

The future of onboard operation systems





A one-stop shop for your sustainable fleet

Discover our innovative solutions for all kinds of marine applications, built and perfected over a century. We pair proven technology with modern automation to achieve the most efficient and reliable systems available – made to work flawlessly in the most challenging environments.

Optimize every aspect of your business



Fuel efficiency



Optimized workflow



Reduced emissions



Reduced human errors



Predicted maintenance



Shorter operation time

LOADMASTER X5®

Loading computer for cargo handling



LOADMASTER® X5 is a loading computer designed to maintain optimal stability and strength of vessels. A complete suite of tools in one interface ensuring maximum efficiency throughout cargo operations.



A next-generation loading computer

The software is the digital counterpart to your vessel's Trim and Stability Booklet and Loading Manual, calculating ship stability and strength using a powerful 3D model. With real-time monitoring, cargo planning tools, and advanced add-ons like fuel-saving trim optimization and deck planning, it elevates cargo handling performance.

Built on real experience

Developed by naval architects and experienced navigators, Loadmaster® X5 is a class-approved, modular solution tailored to your vessel. It supports most ship types, suits both new builds and retrofits, and integrates seamlessly through standard protocols.

Benefits to your operation

- **Optimized cargo handling**
Advanced cargo planning tools streamline port operations and increase fuel efficiency – reducing turnaround time and operational costs.
- **Reduced Human Error**
Automated calculations minimize manual input and errors, making decisions-making easier and onboard operations more efficient.
- **Complete overview**
An intuitive interface and screen setup make detailed information easily accessible.

Technical features

- Approved as an IACS Type 3 and 4 damage loading computer
- Online connection to tanks and automation systems
- User defined set points and alarms
- Built-in log, ullage and stability reports
- Suits both new builds and retrofits

LOADSTAR

Loading computer for container operations



LOADSTAR is a next-generation loading computer built for a complete real-time overview of operations and an unprecedented efficiency in container handling.



Real-time overview and updates

An intuitive graphical interface displays onboard operations in a clear and easy-to-understand 3D view. It also delivers real-time calculations with every change, providing the crew with crucial insights into how to load the vessel for maximum safety and efficiency.

Seamless collaboration

The software can be accessed from anywhere at any time, whether that's the onshore office or onboard the vessel. This enables multiple users to work simultaneously in a seamless collaboration, and in one standardized file. Simple transfer of data enables planning several steps ahead of a vessel's arrival.

Benefits to your operation

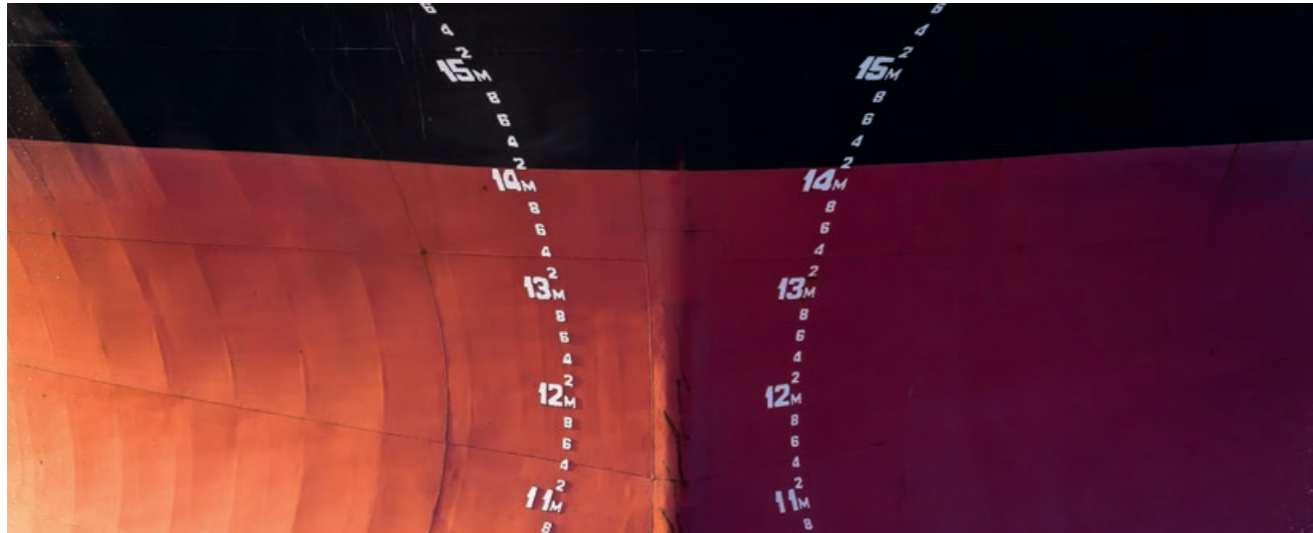
- **Improved operational efficiency**
Powerful tools for faster cargo handling and reduced turnaround times.
- **Reduced fuel and operating costs**
Modules calculate the most efficient cargo distribution to reduce fuel consumption
- **Adapts to your fleet requirements**
Suitable for container vessels of all sizes.

Technical features

- Online connection to tanks and automatic systems
- Lashing calculations
- Automatic IMDG checks
- Built in logs and reports
- Suits both new builds and retrofits

LEVELMASTER®

Level Gauging System



LEVELMASTER® combines proven designs and groundbreaking technology to provide your operations with unmatched tank gauging accuracy, increasing both reliability and service life.



Adaptable to your operation

The system is engineered for ultimate flexibility. Its intuitive interface and user-friendly touchscreens allow the crew to continuously monitor each tank's level, volume, and weight. It also provides a detailed overview over crucial data, including real-time draught, trim, and heel, to ensure maximum efficiency and safety.

Equipped with cutting-edge technology

Our new proprietary air pulse technology automatically keeps sensors clean. This results in an unprecedented accuracy of liquid levels. It also eliminates the need for constant manual maintenance, which reduces downtime and minimal mechanical wear and tear.

Benefits to your operation

- **Unmatched accuracy**
Sensors free from debris and other obstructions provide more reliable readings.
- **Complete overview**
Intuitive interface and screen setup make detailed information easily accessible.
- **Low maintenance**
Automation eliminates the need for manual cleaning and reduces downtime.

Technical features

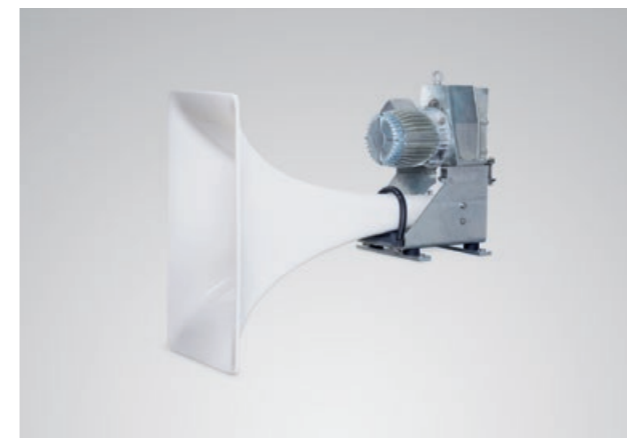
- Adaptive level sensing
- Automatic purge
- Low air consumption
- High update speed
- Electro pneumatic and pressure sensors.
- Suits both new builds and retrofits

TYFON®

Ship Signaling Equipment



TYFON® is one of the world's most used ship signaling equipment, built and designed to keep vessels safe and operations going even under the most extreme weather conditions.



Customizable to your vessels

The TYFON® range covers air-driven and electric whistles, as well as fully integrated acoustic systems. Options include sound surveillance, signal control, GA interfaces, and complete packages with bell, gong, and manoeuvring lights, ensuring safety in all conditions.

Tried and tested over decades

Developed over 80 years and continuously refined with advancing technology, TYFON® is trusted for its clarity, durability, and full compliance with IMO and national standards, it delivers reliable performance across the board, from single whistles to complete acoustic systems.

Benefits to your operation

- **Reduced risk of failure during inspection**
Proven to deliver a dependable, fully compliant signaling performance every time.
- **Lower maintenance costs**
Built to last in extreme weather conditions, the equipment needs minimal ongoing maintenance.
- **Fewer emergency repairs**
Proven reliability prevents unexpected breakdowns, avoiding costly last-minute repairs and vessel delays.

Technical features

- Approved whistles down to -45°C
- Manoeuvring light and signal controller
- Thermostat regulated space heating
- Fits vessels of all sizes

SONIC CLEANING®

Soot Removal



SONIC CLEANING® uses powerful sound wave technology to clean heat exchangers more frequently, safer, and more thoroughly than traditional methods – greatly increasing the heat transfer and reducing the need of manual cleaning.



Automated cleaning process

The automated acoustic system emits low-frequency sound waves at set intervals to prevent soot and ash buildup on heat-transfer surfaces. Operating online without manual intervention, it ensures consistent cleaning, reduced maintenance, and an improved heat transfer.

Increased equipment lifespan

Low-frequency acoustic waves create controlled pressure variations that loosen and prevent extensive ash build-ups without mechanical contact or abrasion. The non-erosive process avoids tube thinning and pitting, which extends equipment lifespan and sustains thermal efficiency over time.

Benefits to your operation

- **Lowered maintenance costs**
The fully automated system cleans on a continuous schedule, reducing the need for manual cleaning.
- **Increased equipment lifespan**
The non-erosive technology extends equipment lifespan and sustains thermal efficiency over time.
- **Reduced fuel consumption**
Automatic cleaning of heat-transfer surfaces prevents efficiency losses and increases fuel efficiency.

Technical features

- Improved efficiency by improved heat transfer
- Reduced risk of soot fires
- Reduced risk of soot flakes on deck
- Reduced need for manual cleaning
- Possible to retrofit

POLAR JET®

Tank Cleaning Machines



The POLAR JET® range has set the standard for tank cleaning for decades. Unique designs reduce the total time cleaning a tank, in many instances down to hours compared to days. With proven reliability and continuously improved technology, it consistently supports more efficient operations, both environmentally and economically.

Efficiency to any operation

Offering a wide range of models for both portable and fixed units, it enables efficient tank cleaning across a variety of applications, from small barges and chemical carriers to large VLCCs and offshore installations.

Designed for sustainability

The revolutionary ECO feature adapts the cleaning pattern to the shape of specific tanks. This allows for a more equal spread of cleaning media across every surface, resulting in a much-improved result and to a 25% reduction in time, washing medium and slop water.

Benefits to your operation

- **Lowered maintenance costs**
Robust designs with few moving parts and reliable components lowers the need for maintenance – and the overall life-cycle cost.
- **Reduced operational time and fuel costs**
New and improved technology cuts cleaning time by up to 25% compared to many other systems, making your operation more cost-efficient.
- **Unique sector cleaning**
A one-of-a-kind automatic sector cleaning feature ensures optimal adaptation to your operational needs.

Technical features

- Deck-mounted and fully programmable
- Pitch, rotation speed and angle limit controls
- Asymmetric slop-reducing distribution pattern
- Unique sector cleaning eliminates the need for hand cranking
- Suits both new builds and retrofits

Our reputation is built on customer satisfaction



Transforming onboard operations together



700

Annual installations

194

Countries served

57

Years in business

Under the Kockumation brand, Polarmarine and Kockum Sonics unite to offer solutions for all marine applications. From advanced software automation, acoustics, and mechatronics to high-performance tank cleaning systems, we deliver fully integrated solutions through a single point of contact.

For over a century, our reputation has been built on two core principles: innovation never stops, and customer

success comes first. Guided by this philosophy, we engineer, integrate, and maintain technology that performs consistently over time, even in the most challenging maritime environments.

By combining proven technology, modern automation, and unmatched customer support, we help businesses across the globe to build and operate fleets that are not only cost-efficient but also sustainable, safe, and future-ready.



SWEDEN (HEADQUARTER)

Kockumation AB
Tel: +46 (0) 40 671 88 00
E-mail: info@kockumation.com



UNITED KINGDOM

Kockum Sonics (UK) Ltd.
Tel: +44 (0) 1525 85 23 23
E-mail: sales@kockumsonicsuk.com



CHINA

Kockum Sonics China
Tel: +86 13801876896
E-mail: jamescao@sonicschina.net



DENMARK

Kockumation A/S
Tel: +45 4495 1321
E-mail: info@kockumation.dk



SWITZERLAND

Kockum Sonics AG
Tel: +41 (44) 820 31 91
E-mail: info@kockumsonics.ch



THE PHILIPPINES

Polarmarine Inc.
Tel: +63-47-252 9200
E-mail: sales@polarmarine.ph