



CERTIFICATE NUMBER
15-LD1427712-PDA

DATE
21 Oct 2015

ABS TECHNICAL OFFICE
London Engineering Department

CERTIFICATE OF DESIGN ASSESSMENT

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

AUTRONICA FIRE AND SECURITY AS

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: **Vapour Alarm System**

Model: **OVS 2.1 OP A/B**

This Product Design Assessment (PDA) Certificate 15-LD1427712-PDA, dated 21/Oct/2015 remains valid until 20/Oct/2020 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

Roberto Alvarez
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).

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Tier: 3 - Type Approved, unit certification not required

Product: Vapour Alarm System

Model: OVS 2.1 OP A/B

Intended Service:

ABS Classed Vessels and Offshore Facilities in accordance with the listed Rules and International Standards.

Description:

The OVS 2.1 OP vapour alarm system is intended for use in oxygen content and pressure level measurements applications for waste vapour lines. It is based on gas sampling principles consists of two cabinets; the detector cabinet in polyester is mounted on deck nearby the vapour manifolds and an electronic cabinet with operating panel mounted typically in the cargo control room (CCR). Sample tubes run from the vapour manifolds to the detector cabinet, which contains the main gas detection units. Signals from the sensors in the detector cabinet are connected to the electronic cabinet by electrical wires to the safety barriers.

Rating:

Power supplies: 100 to 240 V AC, 50 Hz
Detector cabinet enclosure protection: IP 66 and EEx e II PTB Ex 92.C.3132U
Pressure sensor: EEx ia IIC T6 TUV 02 ATEX 1817
Oxygen sensor: EEx ia IIC T4 BASEFA Ex 90C235 or 04ATEX0115
Flow failure initiator: EEx ia IIC T6 PTB 99 ATEX 2128X
Safe barrier category: EEx ia] IIC DMT 01 ATEX E 042X
Pressure range: 0 to 200 mBar
Oxygen content range: 0 to 25%
Sensor signal output range: 4 to 20 mA

Service Restriction:

Unit Certification is not required for this product. If the manufacturer or purchaser's request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined. The vapour alarm system may be connected to external alarm lights and horns provided they meet the certified safe requirements Eex d IIC T5/6 (BAS00ATEX2031) for alarm light with IP 66 and Eex d IIC T4 (BAS00ATEX2097X) for horn with IP 67 respectively.

ATEX certified equipment is not to be installed in hazardous areas on U.S. Flagged Vessels, unless it can be proven to have been tested to the IEC 60079 series standards by an independent laboratory accepted by the U.S. Coast Guard. USCG MI Notice 01-12 (February 7, 2012) refers.

Comments:

Tests and approval are for hardware only. Each vessel configuration and external connection is to be specifically approved.
The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

Notes/Drawing/Documentation:

Drawing No. BDS_GmbH_DX14A_IBExU07ATEX1180X_E_4s, Atex Certification, Revision: -, Pages: --
Drawing No. OVS-2.1-OP, Vapour alarm system Type OVS 2.1 OP

Terms of Validity:

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or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

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STANDARDS

ABS Rules:

Steel Vessel Rules (2015) 1-1-4/7.7, 1-1-A3&A4, 5C-1-7/31.1, 4-9-8/3, 4-9-8/7, 4-9-8/13, 4-9-8/Table1 and Table 2
Steel Vessels Under 90 Meters (295 Feet) in Length (2015): 1-1-4/7.7, 1-1-A3&A4, 4-1-1/3.3, 4-7-1/5.39, 4-7-2/15.1, 4-7-2/15.3, 4-7-2/17.3
Facilities on Offshore Installations: (2015): 1-1-4/9.7, 1-1-A2&A3,
Offshore Support Vessels (2015): 1-1-4/7.7, 1-1-A3&A4, 4-9-8/3, 4-9-8/7, 4-9-8/13, 4-9-8/Table1 and Table 2
Mobile Offshore Drilling Units Rules (2015): 1-1-4/9.7, 1-1-A2&A3, 6-1-1/9, 6-1-1/13
Steel Vessels for Service on Rivers and Intracoastal Waterways (2015): 1-1-4/7.7, 1-1-A3&A4
Bulk Carriers for Service on the Great Lakes (1978, Up-dated April 2008): 1-1-4/7.7, 1-1-A3&A4
High-Speed Craft (2015): 1-1-4/11.9, 1-1-A2&A3
Steel Barge Rules (2015): 1-1-4/7.7, 1-1-A3&A4

National:

NA

International:

EN 60079-0:2006, EN 60079-11:2007 and EN 6007926:2004

Government:

NA

EUMED:

NA

OTHERS:

NA