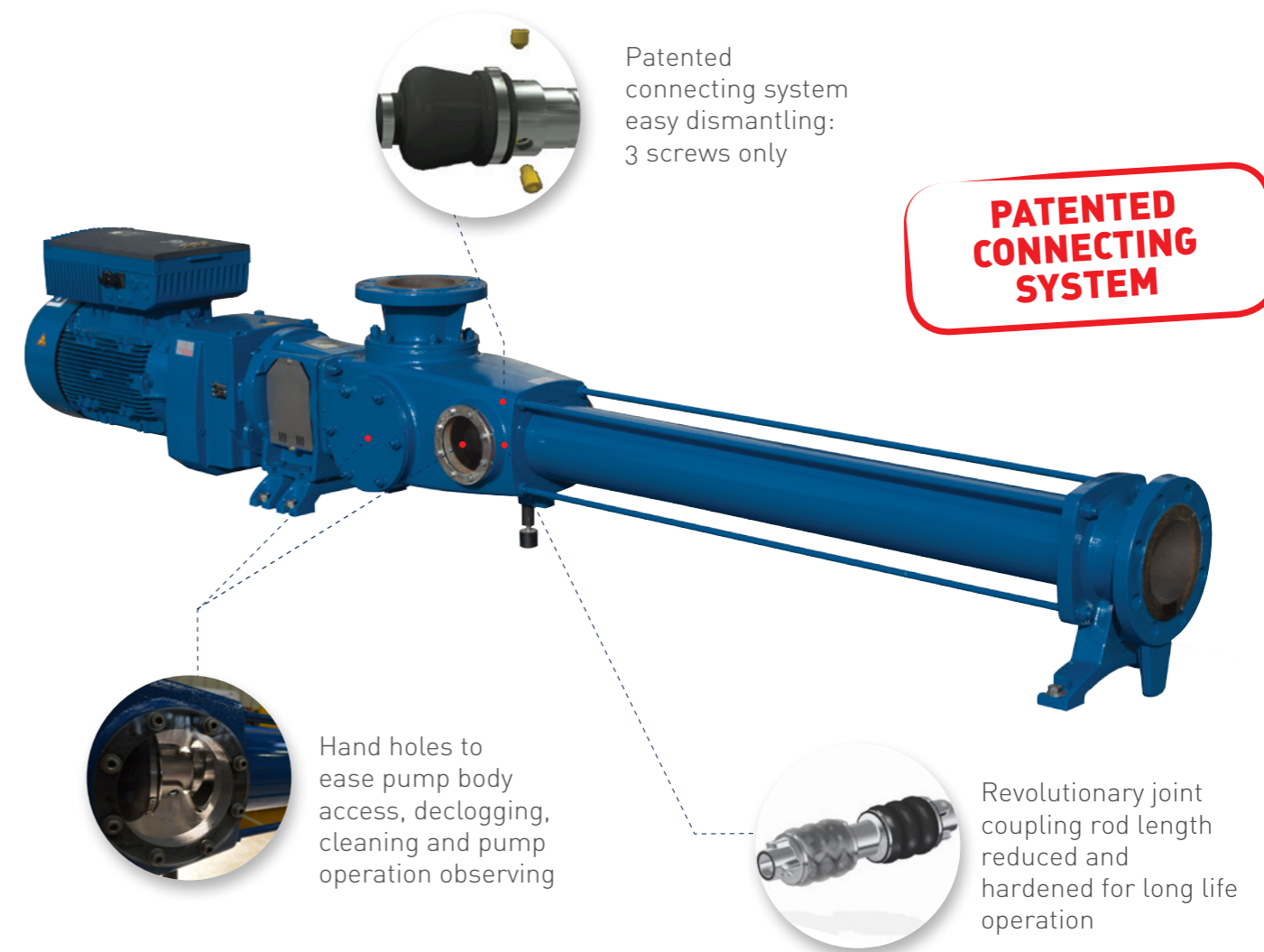
SIMPLIFIED SERVICING

23% maintenance time saving

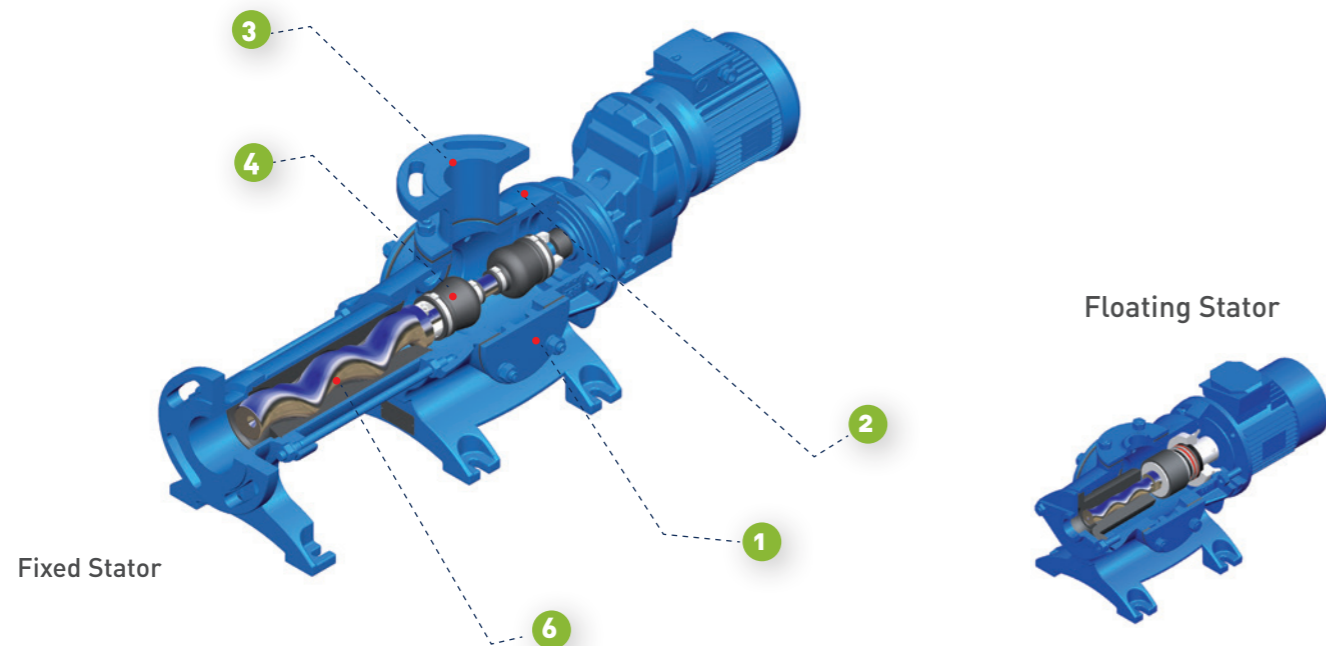
The EcoMoineau™ M pump is made with fewer parts compared to competitors models. This cast iron pump has a multiple of design features that make installation, operation and servicing easier than ever before.

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.
- Only one allen key is necessary to disconnect the stator and rotor from the shaftline and replace the new one in just 5 minutes.



ECOMOINEAU™ M CONSTRUCTION



1 Standard hand holes

- Ease pump body access
- Can be used for polymer or water injection

2 Shorter body

- Reduced dead volume
- Fully drainable body for easy cleaning
- Integrated feet (no base frame required)
- Spacer design provides easy manual access to seals

3 Inventive flanges

- Multi-standard (PN or Class)
- Multiple flanges on single pump
- Flanges can be positioned on site

4 Revolutionary joint

- Coupling rod length reduced by 80%
- Reduced number of parts
- Hardened for long-life operation

5 Patented connecting system

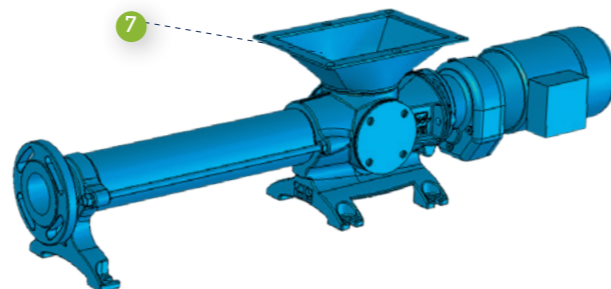
- Drive can be dismantled independently of pump
- Only 70 mm of clearance are required to dismantle the stator
- Easy access to wearing parts without complete dismantling
- Rotor can be disconnected without removing the stator or body

6 Elastomer expertise

- To ensure maximum pump efficiency we develop, mix and produce our own elastomers in our state-of-the-art laboratory.

7 Hopper

- Recovery and transfer of thickened sludges (up to 120g/l) from dripping tables.
- Hopper (200 x 300 mm)



Simplified parts management thanks to common platform and shared components

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

PCM SPARE PARTS ORIGINAL 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**

INDUSTRIES AND APPLICATIONS



› ENVIRONMENT

Liquid sludges to 100g/l, lime milk, polymer, thickened sludges up to 120 g/l



› MECHANICAL ENGINEERING

Oil water mixtures, laminoire wastes, cutting oil, engine lubricants, engine lubricant wastes



› CHEMICALS

Glues, paints, varnishes, polymer, flue gas desulphurization, fiber production, colloidal silica



› NEW ENERGIES

Oil, biodiesel, musts, vinasses, coal water mixtures



› MINERALS

Mineral slurries, explosive preparation, polymer, pulp, grouts, mortars, refuse derived fuels, chrome VI reduction, coloring agent, sludges, flocculants



› PAPER

Mineral slurries (kaolin, talc, bentonite, calcium carbonate, titanium dioxide), binders (starch, casein, AKD, PVA, CMC, latex), additives (retention agents, dispersants, optical brighteners), coating color, polymer