

CARGO OIL AND BALLAST PUMPING SYSTEM

Powering a better future



Solutions for the zero-carbon transition

SVANEHØJ
An ITT Company

Compact solution for ultimate efficiency

Recognized as a leading expert in pumping systems for the marine industry, Hamworthy Pumps is renowned for its Cargo Oil and Ballast Pumping System that combine compact size, reliability and high efficiency.

Hamworthy Pumps Cargo Oil and Ballast Pumping System are in daily operation in hundreds of vessels around the world – and with good reason. They are a result of continuous research and development and a commitment to not only meet but also exceed expectations in the market.

Since the launch of our first Cargo Oil and Ballast Pumping System in 1958, we have been a preferred supplier. Together with allied partners, including owners, design institutes and sub-suppliers, we

have developed fully integrated systems based on modern PLC technology in order to safely control and monitor performance of our system. As a trustworthy solution provider for tankers, we have also successfully delivered for FPSO's and FSO's.

What truly distinguishes the Cargo Oil and Ballast Pumping System from Hamworthy Pumps is the unmatched combination of compact configurations for optimum room layout and high operational efficiency. This ensures easy installation and maintenance and maximum performance during any unloading condition.

Together with worldwide service support throughout the lifetime of the ship and fast on-time delivery, Hamworthy Pumps is a partner that never leaves focus on what matters most: Results you can trust.

Find our products and solutions within the areas of Engine Room Pumps, Cargo Oil and Ballast Pumping System, Fire Water Pump Packages, Exhaust Gas Cleaning Pumps and Offshore Products, as well as global sales and after-sales services at www.hamworthy-pumps.com

Why choose Cargo Oil and Ballast Pumping System from Hamworthy Pumps?

Cargo Oil and Ballast Pumping System are built for ultimate reliability and accessibility and designed to ensure a space-saving solution with a high total system efficiency.



Premium quality

Tough conditions call for tough materials and premium quality. Hamworthy Pumps use nickel aluminium bronze as standard for seawater application because it has the longest service life. Stainless-steel and duplex-steel solutions are also available.



Compact design and easy integration

The compact configurations of Hamworthy Pumps Cargo Oil and Ballast Pumping System save costly space. Simultaneously, the electric PLC-based Control- and Monitoring Systems prepare for easy integration with other systems onboard such as Load Calculator and Level Gauging System.



Effortless maintenance

Designed and built with standards components Hamworthy Pumps pump room system ensures easy access to wearing parts and a separate room for pumping equipment between the engine room and the cargo hold ensures easy access to all key components for regular maintenance.



Robust and reliable

Hamworthy Pumps Cargo Oil and Ballast Pumping System is very robust in construction and designed for fast reliable pumping and final stripping of any liquid cargo.



Worldwide support and fast on-time delivery

Worldwide support and fast delivery are essential. Hamworthy Pumps helps customers 24/7, whether it is in the form of inspections, repairs or technical advice, ensuring comprehensive security throughout the lifecycle of the solution.



Quality, Health, Safety and Environment

Hamworthy Pumps operates with the QHSE management system, which conforms to ISO 9001:2015, ISO 14001:2015, OHSAS 18001:2007 and is certified by DNV GL.

We also hold various product certifications under classification societies such as ABS, BV, DNV GL, LR, NK and we are able to provide other classifications upon request.



Drivers – steam, electric or diesel-based

The drivers are located in the engine room – horizontal or vertical orientation of steam turbines, electric motors or direct diesel engine drives.

Cargo Oil and Ballast Pumping System features

The Cargo Oil and Ballast Pumping System includes unparalleled design and technology and offers a range of features that makes cargo unloading both safer, easier and more efficient.

System supplies – an integrated package

The cargo handling system may come as an integrated package. Some of the key components are:

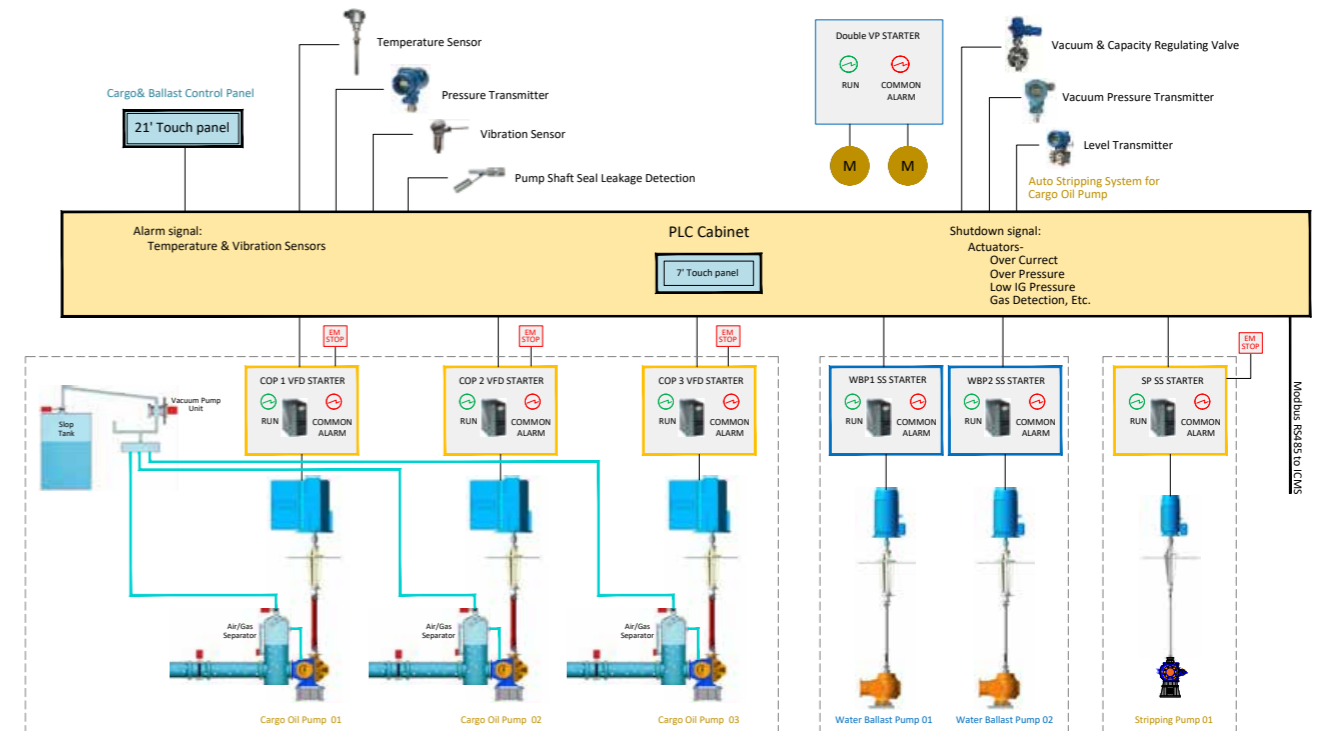
- Cargo pumps
- Ballast pumps
- Drivers – steam, electric or diesel-based
- Auto stripping systems
- Remote cargo valve control
- Condition monitoring

Cargo & Ballast Pumps

The cargo pumps handle crude oil and oil products with capacities from 400 to 6500 m³/h in vertical or horizontal orientations. The design is exceptionally compact with multiple nozzle configurations and pumps with double seals, barrier fluid and leakage detection.

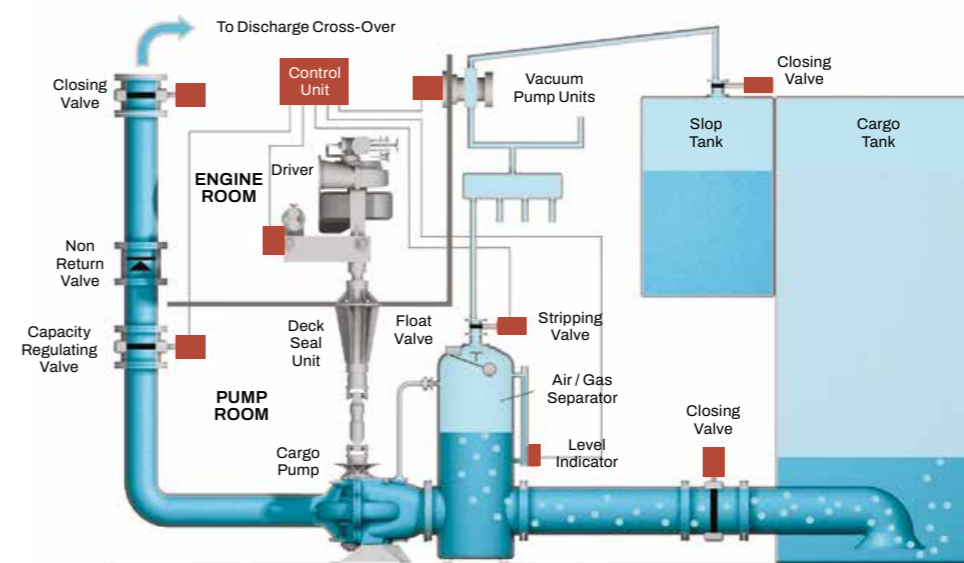
The ballast pumps handle seawater with capacities from 400 to 6500 m³/h in vertical or horizontal orientations. A compact semi axial flow design with multiple nozzle configurations ensures large capacities at lower heads.

Fig. Cargo Control System



The PLC-based system is capable of handling all alarms, shut-downs and monitoring functions required for all components included in the cargo unloading system. All necessary control stations both local and remote in Cargo Control Room (CCR) are included. This improves not only safety matters but also simplifies the daily job of the operator, providing the best possible overview at all times.

Fig. Auto Stripping System



PA Priming and capacity regulating system convert any centrifugal pump into a self-primed unit for optimal discharge capacity and stripping performances to reduce total discharge time to an absolute minimum.

The main components are air/gas separators with built in strainers, vacuum pump units, capacity regulating valves and the latest within PLC based all electric control units.

Excellent service at all times

It is essential for any marine business to have the pumps running. With a strong worldwide service set-up Hamworthy Pumps ensures maximum reliability and competitiveness.

Problems need to be solved quickly in the marine industry. Every minute counts. The support and service of Hamworthy Pumps is designed to match these needs and take on challenges however difficult they might be. As a customer you can be sure of:

- 24/7 hotline managed by experienced experts
- On-site help within 24 hours at any location
- Rapid OEM spare part supply

Hamworthy Pumps also offers a wide range of repair and maintenance services, from performance optimisation to on-site training and monitoring.



Altera Wave

Owner: Altera
Delivery: From HHI 2021
System: Hamworthy Pumps Cargo Oil and Ballast Pumping System with 10000 m³/h offloading capacity.



Tove Knutzen

Owner: KNOT
Delivery: From SHI 2020
System: Hamworthy Pumps Cargo Oil and Ballast Pumping System with 12000 m³/h offloading capacity.



Amarthea

Owner: Chandris
Delivery: From COSCO (Dalian) Shipyard 2018
System: Hamworthy Pumps Cargo Oil and Ballast Pumping System with 10000 m³/h offloading capacity.

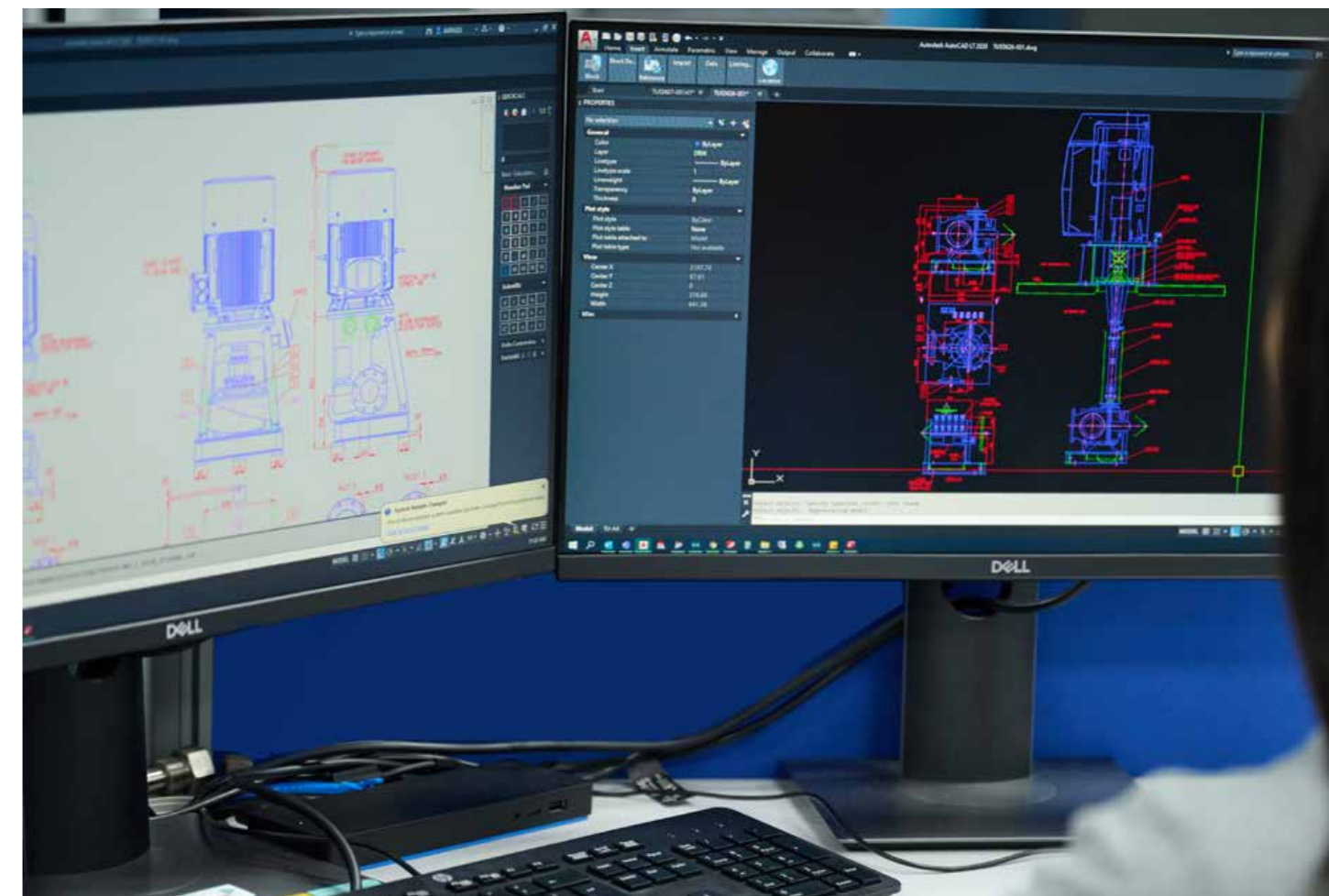


A trusted marine partner since 1889

Hamworthy Pumps is a market-leading manufacturer of In-line Pumps for the marine and offshore industries and delivers Engine Room Pumps, Cargo Oil and Ballast Pumping System, Fire Water Pump Packages and Scrubber Pumps.

Committed to continuous improvement and solutions that keep adding value, Hamworthy Pumps are known for developing strong partnerships and innovation that fit customers' competitive needs. To this belongs a firm focus on ways to reduce the environmental impact of

products, services and operations and actively contributing to UN's Global Goals for Sustainable Development. It is the will to do better every day. It comes with our name – and with being trusted by customers since 1889.



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