

TOTAL CONCEPT



CONCEPT



PETTER'S MARINE HYDRAULICS **(PMH)** has since 1967 manufactured and delivered mechanical equipment to the off-shore, passenger transportation, fishing, shipping and aquaculture industries. From our main line of products we offer a wide range of thrusters, capstans and winches, with both hydraulic and electric drive. We also supply vessel maneuvering systems such as the MOTOR, PIPITCH AND THRUSTER CONTROL (MPTC) system together with a dynamic posioning system; KEEP POSITION (KP).

A very important part of equipping a vessel is not only to install the equipment of choice, but also see though that all equipment is functoning together in a manner of satisfacon. When investing a great amount of money in a vessel, it is of utterly importance that the vessel is capable of performing the tasks of its intended use. Equipping a vessel requires experience, knowledge and competence, of which PMH claim to be one of the leading companies in Norway. In close cooperaon with the customer, designer and ship builder, we provide the TOTAL CONCEPT.

A PMH TOTAL CONCEPT VESSEL is a vessel equipped to operate in demanding environments and tough condions, providing EXCELLENT performance and high RELIABILITY in a COST EFFICIENT way.

DOCUMENTATION

PMH provides the ship owner.designer and ship builder with complete documentaon of allsystems and equipment delivered by PMH. This documentation will be custom for each individual build and function as blueprints for the yard installing the equipment. Once commissioning has been completed, two sets of documentaon of both electrics and hydraulics will be delidelivered to the ship owner for future service purposes. The documentaon will also be stored in our archives

ELECTRONICS AND ATOMATION

A major part of the TOTAL CONCEPT is streamlining the bridge layout, where the aim to organize the working environment, making it pure in style. This is achieved by integrang several accompanying systems into one single control panel, from where the operator can manage and monitor every part of the

systems. For example, we integrate all handling of engine power, propeller pitch, rudder control, thruster control, clutching, PTO, hydraulic pumps, tank monitoring and so on, with the MPTC system. A single control panel and operator screen manages all these units individually and automatically, and it can be done from multiple operator stations: main bridge postiion, bridge wings or deck posion. But the real beauty of it is that each operator station only requires one single cable from the main technical cabinet, making the system easy and cost effcient to install.

HYDRAULICS AND MECHANICS

PETTER'S MAINE HYDRAULICS has a long tradion in designing, supplying and maintaining hydraulic systems. Our main focus in hydraulic system design is durability and reliability. In doing so, we aim to supply suffcient capacity, coaoling, prevenon of overload and redundancy. We also use mostly standard parts which are easily available in most warehouses for hydraulic equipment. Having one company deliver all hydraulics components assures the customer that the hydraulic system will be designed with the suffcient hydraulic capacities to handle all equipment. PETTER'S MARINE HYDRAULICS has skilled construction engineers that design mechanical equipment in regard to standards and regulations of class societies such as DNV, ABS, Lloyd's, BV and so on.

TECHNICAL SUPPORT

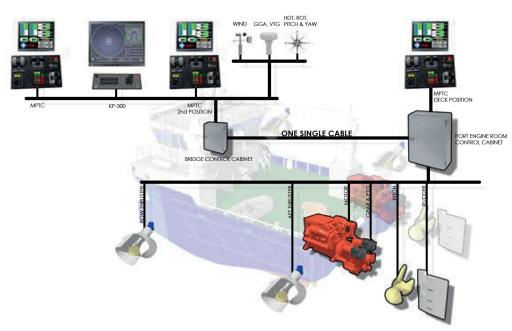
PETTER'S MARINE HYDRAULICS has an experienced team of engineers that provides on-site, technical support for our products and systems. We offer customers service contract that assures that all PMH equipment is routinely serviced and maintained so it will function in accordance to expectations. This includes periodic service, follow-up on specific equipment and software updates for electronic systems. We also offer support contracts that guarantee on-site support within 24 hours, free 24 hour telephone support, free remote access support (internet) and a warehouse stock guarantee for a selection of spare part defined in the contract. With the PETTER'S MARINE HYDRAULICS' support contract, the customer is guaranteed help on a short notice, reducing break down periods and economic losses to a minimum.

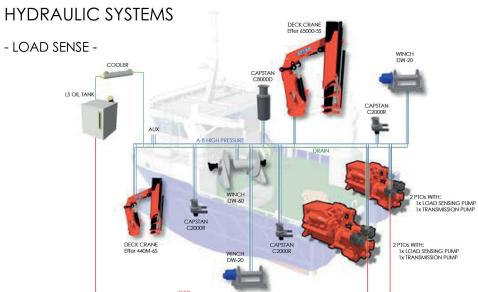


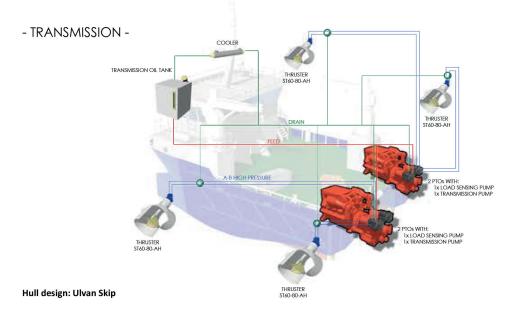


ELECTRONIC SYSTEMS

- VESSEL CONTROL -









STANDARD MANEUVERING SOLUTIONS

PETTER'S MARINE HYDRAULICS c/o Nik. Haugrønning AS

N-7070 Bosberg, NORWAY

web: www.pmh.no switchboard +47 73 96 26

E-mail: post@pmh.no