

MARINE DIVISION

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Certificate number: 19766/A0 BV

File number : ACM 180/2503/01

Product code : 7152H

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

TYPE APPROVAL CERTIFICATE

as per Bureau Veritas Classification Rules

This certificate is issued to

VICTOR MARINE LTD.
SOUTH OCKENDON - UNITED KINGDOM

for the type of product

ANTISPARKING AXIAL FANS

Portable Gas Freeing Fans - VP 800W-Mk5/VP 1350W-Mk5 Water Driven and VP 850A-Mk5 Air Driven

Regulations and standards :

- BUREAU VERITAS Rules for the Classification of Steel Ships
- BUREAU VERITAS Rules for the Classification of Offshore Units
- NR 216 Materials Rules
- IBC Code

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 : 12 Feb 2013

At Paris la Défense, on : 12 Feb 2008

For BUREAU VERITAS,
By order of the Secretary

Approval office

Local office : BV LONDON
Surveyor : S. Yule

L. COURREGELONGUE



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.

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION

Axial flow portable gas freeing fans: VP 1350W-Mk5/ VP 800W-Mk5 Water Driven and VP 850A-Mk5 Air Driven

1.1 Technical specification

Type	VP 1350W-Mk5	VP 800W-Mk5	VP 850A-Mk5
Operating pressure (bar)	10.5	10.5	7.5
Air flow (m ³ /hr)	14,350	8,750	8,500
Drive media flow (m ³ /hr)	68	19,3	220
Min. supply hose (inch)	2"	1-1/2"	3/4"
Standard deck flange (mm)	ID Ø 318	ID Ø 318	ID Ø 318
Gross weight (kg)	35	35	35

1.2 Material specification

Casing	Aluminium alloy
Impeller	Aluminium alloy

2. DOCUMENTS AND DRAWINGS

2.1 Documentation

Type	VP 1350W-Mk5	VP 800W-Mk5	VP 850A-Mk5
General arrangement	VP 1350-001 A	VP 800-001 A	VP 850-001 A
Gas freeing fan portable models	VP 1350-002 A	VP 800-002 A	VP 850-002 A
Typical installation	VP 1350-003 A	VP 800-003 A	VP 850-003 A
Water/air motor assembly	VP 1350-162 B (water)	VP 800-162 A (water)	VP 850-172 A (air)

2.2 Operating and maintenance manuals

- Gas freeing fan Type 1350W~Mk 5 Issue B March 2007
- Gas freeing fan Type 800W~Mk 5 Issue B March 2007
- Gas freeing fan Type 850A~Mk 5 Issue B March 2007

3. TEST REPORTS

Not required.

4. APPLICATION / LIMITATION

4.1 Axial flow portable gas freeing fans are approved for use as non-sparking fans for purging of explosive gas/air mixture from cargo tanks, cofferdams and other hazardous areas of oil/chemical tankers. Fans are capable of operation in supply or exhaust mode.

4.2 Fans are to be suitably earthed to the hull in order to prevent electrostatic charges during operation.

4.3 The installation on board is to be carried out in compliance with manufacturer's instructions and in accordance with the provisions of Bureau Veritas Rules and Regulations stated on the front page of this certificate.

5. PRODUCTION SURVEY REQUIREMENTS

5.1 The products are to be manufactured, examined and tested by the manufacturer in accordance with the approved type described in this certificate and Bureau Veritas Rules and Regulations stated on the front page of this certificate.

5.2 Production sites are to be recognized by Bureau Veritas as per NR 320 for HBV products. To this end, the manufacturer has to make the necessary arrangements for a Society's Surveyor to perform visits and product audits at the production sites.

5.3 The manufacturer has declared to Bureau Veritas that the products detailed in this certificate are manufactured at the production site stated on the front page of this certificate.

5.4 No Bureau Veritas certificate is required for the approved product.

6. MARKING OF PRODUCT

The product is to be at least marked with:

- Manufacturer's name or logo
- Type designation and size
- Capacity

7. OTHERS

This approval is given on the understanding that the manufacturer will accept full responsibility for informing shipbuilders or their sub-contractors of the proper methods of fitting and general maintenance of the approved product and of the conditions of this approval.

*** END OF CERTIFICATE ***