

IMO AB Valve Block for double-pump installation

Cost reduction in applications with double-pump requirements



IMO AB Valve Block

DOUBLE-PUMP INSTALLATIONS

In all type of applications where there is a need for a standby pump to achieve redundancy, a double-pump installation is required. This will then lead to complex pipe work and double installation of expensive components.

In order to simplify this type of applications, IMO AB introduced the first Valve Block back in mid 1960. The most common application is in marine engine-room oil systems where a compact design is requested by ship designers.

IMO AB VALVE BLOCK

The concept for installing a valve block is to reduce cost for pipe-work and installed components. Also there will be a reduction of space for double-pump installations. In order to improve earlier designs of IMO AB Valve Blocks, each component and its use has been evaluated to meet an optimum design.



COST REDUCTION

A Valve Block could be used in favour of a system consisting of loose components and welded pipe joints. Taking cost for engineering and constructions at site into account, the savings will be obvious. For example, 18 joints have to be welded and inspected in a traditional installation. This compared to only one out- and inlet joint for an IMO AB Valve Block installation.

Added to that, easy overhaul and maintenance of the pumps is another key design feature.

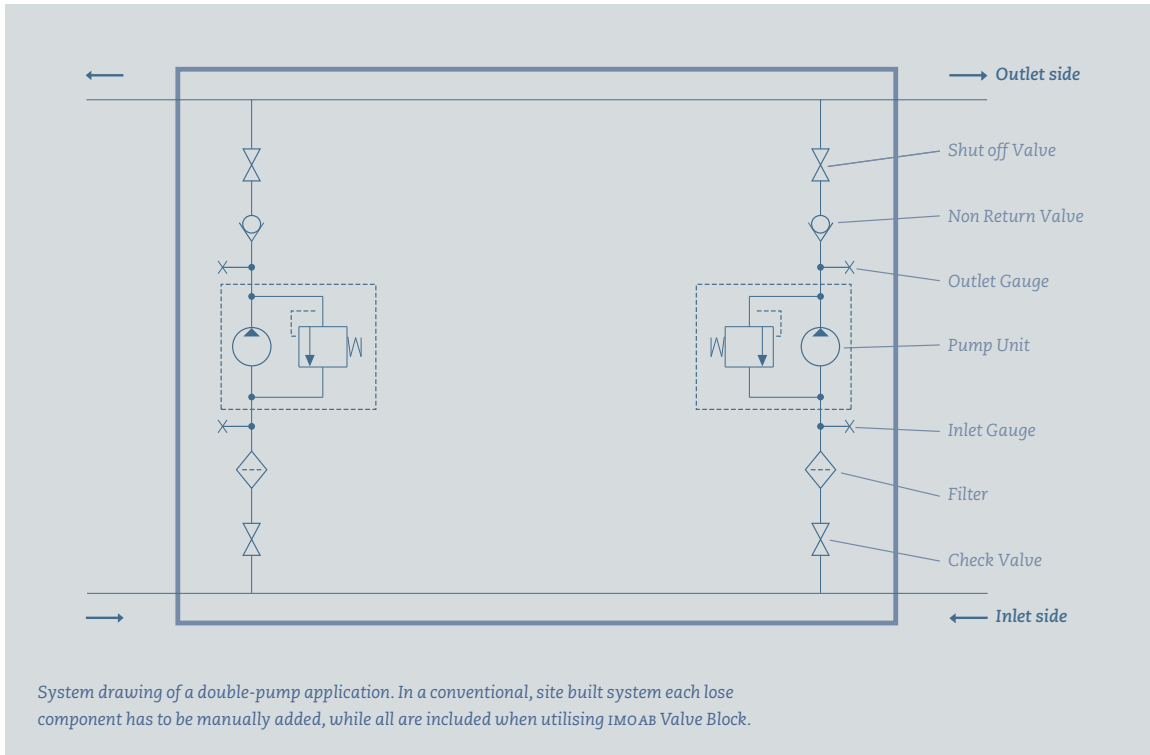
THE NEW IMO AB VALVE BLOCK

To meet the requirement from the market IMO AB has developed a new Valve Block with the following features:

- ▶ One pump running and one pump stand-by
- ▶ Both two pumps in operation
- ▶ The valve block can be installed in a system with common or divided in and outlet pipes
- ▶ The Valve Block can be delivered with or without internal strainers.
- ▶ When being operated with one pump in stand-by, the internal non-return valve will function to avoid reversed flow through the stand-by pump.
- ▶ During service and maintenance of one pump, corresponding shut-off valve at the inlet and outlet side are to be manually closed.
- ▶ The Valve Block can be provided with pressure gauges, that are equipped with anti-sticking devices.
- ▶ To further reduce problems when handling heavy fuel oil, the IMO AB Valve Block is prepared for steam heat tracing.

Cut view of IMO AB Valve Block.

Blue arrows showing inlet flow through shut off valve, entering the strainer and into the pump. Orange arrows showing the outlet flow passing through the combined shut-off/check valve.



PUMP PERFORMANCE

The IMO AB Valve Block can be equipped with pumps in the flow range from 0,5 to 11 M³/H and pressures up to 16 bar. The pumps are available in all basic executions; Lube Line, Fuel Line and OptiLine.

Lube Line: Standard pump to meet the demand of lube oil and light fuel oil applications.

Fuel Line: Rough duty pump to meet the demand of heavy fuel oil applications.

OptiLine: Pump equipped with magnetic coupling to meet and fully withstand the demands of hot, heavy fuel oil application.

IMO AB PUMP MODEL	LUBE LINE	FUEL LINE	OPTILINE
0,5 – 11 M ³ /H (ACE)	YES	YES	YES



