

In Motion

A company presentation from IMO AB



A Colfax Business Unit



Movement

IMO AB, a Colfax Business Unit, is the leading manufacturer of rotary positive displacement 3-screw pumps. Headquartered in Stockholm, and with locations worldwide, IMO AB serves critical applications for oil transfer, navy, commercial marine, power generation as well as general industry.

With over 75 years in operation and over one million pumps delivered, IMO AB is an established and trusted name that represents the highest quality, reliability and service levels in the pump industry today.

75 YEARS LEADING THE INDUSTRY

IMO AB produced the world's first multiple screw pump. The idea was discovered by founder, Carl Montelius, in the early 1920s during what he later described as a "boring evening at home." Sketching out an idea for a pump with three intermeshing screws, rotating in a manner that would make them mutually sealing, Montelius then went on to perfect the mathematical algorithms of the threads which would lay the groundwork for the world's first multiple screw pump. The precisely calculated profile of the rotor threads prevents vibration and makes the IMO AB screw pump smooth and silent even when running at high speed and high pressure. The simplicity of the design is one of the reasons why literally millions of these pumps are now in service around the world, in thousands of different applications.

In 1931, Montelius linked with financier Bengt Ingeström to form IMO AB, taking the name IMO AB from the initials of their own names Ingeström and Montelius.

Since then, IMO AB has delivered over one million pumps. IMO AB pumps are used in almost 65 percent of all ships that are built today. IMO AB pumps ensure reliable everyday performance in hydraulic systems, in fuel and lube oil systems and in oil transfer applications.

With our commitment to delivering the latest advances in pump technology such as the IMO AB OptiLine, a three-screw pump with magnetic coupling, you can count on IMO AB to lead the industry for many more

years to come. Our aim is to contribute to the world's latest developments through our own innovations as the premium fluid-handling manufacturer.

FOCUSING ON OUR CUSTOMERS

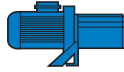
Technological innovation is only half the story behind IMO AB's continued success. A focus on constantly improving our response times and delivery dates as well as understanding our customer's concerns regarding service and support are what keep IMO AB at the forefront of the pump industry.

Choosing the right pump for your unique requirements can be a challenge. However with IMO AB you can rely on knowledgeable sales people and cutting-edge pump selection tools to ensure that the pump you purchase is the optimal solution to meet your needs. Different situations require different solutions. When upgrading to a new pump, we'll help you determine which pump has the right lifecycle and return on investment to suit your business needs.

As part of the Colfax Group we can leverage our sister companies' product portfolios to offer our customers a total package solution covering the entire range of low, medium and high pressure applications.

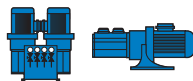
Product integrity and outstanding customer service are the cornerstones on which IMO AB has built a reputation for satisfying its customers. At IMO AB our goal is to provide you with the pump you need at the time you need it.

VISCOSITY RANGE 2–5000MM²/S



PUMP SERIES	LPD
MAX DISCHARGE PRESSURE, BAR	10
FLOW RATE L/MIN	3 – 20
VALVE BLOCK	NO
LO/HFO AT < 90°C	YES
HFO AT MAX 155°C	NO

PUMP SERIES	ACD
MAX DISCHARGE PRESSURE, BAR	7
FLOW RATE L/MIN	11 – 45
VALVE BLOCK	YES
LO/HFO AT < 90°C	YES
HFO AT MAX 155°C	NO



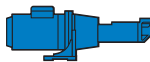
PUMP SERIES	ACE
MAX DISCHARGE PRESSURE, BAR	16
FLOW RATE L/MIN	15 – 185
VALVE BLOCK	YES
LO/HFO AT < 90°C	YES
HFO AT MAX 155°C	YES
MAGDRIVE, HFO AT MAX 160°C*	YES

PUMP SERIES	ACG
MAX DISCHARGE PRESSURE, BAR	16
FLOW RATE L/MIN	65 – 850
LO/HFO AT < 90°C	YES
HFO AT MAX 155°C	YES
MAGDRIVE, HFO AT MAX 160°C*	YES



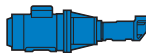
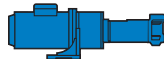
PUMP SERIES	ACF
MAX DISCHARGE PRESSURE, BAR	16
FLOW RATE L/MIN	300 – 3000
LO/HFO AT < 90°C	YES
HFO AT MAX 155°C	NO

PUMP SERIES	LPQ/ABQ
MAX DISCHARGE PRESSURE, BAR	16
FLOW RATE L/MIN	1300 – 11500
LO/HFO AT < 90°C	YES
HFO AT MAX 155°C	NO



PUMP SERIES	E4
MAX DISCHARGE PRESSURE, BAR	100
FLOW RATE L/MIN	10 – 850
LO/HFO AT < 90°C	YES
HFO AT MAX 155°C	NO

PUMP SERIES	D4
MAX DISCHARGE PRESSURE, BAR	160
FLOW RATE L/MIN	10 – 850
LO/HFO AT < 90°C	YES
HFO AT MAX 155°C	YES



PUMP SERIES	D6
MAX DISCHARGE PRESSURE, BAR	250
FLOW RATE L/MIN	100 – 900
LO/HFO AT < 90°C	YES
HFO AT MAX 155°C	NO

PUMP SERIES	CIT-MLO
MAX DISCHARGE PRESSURE, BAR	160
FLOW RATE L/MIN	0 – 26000
LO/HFO AT < 90°C	YES



*Magdrive (OptiLine) = Magnetic coupled design no mechanical seal needed.

All low pressure pumps are equipped with integral relieve valves that can be used as a pressure regulating valve. All pumps can be mounted in any attitude, except for the large pumps LPQ & ABQ series, which are intended for vertical mounting.

IMO AB – FROM INDUSTRY TO MARINE AND POWER GENERATION

Although IMO AB first started producing lubrication pumps primarily for general industry, customers quickly realized that IMO AB pumps were also well suited for other applications. Building on this strong foundation, IMO AB has established a name for itself within other industries such as marine and power generation.

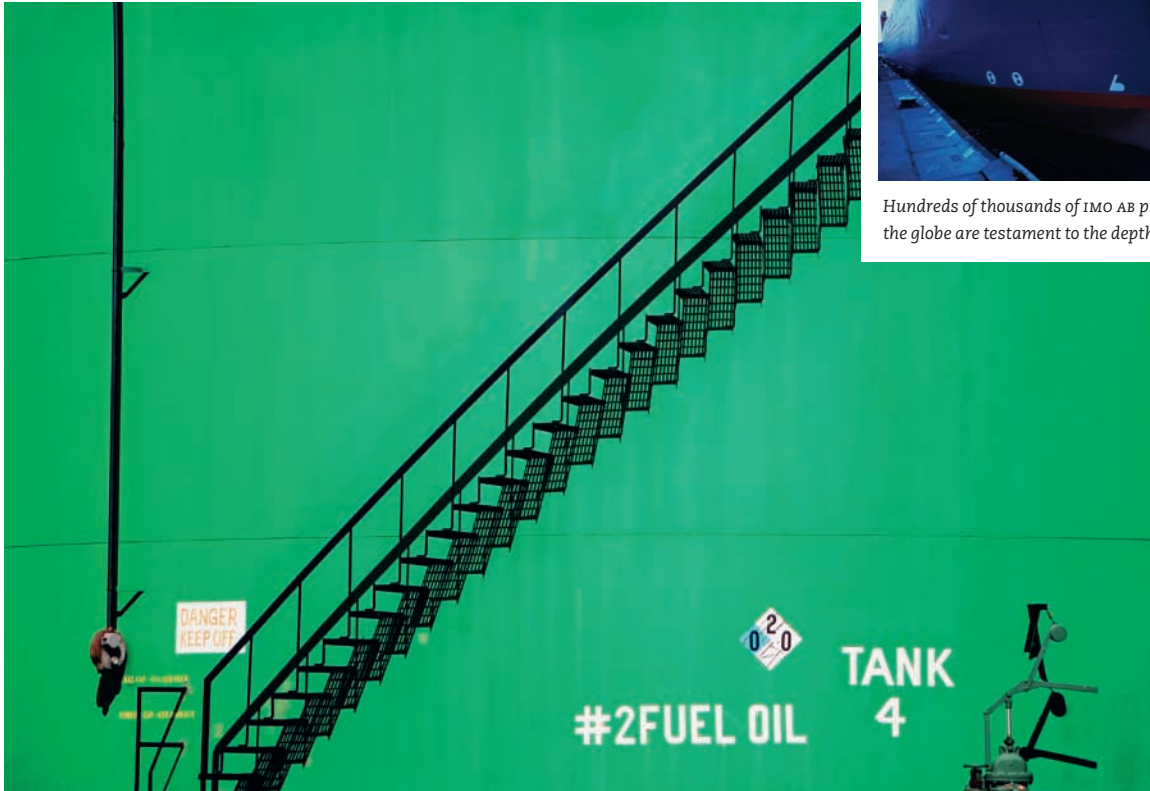
IMO AB pumps can be used in a wide range of applications such as oil transfer, fuel handling, lubrication as well as the hydraulics in propulsion systems.

IMO AB's commitment to research and development means that we can deliver the latest innovations to meet both the changing demands of your applications as well as the regulations which you must adhere to regarding safety, fire prevention etc. We will help you adapt to changing fluid qualities and temperatures and develop the appropriate solutions to extend the life of vital parts such as shaft seals and bearings.

One example is the OptiLine pump, a pump using magnetic coupling designed to handle extreme conditions such as high temperature and high viscosity fuel oils. Another is the T5 double assembly unit, created to meet the demands for redundancy and compact design. This pump is especially appreciated by module builders and shipyards due to its easy and fast installation.



Our customers have come to expect a commitment to engineering excellence which results in pumps designed for long, dependable service.



Hundreds of thousands of IMO AB pumps at work around the globe are testament to the depth of our expertise.

SIMPLE, EFFICIENT AND FLEXIBLE

Simplicity is key. IMO AB pumps are simple to understand. With only three moving parts, there is little that can go wrong. When something does occur, the pumps are quick and easy to repair requiring only standard hand tools and general maintenance personnel.

The versatility of mounting and porting an IMO AB pump is proven by the thousands of foot-mounted, flange-mounted, horizontal, vertical in-tank and vertical free-standing units in operation today. Designing and installing a system with an IMO AB pump couldn't be easier. IMO AB pumps are designed using internal bearings which are also hydraulically balanced so there are no loaded bearings either axial or radial. These design features combine to mean less maintenance for re-greasing, less downtime and longer life. This design also allows the pumps to work well even with contaminated fuel.

Designed to work quietly at high speeds with a wide viscosity range, IMO AB pumps reduce your costs by allowing a more compact pump to be chosen as well as providing flexibility to handle changes to your fluid or parameter requirements.

These design features combine to mean less maintenance, less downtime and longer life.

DELIVERING THE LATEST PUMP INNOVATIONS

The IMO AB three screw pump is ideal for handling all types of viscous fluid such as diesel and heavy fuel oils, lube and hydraulic oils. However as with any pump based on a rotating shaft that extends through the wall of the pump, a certain amount of leakage is always to be expected. In certain cases this is unacceptable, for instance with heavy fuel oil.

The IMO AB OptiLine avoids this problem by incorporating a fully enclosed solution where there is no shaft extension into open air and thus no need for a conventional seal. Power is transmitted into the pump over a magnetic coupling. A number of extremely strong rare earth permanent magnets affixed to the pump shaft inside the can are driven by a similar set of permanent magnets on the driver shaft outside the can.

The benefits are many. Besides offering a leak-free operation that is significantly more environmentally friendly and ideal for exposed applications where safety is important, the IMO AB OptiLine also makes financial sense with less costly downtime and spare parts. Since there is no wear on the magnets in the coupling arrangement, the maintenance cost is reduced to a minimum.

Return on investment for an IMO AB OptiLine compared to a corresponding pump with a mechanical seal is often less than two years.

With a one year warranty you can rest assured that the product you've purchased is fully backed by IMO AB.

QUALITY PRODUCTION

An oil pump within a ship may only be a small component of the entire system, but a failure with the resultant downtime can cause significant losses for that ship's owners. We know that reliability, safety and low life-cycle costs are vital factors when choosing a pump.

IMO AB pumps have established a reputation for long life with high reliability.

For you, our customer, this means lower maintenance costs and downtime as well as fewer warranty claims. IMO AB's adherence to ISO 9000 tells you that IMO AB is committed to achieving the highest levels of production quality and that the pump you've purchased is of the highest quality.

With a one year warranty and an optional extended warranty you can rest assured that the product you've purchased is fully backed by IMO AB.

SERVICE AND SUPPORT

IMO AB pumps are installed in thousands of locations around the globe.

We know that you demand quick response times and convenient access to local support and service. To achieve these goals, IMO AB is establishing Service Points at strategic global locations to ensure the fastest and most convenient access to articles ranging from shaft seals, gaskets and ball bearings. An internet-based search tool, Spares Master allows our distributors to quickly and efficiently find the part you need.

The database not only contains parts for current pumps but also for pumps that were made 25 years ago; another sign that IMO AB will be there to support your business in years to come.



Applications

IMO AB pumps are at work in almost every conceivable application. All around the world our pumps are pumping fluids where and when it is needed in both marine and industrial applications.

CIRCULATION AND FEEDING OF

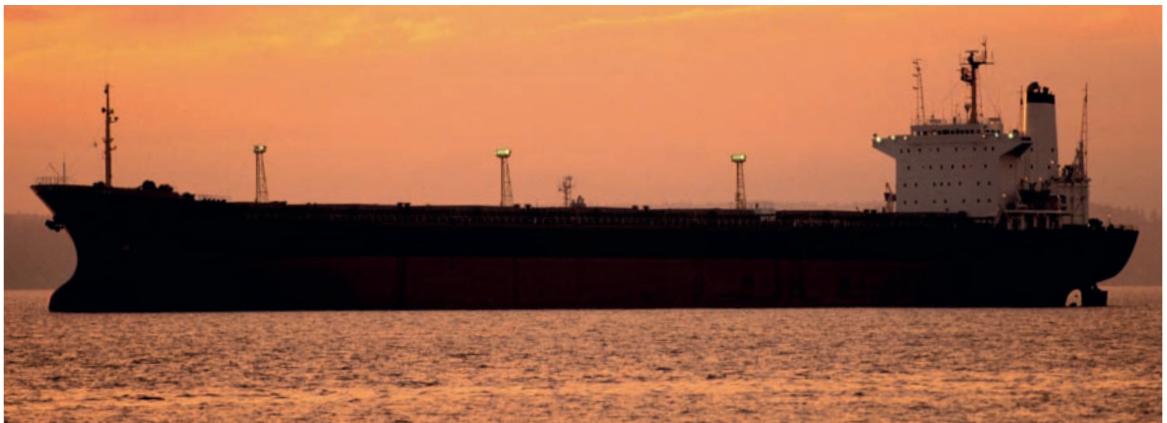
- ▶ Fuels
- ▶ Hydraulic oil
- ▶ Transformer oil
- ▶ Most Petroleum-based fluids
- ▶ Lubrication
- ▶ Diesel Engines
- ▶ Steam turbines
- ▶ Generators
- ▶ Compressors
- ▶ Gear boxes
- ▶ Bearings
- ▶ Grinders

TRANSFER OF

- ▶ Lube oil
- ▶ Fuel oil

HYDRAULICS APPLICATIONS

- ▶ Propeller pitch
- ▶ Hatch cover





Tradition with Innovation

Dear reader,

From the original sketch of the first three-screw pump over 75 years ago to the latest innovations using magnetic coupling, IMO AB has constantly been at the forefront of the pump industry.

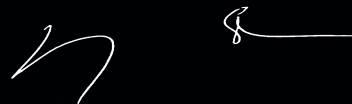
The reason for this is innovation. Not just technical innovation but also innovation of quality, service and support.

As the world has changed so too has the market we serve. Our customers are now spread across the globe, in locations and with applications that set ever-higher demands not only on pump performance but also on support and service. IMO AB is meeting this challenge by building a world-wide service and support network that will be unmatched in the industry.

We have recognized that the factors behind how you choose a pump have changed. Shorter life cycles and more standardized components are becoming the norm and IMO AB is responding with manufacturing and design innovations that meet these needs. We also know that reliable delivery dates are vital. With the evidence of over one million pumps delivered, you know that you can trust IMO to deliver your pump on time. This is a trust that we at IMO AB value very highly.

While technology is important, people are the force which makes IMO AB different from other pump companies. Many of IMO AB's employees have committed their entire careers to the pump industry. We consider every pump delivered to be a partnership with you the customer.

A partnership where we guarantee to keep your pump and your business running smoothly for years to come.



Benny Ström
CEO IMO AB



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