

# PCM ECOMOINEAU<sup>TM</sup> MX The progressive cavity pump equipped with a maintenance in place system as standard.

**The PCM EcoMoineau™ MX pump** is specially designed to offer easy and fast maintenance with its integrated in-place maintenance system as standard. Maintenance operations can be carried out on-site without removing the pump from its installation, **reducing** downtime and optimizing industrial productivity.

Its clever modular design provides easy access to internal components, reducing maintenance costs while ensuring long-term optimal performance. The PCM EcoMoineau<sup>™</sup> MX pump is more compact than similar progressive cavity pumps, requiring less space for maintenance (just 7 cm is sufficient for larger models).

# **) EXAMPLES OF APPLICATIONS**

- Sludge drainage (environment)
- Filter-press feeding (mines and quarries)
- Starch transfer (paper)
- Biomass circulation (new energies)
- Polymer production (chemistry)
- Used oil treatment (mechanics)



PCM

In addition to its in-place maintenance system, this pump stands out with unmatched performance. It combines the advantages of eccentric screw pump technology with the characteristics of progressive cavity pumps, providing optimal efficiency and proven reliability in various industrial applications.

In summary, the PCM EcoMoineau™ MX pump is the ideal choice for industries seeking a high-performance, robust, and user-friendly pumping solution. With its standard-equipped in-place maintenance system, it enables productivity optimization.



# **) TECHNICAL PERFORMANCES**



# PCM ECOMOINEAU<sup>™</sup> MX RANGE BENEFITS

#### SPACE SAVING

- Revolutionary joint 80 % shorter than other PCPc on the market
- Revolutionary joint coupling rod length reduced and hardened for long life operation
- Patented connecting system: only 7 cm of clearance required to dismantle the stator of the biggest models
- Replaceable in place of the PCM EcoMoineau™ M (see next page): The floor mounting system and the center distance between the two flanges are the same which allows easy replacement

#### EASY AND QUICK MAINTENANCE

- Patented connecting system with 3 screws only
- Wide hand holes to ease pump body access, declogging, cleaning and pump operation observing
- It is possible to unscrew the rotor from the stator using a wrench thanks to the added of a flat on the head of the rotor.
- Reduced maintenance time and therefore cost savings
- Sealing maintenance by just removing the drive from the back
- Maintenance in place system in standard on all pump (see next page)

#### **ECO-DESIGN PUMP**

- Less power consumption compared to most Progressing Cavity Pumps on the market
- Less raw materials

Pump joint < 90m³/h

## VERSATILE CONSTRUCTION

Integrated construction

- 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 parts costs
- Ideal for non sticky and low abrasive fluids

#### Monobloc and bearing construction

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

#### Hopper option

• Recovery and transfer of thickened sludges (up to 120 g/l) from dripping table

# **JOINT ASSEMBLY BENEFITS**

- Cost and stock savings: same joint assembly for all models from the same module
- Maintenance time saving: 3 screws only to dismantle the joint. No sheath dismantling, nor usage of grease or oil.
- Patented connecting system
- Durable and robust design: lifespan increase for non corrosive and non abrasive applications

 $imp ioint > 90 m^3/h$ 

# **) MAINTENANCE IN PLACE SYSTEM**

The new maintenance system in place as standard on the entire PCM Ecomoineau<sup>™</sup> MX range allows the stator and/or rotor to be replaced in just 5 steps and without having to remove the pump from its installation. Maintenance time is considerably reduced, which in turn reduces downtime and life-cycle costs.



STEP 1 :

Unscrew the two screws on the MIP ring to remove it. Then unscrew the tie rods on the suction pipe and remove the top two.

**STEP 2 :** Unscrew the suction flange. Shift it towards the pipe to hold and support it.

**STEP 3 :** Remove the inspection hatches from the body. Then unscrew the 3 screws on the shaft line to release the rotor head.

**STEP 4 :** The rotor/stator assembly is now free. The space left by the MIP ring makes it easy to remove them.

**STEP 5 :** The rotor head has two flats. These allow the rotor to be removed from the stator using a simple spanner.



Then simply repeat these steps in reverse to reassemble the pump. Maintenance is now completed!!!

# **PERFORMANCE CONTROL:**

The PCM hydraulics (stator with armature) are unchanged, which gives us better control of leakage rates than a solution with two half-shells or with an unglued elastomer stator. Whatever the pressure, the pump's performance is unchanged.

SIMPLIFIED INSTALLATION :

The centre-to-centre distance between the suction flange and discharge flange is the same as that of the PCM Ecomoineau<sup>™</sup> M which allows it to be replaced in place, thus reducing installation costs in the event of a pump replacement.

## ADAPTABILITY TO THE PROCESS :

Accessories can be added to the  $\ensuremath{\mathsf{MIP}}$  ring using the stitch provided.

**UPGRADE** :

Your PCM Ecomoineau<sup>™</sup> M can be upgraded to PCM Ecomoineau<sup>™</sup> MX using an adaptation kit..

## PCM ECOMOINEAU™ MX



