



PCM Lobes

Ecolobe® Series

The Eco-design lobe pump

- Maintenance in place
- Reduced overall dimensions
- Product integrity



Keep it moving

Eco-design lobe pump: details which make the difference

PCM has been firmly committed to an environmental approach for a number of years. This company policy has been confirmed by the ISO14001 certification.

Eco-design is an application of durable development principles. It aims at reducing the product's impact on the environment through all the stages of its lifecycle, starting with the design phase.

For users it is a sum of details each of which actually minimizes the global cost of ownership of the pump.



REDUCED MAINTENANCE COSTS

Maintenance costs must be taken into consideration when calculating the overall **Life Cycle Cost** of a pump since they are often more costly than the original purchasing price.



REDUCED MAINTENANCE TIME

Our customers are constantly looking for ways to reduce maintenance time in order to maximise productivity.



PRODUCT INTEGRITY

The respect of the product is very important. The pump has been designed so that the product is not affected during the pumping procedure.



ENERGY SAVINGS

On a global scale, it has been estimated that pumping systems account for nearly 3% of the world's energy demand. For a customer 80% of the overall LCC of the pump is related to power consumption.

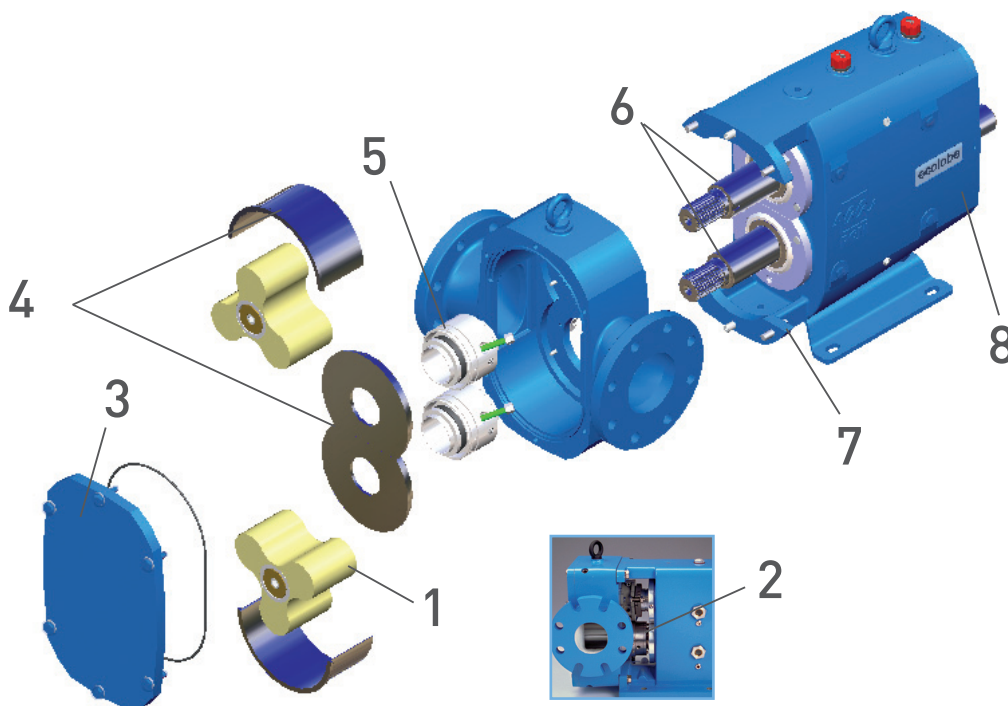


PRESERVED ENVIRONMENT

PCM not only works actively to reduce the overall costs for its customers but also takes into consideration the protection of the environment. The ISO 14001 certification obtained at the beginning of 2006 complements the ISO 9001 certification that the company already possesses, and reinforces the policy of excellence that PCM aims to achieve at every level:

- Customer satisfaction via the quality of its products,
- The safety of company employees and pump users,
- Environmental awareness and civic-mindedness.

Ecolobe® Highlights



- 1 Lobes
- 2 Air gap between gearbox and pumphead
- 3 Front cover
- 4 Wear plates
- 5 Sealing
- 6 Shafts
- 7 Dripping collection built-in
- 8 Gearbox

Optional equipment:



Swan neck is necessary for an all-time self priming capacity when the pump is not flooded. The pump can be filled or emptied by means of vent/drain connections: useful during winter time when the pump is outdoors or in order to fit sensors.



The lubrication bottle (thermosiphon) guarantees a good lubrication of quenched mechanical seals even in the case of dry-running. It is very useful when there is a risk of dry-running and no water supply available close-by.



Direct start-up box with start/stop/reverse button allows the content of the discharge pipe to be pumped back. Alternatively, when pumping sludges, in case fibres clog up at suction, they can be pushed back and pumped by reversing the pump.



Pressure switch which includes a contact with adjustable pressure thresholds. It protects the pump as well as improving the safety of the installation and process.



Pressure Gauge with local pressure display. Lets you monitor pump operation. Flexible operation.

Advantages of Lobe technology

- Compact size
- Maintenance in place without piping disassembly
- Reversibility
- Low pulsation rate
- Suitable for shear sensitive liquids
- Tolerates dry-running

Advantages of PCM Ecolobe[®] pump technology

1 Lobes

PCM elastomer expertise
Polyurethane: abrasion resistance
Nitrile: chemical resistance

2 Air gap between gearbox and pumphead

- No blocking chamber: avoids risk of penetration of the pumped fluid into the gearbox
- No blocking chamber: avoids risk of oil contaminating added value fluids

3 Front cover

- Reversible front cover: doubled service life
- Hinged (size 125 and above) front cover
- Hardened steel : long service life

4 Wear plates

- Radial:

No fasteners : no wear due to protruding fasteners inside pump body easy dismantling

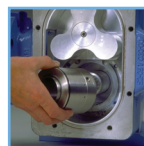
- Rear plates:

External fasteners: no wear due to protruding fasteners inside pumps body, no heads wearing

In two parts: each mechanical seal can be accessed separately

5 Sealing

- Mechanical seals: less pollution
- Front loading cartridge: extracted and put back into place easily
- Optional quench: pump can run dry



6 Shafts

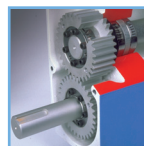
- Splined: increased stress resistance compared to keyed shafts
- Sleeved: corrosion protection: pumped fluid does not come in contact with the shafts

7 Drip tray built-in

- Cleaner pump and pump environment

8 Gearbox

- Gear timing: easily done with taper locking assembly



Modular design

- Body: 2 body sizes can be mounted on each gearbox
- Feet: flanges can be orientated vertically

Applications

Industrial Fields

Paper cardboard and cellulose industry



Chemicals industry



Minerals industry



Environment



Food industry



Products

Coating colour titanium dioxide, kaolin, calcium carbonate, calcium stearate, latex, starch, pulp, liquor, sludge.

Paints, varnish, inks, lacquers, resins, glues, oil residues, polymers, oils, grease, waste-water.

Ceramic slurry, lime milk, cement grout, mineral sludge, bentonite.

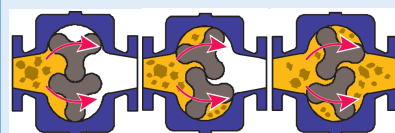
Liquid sludge, thickened sludge, grease, lime milk.

Starch products, sugar products, animal feed.

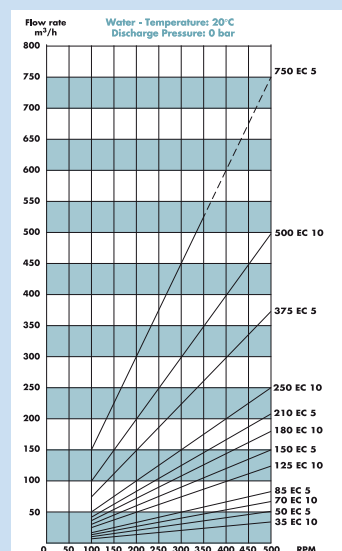
Pump specifications

- Maximum flow rate: 525 m³/h
- Maximum pressure: 10 bars
- Maximum Temperature in continuous service: 90°C
- Viscosity up to 1000000 cpo
- Particles of up to 90 mm in ø

The Ecolobe® Series lobe pumps are equipped with two identical rotors that turn in opposite directions.



Performances



Model designation

35 EC 10
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 Hydraulic Series Maximum
 size pressure
 (in bar)

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