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CERTIFICATE NUMBER

08-HG393980-PDA

DATE

11 November 2008

ABS TECHNICAL OFFICE

Certificate of Design Assessment

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

Schaller Automation GmbH & Co. KG

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. It will remain valid as noted below or until the Rules or specifications used in the assessment are revised (whichever occurs first).

PRODUCT:

Oil Mist Detector

MODEL:

VISATRON VN 115/87plus, VN 116/87plus, VN 215/87plus

ABS RULE:

2008 Steel Vessel Rules 1-1-4/7.7, 4-2-1/7.2/App.6, 4-6-5/13.1, 4-8-3/1.7/1.11/1.17, 4-9-7/13, 4-9-4/Tables

3A, B, 5-8-16/11.1

OTHER STANDARD:

IACS UR E10 and M67;

AMERICAN BUREAU OF SHIPPING

Hartmut Grommel

Engineering Type Approval Co-ordinator

AB258(07/03)

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of American Bureau of Shipping or a statutory, Industrial or manufacturer's standard and is issued solely for the use of the Bureau, its committees, its clients or other authorized entities, Any significant changes to the aforementioned product without ABS approval will result in this certificate becoming null and vold. This certificate is governed by the terms and conditions on the reverse side hereof.

A4 1000

Certificate number: 06162/D0 BV

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

"OIL MIST DETECTOR

Type: "VN 115/87-EMC".

2, DOCUMENTS AND DRAWINGS:

- 2.1 According to IEC 801-2/3. For medium and high speed engines.
- 2.2 According to documents filed in AP 0310.
- 2.3 Agreed where crankcase length does not exceed 4 meters.

3. TEST REPORTS:

- 3.1 Test reports N°s: 022a/94 and 7.5.1-022b/94 issued by CETECOM GmbH on 26 April 1994 and those filed in AP 310 under Society's supervision.
- 3.2 Schaller test report dated 12/08/99.
- 3.3 CETECOM Test report Nº 4-1122-01-01/03 dated 24/09/03.

4. APPLICATION / LIMITATION:

- 4.1 BV Rules for the Classification of Steel Ships.
- 4.2 Approval also valid for ships to be granted with the notations: AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.
- 4.3 The equipment, once installed on board ship, is to be tested in accordance with the above referred Regulations under the supervision of a Society's Surveyor.

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 Arrangements shall be made for a Society's Surveyor to carry out, on a periodic basis, visits of the manufacturer's premises and product audits.
- 5.2 Each equipment is to be supplied with manual(s) for installation, use and maintenance.

6. MARKING OF PRODUCT:

- Trade name.
- Date of manufacture and serial number.
- Equipment type number or model identification under which it was type-tested.

7. OTHERS:

- 7.1 This approval is given on the understanding that the Society reserves the right to require check tests to be carried out on the units at any time and that SCHALLER AUTOMATION, will accept full responsibility for informing shipbuilders, shipowners or their sub-contractors of the proper methods of use and general maintenance of the units and the conditions of this approval.
- 7.2 This certificate supersedes the Type Approval Certificate No 06162/C0 BV issued on 27/01/2005 by the Society.

*** END OF CERTIFICATE ***

Certificate number: 06163/D0 BV

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

OIL MIST DETECTOR

Type: "VN 116/87-EMC"

2. DOCUMENTS AND DRAWINGS:

- 2.1 According to IEC 801-2/3. For medium speed engines.
- 2.2 According to documents filed in AP 0310.
- 2.3 Agreed where crankcase length does not exceed 6 meters.

3. TEST REPORTS:

- 3.1 According to test reports filed in AP 0310 under Society's supervision.
- 3.2 Schaller test report dated 12/08/99.
- 3.3 CETECOM Test report N° 4-1122-01-01/03 dated 24/09/03.

4. APPLICATION / LIMITATION:

Application / Limitation of use:

- BV Rules for the Classification of Steel Ships.
- Approval also valid for ships to be granted with the notations: AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.

On board installation & Maintenance requirements:

The equipment, once installed on board ship, is to be tested in accordance with the above referred Regulations under the supervision of a Society's Surveyor.

5. PRODUCTION SURVEY REQUIREMENTS:

- 5.1 Arrangements shall be made for a Society's Surveyor to carry out, on a periodic basis, visits of the manufacturer's premises and product audits.
- 5.2 Each equipment is to be supplied with manual(s) for installation, use and maintenance.

6. MARKING OF PRODUCT:

- Trade name.
- Date of manufacture and serial number.
- Equipment type or model identification under which it was type-tested.

7. OTHERS:

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*** END OF CERTIFICATE ***