

Marine & Offshore

Certificate number: 07373/D0 MED File number: ACM 141/1306/005

Item number: MED/2.2

This certificate is not valid when presented without the full attached schedule composed of 7 sections

www.veristar.com

Notified Body 2690 - MARINE EQUIPMENT DIRECTIVE 2014/90/EU

EC TYPE EXAMINATION CERTIFICATE

as per Module B of Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 as transposed in the French Regulations and Commission Implementing Regulation (EU) 2017/306 of 06 Feb. 2017

This certificate is issued to:

MMC INTERNATIONAL CORP.

Inwood - UNITED STATES OF AMERICA

for the type of product

OIL/WATER INTERFACE DETECTORS

Portable FLEXI-DIP Tank Gauging Tape

Requirements:

- MARPOL 73/78 as amended, Annex I, Regulation 32
- IMO Res. MEPC.5(XIII)

This certificate is issued on behalf of the French Maritime Authorities to attest that Bureau Veritas Marine & Offshore did undertake the relevant type-examination procedures for the product identified above which was found to comply with the relevant requirements of the Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 as transposed in the French Regulations.

This certificate will expire on: 12 Jan 2023

For Bureau Veritas Marine & Offshore Notified Body 2690,

At BV PORT EVERGLADES CENTRE, on 12 Jan 2018, Flavio Rosas





This certificate does not allow to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark) to the products corresponding to this type. To this end, the production-control phase module (D, E or F) of Annex II of the Directive is to be complied with and controlled by a written inspection agreement with a notified body.

This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. Bureau Veritas Marine & Offshore is designated by the French Maritime Authority as a "notified body" under the terms of the French Regulations Division 140 Chapter 140-2. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide

Certificate number: 07373/D0 MED

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION

Portable FLEXI-DIP Tank Gauging Tape

1.1 Sensor type

| Sensor Type | Model Number | Monitoring Function |
|---------------------|--------------|--|
| Trimode | D-2401-2 | Ullage, Temperature, Oil/Water Interface |
| Oil/Water Interface | D-2401-2UI | Ullage, Oil/Water Interface |

1.2 Vapor control valves

| Valve Type | Model Number | Monitoring Function |
|------------|-----------------|-----------------------|
| "A" | D-2291-1A | 4" A.N.S.I., 150# |
| "B" | B-2318-23 (XXX) | 2" A.N.S.I., 150# |
| "MB" | B-2318-24 (XXX) | 2" A.N.S.I., 150# |
| "MMB" | B-2318-18 (XXX) | 1-1/2" A.N.S.I., 150# |
| "S" | D-2314-1S | 4" A.N.S.I., 150# |

Note: (XXX) denotes material variation in valve trim (seals, valve cap)

1.3 Material specification as per manufacturer's part list

2. DOCUMENTS AND DRAWINGS

2.1 Intrinsically safe gauging devices

| Model N° | Drawing N° | Description | IBC Gauging class (1) | Issued on | I.S. Class |
|------------|---------------------|--------------------------------------|-----------------------|-----------|------------|
| D-2401-2 | DB-2562-1FRL Rev. C | Ullage, Temperature, Interface (UTI) | Restricted or open | 11/06 | IIB T3 |
| D-2401-2 | S-2562-1TR | Gas-tight version of UTI | Closed | 10/91 | IIB T3 |
| D-2401-2UI | DB-2562-1FRI Rev. A | Ullage, Interface (UI) | Restricted or open | 10/87 | IIB T3 |
| D-2401-2UI | S-2562-1UI | Gas-tight version of UI | Closed | 10/91 | IIB T3 |

2.2 Vapor control valves

| Drawing N° | Description | IBC Gauging class (1) | Issued on | I.S. class |
|--------------------|---|-----------------------|-----------|------------|
| B2318-18SBC | 1.5" (38mm) 150# Flanged MMC Type "MMB" Vapor valve with bronze end cap | Restricted or closed | 03/96 | (2) (3) |
| B2318-23SBC Rev. A | 2" (50mm) 150# Flanged MMC Type "B" Vapor valve with bronze end cap | Restricted or closed | 06/06 | (2) (3) |
| B2318-24SBC Rev. D | 2" (50mm) 150# Flanged MMC Type "MB" Vapor valve with bronze end cap | Restricted or closed | 06/06 | (2) (3) |

Notes: (1) IBC gauging class definition for chemical carriers. I.S. class ullage to be confirmed; (2) Valve ballport is electrostatically grounded; (3) Ship's hull ground to vapor valve to be confirmed upon all valve installations

2.3 Typical installation drawings. Gauging device with vapor control valves

| Drawing N° | Manufacturer's Installation Guidance | |
|-----------------|--|-------|
| S-2300-1 Rev. C | Typical installation criteria for hand gauging tapes and vapor control valve type "S", "B", "MB" and "MMB" | |
| S-2300-2 | Typical installation criteria for hand gauging tapes and vapor control valve type "A" and "U" | 08/90 |
| S-2300-3 | Typical installation criteria for hand gauging tapes and vapor control valve type "MB" | 06/95 |
| S-2300-4 | Typical installation criteria for hand gauging tapes and vapor control valve type "B" | 10/97 |
| S-2314-1SVS | Type "S" vapor control control valve for use with hand gauging tapes | 07/96 |

2.4 Operating and maintenance instructions N° A-2401-60 Rev.A dated January 2017

No departure from the above documents shall be made without the prior consent of the notified body named on this certificate. The manufacturer must inform the notified body of any modification or changes to these documents and drawings.

Certificate number: 07373/D0 MED

3. TEST REPORTS

- 3.1 EECS/BASEEFA Licence for the Intrinsically Safe production of Gauging Equipment, issued on 21 October 1996.
- 3.2 Test report N° 3984 dated 06/05/1997 on equipment Type D-2401-2 (plastic sensor) in accordance with the requirements of the IMO Resolution MEPC. 5(XIII).

4. APPLICATION / LIMITATION

- 4.1 To be used as a portable interface detector capable of providing a rapid and accurate determination of the oil/water interface in slop tanks and other cargo tanks on board oil tankers and chemical tankers.
- 4.2 The use of the gauging system is limited to products requiring not more than temperature Class T3, group IIB.
- 4.3 Materials are to be suitable for use with intended cargoes.
- 4.4 The interface detector is to be set up and used according to the manufacturer's operating instructions.

5. PRODUCTION SURVEY REQUIREMENTS

- 5.1 This certificate does not allow the applicant to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark) to the products corresponding to this type. To this end, the production-control phase module D "Production Quality Assurance" or E "Product Quality Assurance" or F "Product Verification" of Annex II of the Directive is to be complied with and controlled by a written inspection agreement with a notified body.
- 5.2 The manufacturer shall institute quality control procedure in order to ensure that the gauging system is produced to the same standard as the prototype approved one, and to keep records of any production tests carried out in accordance with Requirements stated on the front page of this certificate.
- 5.3 The manufacturer has declared to the notified body that the product detailed in this certificate is manufactured at the production site stated on the front page of this certificate.
- 5.4 Each gauging system is to be supplied with its manual for installation, use and maintenance.

For information concerning the production phase modules, **MMC INTERNATIONAL CORP.:** has declared the following manufacturing site:

MMC INTERNATIONAL CORP.: 60 INIP DRIVE, 11096 Inwood, UNITED STATES OF AMERICA

6. MARKING OF PRODUCT

Each gauging system shall be marked with:

- Manufacturer's name or logo
- Type designation
- Serial number

Reference is made to MED 2014/90/EU chapter 2.

In particular Article 10.3 specifies that the wheelmark shall be followed by the identification number of the Notified Body involved in the production control phase (module D, E or F) and by the year in which the mark is affixed (4 digits or last 2 digits).

7. OTHERS

It is **MMC INTERNATIONAL CORP.**'s responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

This certificate supersedes the EC Type-Examination Certificate N° 07373/C1 EC issued by the Society.

*** END OF CERTIFICATE ***