

RulesCalc July 2011

Lloyd's Register, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register Group'. The Lloyd's Register Group assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register Group entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

What's new in RulesCalc July 2011.1

RulesCalc July 2011.1 is a maintenance update containing bug fixes for issues reported until May 2011.

Please note that all rule references in this document pertain to the Lloyd's Register *Rules and Regulations for the Classification of Ships* unless otherwise noted.

Product information

Information on Lloyd's Register Marine software products can be obtained from <http://www.lr.org/marine-software>.

To obtain the latest version of RulesCalc, please go to the [RulesCalc page](#).

System Requirements

RulesCalc requires the following hardware and software configurations:

Hardware

2GB RAM, or greater.

24" Display strongly recommended.

Intel Core processor or equivalent.

Software

Microsoft Windows versions:

- XP SP2 and later (32-bit only)
- Vista (32-bit only)
- 7 (32-bit and 64-bit)

Support Information

To obtain software support or to report an error, please contact our engineering software support team at es.support@lr.org.

Training Information

To find out about RulesCalc or other Lloyd's Register software training courses, please contact es.training@lr.org.

Resolved Issues

Log number:	8322, 8165	Impacting:	Calculations	Rule reference:	P3 C2 §1.2.2
--------------------	-----------------------	-------------------	---------------------	------------------------	---------------------

The correct high-tensile steel factor is applied for materials with a yield stress over 390.

Log number:	8158, 8160	Impacting:	User interface	Rule reference:	P4 C4 §4.1
--------------------	-----------------------	-------------------	-----------------------	------------------------	-------------------

Rule coverage for transverse frames is implemented for offshore supply vessels.

Log number:	8362	Impacting:	User interface	Rule reference:	P4 C1 §9 T1.9.1
--------------------	-------------	-------------------	-----------------------	------------------------	----------------------------

Deep tank thickness requirement now uses the correct K1 factor (2.5)

Log number:	8330	Impacting:	User interface	Rule reference:	P4 C8 §15.4.3
--------------------	-------------	-------------------	-----------------------	------------------------	----------------------

The hydrodynamic torque distribution has been corrected.

Log number:	8322	Impacting:	User interface	Rule reference:	P3 C2 §1.2.2
--------------------	-------------	-------------------	-----------------------	------------------------	---------------------

The Material library has been updated with H40 steels.

Log number:	8321	Impacting:	User interface	Rule reference:	N/A
--------------------	-------------	-------------------	-----------------------	------------------------	------------

The higher-tensile steel region can now be enabled in a single step.

RulesCalc July 2011.1 Release Notes



Log number:	8319	Impacting:	Calculations	Rule reference:	N/A
--------------------	-------------	-------------------	---------------------	------------------------	------------

Built stiffener under stiffener profile is now correctly considering attached plate thickness and width.

Log number:	8318	Impacting:	User interface	Rule reference:	N/A
--------------------	-------------	-------------------	-----------------------	------------------------	------------

Expanding the intermediate calculation branch no longer takes the user to the Rule reference instead of showing intermediates (in some areas such as wave bending moment under the loadings tab).

Log number:	8312	Impacting:	User interface	Rule reference:	P3 C8 §4
--------------------	-------------	-------------------	-----------------------	------------------------	-----------------

The forecastle deck plating thickness requirement has now been implemented.

Log number:	8280	Impacting:	User Interface	Rule reference:	N/A
--------------------	-------------	-------------------	-----------------------	------------------------	------------

Time zones are now accounted for when activating licences.

Log number:	8273	Impacting:	Calculations	Rule reference:	P3 C13 §7 T13.7.1
--------------------	-------------	-------------------	---------------------	------------------------	------------------------------

Stream anchor details are now hidden for tugs.

Log number:	8272	Impacting:	Calculations	Rule reference:	P3 C13 §2 F13.2.4
--------------------	-------------	-------------------	---------------------	------------------------	------------------------------

In Rudder calculations, distance from centre of rudder area to the lowest bearing is now calculated correctly.

Log number:	8263	Impacting:	Calculations	Rule reference:	N/A
--------------------	-------------	-------------------	---------------------	------------------------	------------

In Local scantlings->Aft Structure->Shell Structure->Shell->Shell->Primary Structure tab, Inertia is now calculated including the attached plate.

RulesCalc July 2011.1 Release Notes



Log number: 8260 **Impacting:** Calculations **Rule reference:** P3 C1 §7.1.5

The equipment number for tugs is now calculated correctly.

Log number: 8240 **Impacting:** User interface **Rule reference:** N/A

In Panels -> Stiffener groups tab, required material is no longer shown in red even it matches the required material.

Log number: 8211 **Impacting:** Calculations **Rule reference:** N/A

When a torsion cell crosses centreline through reflection, and with no double bottom girder, the symmetry condition is now correctly applied in RulesCalc.

Log number: 8195 **Impacting:** Calculations **Rule reference:** N/A

For non-CSR bulk carriers, RulesCalc is calculating deep tank bulkhead scantlings in two ways (as deep tank and as watertight). Only ballast boundaries are required to satisfy the water tight requirement.

Log number: 8164 **Impacting:** User interface **Rule reference:** N/A

The stiffener library has been updated to contain 200x90x10/14.

Log number: 8163 **Impacting:** User interface **Rule reference:** N/A

The licensing mechanism has been corrected so licences work for the prescribed version only.

Log number: 8153 **Impacting:** User interface **Rule reference:** N/A

'Automated charts' are now showing deck stresses correctly for LR ship types.

Log number: 8151 **Impacting:** User interface **Rule reference:** P4 C1 §6 T1.6.1

RulesCalc July 2011.1 Release Notes



Side shell longitudinals now correctly use the scantling (not summer) draught for section modulus calculations.

Log number:	8126	Impacting:	Calculations	Rule reference:	N/A
--------------------	-------------	-------------------	---------------------	------------------------	------------

In 'Loadings>Still water shear forces>Wave shear forces tab', div-zero errors occur when the inner hull and the double bottom girders are on the same coordinates.

Log number:	8125	Impacting:	User Interface	Rule reference:	N/A
--------------------	-------------	-------------------	-----------------------	------------------------	------------

The registered file type now displays the correct text label.

Log number:	8124	Impacting:	User Interface	Rule reference:	N/A
--------------------	-------------	-------------------	-----------------------	------------------------	------------

.shp files are now correctly associated with the latest version of the application.

Log number:	8118	Impacting:	User Interface	Rule reference:	N/A
--------------------	-------------	-------------------	-----------------------	------------------------	------------

Assembled corrugation profiles are now displayed correctly.

Log number:	8041	Impacting:	Calculations	Rule reference:	P4 C1 T1.4.5
--------------------	-------------	-------------------	---------------------	------------------------	---------------------

The correct stiffener scantlings for transversely framed fore and aft decks are now applied.

Log number:	7981	Impacting:	LPG ship type	Rule reference:	N/A
--------------------	-------------	-------------------	----------------------	------------------------	------------

LPG ship types: Material yield strength for the welded alloy aluminium material has been corrected.

Log number:	7828	Impacting:	Passenger ship	Rule reference:	P3 C4 T4.7.1
--------------------	-------------	-------------------	-----------------------	------------------------	---------------------

The bilge corrosion addition is now included as per Pt 3 Chap 4 sec 7 Table 4.7.1

RulesCalc July 2011.1 Release Notes



Log number: 7601 **Impacting:** User interface **Rule reference:** N/A

RulesCalc no longer crashes when construction lines are inserted.

Log number: 7477 **Impacting:** User interface **Rule reference:** P4 C7 §4.3

Rule coverage for hatchways is implemented.

Log number: 7027 **Impacting:** User interface **Rule reference:** N/A

RulesCalc will no longer open a file that has been deleted or moved as a blank file in the same location.

Log number: 6846
6847 **Impacting:** User interface **Rule reference:** N/A

Unit nomenclatures are now clarified for imperial measurements – pound force and pound mass units are now displayed as lbf and lbm, respectively. Bending moment units have been corrected to read 'lbm-ft' and not 'lbm/ft'. This was a labelling error only, the associated calculations were correct.

Log number: 6843 **Impacting:** Offshore supply vessel **Rule reference:** N/A

An error in metric / imperial unit conversation for required anchor mass for offshore supply vessels has been corrected.

Log number: 6686 **Impacting:** LNG and LPG **Rule reference:** N/A

Un-applicable hull types have been disabled for LNG/LPG ship types in the *new ship wizard*.

Log number: 6679 **Impacting:** User interface **Rule reference:** N/A

Bending moment units are corrected from KNm to kNm.

RulesCalc July 2011.1 Release Notes



Log number: 5924 **Impacting:** Wheel load calculation **Rule reference:** N/A

Axle spacing is now properly reflected in the wheeled load calculation to utilize the maximum loading point.

Log number: 5920 **Impacting:** Wheel load calculation **Rule reference:** N/A

Calculation for deck beams loaded with both vehicles and cargo are now working correctly.

Known Issues

Log number: 7422 **Impacting:** User interface **Rule reference:** N/A

Copying a transverse section does not correctly copy construction lines or brackets.

Expanding the intermediate calculation branch is taking user to the Rule reference instead of showing intermediates in some areas such as wave bending moment under the loadings tab.

Log number: 8317 **Impacting:** User interface **Rule reference:** N/A

The wider tables printed with the print report functionality moves out of the printable area in the PDF output .E.g. Shear forces table of hull shear strength under mid-ship section.

Log number: 8320 **Impacting:** User interface **Rule reference:** N/A

Colouring structure labelling option is not activated under extended monitor arrangement.

Log number: 8316 **Impacting:** Calculations **Rule reference:** N/A

For LR ship types, where damaged stability requirement is mandatory, damaged stability line not affecting the water tight BH requirement at the local scantlings branch.

Lloyd's Register EMEA

T +44 (0)20 7709 9166

F +44 (0)20 7423 2057

E emea@lr.org

71 Fenchurch Street
London EC3M 4BS, UK

www.lr.org

September 2011

Lloyd's Register Asia

T +852 2287 9333

F +852 2526 2921

E asia@lr.org

Suite 3501 China Merchants Tower
Shun Tak Centre

168-200 Connaught Road Central

Lloyd's Register Americas, Inc

T +1 (1)281 675 3100

F +1 (1)281 675 3139

E americas@lr.org

1401 Enclave Parkway, Suite
200

Houston, Texas, 77077, USA



LIFE MATTERS

Services are provided by members of the Lloyd's Register Group.