

Engine Room Pumps

High-efficiency & Reliable Marine Pump Solutions



PROVEN TECHNOLOGY

THE NATURAL CHOICE OF HIGH-QUALITY PUMPS

Thousands of DESMI pumps are at work on the seven seas, and these pumping solutions are living proof that our customers are satisfied with the performance of our products.

For more than 50 years we have supplied marine pumps to the world's fleet - from the largest container ships to the smallest fishing vessels. Regardless of the size of the ship we know the owners' demands for many years of trouble-free operation.

In recent years we have also taken on the supply for offshore installations worldwide.

VERTICAL PUMPS 6 HORIZONTAL PUMPS SUBMERGED LUBE OIL PUMPS 10 ROTAN[®] INTERNAL GEAR PUMPS 11 DESMI 48 - FAST TRACK 12 DESMI OPTISAVETM 13 DESMI SERVICES 14

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INTRODUCTION

MARINE PUMP SOLUTIONS

For half a century we have supplied reliable pump solutions to vessels around the globe with the best in marine pumps and systems. They are living proof that DESMI customers are satisfied with the performance of our products. Be it for the world's largest container ships or small fishing vessels, we know the owners' demands for many years of trouble-free operation.

Our customer's demand for a minimum down-time period and low CO_2 emissions has proved itself from various concepts within DESMI.

DESMI offers fast track pumps with the DESMI 48 concept which reduces maintenance and down-time.

DESMI's dedication to constantly improve our existing programme and also develop new concepts, has tailored more than 100 types of pump combinations and designs, guaranteeing DESMI can always provide the right pump solutions for our customers.

Via our 30 DESMI offices and more than 50 distributors all over the world our service is global, and spare parts are available from stock at reasonable costs.

High quality according to international standards

All DESMI products are developed, manufactured and marketed in accordance with international standards and our ISO 9001:2008 quality control system. Further all DESMI pumps can be supplied in accordance with the requirements from all leading marine classification societies.



We offer complete pump packages. DESMI is your reliable and trustworthy supplier.

Newly developed pumps and acquisitions have made our product range more comprehensive.

To supplement our product range we cooperate with other manufacturers of highquality pumps and accessories.

Materials

Our pumps are available in cast iron, various bronze alloys, stainless steel and many other different materials suited to individual applications.



The complete pump packages have been designed to meet the customer's requirements regarding reliability and high system efficiency.

DESMI supplies service-friendly and highly efficient pumps with extended operating life and easy maintenance. We have developed a process for checking the energy efficiency of marine pump installations and seawater cooling systems called DESMI OptiSaveTM.

The energy check method provides real-time performance data for existing and new ship systems, delivering recommendations on how best to optimise the installation.

Vertical In-Line Centrifugal Pumps

DESMI vertical in-line centrifugal pumps are designed for the special marine and offshore requirements in regards to low maintenance costs, high efficiency, low NPSH and configuration flexibility.

DESMI centrifugal pumps are used with freshwater and seawater, as well as aggressive and polluted liquids, capable of reaching capacities up to 4400 m³/h and delivering heads up to 220 mWC. Typical applications for DESMI pumps includes; cooling, ballast, fire and bilge.

Our product range is based on the modular principle which gives interchangeability of the most commonly used items and consequently a quick and safe supply of spare parts. DESMI pumps are also installed in many naval vessels where special requirements as to materials, shock resistance etc. apply.

As a special feature the NSL spacer model is equipped with a coupling which is a combined distance and flexible coupling making it possible to remove the complete bearing housing with shaft, bearings, shaft seal, and impeller without dismantling or loosening the motor or piping.

Non-selfpriming DESMI pumps are available with built-on priming devices which ensure the evacuation of the suction line.



DSL - Compact design with spacer coupling



Capacity range: Up to 4400 m³/h Pressure range: Up to 55 mWC

NSL - Spacer and monobloc design



Capacity range: Up to 1800 m³/h Pressure range: Up to 220 mWC Scrubber pump NSL stainless steel



Capacity range: Up to 30 - 1400 m³/h Pressure range: Up to 15 - 80 mLC A DESMI speciality is horizontal, self-priming pumps where suction is based on the diffuser principle and the pump itself is able to evacuate the suction line at suction lifts up to 8.5 m

Modular S pumps

A complete family of self-priming pumps which fulfils our customers' need for versatile pumps.

Long, tall or compact with electric or hydraulic motor, petrol or diesel engine or V-belt drive.



Modular S horizontal self-priming pump



Capacity range: Up to 400 m³/h Pressure range: Up to 150 mWC SA - With open impeller design suitable for medium-sized particles



Capacity range: Up to 650 m³/h Pressure range: Up to 110 mWC

High-efficiency & Reliable Marine Pump Solutions

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We supply marine pumps to the world's fleet - from the largest container ships to the smallest fishing vessels.

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- proven technology

Submerged Lube Oil Pump

The DESLUBE series is a submerged deep-well pump designed for main engine lube oil (supply) for large two-stroke engines.

The design is based on our long-time experience of manufacturing deep-well pumps as well as the design features from our in-line centrifugal series.

The discharge socket is bolted to the dome flange and thus carries the pump without further suspension to the tank. The DESLUBE pump should be used whenever reliability and flexibility is required.

The DESLUBE pump from DESMI applies the advantage of a centrifugal pump to the main engine lube oil supply pump. If the lube oil pressure is dropping, a DESLUBE pump will increase the flow to reduce the risk of severe damage and eventually break-down on the main engine.

Benefits:

- Low NPSH
- Low noice
- Low vibration
- Low maintenance costs
- High reliability
- High flexibility





Capacity range: 80 - 1000 m³/h Head: 30 - 100 mlc

For the pumping of viscous liquids such as lubricating and fuel oil, ROTAN[®] gear pumps are the right choice

ROTAN[®] GP

General purpose pumps in cast iron. The simple and compact construction makes it a competitive pump suitable for most applications.

ROTAN[®] HD

Heavy duty pumps in cast iron for a wide range of viscous, non-corrosive liquids. Designed for difficult applications and those involving high-viscosity oils.

ROTAN[®] ED

Environmental duty - Magnetically coupled pumps in cast iron, carbon or stainless steel for ultimate protection against leakage.

All the ROTAN[®] models have a differential pressure up to 16 bar and a suction lift up to 0.8 bar vacuum while pumping



ROTAN[®] GP - for clean, nonabrasive liquids and clean oils



Capacity range: Up to 50 m³/h Viscosity range: Up to 7,500 cSt Temperature: Up to 150°C ROTAN[®] HD - for viscous, non-corrosive liquids



Capacity range: Up to 250 m³/h Viscosity range: Up to 250,000 cSt Temperature: Up to 250°C ROTAN[®] ED - where no leakage, liquid or gaseous, is allowed



Capacity range: Up to 90 m³/h Viscosity range: Up to 10,000 cSt Temperature: Up to 250°C

DESMI 48 = Fast Track

DESMI NSL Series - The right choice for retrofit - and fast delivery!

The NSL range is a series of sturdy and reliable pumps, and the development of the pumps has been based on the latest methods for the calculation of strength and optimum performance. At the same time we have attached great importance to developing a pump type that meets the special marine requirements of high efficiency, low NPSH values, easy installation/service and specific materials.



"DESMI 48" offers:

A selection of in-line pumps available from stock, delivery time max. 5 working days* Delivery from European and Asian distribution centres. Reduces maintenance and down-time Upgrading for higher efficiency

* Add 2 working days for certification from major classification societies

<u>Example:</u>

Seawater Pump Capacity: 280 m³/h x 27 mWC x 1765 RPM NSL150-265/D02 complete pump Mounted with 36 kW electric motor Pump casing: Bronze Impeller: NiAL Bronze Delivered complete with gauges, base plate and counter flanges, ready for installation.



Save 80,000 USD per year by having an intelligent control of your cooling water system

Save 80,000 USD by means of intelligent cooling water system control, onboard your vessel.

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 the operation time, is absorbing 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 generator sets.

You will achieve a 50% reduction in the energy consumption for your cooling water pumps already at 28°C. The power consumption of the pump will be reduced 4 times compared to the speed reduction of the pump.



For more information on OptiSave™ please follow the QR link or visit www.optisave.info

The many benefits of DESMI OptiSave[™] are:

- \checkmark Energy saving up to 80%
- \checkmark Short return on investment
- ✓ Prolonged lifetime of pumps due to less wear and tear
- Minimum changes in existing electrical installations
- Proven technology
- \checkmark Proven savings
- ✓ Reduced OPEX
- ✓ Worldwide service support

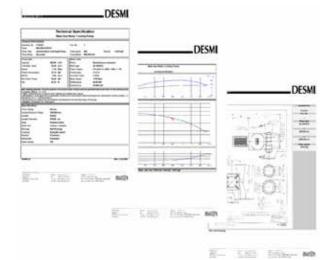


Free selection program for download

All centrifugal pumps can be selected by means of our DESMI pump selection program called WinPSP. The program is free for download from www.desmi.com.

It can be used by shipyards, designers, operators, service providers anybody who needs pump information.

Find curves for existing pumps, get GA drawings for initial designs and compare efficiency, motor power, NPSH and other data to find the right pump - or call DESMI to collect the required information.





DESMI service

Reliable and economical operation is a crucial customer requirement on all DESMI products.

In addition to the actual product we also supply customer-adapted service and maintenance concepts and assist world-wide in maintaining and quickly repairing their systems in case of breakdowns.

Our service assistants are ready by the phone to answer both technical and practical questions.

We are all specially trained within pumps, and we are prepared to share our knowledge in the form of education of our partners.

www.desmi.com is only a click away. Read about the history of DESMI or download

- Brochures
- Manuals
- Pump selection programs in order to quickly find the pump for your specific need

DESMI's staff - ensures good quality







DESMI's biggest asset is our dedicated staff.

Their key skills and combined competences of the organisation ensure that the "future DESMI" is based on good ethics and healthy values.

We build our business on relations and trust and are known for:

- Supplying solutions that work in practice
- Being true to our word and honouring our responsibilities
- Operating and servicing globally with local strength
- Being environmentally responsible
- Being socially responsible



www.desmi.com



Need more information or specifications? Contact us at desmi@desmi.com or read more about DESMI and DESMI's other products and solutions at www.desmi.com

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