

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Mobile Water Monitor

with type designation(s)
NK-WM-40

Issued to

NK Co., Ltd.
Busan 11, Republic of Korea

is found to comply with
DNV GL offshore standards
DNV GL rules for classification – Ships
DNV GL statutory interpretations DNVGL-SI-0364 – SOLAS interpretations

Application :

Approved as a mobile water monitor in accordance to IMO MSC.1/Circ.1472.

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

This Certificate is valid until **2022-01-04**.

Issued at **Høvik** on **2017-01-05**

DNV GL local station: **Busan**

Approval Engineer: **Piotr Orzechowski**

for **DNV GL**

Petter Langnes
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.

Job Id:
Certificate No: **TAF00000FK**

Product description

"NK-WM-40"

Mobile water monitor composed of inlet fitting, monitor waterway, swivel fittings, discharge nozzle and shut-off device. The spray/jet nozzles are of constant flow type, i.e. flow is the same at both spray and jet settings.

Flow rate	63 m ³ /h
k-factor	500 lpm/bar ^{0,5}
Nominal working pressure	4 bar
Maximum working pressure	16 bar
Nominal throw length	40 m
Rotation range	-90° – 90°
Elevation range	0 - 90°
Body material	SUS 316L
Pipe size	50 A
Weight	18 kg

Application/Limitation

Approved as a mobile water monitor in accordance to IMO MSC.1/Circ.1472.

Only the monitor is approved by this certificate. Other systems components are subject to case-by-case approval.

Each monitor to be function and hydraulically pressure tested at 1.5 times max. working pressure.

The Mobile Water Monitor shall be equipped with a coupling allowing connection to the vessel's fire hydrants via a fire hose. The coupling is to be sized for the proper flow and pressure performance of the monitor.

The mobile water monitor is to be located in a weather protected area when not in use.

Each monitor shall be supplied with its manual for installation, operation and maintenance.

Type Approval documentation

Tests carried out

Discharge coefficient/characteristic test, Range test, Corrosion test, Leak test, Mechanical test.

Marking of product

The product is to be marked with name of manufacturer, type designation, working pressure, rated pressure and flow rate.

Periodical assessment

DNV GL's surveyor is to be given permission to perform Periodical Assessments at any time during the validity of this certificate. The arrangement is to be in accordance with procedure described in DNVGL-CP-0338 Section 4.