

# OptiSave™ installation for sea and freshwater pumps onboard "Johann Jacob".

Ernst Jacob (GmbH & Co KG) - a German ship manager and owner of 11 ships all providing safe and environmentally friendly service of consistent quality - decided to save as much energy as possible.

DESMI has signed an agreement to continuously install the energy saving system OptiSave™ on board all the 11 vessels of Ernst Jacob.

## The Challenge

*"Back in 2014 the fuel prices were sky-high, about 700 USD per m<sup>3</sup> fuel, and it became obvious that we had to make some distinctive changes to stay ahead in business",* says Chief Engineer Dieter Nühse.

Ernst Jacob GmbH decided to make some overall changes for the benefit of the environment and of course to save costs for bunker.



Chief Engineer Dieter Nühse.

Chief Electrician Zeljko Bui

*"First of all we bought OptiSave™ for all our ships "Johann Jacob" is number two in a row, to get OptiSave™ installed.*

*The OptiSave™ was installed on may 22. 2015 and already, after only two weeks we can see big savings. We save about 250-350 liters fuel a day (about 1 m<sup>3</sup> in 3 days), and with today's fuel prices the savings are about 350 USD in 3 days, 42,583 USD a year."* says Chief Engineer Dieter Nühse.

With DESMI OptiSave™ it is simple as you get an intelligent control of your cooling water system. You will be able to regulate the energy consumption according to actual cooling demand and thereby save fuel for your generating sets.

OptiSave™ helps ship owners and designers to meet the requirement for reduction of CO<sub>2</sub> stipulated in IMO MEPC 62 rules. OptiSave™ is designed to be integrated in newbuild and retrofit applications and can be fully integrated into the overall control system.

At Johann Jacob the OptiSave™ system is saving fuel running both the seawater and freshwater pumps.

*"We measure the kW load of the motor and the flow meter 24 hr. consumption and keep a logbook. The OptiSave™ has already lived up to expectations". So far it has been working just fine, and although we are only two weeks into the course, I can see it saves us a lot. I can easily recommend the system".* says Dieter Nühse.

Dieter Nühse has been Chief Engineer with Ernst Jacob (GmbH & Co KG) since 1999 and has worked as 2. Engineer since 1987.

Chief Electrician Zeljko Bui agrees *"Installation and service of the system has been running without problems and we are already saving fuel",* he says. *"We are all "saving-nerds" we save where we can. We also have CFLs in all lamps on board and vacuum toilets that use as little water as possible",* says Dieter with a huge smile on his lips.

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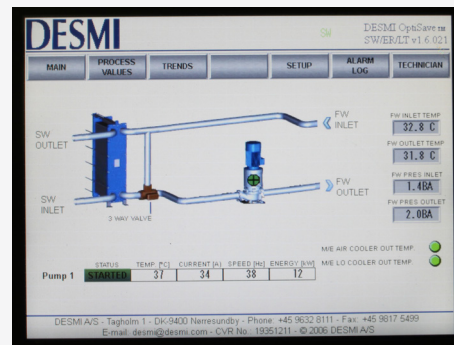
UTILITY

# Facts about "Johann Jacob"



## Facts about OptiSave™ onboard the vessels

The OptiSave™ onboard this vessels in a combined solution for sea water and fresh water cooling.



**Facts about "Johann Jacob"**

IMO: 9189134  
 Callsign: A8XD7  
 Flag: Liberia (LR)  
 Year built: 2000  
 Home port: MONROVIA  
 MMSI: 636092124  
 Type: TANKER  
 Gross tonnage: 40037  
 Dead weight: 73072 tons  
 Length: 228.5m × 32.24m  
 Draught: 14.018m

The sea water pumps are 50kW and the fresh water pumps are 55kW. The system is controlled via a master control panel. The crew can operate the system from the engine control room, where the 8" Colour touch screen is installed in the desk.

Ernst Jacob (GmbH & Co KG) have made the retrofit installation themselves and commissioning was handled by DESMI.