

MACS3

Cargo Management System for Bulk Carriers



seacos Cargo Management

Stability calculation

Longitudinal strength calculation

Customizable user interface

User-defined warning points

Visualization of various vessel views

Automatic wind pressure calculation

Automatic ballast tank optimization

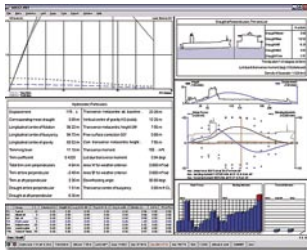
Modular extension

Screen and print reports

MACS3 for bulk carriers

The loading computer modules for bulk carriers offer the full scope of solutions, ranging from grain stability to safe planning.

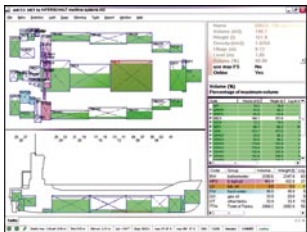
Basic System



Basic Program MACS3.net

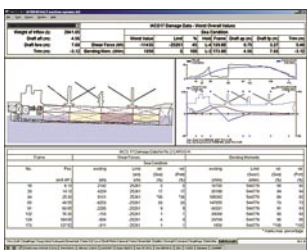
- Graphical tankplans of the vessel showing current conditions
- Optimization of trim, heel, stability and stress by ballast tanks
- Display and printout of loading conditions and calculations
- Saving and loading of loading conditions
- Online help
- Warning points (e.g. trim, draught, GM)

Selected add-ons

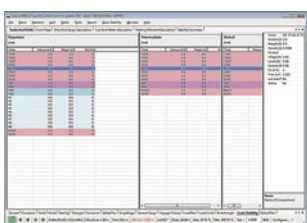


TANK ONLINE reads tank filling levels into MACS3. It relieves the user of manually entering the values that are needed for the stability and strength calculations. Drafts, trim and heeling can also be read online and compared with the MACS3 calculations.

TANK ONLINE is available for all major on-board measurement systems, connecting to over 25 different makers.



BULKSTRENGTH calculates the longitudinal strength in flooded conditions according to IACS requirements UR Z11, S17, S25. Each hold is assumed to be damaged and the according loading situation is checked with regard to strength limit value.



GRAIN provides the examination of the special grain stability requirements of SOLAS 74. It includes the completion of the "Grain Stability Calculation Form" required when loading bulk grain in the USA.

LOADMAN is an additional module for bulk carriers and cargo tankers for the pre-calculation of the loading or unloading plan. The optimization of total cargo distributions with respect to certain criteria, e.g. trim, GM, stability, stress of the vessel is integrated.

After number of holds to take a certain amount of homogeneous cargo are selected, the program makes a proposal how to divide the cargo among the selected holds.

Calculation of intermediate conditions (stability and strength) for loading and discharging operations incl. graphical display of the results. Integrated facility for preparing the loading/unloading plan in accordance with resolution A.862(20) as pdf file.

A loading/unloading plan is created automatically and can be printed and written into a pdf file.

The plan fulfills the form requirements of IMO resolution A.862 (20).

BULKIM makes sure that all loading limits set by the classification societies are never exceeded. Charts show the load limit for the current draft.

Details of result presentation depend on the requirements of the specific classification society. Another window shows the load diagram used to receive the allowable load values for each hold. The green area is the allowed region for loading. The current situation is marked by a dot.

BALLASTMAN the ballast water exchange module provides the means to plan and supervise the process of ballast water exchange while at the same time ensuring the steady stability and strength of the vessel. An appropriate ballast water exchange report will be generated.

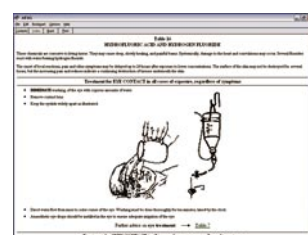
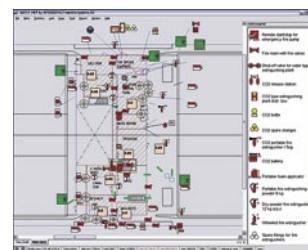
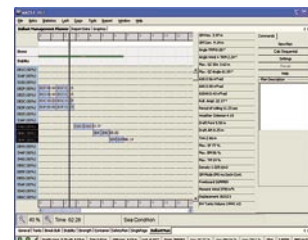
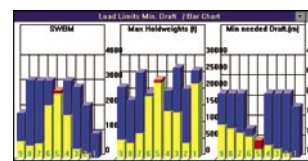
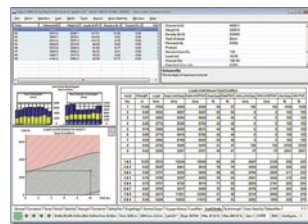
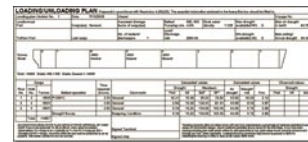
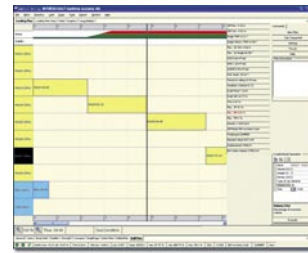
DAGO for bulk carriers manages dangerous goods.

It checks the fulfillment of the stowage and segregation requirements imposed by the latest IMDG Code.

DAGO I considers dangerous cargo in bulk. The functions available are based on the BC-Code, IMDG-code, Document of Compliance, company specific rules and the Emergency Schedule (EMS).

DAGO II adds the fire-fighting and safety plans.

DAGO III contains the complete Medical First Aid Guide (MFAG).



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