



Opti-Line Pumps
Seal-less solution, Seamless performance



>> Invest in a leakfree future

Oil leaks:

- >> damage the environment
- >> jeopardize safety
- >> threaten process function.

Invest in a leak-free future.

A leaking pump also leaks money – it's that simple.
The solution is Imo OptiLine.



NO CLEAN-UP, LESS WASTE, LESS MAINTENANCE

With the Imo OptiLine series, there is no shaft extending into the external environment. Instead, the power from the motor is transmitted via permanent magnets leaving the pumping chamber completely sealed off. The absence of mechanical seals means zero leakage. There is no more need for cleaning plant floors of oil, for replacing worn out seals, or for spending money on unnecessary maintenance. Once installed, the Imo OptiLine pump keeps pumping for years with practically no associated costs.

HAPPY WITH YOUR EXISTING PUMP? STILL, YOU MAY WANT TO UPGRADE

Why? First, and most obviously, your leaks disappear – no messy factory floors, no wasted man-hours or delays, just solid performance. But the greatest benefit is financial; the costs of operating your pump have been drastically reduced. From day one, your maintenance costs are substantially lower. The removal of mechanical seals eliminates wear on the parts and, therefore, there is nothing to replace. An Imo OptiLine pump can literally save you tens of thousands of dollars almost immediately.

PUMP REPLACEMENT IS EASY

In fact, it is often virtually a drop-in replacement with your current Imo three-screw pump. The result is minimum costs of piping and re-structuring. The compact design and different flange option means replacing even a non-Imo pump can be very easy, with little or no impact on the current piping and layout.

>> Take a closer look

To achieve maximum pumping efficiency, we re-examined how the fluid was pumped. The challenge was then to remove any obvious problem areas. The solution: Imo OptiLine.

DESIGN ADVANTAGE: IT'S FULLY ENCLOSED

The traditional mechanical sealed pump has an inherent design flaw. In order for the seal to function, the seal faces must be lubricated. In order for this to occur, a thin film of pumped liquid must pass between the rotating and stationary faces. Ideally, this fluid will vaporize when it reaches the outer edge of the seal face. However, as the seal faces wear, leakage will typically occur. To avoid this problem, we designed a pump with no mechanical seal. The solution is a pump with a completely sealed pumping chamber.

Power is transmitted from the motor to the pump's rotor set via permanent magnets. Instead of the traditional seal and coupling, the rotor shaft is equipped with permanent magnets. The rotor shaft is then sealed inside a nonmagnetic can. Fluid cannot leak through this can. On the outer atmospheric side of the can, an outer rotor, also with permanent magnets, is coupled to the driver. With no sliding contact seals, there is no way for oil to escape.

NO NEED FOR EXTERNAL COOLING

The Magnetic coupling of the Imo OptiLine pump is designed to withstand temperatures of up to 350° F without risking failure. A small fraction of the pump flow is diverted back into the inner side of the magnetic coupling and then returned to the pump inlet. The minimal loss of flow has no practical impact but removes the heat generated in the coupling. As a result, there is no need for any external cooling, and the connecting frame can be sealed to eliminate dust damaging the magnetic coupling on the atmospheric side.

HIGH TORQUE PERFORMANCE MAGNETS

The magnets in Imo OptiLine pumps are dimensioned and very well suited for the harshest running conditions in terms of high viscosities. In addition, select OptiLine pumps are designed so that they may be connected to either steam or thermal fluid for heat tracing purposes, if necessary.

- >> No mechanical seal to leak or replace
- >> Seamless performance
- >> Extreme duty
- >> Hassle-free conversion
- >> Green solution

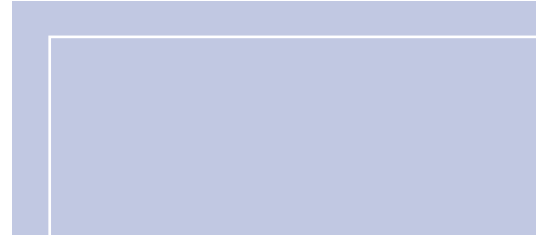


>> Technical data - OptiLine



MODEL	ACE	ACG	UNIT
CAPACITY	2.2 - 48.8	44.1 - 309.1	GPM
DIFF. PRESSURE	232	232	PSI
VISCOSITY	1.6 - 1500	1.6 - 1500	cSt
TEMPERATURE RANGE	-4 - +320	-4 - +356	°F
MAX.SPEED	3600	3600	RPM

Simply put, for severe duty pumping, IMO Opti-Line is the best solution to eliminate leaks.



OptiLine ACG





>> Fluid-handling solutions

COLFAX: LEADING TECHNOLOGY, GLOBAL CAPACITY

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You and your fluid-handling needs: that's the focus at Colfax Americas. While known as a world class manufacturing and marketing organization, Colfax Americas finds the most satisfaction in the relationships we establish with our customers. We seek first to understand their unique business challenges and then to deliver the design, manufacture, installation, testing and support services that create a fluid-handling solution which meets their precise needs.

That's the way we serve customers in the crude oil transport, power generation, machinery manufacture, commercial marine, hydrocarbon processing, pulp and paper, polymer and various other processes throughout Canada, the United States, Latin America and South America. Colfax Americas brings comprehensive resources to customers just like you, making sure your fluid-handling solution will deliver not only precise, pulseless, reliable performance, but operational efficiencies and flexibility.





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