

## **Certificate of Approval**

Certificate No: CLI/14/234

**Issue Date:** 08/12/2014

**Expiry Date:** 09/12/2016

**This certificate is issued to:** Effepi Mon. Ltd

7 Sotiros Dios Str 185 35 Piraeus

Greece

**Program Name:** C.A.M.E.L.

**Program ID/Version Number:** 1.5.0.0

Minimum Hardware Specification: IBM Compatible PC Pentium Processor running at 166 MHz, Hard

Disk Drive with 100 MB of free space, MS MB of RAM, VGA Monitor, Graphics Card and Driver, Mouse and Driver, and CD-

Rom.

Operating System: Microsoft Windows '9X/2000/XP/Vista/7/8

Program Notes: ""Stability program not assessed against UR L5 and #cf'88\$, '=G7cXY

User's Operations Manual ID: CLI/14/234

This is to certify that the above Strength And Stability calculation program has been examined in accordance with the relevant Classification Rules and the requirements of Statutory Regulations and is approved for the functions stated on the Supplement attached hereto.

## **Conditions of Certification:**

Approval of test conditions will be required together with an installation test for each specific ship.

The supplier is responsible for ensuring that any computer software and hardware is capable of handling date changes without loss of performance or functionality. The capability of the computer software and hardware to handle date changes without loss of performance or functionality has not been demonstrated to Lloyd's Register EMEA.

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Carlos Arias

Surveyor to Lloyd's Register EMEA A Subsidiary Of Lloyd's Register Group Limited



## **Supplement To The Certificate of Approval**

Program Name: C.A.M.E.L.

Version No: 1.5.0.0

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Cargo torque

Multiple Cargo Torque Limits

Local Double Bottom Strength

Longitudinal Strength in Flooded Conditions

INTACT STABILITY (IMO RES A 749(18))	✓
Para 3.1.2 (A-167) - General criteria	✓
Para 4.1.3 (A-206) - Timber deck cargo criteria	*
Timber water absorption - manual / auto	
Para 3.2.2 (A-562) – Weather criterion	×
Icing - deadweight item / density on surface area	×
GZ CURVE	
Corrected for constant FSM/GGo	✓
Corrected for FSM varying with θ	×
Curve and GZ areas reflect heel angle	<b>√</b>
FREE SURFACE	
Max values only	*
Tank calibrated data (pre-programmed)	<b>√</b>
Actual liquid level taking heel and trim into account	×
ALLOWABLE GM/KG CURVES Intact/Damage	✓
GRAIN	<b>─</b> ✓
Grain stability criteria	<b>─</b> ✓
GZ curve with H.M. plot	<b>─</b> ✓
Allowable H.M. pre-programmed	<b>✓</b>
Allowable H.M. calculated by program	*
Allowable H.M. vs Actual H.M.	<b>√</b>
STRENGTH	
Shear force and bending moments	✓
Multiple SF/BM Limits	×
Wattiple 31'/ DW Littles	-