

# TYPE APPROVAL CERTIFICATE

## This is to certify:

**That the Planned Maintenance System for Machinery**

with type designation(s)  
**Marad 5.x**

Issued to

**MaraSoft B.V.**  
**Urk Flevoland, Netherlands**

is found to comply with  
**DNV GL class programme DNVGL-CP-0206 – Type approval – Machinery planned maintenance system (MPMS)**  
**DNV GL rules for classification – Ships**

## Application :

**The Planned Maintenance System is approved for use onboard DNV GL classed vessels with the survey arrangement Machinery PMS**

Issued at **Høvik** on **2017-10-17**

for **DNV GL**

This Certificate is valid until **2022-10-16**.

DNV GL local station: **Hull, Materials & Machinery**

Approval Engineer: **Thomas Knödseder**

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**Marit Laumann**  
**Head of Section**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



## Product description

This system is a computer based tool for systematic planning of maintenance and documentation of maintenance carried out.

## Application/Limitation

The system shall at least cover Class related machinery and field instrument testing for periodically unmanned machinery space (Class notation E0, AUT, AUT-nh), when requested. In order to obtain the Survey Arrangement Machinery PMS for a specific vessel, all relevant requirements of the current set of Rules for Classification (Ships and Offshore Units) are to be met.

## Type Approval documentation

Manual  
Installation Guide  
Version history, roadmap  
Software support  
Class specific documentation

## Tests carried out

A System evaluation has been carried out to verify that the system complies with the requirements as per Type Approval Class Programme DNVGL-CP-0206.

## Marking of product

The identification is stated in the programme display and on the printed reports.

## Periodical assessment

For retention of the Type Approval Certificate (TAC) a retention survey has to be carried out at least every second year, and one of the retention surveys will be at renewal of the TAC, i.e. before expiry date of the TAC.

Retention / renewal of the Type Approval Certificate will be based on an evaluation of the system with regards to changes in software and/ or DNV GL requirements.

During the validity of this Type Approval Certificate all relevant changes and launching of new versions shall be reported to DNV GL.

## Other conditions

Any significant change in the software may render this Certificate invalid.

The validity date relates to the Type Approval Certificate issued to the manufacturer of the system, and not to the approval of the individual Planned Maintenance System installed on each particular vessel. The digitally signed electronic version of the TA certificate represents the original of the certificate, and any paper version is a copy.