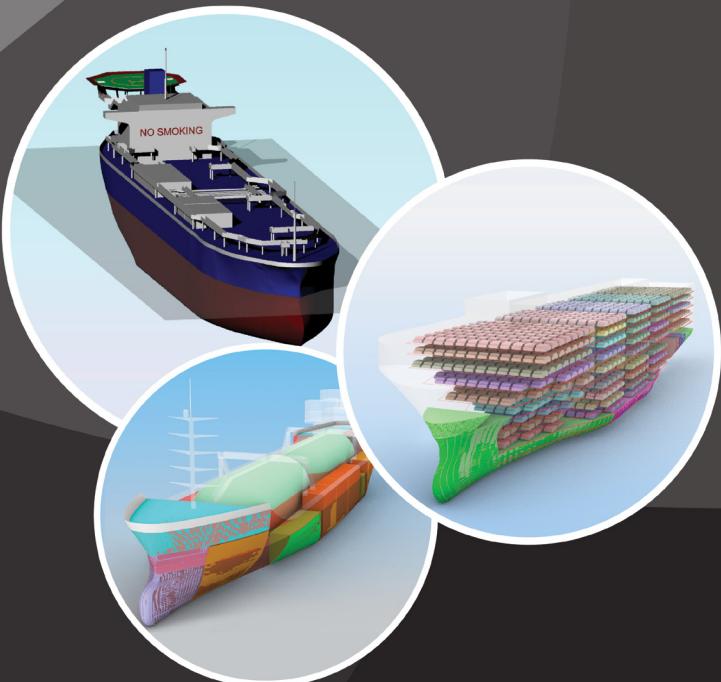




CyberMaster 3D
Advanced Ship Loading Software

EMINENT





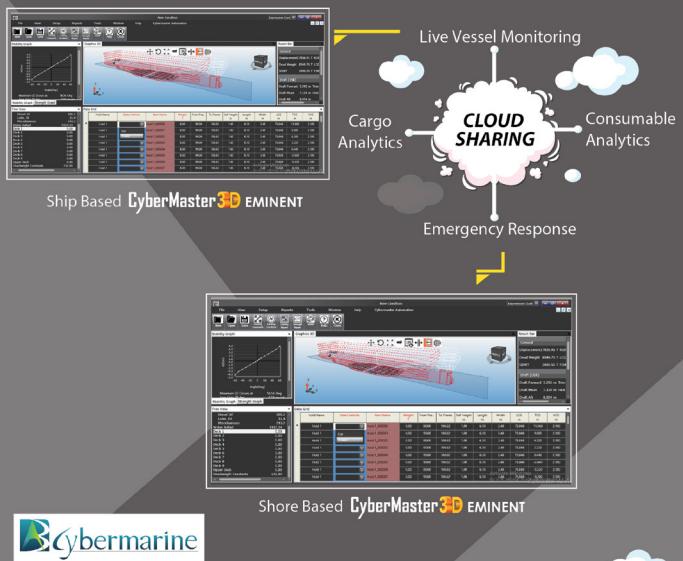
CyberMaster 3D Advanced Ship Loading Software

EMINENT

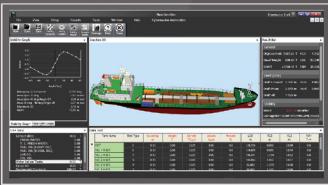
GENERAL

- CyberMaster 3D EMINENT - is an advanced Ship Loading software integrated with management tools.
- Software is specially developed to perform all necessary operations pertaining to live vessel monitoring and reporting.
- Available with all features and Class approvals of CyberMaster 3D
- Works on all windows-based Desktops, Laptops and Mobile Devices.
- Cloud based data transmission to shore offices or operational centres.
- Primarily available in two variants :

Ship - Shore Configuration Mode: A single vessel connected to the head office and operational centres through Cloud



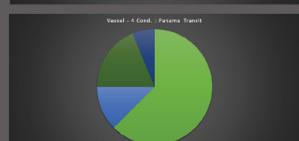
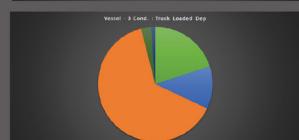
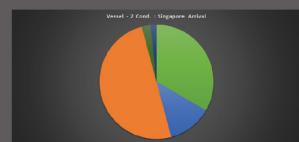
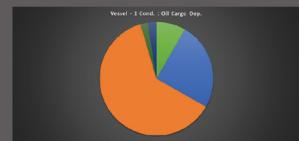
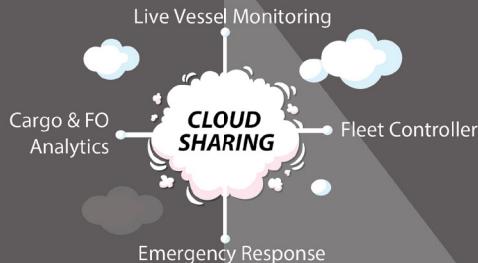
Fleet Controller Mode: Multiple vessels connected to head office and Operational centres through cloud.



CYBERMASTER EMINENT DASHBOARD

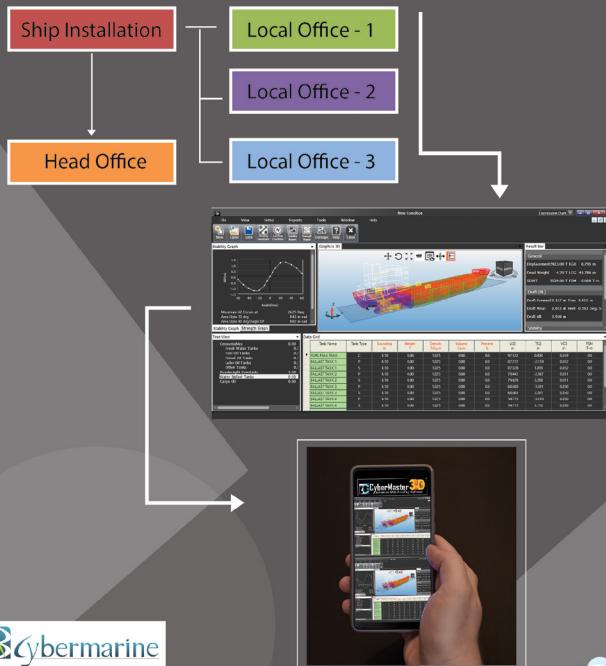


The software is available with several superior modules as enumerated below



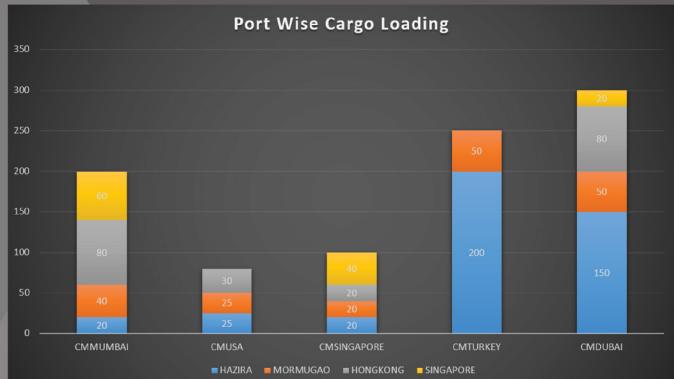
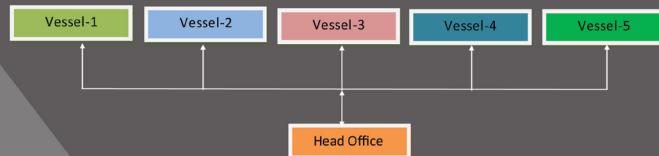
SHIP -SHORE MODULE

- Ship – Shore configuration allows communication of shore-based office with a single vessel through cloud-based data transfer
- Ship installation will have administrative privileges to generate loading conditions
- Enables remote vessel monitoring at shore-based installation
- Shore-based installation shall be able to extract monthly consumption reports and cargo load/discharge analytics
- Ship based installations can be done in several operational centres
- It will also be available on mobile devices, however with only the reporting mode.



FLEET CONTROLLER MODULE

- Provision to manage multiple vessels from single location.
- Shore based installations can be done in Head Office and several operational centres with the ability to assign different roles at different locations
- Option to generate consumable & cargo analytics for individual vessels in a fleet.
- Provision to compare the quantities of F.O, F.W consumed by various vessels for a defined time frame.
- Option to generate consumption and cargo load and discharge reports for a maximum period of 6 months.
- Real-time monitoring enables the Head office and operational centres to arrange provisions and bunker.



LIVE VESSELS MONITORING MODULE

- Integrated with tank gauging system to gauge the tank levels in real time.
- Soundings from Online Tank Gauging System will be used to update the filling ratios of the tanks at a set time interval.
- Automated loading conditions based on instantaneous soundings.
- Online tank gauging and draft gauging feature enables Live Stability & Strength assessment
- Computation of global deflections based on the draft gauging.
- Draft gauging module combined with draft survey module enables the ship & shore office to calculate unknown weights on-board and to keep track of the lightship of the vessel.
- Monitoring of F.O, F.W, Sludge, Bilge & Dirty oil logs
- Monitoring of operational parameters such as propeller immersion, bow slamming etc



EMERGENCY SUPPORT MODULE

- CyberMaster 3D's actual damage case simulation enables speedy emergency response by shore personnel by means of fast and live computations.
- Superior GUI facilitates the Ship and Shore Personnel to see the breach of watertight integrity and vessel's current equilibrium.
- A quick check of vessel's damage stability can be run using all the standard damage cases.
- A detailed check of the specific damaged part can be carried out by means of user specified damage case feature.
- Comprehensive damage summary report with all relevant criteria and overall damage stability status is generated, which enables the ship and shore to arrive at quick decisions.
- Corrective actions can be simulated and suggested from shore office by a Naval Architect.
- Enables the Ship and Shore installations to evaluate the stability of the vessel during intermediate stages of flooding and arrive at quick decisions.
- Damage Strength calculation verifies the residual strength post damage and warnings are shown if violations are observed.



ENHANCED REPORTS GENERATION

- Eminent enables the quick generation of information for filing of various reports such as:
 - Bunker Reports
 - Port Arrival & Departure Reports
 - Cargo Manifests
 - Cargo Survey Reports
 - Forward Visibility Check Reports
 - Permissible Air Draft Reports
 - Cargo Stowage Plan Reports
- Reports can be configured to be dispatched by emails to different Executives,

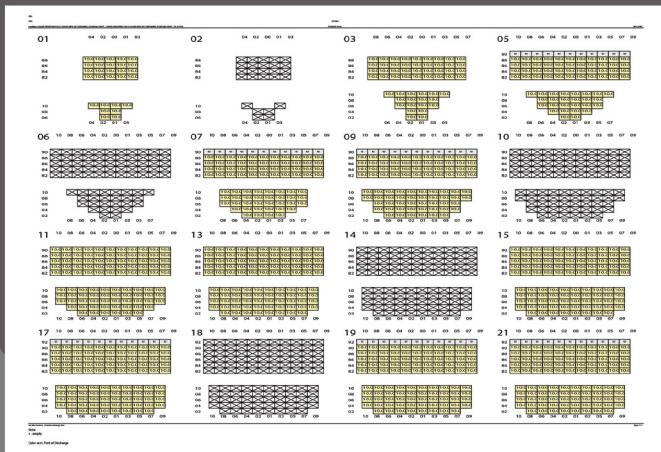
Data Analytics

- Eminent enables periodical review of vessel performance by means of analysing patterns and statistics generated through
- Cargo load and discharge analytics can be generated for a user defined time period
- Fuel Oil Consumption patterns can be studied through bunker loading and consumption reports.
- Facilitates the comparison of FO consumption patterns of different vessels in the same fleet.

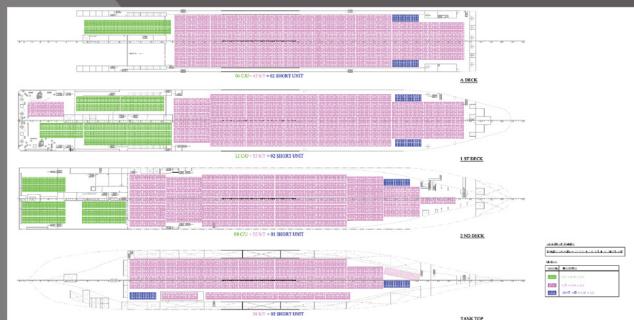


The reports generated from the module are elaborated in the subsequent pages.

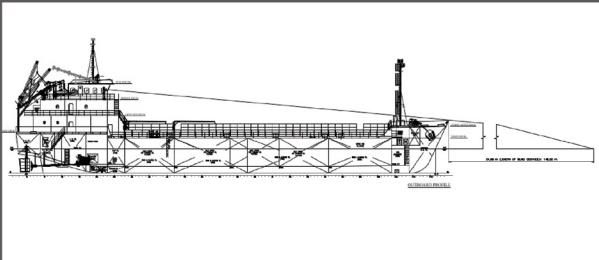
Container Stowage Plan Report



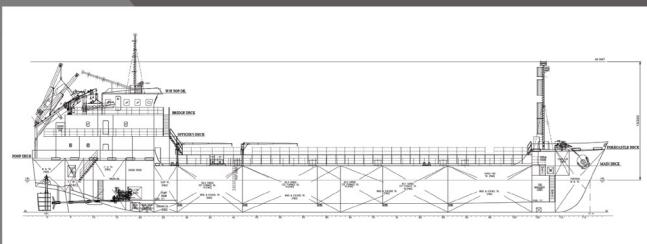
Ro-Ro Stowage Plan Report



Forward Visibility Report



Air Draft Report



PORT ARRIVAL DECLARATION REPORT

S.No.	Details
1	Name of vessel
ANGUS EXPRESS	
2	IMO Number
9167057	
3	Call sign or (in the absence of call sign) official number of vessel
LXEA	
4	Flag
Luxembourg (LU)	
5	Type of vessel
Livestock Carrier	
6	Gross Tonnage of vessel (GRT)
4752	
7	Length of overall vessel in meters (LOA)
103.1	
8	Number of crew including master
9	Purpose of call and intended berth or anchorage on arrival Hong Kong
10	Estimated maximum draught of vessel in meters overall (in meters)
6.2	
11	(a) Any defects affecting the maneuverability or seaworthiness of the vessel
12	(b) Any special condition of the vessel
13	Quantities and class of dangerous goods carried on board including radioactive materials (insert "None" if applicable)
14	(a) Name of agent or owner of vessel in Hong Kong (insert "None" if no agent appointed and indicate whether an agent is to be appointed or whether the co-owner is to act as agent)
15	(b) Name of master of vessel
16	Where a pilot is required, the intended pilot boarding station
17	Estimated time of arrival at berth or intended pilot boarding station (expressed as "YYYY/MM/DD hh:mm")
18	Last port of call (state name of port and country or territory)
19	Height to highest point of vessel in meters above waterline on arrival
29.31	
20	Any other relevant information and the expiry date of SMC and DOC (if applicable)

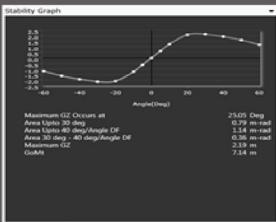
Bunker Report

Method used to measure fuel oil consumption	Tank Soundings	
	HFO	Diesel/Gas Oil
	169.98	24.56
Hours Underways (h)	36	
Distance Travelled (nm)	355	
Power Output (Rated Power) (kW)	Auxiliary Engines	Main Propulsion Power
	750	2942
Ice Class	No	
EEDI (gCO ₂ /t.nm)	N/A	
DWT	2703	
NT	2381	
Gross Tonnage	4752	
Ship Type	Livestock Carrier	
IMO Number	9167057	
End Date	13/10/2018	
Start Date	12/10/2018	

CyberMaster 3D BASIC MODULE

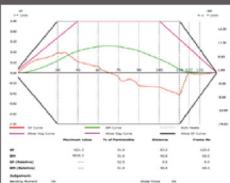
Loading Conditions & Intact Stability Computation

- Preparation of Loading Conditions via percentage filling, volume, weight or sounding/ullage depth.
- Use of accurate tank soundings from 3-D models.
- Computation of Draft & Intact Stability
- Displacement & Deadweight Calculation
- GM & GoM Calculation
- Stability check by means of GZ curve or Limit KG curve
- Stability computation as per I.S Code 2008 & compliance comparison.



Longitudinal Strength Computation

- SF/BM Computations at various pre decided Bulk heads / Frames.
- Graphical Representation of SF/BM curve throughout length of vessel
- Option to input of allowable values for SF & BM as per service restriction.
- Printable Reports with SF/BM values against Permissible allowable.
- Warnings if allowable limits are violated.



Damage Stability Module

- Graphical view of equilibrium damaged condition of the vessel.
- Flexibility to choose from various pre-loaded Damage cases.
- Report showing status of the vessel's before & after damage equilibrium.
- All required significant criteria – MARPOL, IGC, IBC, OSV and SPS
- Flexibility to update default Permeability of the compartments.
- Stability during intermediate stages of flooding.
- Capability to specify actual user defined damage cases.
- Progressive Flooding through hull openings.



User Defined Loading Constraints

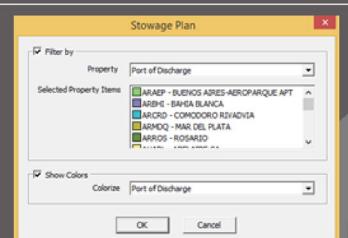
- Enables master to provide operational constraints.
- User can set Loading constraints for Trim, Heel, Air Draft and Bow Thruster Draft.
- The permissible extreme draft can be changed based on the applicable load line
- Warnings if violation is observed
- Real time wind speed shall be given as input to check stability of the vessel during emergency response



Generation of Reports

- Executive summary with the deck & tank wise deadweight distribution during of loading or discharge operations
- Loading Condition Reports with tank & deadweight constants
- Detailed Intact Stability, Longitudinal Strength & Damage Stability Reports
- Damage Summary Report to quickly assess the results
- Option to print functional reports such as Stowage Plan, Ullage Report
- Choice to create stowage report based on special filters such as Port of Load & Port of Discharge

Tree View			
Consumables	3098.48	T	3249.19 Cu.M
Fresh Water	347.80	T	347.80 Cu.M
Fuel Oil	2186.83	T	2307.93 Cu.M
Diesel Oil	393.00	T	321.50 Cu.M
Lube. Oil	31.40	T	24.89 Cu.M
Miscellaneous	243.24	T	243.24 Cu.M
Water Ballast	184.00	T	1795.10 Cu.M
Deck 1	213.00	T	
Deck 2	135.00	T	
Deck 3	125.00	T	
Deck 4	142.00	T	
Deck 5	156.00	T	
Deck 6	138.00	T	
Deck 7	210.00	T	
Deck 8	218.00	T	
Deck 9	213.00	T	
Upper Deck	189.00	T	
Deadweight Constants	132.00	T	





EMINENT



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