



CERTIFICATE NUMBER
11-LD836581-PDA

DATE
21 December 2011

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
ZENITEL MARINE - HORTEN

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: **Integrated Communication**

MODEL: **Vingtor ACM Communication System**

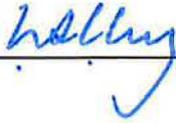
This Product Design Assessment (PDA) Certificate 11-LD836581-PDA, dated 21/Dec/2011 remains valid until 20/Dec/2016 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

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



Wing F. Cheung
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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Product: Integrated Communication

Model: Vingtor ACM Communication System

Intended Service:

Integrated two way communication and public address system with general alarm and command talkback.

Description:

An integrated communication solution based upon central rack and field station architecture incorporating traditional analogue and IP based communication protocols. Refer to supplementary information for full equipment details. The system can be used as public address and general alarm system in combination with Vingtor SPA-V2 system, Product Design Assessment Certificate 11-LD836581A-PDA.

Ratings:

90-230V AC Main Power with 90-230V AC UPS input and option for 24V DC emergency supply

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.

Where equipment is to be installed in a Hazardous Area it is to be certified accordingly.

Comments:

Each vessel installation is to be specifically approved in accordance with the applicable rules. Where a single system serves for both public address and general alarm emergency functions together with Vingtor SPA-V2, two independent loops are to be provided. The ACM intercom units can provide PA/GA coverage for one of the loops and the SPA-V2 will provide PA/GA coverage for the second loop fulfilling the requirements of 4-8-2/11.5.4.v of the Steel Vessel Rules 2012. The system may be used on passenger vessels provided provided that the Vingtor SPA-V2 system is duplicated as required by 5/13.15.ii. of the Passenger Vessel Guide 2001 up to 2010.

Notes / Drawings / Documentation:

Zenitel Technical Report ACM System - IEC 60945 Compliance; Nemko Test Reports 106916/04, E06067.00; DNV Technical Report No. 2010-3593

Term of Validity:

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STANDARDS

ABS Rules:

2012 Steel Vessel Rules 1-1-4/7.7, 4-8-2/11.5.3, 4-8-2/11.5.4, 4-8-2/11.7.1; 2008 MODU Rules 4-3-2/15.5, 4-3-2/15.9, 4-3-2/17.1; 2001 Passenger Vessel Guide 5/13.13, 5/13.15

National:

NA

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International:

2010 LSA Code VII 7.2.1, 7.2.2

IEC 60945 Ed 4.0:2002

Government Authority:

NA

EUMED:

NA

Others:

NA

