



Marine & Offshore

Certificate number: 68411/A0 BV

File number: MMS132986/1

Product code: 0001D

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

TECNOVERITAS - SERVICOS DE ENG E SISTEMAS TECNOL. LDA
MAFRA - PORTUGAL

for the type of product

MAINTENANCE MANAGEMENT SOFTWARE

Blue Overall Energy Monitoring (BOEM) Version 2.01.00
and later releases (see limitations 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 will expire on: 07 Jun 2027

For Bureau Veritas Marine & Offshore,

At BV LISBON, on 07 Jun 2022,

Miguel MORGADO

This certificate was created electronically and is valid without signature



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. 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 electronic version is available at: <https://www.veristarp.com/veristarnb/jsp/viewPublicPdfTypepec.jsp?id=2cq9xf5yv>

BV Mod. Ad.E 530 June 2017

This certificate consists of 2 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION (software):

Blue Overall Energy Monitoring (BOEM) is a cloud-based software possible to be accessed on any device with internet access. The BOEM is a remote monitoring system with several modules: Performance management, Voyage optimisation, Maintenance management, Reports & Documents, Purchasing, Ticket management and Crew management.

Programming language: HTML5, CSS, JavaScript, PHP

Database Manager: MySQL Server

Integrated Development Environment (IDE): Adobe Dreamweaver

Production site: TECNOVERITAS - SERVICOS DE ENG E SISTEMAS TECNOL. LDA - Av.Dr.Francisco Sá Carneiro, NEM, Pav.36-A, 2640-486, MAFRA, Portugal

2. DOCUMENTS AND DRAWINGS :

- BOEM User Manual - Maintenance Management, Ref. BOEM_MM_V.2.2 for BOEM Version 2.01 (dd 22/03/2022)
- Demo versions accessible via web: <https://boem-s.com> (Vessel version)

3. TEST REPORTS :

- BOEM version 2.01.00, tested as per report RRM-2104397-Test4, dd 30/05/2022.

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 BOEM version 2.01.00 and later releases, 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 of job planning, maintenance histories and maintenance logs.
- Data back-up is to be scheduled 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 TecnoVeritas in accordance with the type described in this certificate.

6. MARKING OF PRODUCT :

Identification is:

- Maker's name or trade mark: TecnoVeritas.
 - Software name and version: BOEM Version 2.01.00 (and later releases).
- The identification is displayed on the main screen. It is to be available in the software user manual.

7. OTHERS :

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

TecnoVeritas 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 **TecnoVeritas** 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 - TecnoVeritas web site address for BOEM is: <https://boem-s.tecnoveritas.net/>

*** END OF CERTIFICATE ***