

MARINE DIVISION
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**BUREAU
VERITAS**

Certificate N°:
08997/A0 EC
File Number : LSA 17941/02
Product Code : A1118
The attached Schedule, composed of 10 sections, forms part of
the certificate

EUROPEAN UNION COUNCIL DIRECTIVE 96/98 EC on MARINE EQUIPMENT
as amended by the Commission Directive 98/85 EC of the 11th November 1998

CERTIFICATE OF TYPE APPROVAL
(EC TYPE EXAMINATION CERTIFICATE)

This is to certify that Bureau Veritas, acting within the scope of its notification for purpose of the Council Directive 96/98 EC on Marine Equipment, as amended, has found the product identified below in compliance with the prescribed design requirements of the hereunder stated Regulations & Standards

RIGID RESCUE BOATS
RIGID RESCUE BOAT type "MOB ALU 460F".

MANUFACTURED BY:

ESVAGT A/S
Esbjerg - DENMARK

SPECIFIED REGULATIONS & STANDARDS :

- SOLAS 74/96 Convention, Regs. III/4- LSA Code, IMO Res. MSC. 48(66), 1.2 & 5.1.1. to 5.1.2.
- IMO Resolution A689(17) as amended by IMO Res. MSC 54(66), Part 1, paras. 7.1.

The Approval is valid until : 29/06/2004

BUREAU VERITAS COPENHAGEN

At Paris la Défense, on : 29/06/99



J. BENOIT
For the Secretary



E.U. Notification Number
allocated to Bureau Veritas
0062

This Certificate is issued in pursuance of clause 5, module B, of Annex B to the Council Directive 96/98 EC.
The Manufacturer is allowed to affix the special Marine Conformity Mark to approved equipment in the conditions described in Art.11 of the Directive, only if the requirements stated in section 7 of the Schedule of Approval are fully complied with.
For being valid, this Certificate is to be endorsed by the Society's surveyor having carrying out the Detailed Inspection of the approved equipment as defined in 2.2.8 of the Society's Guidance Note NI 464 DTE.



**BUREAU
VERITAS**
MARINE DIVISION

File Number : LSA 17941/02

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

" MOB ALU 460F" is a rigid rescue boat capable to crew 6 persons.
It consists in a fender/tube filled with foam and an aluminium rigid hull.
The hoisting consists in a fixed lifting arrangement.

Dimension :	4,73 x 1,86 m (overall) Foam Tube diameter : as per drawing C.479A-20A,Fr.#3.
Capacity :	6 persons (including one lying down)
Weight :	boat including engine (36 HP), fuel and equipment : 580 kg approx. Full recovery load including 6 persons: 1030 kg approx.
Manoeuvring Speed :	6 Knots in calm water with 6 persons on board, for a period of at least 4 hours.
Fuel oil tank capacity :	48 litres


2. DESIGN DRAWINGS and/or SPECIFICATIONS

2.1 The constructional arrangements, details and materials of the boat shall be in accordance with the Manufacturer's drawing:

- C479-01 dated 07/11/95: "General Arrangement".
- C479A-20A: "aluminium hull structure".
- C479-300 dated 08/03/96: "Braendoliesystem".
- Electrical diagram dated 30/08/94.
- C479-21 and C479-22: "SNIT".

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

2.2 Manufacturing documentation:

To be approved by the Society prior to EC  marking authorization.

2.3 Manual for installation, use and maintenance:

To be available in one of the official languages of IMO, in addition to ship's flag language.

3. TYPE TEST REPORTS / LABORATORY RECOGNITION STATUS

The boat was type tested by the Manufacturer at Esbjerg harbour, under the supervision of DMA, as per test report "Esvagt GRP1/Alu MOB-BOAT" dated 30/11/95.

Further type tested by the manufacturer, under the supervision of Bureau Veritas, as per test report "IMO Formats DE 41/11/11, rigid rescue boat" dated 21/06/99.

(type tests also found to be in compliance with IMO RES.MSC.81(70))

4. MATERIALS and/or COMPONENTS REQUIRED TO BE TYPE APPROVED and/or TYPE TESTED

4.1 Fender/ tube cover material

Hyperlast 7850767 PUR material, 5 mm thickness, manufactured by Hyperlast Ltd., High Peak, UK, tested for fire-retardancy as per test report ref:15/6/99 PAF 0767FT

4.2. Engine

The rescue boat was tested with a 36HP outboard diesel engine, fitted with a propeller safety guard.

TYPE: Yanmar D36 AXULE(P)


Weight: 122 kg.


Power: 36 hp/26.5 kw at 4500 rpm.

Shaft Length: long.

Maximum towing force of the rescue boat fitted with this engine:2900N.

Alternative outboard engine can also be fitted provided the same above characteristics are fulfilled.

To be EC type approved and bear the EC  mark.

4.3- Other equipment or components to be EC Type Approved and  marked (except where exemption is granted in accordance with Article 5.3 of the Directive):

- a) Position indicating lights (Item A.1/1.2 of Annex A1):external light.
- b) TPA's (Item A.1/1.7 of Annex A1)
- c) Retro-reflective materials.(Item A.1/1.30 of Annex A1)
- d) Portable fire extinguishers (Item A.1/1.35 of Annex A1)
- e) Radar Reflector (Item A.1/1.33 of Annex A1)
- f) Compass (Item A.1/1.34 of Annex A1)

4.4 Other equipment to be approved by the ship's Authorities:

All the items of the equipment (other than those listed in 4.3 above), listed in 5.1.2.2 of the LSA Code.

4.5. Rigid hull material:

4.5.1. Aluminium plate grade AlMg 4.5 Mn W28, according to DIN 1725,1745,1783,59600.

4.6. Buoyancy foam :

LD29 foam manufactured by Zotefoams, Bramming Plast-Industry A/S, Bramming, Denmark, type tested by Russel House Laboratories Ltd, Meedus Division, Petworth West Sussex, UK,according to IMO Res.A689(17) as amended Part 1, Para.6.2.2, as per test report No 1917 "Test certificate issued by Meedus Division" dated 26/05/99.

4.7 Disengaging gear

To be EC type approved and bear the  mark with a S.W.L. of not less than 1500 kg .

5. OTHER MATERIALS and/or COMPONENTS

5.1. As per the Manufacturer's Part list.

6. APPLICATION / LIMITATION OF USE

6.1. As per requirements of Regulations stated on front page of this Certificate.


6.2 Maximum capacity: 6 persons.

7. PRODUCTION SURVEY REQUIREMENTS

7.1. Arrangements shall be made for a Society's Surveyor to carry out, on a periodic basis, visit of the Manufacturer's premises and product audits.

7.2. ESVAGT A/S, Denmark, shall institute a quality control procedure, to the Society's satisfaction, in order to ensure that all boats are produced to the same standard as the prototype approved by the Society, and in order to comply with requirements of IMO Res.A689(17), as amended, Part 2.

7.3- The Production Conformity Assessment Module shall be "D.Production Quality Assurance" .

7.4- Each manufactured equipment is to bear the  mark and BV notification number (BV 0062), subject to the authorization of the Society.

7.5- 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.

7.6- Each equipment, or batch of equipment, is to be supplied with its Manual(s) for installation, use & maintenance (Cf. § 2.3 above) .

8. ON BOARD INSTALLATION & MAINTENANCE REQUIREMENTS


8.1 As per requirements of Regulations stated on front page of this Certificate and, especially :

- The International Convention for the Safety at Sea 1974/96 (SOLAS 74/96), as amended, Reg. III/14 and III/20.
- IMO Resolution A689(17), as amended, Part 2, paras 5.3.1 & 5.3.3.

8.2 The maintenance of the boat shall be only carried out by Servicing Stations approved by ESVAGT A/S, Denmark, and recognized by the Society.

9. MARKING FOR IDENTIFICATION

9.1. The boat shall be marked in clear permanent characters as follows :

- Dimensions, the number of persons which it is permitted to accomodate (i.e. : 6 persons).
- Manufacturer's serial number , name or trade mark.
- S.W.L .
- Date of manufacture.
- BV (SOLAS 74/96) approved.
-  BV 0062 .

9.2. On each side of the boat's bow in block capitals of the Roman alphabet :
The name and port or registry of the ship to which the boat belongs.

9.3. All materials used to mark the inflated rescue boat shall be of a type which is compatible with the boat's coated fabric and approved by the boat manufacturer

10. OTHERS

10.1 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 ESVAGT A/S, Denmark, will accept the responsibility for informing shipbuilders or their sub-contractors of the proper methods of use and general maintenance of the boat and the conditions of this approval.

10.2 This certificate is based on type approval certificate issued by Danish Maritime Authority (DMA) on the 08/02/96.

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BUREAU VERITAS COPENHAGEN



COPY

ESVAGT
Adgangsvejen 1
6700 Esbjerg

8. februar 1996
G.F.Thomsen
Teknisk kontor

Journalnr.: 5611.1271-14
(Anføres ved svar)

ESVAGT MOB-båd - Typegodkendelse.

Ole Steen Knudsen har ved brev af 21. november 1995 fremsendt følgende tegninger for godkendelse:

C.479-20A-MOB-båd, aluminium-skrog

C.479-01 Generalarrangement

Efter afholdt prøver i Esbjerg havn den 30. november 1995 har De yderlig fremsendt billede af bundkonstruktionen, hvor der yderlig er isvejst en ekstra bundstok i hver side.

Efter gennemgang af tegningerne og de afholdte prøveresultater fra ovennævnte prøver, kan vi typegodkende MOB-båden som den er vist og beskrevet.

2 sæt af tegningerne forsynet med vor godkendelsesstempel samt typegodkendelsescertifikat vedlægges.

G. F. Thomsen
Ship Surveyor



SØFARTSSTYRELSEN

Danish Maritime Authority

TYPEGODKENDELSESCERTIFIKAT
Type approval certificate

DET BEKRÆFTES HERMED AT KONSTRUKTIONEN AF:
This is to certify that the design of:

PRODUKT BESKRIVELSE:

Product description:

Mand-overbord-båd type (Rescue boat)

Typebetegnelse: (Type description)

ESVAGT GRP 1

M.O.B. BOAT

Skrogmateriale: (Hull material)

Aluminium

Hoveddimensioner: (Main dimensions)

L 4,73 m, B 1,86 m

Max. antal pers. (Max numbers of pers)

6

Motor type: (Type of engine)

Yanmar diesel 27 hp

FABRIKANT:

Manufactured by:

ESVAGT, Adgangsvejen 1, 6700, Esbjerg

ER I OVERENSSTEMMELSE MED:

Is found to comply with:

The Danish Skibstilsynets Meddelelser B. III/47, which includes the 1983 amendments to SOLAS 1974.

ANVENDELSE:

Application:

Som MOB-båd i danske skibe.

Rescue boat in danish vessels.

GODKENDELSESKRITERIER:

Approval conditions:

Slipkrog af fast type. (Slip hook of fixed type.)

Enhver ændring i forhold til den godkendte prototype, herunder ændringer i det for godkendelsen nødvendige tegningsmateriale, ændringer i produktionskontrollen eller ændringer i forhold til øvrige godkendelsesvilkår, hvortil Søfartsstyrelsens skriftlige tilladelse ikke forligger, medfører automatisk, at typegodkendelsen bortfalder.



Any conversion of the approved prototype, include modifications of approved necessary drawings, approved production control, or other conditions of approval, for which no written permission is given from the Danish Maritime Authority, shall automatically result in annulment of the type approval.

DENNE TYPEGODKENDELSE ER GYLDIG INDTIL:

This approval is valid until: 8 February 2001

UDSTEDT I KØBENHAVN **den** 8. februar 1996
Issued at COPENHAGEN **on** 8 February 1996

Sign: G. F. Thomsen

G. F. Thomsen
 Ship Surveyor