

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of Norway.

This is to certify:

That the Oil/water interface detectors

with type designation(s)

Models D-2401-2 (Restricted Type) / N-2401-2 (Closed Type)

Issued to

MMC (Asia) Limited
Kobe, Hyogo Pref, Japan

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2018/773**,

item No. MED/2.2. Marpol 73/78 as amended, Annex I Regulation 32, IMO Res. MEPC.5 (XIII)

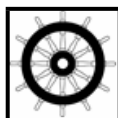
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2024-03-11**.

Issued at **Høvik** on **2019-03-11**

DNV GL local station:
Kobe

Approval Engineer:
Kristian Hammer



Notified Body
No.: **0575**

for **DNV GL AS**

Roald Vårheim
Head of Notified Body



The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.

Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.



Product description

MMC Portable Tank Gauging device is intended for Ullage/ Temperature/ Oil-Water Interface Detection.

Application/Limitation

The detector can be used in gas-dangerous area (Intrinsically Safe Ex (ia) IIB T4) of oil carriers and chemical tankers carrying cargo liquids for which restricted or closed gauging equipment is required.

This equipment can not replace the required permanent level gauging device on oil product and chemical carriers for which closed gauging is required.

Installation of Vapor Control Valves (Tank Gauging Station) Model "A", "ANK-52", "B", "B333-C50", "C-50", "C38", "D-25", "F-50", "F-100", G65K80 and "S" to be fitted on tank top for ullage/oil-water interface/temperature gauging, hand dipping, oxygen measuring, cargo liquid sampling (by portable device) without releasing inert gas.

Type Examination documentation

Tests carried out

Test reports:

- Appendix to Type Approval Certificate No.M-124 from Japanese Administration, Minister of Transport, Report on Performance Testing.
- Oil-Water Interface Detector test by Japanese Government, Intrinsically Safe test and vibration test by Research Institute of Marine Engineering, Tokyo, for ullage, oil-water interface and temperature gauging functions, Report Nos. 85-372(E) & 85-295(E).
- Research Institute of Marine Engineering, Test Report No. 98-318 (E), dated Dec.3, 1998, 'Intrinsically safe Spark and Temperature Test for MMC (Asia) Ltd'.

Marking of product

For traceability to this type approval, each unit is to be marked with:

- Manufacturers name or trade mark
- Type designation
- Serial No.

Mark of Conformity

The manufacturer is allowed to affix the Mark of Conformity according to Article 11 in the Council Directive 96/98/EC on Marine Equipment and shall issue a Declaration of Conformity, only when the module D or E or F of Annex B in the same directive is fully complied with.

Module D: The quality system for production and testing shall be approved by the Notified Body.

Module E: The quality system for inspection and testing shall be approved by the Notified Body.

Module F: Compliance of the products to type as described in this EC Type-Examination Certificate must be verified by the Notified Body who also shall issue a Certificate of Conformity.

This certificate replaces previous EC Type-Examination Certificate No. MED-B-8882.