



CERTIFICATE NUMBER
EFFECTIVE DATE
EXPIRY DATE
ABS TECHNICAL OFFICE

20-1966754-PDA
31-Mar-2020
30-Mar-2025
Rio de Janeiro Engineering -
Machinery

CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

MMC INTERNATIONAL CORP.

located at

60 INIP DRIVE, INWOOD, NY, United States, 100960664

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product Oil / Water Interface Detector

Model Type 2401

This Product Design Assessment (PDA) Certificate remains valid until 30/Mar/2025 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau Of Shipping

Roberto B Assumpcao, Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

MMC INTERNATIONAL CORP.

60 INIP DRIVE

INWOOD NY

United States 100960664

Telephone: 516-239-7339 / 718-327-3430

Fax: 516-371-3134

Email: Info@mmcintl.com

Web: www.mmcintl.com

Tier: 2 - PDA Issued

Product: Oil / Water Interface Detector

Model: Type 2401

Intended Service:

Marine Applications - Designed to provide measuring ullage, temperature and interface indications for various oil and water in Tanks.

Description:

Intrinsically safe, portable tank gauging equipment type 2401 comprises a probe head fitted to the end of a graduated flexible tape wound on a drum. The tape incorporates two conductors in addition to the graduated tape. Electronic circuits on printed circuit boards are fitted both in the probe and in the center of the drum, and a liquid crystal display and push buttons are mounted on the drum.

Rating:

EEx ia IIC T4

Ambient temperature range: -20°C to +40°C

Service Restriction:

1. Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

2. Suitability of materials and temperature limits is to be confirmed to the user in each case.

-The apparatus must be connected to the tank earth before and during introduction into the tank. This connection must not be removed until after the apparatus has been completely withdrawn from the tank at the end of the measuring operation.

-The user will have specific operation procedures laid down to ensure safety when introducing the device into tank.

-The equipment shall be identified by the manufacturer's name, serial number, type, locations, year, area classification and group.

Comments:

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

The manufacturer MMC international is fully responsible for informing shipbuilders and their subcontractors of the proper methods of fitting and maintenance of this product.

ATEX certified equipment is not to be installed in hazardous areas on U.S vessels unless it can be prove to have been tested to the applicable IEC 60079 series standards by an independent laboratory accepted by the U.S coast Guard. USCG notice 01-12 (February 7, 2012).

Notes/Drawing/Documentation:

Drawing No. PDA App, PDA Application

Drawing No. DOC498, Declaration of Conformance

Sira Assessment Report No. R23626A/00, August 2011

EC Type-Examination Certificate No. BAS 02ATEX1274X, Issue: 1

Terms of Validity:

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STANDARDS

ABS Rules:

Rules for Conditions of Classification, Part 1, 2020: 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:
Rules for Building and Classing Marine Vessels, 2020: 4-8-3/1.11, 4-8-3/Table 2, 4-8-3/13.3.1, 4-8-4/27.7.1

Rules for Conditions of Classification, Part 1, 2020 - Offshore Units and Structures: 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

Rules for Building and Classing Mobile Offshore Units, 2020: 4-3-3/3.1.1, 4-3-3/Table 1, 4-3-3/9.1, 4-3-3/9.3.1, 4-3-3/9.3.2

National:

NA

International:

NA

Government:

NA

EUMED:

NA

OTHERS:

NA