

**MARINE DIVISION**

17 bis Place des Reflets - La Défense 2  
92400 Courbevoie - France

Tel. 33 1 42 91 52 91  
Fax. 33 1 42 91 28 94  
www.veristar.com



Certificate number: 10592/B0 BV

File number : ACI 3000/022/001

Product code : 5808H

*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*

### OCENCO INCORPORATED

Pleasant Prairie WI - UNITED STATES OF AMERICA

*for the type of product*

### EMERGENCY ESCAPE BREATHING DEVICES (EEBD)

type OCENCO M-20.2

**Regulations and standards :**

SOLAS 1974 as amended, Chapter II-2 (Resolution MSC.99(73)) - Fire Safety Systems Code - IMO Circular MSC / Circ.849 -  
BV Rules for the Classification of Steel Ships 2000, Part C  
Testing standards EN400:1993

*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 : 13 Sep 2011**

At Paris la Défense, on : 13 Sep 2006

**For BUREAU VERITAS,**  
By order of the Secretary

Approval office

Local office : BV PORT EVERGLADES  
CENTRE

Surveyor : F. Rosas

  
J. BENOIT



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 :

The OCENCO M-20.2 (10 Minute Version) is a belt worn or stored, compressed-oxygen, emergency escape breathing device (EEBD) to provide personnel breathing protection for at least 10 minutes against a hazardous atmosphere while escaping from any area of toxic gas or oxygen deficiency to an area of safety.

### 2. DOCUMENTS AND DRAWINGS :

#### 2.1 - Design Drawings

M-20.2 MAIN ASSEMBLY - CE	N22003 Rev. G
M-20 CYLINDER	C15519 Rev. H

#### 2.2 - Manual(s) for installation, use and maintenance

INSTRUCTION MANUAL	NH22050 Rev.E, 21-Oct-97
INSTUCTION BOOKLET P/N 340019	C15991 Rev. C, ECN 2387

### 3. TEST REPORTS :

Type tested in accordance with the provisions of EN400 : 1993 as per :

- Ocenco Incorporated test reports of exhibit 3
- Advanced Packaging Technologies, Inc. Report 9509.1
- Advanced Packaging Technologies, Inc. Report 9509.2
- Ocenco Incorporated test report E155000.doc

### 4. APPLICATION / LIMITATION :

Compressed oxygen cylinder has been tested as per report dated 08/09/2000 of Authorized Testing, Inc.

#### Other materials and/or components :

- mouthpiece assembly
- oxygen assembly
- scrubber assembly
- breathing bag assembly
- hood
- storage case

**Application / Limitation of use :**

4.1 -Emergency escape use only : Not to be used for fire fighting or when entering oxygen deficient tanks or voids, or worn by fire-fighters.

4.2 -Service life : the equipment may remain in service for fifteen years from the date of manufacture, provided the conditions of use are observed. It must be either stored or belt worn, according to the conditions of use, throughout its service life. It may be deployed in the belt worn configuration for 5 continuous years during its 15 year service life.

4.3 -Approval valid for ships having to comply with SOLAS 74 Convention, as amended, and for units having to comply with IMO Resolution A.649 ("MODU Code").

**On board installation & Maintenance requirements :**

4.4 -The equipment is to be stored on board according to manufacturer's instructions and if worn, it must be belt worn on the person.

4.5 -Manufacturer's instruction (see 2.2 above) should accompany every apparatus on delivery and should be kept on board.

**5. PRODUCTION SURVEY REQUIREMENTS :**

5.1 -According to Bureau Veritas Rules.

5.2 - Each equipment or batch of equipment is to be supplied with its manual(s) for maintenance (refer to paragraph 2.2 above) in the language required by the ship's Flag Administration.

**6. MARKING OF PRODUCT :**

Each apparatus is to be marked in accordance with provisions of paragraph 8 of EN 400 :

6.1 - on the apparatus :

- manufacturer's name
- equipment type
- rated duration
- brief instructions or diagrams clearly illustrating the application
- serial number
- manufacture year
- shelf life
- name of approving authority
- Ⓟ or Ⓡ, as relevant.

6.2 - on the cylinder :

- the charging pressure (bar)
- the capacity (normal liters)
- the stamp of the authorized third inspection body

All training units shall be clearly marked.

**7. OTHERS :**

7.1 -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 equipment and the conditions of this approval.

7.2 - This certificate is based on the "OCENCO M-20.2 EEBD NIOSH Approval", letter reference TN-05546.1, approval TC-13F-269 issued on 12.11.1991, letter reference TN-09017, approval TC-13F-386 issued on 26.11.1996, and on the EC TYPE EXAMINATION CERTIFICATE NO: 743 issued on 19.07.1999 by INSPEC Certification Limited (NB 0194) for the purpose of compliance with Council Directive CEE/89/686.

7.3 -This certificate supersedes Certificate of Type Approval N° 10592/A0 BV issued on 10/05/2001 by Bureau Veritas.

**\*\*\* END OF CERTIFICATE \*\*\***