



Marine &amp; Offshore

Certificate number: 14482/B0 BV

File number: MMS11/1

Product code: 0001

*This certificate is not valid when presented without the full attached schedule composed of 7 sections*

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## TYPE APPROVAL CERTIFICATE

*This certificate is issued to*

**Kongsberg Maritime AS**

Horten - NORWAY

*for the type of product*

**MAINTENANCE MANAGEMENT SOFTWARE**

FLEET MANAGEMENT SOFTWARE - Vessel Mode

K-FLEET MAINTENANCE SYSTEM FOR MACHINERY module version 4.x

Former name:

CONSULTAS FLEET MANAGEMENT SOFTWARE - Vessel Mode

C-MAINTENANCE module version 4.x

(see limitation in clause 4)

**Requirements:**

Bureau Veritas Rules for the Classification of Steel Ships NR 496 DTM R01 E

Approval of Computerized Maintenance Management System used on board ships

*This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.*

*This certificate is a renewal of certificate N° 14482/A0 BV expiring on 12/11/2017*

**This certificate will expire on: 12 Nov 2022**

**For Bureau Veritas Marine & Offshore,**

At BV OSLO, on 21 Jul 2017,

Rune MARSTEIN

*Rune Marstein*



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site [www.veristar.com](http://www.veristar.com). Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

## THE SCHEDULE OF APPROVAL

### 1. PRODUCT DESCRIPTION (software)

**K-Fleet Maintenance System for Machinery** is the Planned Maintenance System module of **Fleet Management Software** which is a windows based program, including other modules such as Purchase, Spares, Voyage intended for fleet management.

**K-Fleet Maintenance System for Machinery** is the new name of the module C-Maintenance of Consultas Fleet Management Software further to acquisition in 2012 of the Jotron Consultas by Kongsberg Maritime AS.

Database manager:

- MS SQL Server 2005/2008/2012/2014;
- Firebird SQL 1.5/2.0/2.1/2.5.

Production site :

Kongsberg Maritime AS - Consultas  
Bekkajordet 8A  
P.O Box 1009  
N-3194 Horten - NORWAY

### 2. DOCUMENTS AND DRAWINGS

- Operator Manual - Maintenance - Planned Maintenance System - Maintenance User Manual (Published: 23/11/2016);
- Training Manual - K-Fleet - Fleet Management Software (Published: 21/11/2016);
- C-Maintenance – User Manual v.4.0. (Published: 09/06/2012);
- Maintenance Program – User Manual ver.3.2;
- Maintenance Program – User Manual ver.3.

### 3. TEST REPORTS

- Vessel Demo version 2007 - 3.01r, tested as per report VSM/05/00019, Date: 25/05/05 (test1);
- Vessel Demo version 2007 - 3.10p, tested as per reports VSM/07/00004, Date: 23/03/07; and VSM/08/00011, Date: 17/03/08 (test2);
- Vessel Demo version 2007 - 3.21g, tested as per report VSM/09/00048, Date: 21/04/09 (test 3);
- Vessel Demo version 2011 - 4.0.0.1166, tested as per report VSM/12/00027, Date: 27/08/12 (test 4);
- Vessel Demo version 2011 - 4.0.0.1177, tested as per report VSM/12/00033, Date: 15/10/12 (test 5);
- Vessel Demo version 2011 - 4.0.0.1186, tested as per report VSM/12/00035, Date: 24/10/12 (test 6).

### 4. APPLICATION / LIMITATION

The approved Computerized Maintenance Management System is acceptable for use onboard BV classed vessels surveyed under Planned Maintenance System (PMS), or granted with STAR-MACH additional class notation.

This certificate is valid for:

- tested C-Maintenance (Vessel Mode) module version 4.0.0.1186 and later releases of version 4; and
  - K-Fleet Maintenance System for Machinery (Vessel Mode) version 4.05 (build 13238) and later releases of version 4,
- provided that alterations of functionality remain in line with the Rules in force.

Onboard installation and maintenance requirements:

- The system is to be installed and used according to the manufacturer's recommendations;
- The system is to store history of reported jobs, equipment breakdowns and damages for at least 5 years;
- Access rights are to be set in order to avoid unexpected or spiteful editing or deleting job planning, maintenance histories and maintenance logs;
- The data is to be saved at regular intervals, so that it can be readily restored if needed without loss of essential information.

## **5. PRODUCTION SURVEY REQUIREMENTS**

The maintenance management software is to be manufactured, examined and tested by **Kongsberg Maritime AS** in accordance with the type described in this certificate.

## **6. MARKING OF PRODUCT**

Identification is:

- Maker's name or trade mark: Kongsberg Maritime AS;
  - Software name and version: Fleet Management Software - K-Fleet Maintenance System for Machinery (Vessel Mode) version 4.x;
  - Former name and version: Consultas Fleet Management Software - C-Maintenance (Vessel Mode) version 4.x.
- The identification is displayed in the main window. It is to be available in the software manual.

## **7. OTHERS**

7.1 - The approval only concerns the functionality and does not certify that the software is free from anomalies.

**Kongsberg Maritime AS - Norway** should notify **BUREAU VERITAS** of any modification or changes to the software in order to maintain the validity of the Type Approval Certificate or to renew it, as relevant.

This approval is given on the understanding that the Society reserves the right to require check tests to be carried out on the installed softwares at any time and that **Kongsberg Maritime AS- Norway** will accept full responsibility for informing shipbuilders, ship owners or their sub-contractors of the proper methods of use and general maintenance of the software and the conditions of this approval.

7.2 – Kongsberg Maritime AS website is <http://www.km.kongsberg.com/>

\*\*\* END OF CERTIFICATE \*\*\*