



**Certificate number:** 22309/A3 EC  
**File number:** LSA4099/09 - LSA87048/03  
**Annex A1 Item number:** A.1/1.43

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

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**Notified Body 0062 - MARINE EQUIPMENT DIRECTIVE 96/98/EC**

## EC TYPE EXAMINATION CERTIFICATE

*as per Module B of European Union Council Directive 96/98/EC on marine equipment  
as amended by Commission Directive 2012/32/EU*

*This certificate is issued to*

**SURVITEC SAS**  
CHEVANCEAUX - FRANCE

*for the type of product*

**RIGID/INFLATED RESCUE BOATS**  
RIBO 450

### Requirements:

SOLAS 74 Convention as amended, Regulations III/4, X/3, III/21, III/31 and III/34  
IMO Res. MSC.48(66) amended by MSC.207(81), MSC.218(82), MSC.272(85) and MSC.320(89)  
IMO Res. MSC.36(63)-(1994 HSC Code) 8  
IMO Res. MSC.97(73)-(2000 HSC Code) 8  
IMO Res. MSC.81(70) amended by MSC.200(80), MSC.226(82), MSC.274(85) and MSC.321(89)  
IMO MSC/Circ.1006  
ISO 15372 (2000)  
IMO MSC/Circ.980

*This certificate is issued under the French Maritime Authority to attest that BUREAU VERITAS did undertake the relevant type-examination procedures for the product identified above which was found to comply with the relevant requirements of the Council Directive 96/98/EC of 20 December 1996 as amended.*

**This certificate will expire on: 29 Mar 2018**


**For BUREAU VERITAS Notified Body 0062,**

At BV BORDEAUX, on 07 Mar 2014,

Raphael Garnier

A handwritten signature in black ink, appearing to read 'Raphael Garnier', written over a horizontal line.



**This certificate does not allow to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark ) to the products corresponding to this type. To this end, the production-control phase module (D, E or F) of Annex B of the Directive is to be complied with and controlled by a written inspection agreement with a notified body.**

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. BUREAU VERITAS is designated by the French Maritime Authority as a "notified body" under the terms of the French Regulations Division 140 Chapter 140-2. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine Division available on the internet site www.veristar.com. 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:

**Rigid/Inflated Rescue Boat of GRP Construction with 4 points lifting slings, Type: RIBO 450.**

Main Particulars	RIBO 450
Length Over All	4.50 m
Breadth	1.90 m
Tube Diameter	0.45 m

Weight of boat	RIBO 450
Light Weight (Fully equipped)	398 kg
Full Load (6 persons)	925 kg

**Maximum Capacity:** 6 persons including one person lying down on a stretcher.

**Buoyancy working pressure:** 0.24 bar.

**Fuel oil tank capacity:** 50 litres (2 x 25 litres).

The rescue boat has various accessories as described in "Design report BF0852-EC" dated 05.02.2013.

### 2. DOCUMENTS AND DRAWINGS:

#### **Design appraisal documents:**

Reference	Date	Revision	Title
- 802140	21.01.14	I	General Arrangement
- 802139	07.01.08	-	General Drawing Buoyancy Tube
- 802143	17.12.08	A	Accessories Location EC
- 802146	21.01.14	B	Righting Bag Assist
- 802147	02.06.08	-	Retro-reflective Material Hull Layout
- 802149	21.04.08	-	Hull - Buoyancy Tube Assembly
- 802150	05.02.13	B	Lifting Sling Position
- 802151	17.12.08	A	Towing Settings
- 802155	05.02.13	C	Fitting Layout
- 802507	17.02.10	-	Installation Echelle Bain
- 802530	26.03.10	-	Saisine Inférieure
- 803482	31.01.13	-	Elingue
- 890056	07.02.08	-	Lay-up
- 890057	10.10.08	C	Coque (9 pages)
- 890059	04.08.08	-	Pont (12 pages)

No departure from these drawings is permitted without the prior consent of the Society.

### 3. TEST REPORTS:

The Rescue Boat was tested under witnessing of Bureau Veritas on serial number Proto 205 as per Prototype Test Report No. BE049/2009 dated 23.04.2009, prototype test report No. IEN-06-09 dated 14.07.2009, prototype tests report No. IEN-05-08 dated 08.08.2008 and prototype test report No. InEn 06-13 dated 13.03.2013. Additional tests have been carried out under witnessing of Bureau Veritas on serial number XMP C232MA414 as per prototype test report No. BE 003/2014 dated 24.01.2014.

The laminate materials of hull and rigid cover were tested as per tests report No. LA 09 FIG 2331 PV dated 14.01.2009 and No. LA 10 CHX 2539 P.V. dated 20.01.2010, tests report No. 100024-b dated 20.01.2010, tests report No. 100040 dated 18.01.2010.

The Inherent and additional buoyancy materials were tested as per test report No. LA 08 TLS 2317 P.V. dated 17.12.2008.

**Maximum towing force measured with rescue boat serial number Proto 205:**

- 188 kg with engine type TOHATSU M25C3 L SOLAS
- 250 kg with engine type TOHATSU M40C L SOLAS
- 184 kg with engine type YAMAHA 25NMHOL SOLAS
- 313 kg with engine type YAMAHA 40 VMHO SOLAS

**4. APPLICATION / LIMITATION:**

- The scope of the appraisal made by Bureau Veritas to issue this certificate is strictly restricted to the relevant requirements stated on the front page of this certificate.
- Application / limitation as per product description and requirements stated on front page of this certificate.
- The period of shelf life of equipment subjected to deterioration with age is to be indicated.
- On board installation & maintenance as per requirements stated on front page of this certificate.

-The following components shall have to comply with the requirements of MED/96/98/EC, as amended, and be wheelmarked:

- + Propulsion Engines:
  - Manufacturer: TOHATSU
  - Type: M25C3 L SOLAS
  - Power: 25 HP/18.3 kW
  - or
  - Manufacturer: TOHATSU
  - Type: M40C L SOLAS
  - Power: 40 HP/29.4 kW
  - or
  - Manufacturer: YAMAHA
  - Type: 25 NMHOL SOLAS
  - Power: 25 HP/18.3 kW
  - or
  - Manufacturer: YAMAHA
  - Type: 40 VMHO SOLAS
  - Power: 40 HP/29.4 kW

- + Release Mechanism: with indication of SWL (to be not less than 950 kg)
- + Position indicating lights
- + Thermal protective aids
- + Retro reflective materials
- + Radar reflector
- + Portable fire-extinguishing equipment
- + Compass: Offshore 115 (Plastimo Marine)
- + Searchlight

- Other rescue boat equipment as listed in LSA Code chapter 5.1.2.2, 5.1.2.3, 5.1.2.4, means for recharging searchlight batteries as per LSA Code chapter 4.4.6.11 and searchlight batteries is to be to the satisfaction of the ship's flag administration for acceptance of the equipped rescue boat on board the concerned ship.

- Electrical components including batteries to be as per documents and drawings listed in paragraph 2.

- Fabric for inflatable parts: ORCA 866 (Pennel & Flippo).

- Raw materials for the GRP Hull:

Material	Type	Manufacturer
Gel Coat	UNIGEL 2AE-5610 AIRLESS	Cromogenia Units
Polyester Resin	F240 TF Norsodyne H13348TA	Neste Cray Valley
Fiber Glass Mat	Mat 300, 450, 600	Verotrex
Fiber Glass Woven Roving	Roving 600	Quimidroga
Fiber Glass Quadriaxial	850: 3209 E-QX86	Owens Corning
Buoyancy Material	POL CX 25 STD	Flexicel

**5. PRODUCTION SURVEY REQUIREMENTS:**

- The raw materials are to be traceable in case of compatibility problems in repair.
- This certificate alone does not allow the applicant to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark) to the products corresponding to this type. To this end, the production-control phase module D "Production Quality Assurance" or F "Product Verification" of Annex B of the Directive is to be complied with and controlled by a written inspection agreement with a Notified Body.
- Each rescue boat intended to be fitted onboard a ship registered to a National register adhering to the Directive shall be delivered with a Declaration of Conformity.
- The manufacturer shall keep records of any production tests carried out in accordance with instructions given in IMO resolution MSC.81(70) Part 2 as amended.
- Each equipment, or batch of equipment, is to be supplied with its Manual(s) for installation, use and maintenance.

**6. MARKING OF PRODUCT:**

The rigid/inflated rescue boat shall be marked with:

- Markings as per MED 96/98/EC: ☒ YYYY/XX where YYYY is the number of the Notified Body undertaking surveillance module (when BV, 0062) and where XX are the last two digits of year mark affixed.
- Markings as per chapters 1.2, 4.4.1.2, 4.4.9 and 5.1.3.4 of the LSA Code as amended.

**7. OTHERS:**

- This approval is given on the understanding that the Society reserves the right to require check tests to be carried out on the rigid inflated rescue boats at any time and that the Manufacturer will accept the responsibility for informing shipbuilders or their sub-contractors of the proper methods of use and general maintenance of the rescue boat and the conditions of this approval.
- This certificate supersedes the previous EC Type Examination Certificate No. 22309/A2 EC dated 05.04.2013 issued by the Society.

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