DNV·GL

Certificate No:
TAF00000CM

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Mobile Water Monitor

with type designation(s)
X - Monitor WM65-A

Issued to
Tanktech Co., Ltd.
Busan, 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 **2017-09-05**.

Issued at **Høvik** on **2016-09-06**

for **DNV GL**

DNV GL local station: **Pusan**

Approval Engineer: **Piotr Orzechowski**

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.

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Job Id: **262.1-022164-1**
Certificate No: **TAF00000CM**

Product description

"X - Monitor WM65-A"
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	61 m^3/h
k-factor	508 $lpm/bar^{0,5}$
Working pressure	4 – 6 bar
Rated pressure	10 bar
Throw length	42 m
Spray angle	65°
Rotation range	0° – 360°
Elevation range	-30° - 90°
Body material	Aluminium alloy
Weight	12.5 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 hydraulicly 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.

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

Type Approval documentation

Certification in accordance with Class Programme DNVGL-CP-0338, October 2015.

Inspection and test plan No. XM-TA-WM-ITP-RO-00 Rev.0 dated 11 April 2016 from manufacturer.

Inspection report No. TKT-TA01 dated 11 April 2016 from manufacturer.

Engineering Specification No. XM-TA-WM-00 Rev. 0 dated 11 April 2016 from manufacturer.

Instruction Manual Ver. 0 from manufacturer.

Tests carried out

Discharge coefficient /characteristic, Range, Leak test.

Marking of product

The product s 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.