DNV·GL

Certificate No:
TAA00000VY

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Wave Monitoring System

with type designation(s)
WaveFinder

Issued to
MIROS AS
ASKER, Norway

is found to comply with
IEC 60945 Ed. 4 (2002-08) Maritime navigation and radiocommunication equipment and systems – General requirements – Methods of testing and required test results

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

This Certificate is valid until **2022-05-10**.

Issued at **Høvik** on **2017-05-11**
DNV GL local station: **Station Oslo Maritime and CAP** for **DNV GL**

Approval Engineer: **Frederik Tore Elter**

Jan Tore Grimsrud
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.

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Product description

Miros WaveFinder is a shipboard wave monitoring system consisting of the following components:

- SM-140 RangeFinder is a microwave radar based sensor operating at 9.6 GHz.
- CA-383 Cable tail
- SM-146 Motion Reference Unit (Kongsberg Seatex MRU 5 or MRU H)
- EA-123 Junction Box
- SM-145 Marine certified computer (Moxa MC-5150-AC or Moxa MC-7200-MP-T) w/Microsoft Windows operating system
- Display; JH19T14MMD, DuraMON19 LED, DuraMON 19 GLASS or DuraMON 24 GLASS
- SW-016 WaveFinder system software

Application/Limitation

- WaveFinder is found to be suitable for alpha factor related wave monitoring according to DNV OS-H101, Section 4, D300 within 1m≤ Hs≤ 4m.
- For marine and offhshore applications.
- Installation to be performed according to the manufactuerers installation and operating manual.

Type Approval documentation

Tests carried out

- IEC 60945 (2002)
- Type testing for compliance with DNV OS-H101
- Performance testing: IEC 62288 (2014)

Marking of product

The Manufacturer and Type Designation to be applied to the equipment in a clearly visible location. In addition the equipment shall be marked with serial number, safe distance to magnetic compass, power consumption and/or supply voltage.

Periodical assessment

A retention survey is to be performed upon renewal of this certificate. The scope of the retention survey is to verfify that the production quality conditions stipulated for the type approval are complied with and that no alterations are made to the product design or its components and/or materials without appraisal by the Society.