



CERTIFICATE NUMBER

14-HS1222027-PDA

DATE

11 August 2014

ABS TECHNICAL OFFICE

Houston SED - Ship Systems

CERTIFICATE OF DESIGN ASSESSMENT

This is to Certify that a representative of this Bureau did, at the request of
MMC International Corp. - Inwood

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 14-HS1222027-PDA, dated 11/Aug/2014 remains valid until 10/Aug/2019 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

AMERICAN BUREAU OF SHIPPING


Mohamed C Boukamcha

Engineer

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 the terms and conditions as contained in 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
New York 11096-0664
United States
Telephone: 516-239-7339 / 718-327-3430
Fax: 516-371-3134
Email: mncinwd@aol.com
Web: www.mmc.intl.com

Tier: 2

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.

Ratings:

EEx ia IIB T3

Service Restrictions:

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.

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 / Drawings / Documentation:

Supporting Documentation:

BAS 02ATEX1274X Sira Cert Service;

Bureau Veritas Report 2007;

EC Type Examination Cert 07373 A1 EC;

Term of Validity:

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