

LOADMASTER X5

SHIP OFFICER'S CHOICE WHEN IT
COMES TO LOADING COMPUTERS



KOCKUMATION GROUP

Kockum Sonics POLARMARINE *Texon* MARINE ALIGNMENT

LOADMASTER® LOADING COMPUTER OF PROVEN QUALITY

For decades now, the software engineers of Kockum Sonics have continuously developed and improved the industry renowned LOADMASTER® loading computer to arrive at the current X5 version. Through this long term commitment to research and development Kockum Sonics boasts a unique knowledge and capability base that has been built upon more than 10,000 deliveries to date. Regular co-operation with naval architects, classification societies and ship's masters ensures that all requirements are met be they theoretical or operational.

Today LOADMASTER® X5 has a user interface that is unparalleled in it's user friendliness. It is designed to be simple enough for inexperienced users to operate yet it still provides a full range of powerful features for experienced users. With the Type Approved LOADMASTER X5 you will be in possession of the most powerful and versatile cargo planning and stability application available.



LOADMASTER X5 - COMPLIANCE AND CARGO PLANNING ALL IN ONE

Every LOADMASTER® X5 delivered contains at its core a base module that is packed with calculative tools that fulfill the mandatory stress and stability requirements imposed by the maritime authorities. So despite the name 'Base' module any ship owner, yard or technical manager can be assured that with LOADMASTER® X5 they are ensuring compliance and good practice without dedicating critical procurement resources. The base module is also flexible enough to contain additional ship-specific mandatory tools such as in the case of bulk carriers where automatic checks are made against flooded holds as per the rules.

On top of the base module is the cargo planning suite that is tailored to incorporate all of the operational functions particular to that type of vessel. For example the LOADMASTER® Bulk package includes a powerful loading sequence simulation and an auto bulk cargo optimization tool that presents the officer with a number of loading proposals that aim to minimize the GM whilst concurrently complying with all stress and stability parameters and restrictions. In addition to this the bulk package incorporates a break-bulk planning tool enabling cargo to be easily imported en masse from a booking list significantly speeding up and increasing the accuracy of the hold space planning operation complete with port rotation. Thereafter, the complete planning file in the company livery can be exported either in hard or soft copy to ports, technical offices and surveyors as required.

SHIP SPECIFIC PACKAGES - IMPROVES YOUR CARGO HANDLING

General Cargo package – the deck plans are mapped into the software complete with obstructed areas allowing easy graphical loading via drag and drop. Cargoes can be loaded on a multi-level basis and can be corrected by clearance and stowage factor restrictions. The planning procedure can be greatly reduced by importing regular cargo load plans and by recalling stored cargo data from the library.



Container package – reduces planning time by enabling the planner to enter and edit containers individually or by group with all relevant identification details visually available. Time saving features allowing copying, swapping and moving are included as standard and instant alarms are generated if a box is misplaced or a stack's weight is exceeded. Each stack is graphically presented allowing the user to easily define various POD / POL / IMDG data by color coding for simple and quick reference.

Tanker Package - The officer can plan the tanker loading or discharging operation in a simple user friendly graphical mode when conditions are more relaxed. The simulation procedure is extremely simple to use whereby tank filling bars are merely drag and dropped until the most optimum and cost effective procedure is arrived at. All events and procedures are managed by the LOADMASTER® X5 to ensure that the vessel remains within all safe stress and stability limits throughout and subsequent work orders and reports are generated for action by the crew and surveyors. Simulation is an extremely valuable tool that reduces terminal turn-around time drastically, paying back its investment literally in a matter of hours.

Pure Car and Truck Carrier (PCTC) – With a long cooperation with the biggest actor in this PCTC segment the LOADMASTER® X5 can offer a program that fits the vessels demand as well as shore based organization. Kockum Sonics have a sophisticated interface that can be linked to the planning system used in port. The super cargo simply transfer a file via e-mail to the vessel and the same is read by LOADMASTER® X5. A special side view of the vessel gives instant over view of the loaded weights.

Livestock Carrier – LOADMASTER® X5 has the experience of calculating livestock cargo. The program is made for considering loading in individual pens, zones or as entire decks. Special weights such as water in trays, fodder and dung is entered by simple means. External planning tools can be connected for automatic weight inputs. Numerous programs are approved by AMSA.



LOADMASTER - MODULE BASED



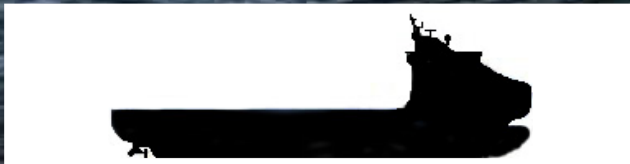
Bulk package

- Grain calculations complying with IMO grain code
- Timber calculation
- Flooded holds check according to IACS regulation S17
- Auto Bulk Cargo and Auto ballast distribution
- Loading/unloading sequence simulation
- OptiTrim. Trim optimization with full stability/strength check



Tanker package

- Online tank monitor with user defined set points and alarms
- Graphical sequence simulation and prediction
- Direct calculation of damage stability acc to IACS UR L5
- Cargo Administration covering all your reporting needs
- Built in pump log for multi grade operation
- OptiTrim. Trim optimization with full stability/strength check



Offshore package

- Anchor handling calculations
- Chain forces calculation
- Solid and liquid cargo calculations
- Report handling for discharged quantities
- Crane Program
- OptiTrim. Trim optimization with full stability/strength check



LNG/LPG package

- Online tank monitor with user defined set points and alarms
- Liquefied fraction calculation
- Vapour fraction Calculation
- Summary calculation
- Extended ullage report
- OptiTrim. Trim optimization with full stability/strength check

SYSTEM FOR ANY KIND OF VESSEL



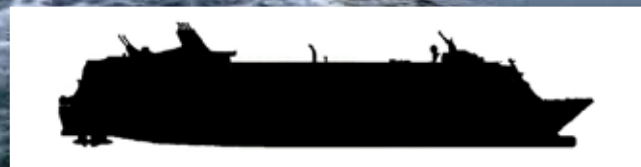
Container package

- Powerful and user friendly graphical interface for loading and discharging
- Dangerous goods module
- Edifact/Baplie translator
- Lashmaster lashing optimizer
- Booking list import and export
- Ballast exchange simulation
- OptiTrim. Trim optimization with full stability/strength check



Ro/Ro package

- Powerful and user friendly graphical interface for loading and discharging
- Drag and drop loading
- Loading plans and loading plans editor
- Manual or automatic import of booking lists
- OptiTrim. Trim optimization with full stability/strength check



Cruise package

- Easy dry weight input
- Ballast Exchange module
- Report generator for oil on-board
- OptiTrim. Trim optimization with full stability/strength check



Offshore package

- Longitudinal/Transverse stability calculation
- Damage calculation according to MODU
- Riser/Mooring line tension
- Oil/Water interface calculation
- Crane Program



Marine Alignment is now a part of the Kockumation Group. We offer LOADMASTER Easeacon as well.

SPECIAL FEATURES - CUTTING EDGE FEATURES

Direct damage stability

Kockum Sonics can today offer an advanced direct damage calculation feature that fully complies to IACS URL 5 type III. The feature is type approved by all major classification societies. Our team of experienced naval architects can create full sets of damage conditions that reflect MARPOL as well as the ICB code. This competence ensures that LOADMASTER® X5 programs can be approved by LRS without external design company consultants.

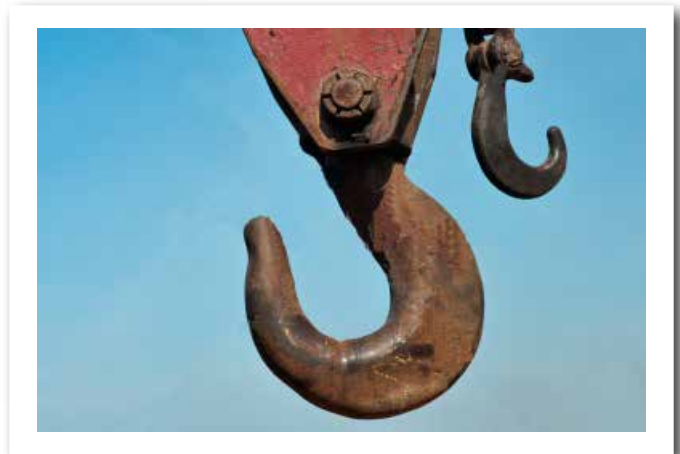
FuelSaver - OptiTrim

Maximum cost-efficiency is essential to today's marine operators and in parallel with this environmental responsibility is now a growing aspect of shipping. At Kockum Sonics one of our contributions is a new, second generation, LOADMASTER® X5 tool for maximizing fuel efficiency. FuelSaver - Optitrim calculates the optimum voyage trim for any given displacement and also calculates how to achieve this actual condition whilst complying with all stress and stability limits. Both cargo and ballast tanks are considered in the calculations.

Supply vessel anchor handling

It is well known that anchor handling off shore is a complicated task and surrounded with numerous potential serious risks. Given this Kockum Sonics developed a special LOADMASTER® X5 package to simulate what effects anchor and chain weights plus any connected tow weights will have on the vessel in its current or future condition.

This allows the crew to safely calculate the vessel's limitations and to avoid any unnecessary operational situations.



Semi Sub heavy lift vessels

In close cooperation with masters and officers onboard a series of semi-submersible heavy lift vessels Kockum Sonics developed this feature. The LOADMASTER® X5 calculates any floating cargo and its shift to deck load through the semi-sub's ballast operation.