# LODIC





March 2014

## A FLEXIBLE LOADING COMPUTER SYSTEM

The Lodic loading computer system is designed to meet the high standards of the maritime industry. With robust, reliable and well proven technology, the system is used onboard ships, semi-subs and jack-up rigs. Based on a 3D geometry model and being a modular system, it offers great flexibility and unique functionality. Tailored solutions can be offered to fulfill the requirements for each particular ship or rig.

## Lodic application

The system is delivered to a wide range of ships, such as supply vessels, construction vessels, anchor handling vessels, drilling units, heavy lifting units, FPSOs, tankers, bulk carriers and general cargo vessels. Vessel specific software versions are available, fulfilling the operational requirements for each vessel type, i.e. cargo monitoring and ullage reporting functionalities for tanker vessels or deck stowage, anchor handling and crane lifting simulation for offshore supply vessels. Drilling units with several deck load stowage areas and riser handling systems find useful solutions using Lodic for monitoring or planning purposes. Tailored solutions are offered and brand new solutions can be made for special project deliveries.

The Lodic system covers the full range of semi-sub rigs with its unique functionality for mooring and anchoring analysis, residual deck load capacities and ballast advisory functionality. The system is delivered to drilling, accommodation, FPSO and heavy lifting units on a regular basis, providing a reliable tool to control stability and skew loads. Functionalities will be tailored to match rig type and operation. DP positioned, anchored or tension leg platforms, all find a dedicated system providing vital information to the operator. Jack-up rigs require dedicated functionalities for control when floating, pre-loading, jacking or in elevated condition. Lodic supports the full picture of jack-up rig operations enabling a unique possibility to control rig stability and leg forces in any operation.

## Office solution

To enable cooperation between vessel and management, Lodic offers an office solution for onshore use. The office solution enables the management to cooperate with the vessels within its fleet, exchanging loading condition information. The management can switch between the different vessels, and can obtain the same information as onboard the vessels simply by receiving text based loading condition files.

## FEATURES LODIC

- User friendly input of deadweights
- Online interface with automation or tank gauging system for automatic updates of tank filling, draughts, crane loads or other data
- Calculation and control of floating position, longitudinal strength, intact and damage stability
- Planning future scenarios using all manual input or online monitoring of the current loading situation
- Emergency response functionality enabling simulation of grounding and damage scenarios with user defined damage cases, grounding/beaching forces and residual strength
- Ballast advisory functionality will simulate and suggest safe ballast or de-ballast operations, keeping the vessel within stability and strength limitations
- Crane lifting functionality and crane lifting simulation tools
- Draft survey functionality identifying correctional loads
- Reporting functionality
- Type approved by Det Norske Veritas. Approval on a regular basis by all major Class Societies.

## **TECHNICAL SPECIFICATIONS**

## **OPERATIVE SYSTEM**

Windows XP or newer.

## HARDWARE

Standalone PC or integrated with automation system OS.

## CALCULATIONS

Based on 3D geometry vessel models.

. . . . . . . . . . . . .

#### ONLINE

OPC, MODBUS, network, serial communication, file sharing and more.

Specifications subject to change without any further notice.

www.km.kongsberg.com/seatex

E-mail: km.seatex@kongsberg.com Telephone: +47 73 54 55 00

