



# Automation Solutions

Service

**DESMI**  
Make life flow

## Automation

With DESMI Automation you get a solution that increases efficiency, competitiveness and enables you to meet future challenges with a green and sustainable profile.





# Customized Automation Solutions

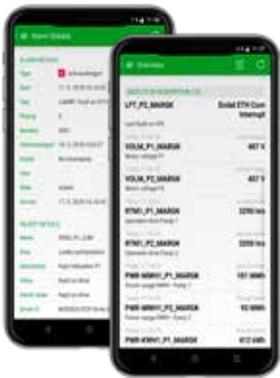
DESMI offers a wide range of automation solutions developed for both marine and industrial application. The right combination of process and engineering knowhow enables us to develop and commission integrated control and monitoring systems for our pumps, whether it being on board vessels or in industrial production facilities.

Our product range covers solutions from simple motor starters to advanced PLC based energy saving and power quality solutions.

With continuous development of our range of automation solutions, when installing pumps and pumping solutions around the world, we extend our optimization expertise to a range of other applications, where automation can make a difference.

DESMI has a wide portfolio of pumps and pumping solutions and oil spill response equipment, which are integrated with DESMI Automation for optimizing energy consumption.

# Monitoring of your system with data acquisition



Become more efficient, reduce costs and meet your energy optimization goals with our comprehensive portfolio of integrated solutions.

DESMI's energy-optimised, customised solutions for pump applications allow for outstanding operational performance in your industry.

DESMI's solutions provide you with a detailed overview of your installations, including fixed reporting of the requested data.

Our solutions are based on highly recognized automation platforms, where historical or current data for energy consumption, flow, operation, alarms, etc. can be displayed on mobile devices, operator panel or computers.



## Customized solutions for smartphone or tablet.

- Real-time data overview
- Quick overview
- Report generator
- Alarm handling

# Start your pump but consider energy consumption

DESMI supplies a wide range of motor starters for our pumps. A motor starter is used in any application, which includes a pump or pumping system, and we can provide the solution you need.

The three different solutions we supply are the DOL starter, soft starter and frequency converter, also known as the VFD or VSD. We can design the perfect energy solution based on your requirements.



DOL Starter  
0.25 kW - 22 kW



Soft Starter  
11 kW - 800 kW



VFD/VSD  
0.25 kW - 800 kW



DESMI manufactures motor starters ranging in size from 0.25 kW to 800 kW.





Yearly saving  
**+700**  
installed  
OptiSave™

# OptiSave™ An Energy Saving System



216,000  
tons of CO<sub>2</sub>



80,400  
tons of fuel



414,000  
MWh

On board hundreds of vessels OptiSave™ Energy Saving Systems have been installed to save energy by providing intelligent control of the vessel's cooling water system. And, with a typical investment payback time as short as 12 to 15 months, the many systems have quickly proved their worth.

The cooling water system on-board vessels is designed for operation in 32°C seawater and 100% engine load and the auxiliary equipment runs as if this condition is permanent.

However, the seawater temperatures of the oceans are not 32°C all over the world. Actually, there are only few hotspots where these conditions are present. This means that the cooling system in 95% of operation time is consuming too much energy.

By installing DESMI OptiSave™ Energy Saving System you will be able to regulate the energy consumption according to actual cooling demand and thereby save fuel for your generating sets.

## Benefits of the DESMI OptiSave™ system:

- Energy saving up to 90%
- Short return on investment
- Prolonged lifetime of pumps due to less wear and tear
- Minimum changes in existing electrical installations
- Proven technology
- Proven savings from +575 systems in operation
- Reduced OPEX
- Worldwide service support





# OptiSave™

## Pumps for free

### *On Land and at Sea*

With the Pumps For Free concept, DESMI offers a unique financing package for ship owners, who want to energy optimize their vessels, where the savings are used to pay for the investment.

Short payback time, typically between 14-18 months.

**DESMI offers a wide range of energy-saving products under the Pumps For Free concept, such as:**

- Replacement of old low efficiency pump with DESMI highly energy-efficient pumps
- OptiSave™ Online monitoring
- Energy-saving system, also called OptiSave™ for pump applications
- Energy-saving system, also called OptiSave™ for ventilation applications

The financing schedule is directly linked to the return on investment time / payback time, with quarterly payments



- Small investment
- big returns
- lifetime savings

# Control at a high level

For marine and industrial applications

The frequency converter contributes to creating great value for our customers. Based on our wide knowledge of pumps, DESMI design the optimal energy solution.



DESMI has a wide range of frequency converters for all marine or industrial applications. DESMI supplies frequency converters ranging in size from 0.37 to 1000 kW in collaboration with leading control technology suppliers.

# DESMI Automation

Has a team of engineers  
around the world

DESMI has the skills and knowhow required for onsite inspections and upgrade of automation systems.

**We handle:**

For new-buildings we also do consulting work including reports and description of customized systems.

We have a flexible work force with a core of skilled automation engineers.

Our automation team currently consists of 25 skilled automation engineers and technicians, who are located in Denmark, Poland, Singapore, Korea, and China ready to participate in joint developments across the many different industries and applications.



DESMI Automation handles project management from quotation to commissioning

# We exist to keep your business flowing

DESMI works closely with vessel owners, operators, shipyards, system designers, plant engineers, and other stakeholders to deliver critical flow processes for diverse applications. Our pumps and supporting systems are trusted worldwide for dependability and the lowest total cost of ownership.

No matter which flow challenges you are facing, we can help you overcome them with class-leading equipment, solutions, and services designed specifically for your applications and environment. At DESMI, our focus has never been on discovering what we can do - it's about pushing the boundaries of what we can do for you.

Founded in Denmark in 1834, we have provided the expertise, solutions, and aftermarket support our customers need for nearly two centuries. We help you operate more efficiently and reliably, enabling your ambitions for performance, compliance, and growth whilst helping you reduce your climate impact.

Together, we can make a difference, whatever the future holds. Because we, like you, are here to make life flow.

For more information, visit [desmi.com](https://desmi.com)

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