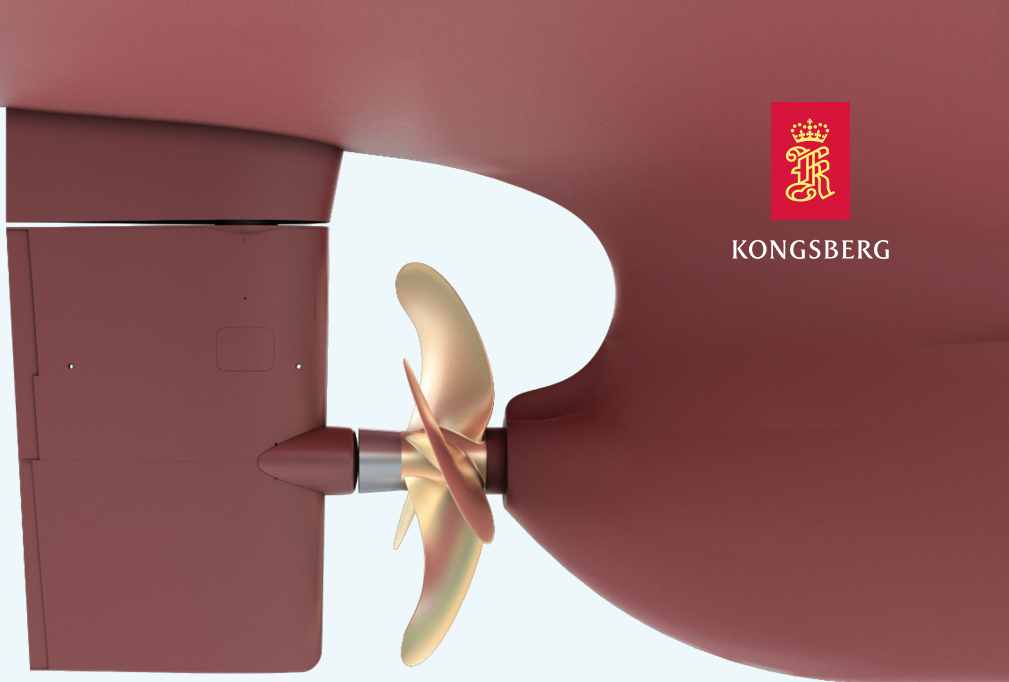




KONGSBERG

PROMAS LITE



PROMAS PROPULSION AND MANOEUVRING SYSTEM

PROMAS Lite

SUPERIOR ENERGY EFFICIENCY AND FUEL-SAVING CAPABILITIES

The superior retrofit upgrade

PROMAS is a reputable propulsion system on the market, and the inspiration has been realised in the development of PROMAS Lite. PROMAS Lite is a solution for upgrading propulsion systems on already existing vessels. The system has substantial potential for energy savings for most vessels, especially on those operating in different circumstances than originally designed for, also for other vessels that needs improvement to meet new stricter regulations such as EEXI & CII.

PROMAS Lite is an integrated propulsion system. The system consists of a re-bladed propeller, bulb and hub cap. The integrated PROMAS Lite system is designed as one unit to optimise the hydrodynamic characteristics and maximise efficiency that results in saved fuel.

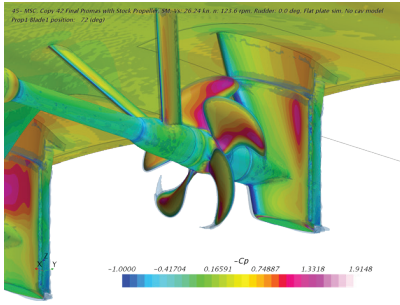
The bulb optimises the hydrodynamic properties by reducing the creation of vortices and hub drag. This makes the system more efficient in propulsion thrust and consumes lesser energy at the same times it allows for a more efficient blade design when designed as one unit. It is also possible to shorten the length of the hub cap at the shipyard to make installation easier.

The profitable investment

The efficiency gain is 3-5% for adopting the PROMAS Lite concept. If combined with conventional re-blading, the fuel savings range is upto 20%, depending on the vessel and its operational profile. The PROMAS Lite system is customised for the individual vessel and the shipping route to meet various vessel profile challenges. With todays fuel prices the payback period for installing POMAS Lite is extremely short and KONGSBERG can easily provide predictions and payback calculations.

BENEFITS

- Potential fuel savings up to 20%
- Short payback period
- Customised solution
- Environmentally friendly solution
- Robust design
- Simplified installation procedure
- Extensive reference list available
- 24/7 global service and support



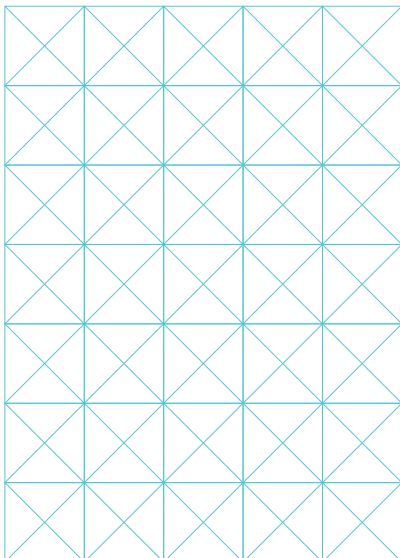
We predict the performance with the latest technology



Robust and customised solutions



Through experience, we enable a faster installation



Why Kongsberg Maritime as a supplier?

Kongsberg Maritime is a world leader in research and development for propulsion systems. We have the only fully equipped hydrodynamic research centre in the business. Kongsberg Maritime aim to develop solutions to make our clients' businesses profitable and secure their different expectations of the propulsion systems. We use the latest CFD methods, model tests, and in-service results to improve, customise and design optimised solutions for our customers. Through our advanced testing technology and in-service results, we can ensure the performance of our propulsion systems. In addition, we can provide extensive reference lists of earlier successful deliveries and installations. Kongsberg Maritime offers high performance and a new quality standard for our solutions with a global service network to support you through life.

Kongsberg Maritime has taken a natural step in research and development to meet increasingly strict regulations for the operation of marine devices. Additionally, our research centre and personnel ambitiously focus on essential research and developments for our customers. Specifically, we have noticed growing expectations in energy efficiency, quality and environmentally friendlier solutions. The PROMAS Lite is the latest development of propulsion solutions for updating existing and old systems to meet your demands.