

MARINE DIVISION

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Certificate number: 13404/B0 BV

File number: ACI 1000/327/004

Product code: 52901

This certificate is not valid when presented without the full attached schedule composed of 7 sections

TYPE APPROVAL CERTIFICATE

This certificate is issued to

HALTON Oy

Lahti - FINLAND

for the type of product

VENTILATING UNITS

Single or double air flow pattern, manual or automatic, ventilating units types "HMR", "HMF", "HMM", "HME", "HMC/TCL"

Regulations and standards:

BV Rules, Part C, Chapter 4 - SOLAS 74 Convention, as amended, SOLAS 2000 Regulation II-2/9 - IMO Resolution A.754(18) - IMO Resolution MSC.61(67) [FTP Code] Annex 1, Part 3 - IMO MSC/Circ. 1120.

This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements of the Regulations and standards mentioned above.

This certificate is valid until: 30 Sep 2014

At Neuilly, on: 18 Mar 2009

For BUREAU VERITAS,
By order of the Secretary

L.COUREGELONGUE

Approval office



Local office: BV HELSINKI
Surveyor: T. Andersson



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine Division. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

6. MARKING OF PRODUCT :

The product or packing is to be marked with manufacturer name, type, designation and fire-technical rating.

7. OTHERS :

7.1 - This approval is given with the understanding that **Halton Oy, Lahti - Finland** will accept full responsibility for informing shipbuilders, shipowners and/or their sub-contractors of the proper methods of fitting and general maintenance of the approved equipment and the conditions of this approval.

7.2 - This certificate is based on EC Type Examination certificate N° 10809/B2 EC issued on 2008/11/25 by the Society.

7.3 - This Certificate supersedes the Type Approval Certificate N° 13404/A1 BV issued on 2004/10/22 by the Society.

*** END OF CERTIFICATE ***

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

Cabin ventilation units

"HMR": automatic double flow
 "HMF": automatic single flow
 "HMM": manual single flow
 "HME": terminal unit
 "HMC": manual single flow unit to be used associated to TCL diffuser

Approved for use as part of B0 / B15 continuous (or not) class ceiling, depending on the type, when mounted as per the Manufacturer's specifications.

2. DOCUMENTS AND DRAWINGS :

As per the Manufacturer's drawings:

- * HMR: n° LH-9400 rev. A dated 14.08.02
- * HMF: n° LH-9100 rev. A dated 26.07.02
- * HMM: n° LH-9201 rev. A dated 26.07.02
- * HME: n° LH-9200 rev. A dated 26.07.02
- * HMC/TCL: n° KHa07633 dated 14.11.07 and KHa07613 dated 13.11.07

3. TEST REPORTS :

3.1 - Test reports n° RTE2028/00 dated 16.08.2000 and NO VTT-S-10426-07 dated 8 January 2008 from VTT Laboratories, Finland, and n° 121/00/A/NP/R 102 dated 08.04.2000 from GERBAM Laboratories, France, all as per IMO Resolution A.754(18).

3.2 - Non -combustible insulating mineral wool to be type approved.

4. APPLICATION / LIMITATION :

4.1 - Approval valid for ships having to comply with SOLAS 74 Convention, as amended, and for units having to comply with IMO Resolution A649 (The "MODU Code").

4.2 - Ceiling to be type approved.

4.3 - - Flame spread, smoke characteristics and calorific value of the lining to be as per applicable regulations.

4.4 - The fitting aboard to be the same as used for the test.

5. PRODUCTION SURVEY REQUIREMENTS :

5.1 - The above products are to be manufactured, examined and tested by **HALTON Oy** in accordance with the type described in this certificate and Bureau Veritas Rules for the Classification of Steel Ships.

5.2 - Arrangements shall be made for a Society's Surveyor to attend the relevant tests and examinations at manufacturer's works or to perform the relevant audits when an alternative survey scheme (BV Mode I) has been agreed. Relevant Bureau Veritas certificate will be issued after satisfactory completion of the procedure.

5.3 - **HALTON Oy** has declared to Bureau Veritas that the types of products described in this certificate are manufactured at the following production sites:

Halton Manufacturing SDN. BHD
Halton Manufacturing 22, Jalan Hishamuddin 1
Selat Klang Utara
P.O. Box 276
42000 port Klang Selangor

Halton Ventilation Co. Ltd
4C, 127 Fu Te Bei Road
Waigaiqiao Free Trade Zone
Shanghai
People's Republic of China