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## Service Update: New FOBAS Fuel Management Toolkit

### Applicability: All ship owners and operators

In line with the Lloyd's Register FOBAS commitment to provide technically robust, impartial and practical solutions for fuel oil bunker management, we are pleased to introduce our newly developed 'Fuel Management Toolkit'.

The 'Fuel Management Toolkit' software has been developed to assist our clients in various fuel management procedures and needs such as quantity calculations, quality specifications, operational optimisation, energy consumption and emissions calculations.

A major feature of the Toolkit is the 'Knowledge Base', a quick guide with detailed information about fuel quality, risks associated with poor fuel quality, and preventive measures that can be considered to avoid damage to components of on-board fuel management systems.

The total package of applications of the toolkit is designed to offer greater insight in both technical and commercial aspects of fuel management and is arranged in six sections covering matters of-

- 1) Quantity: To accurately calculate the quantity of fuel bunkered based on the advised delivery data for density and temperature along with measured volume.
- 2) Quality: This includes comparing marine fuel standard specifications, assessment of fuel quality parameters against specified limits and to calculate the expected fuel quality specification when different products are blended.
- 3) Operations: To calculate fuel ignition and combustion characteristics (Cetane Index & Calculated Carbon Aromaticity Index), injection temperature and temperature / density converters
- 4) Energy: Net and Gross Specific Energy calculators as well as an estimated cost / 100MJ calculator
- 5) Emissions: Emissions calculator for SO<sub>x</sub> and CO<sub>2</sub>
- 6) Knowledge Base: A fuel property glossary including definitions, effect on different parts of fuel system, indications and recommended actions for all basic fuel parameters

As a valued customer of FOBAS, you will have direct and immediate access to the Fuel Management Toolkit which can be downloaded from <http://www.lr.org/en/services/fuel-testing/FuelManagementToolkit.aspx>.

In order for us to work towards enhancing this application, we would appreciate your feedback on its contents, usability and general feel, and how well you believe it addresses your needs.

If you require additional information or have any questions or comments regarding the software please email us at [fobas@lr.org](mailto:fobas@lr.org) or speak to one of our consultants directly.

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