

CERTIFICATE OF CONFORMITY - EC (MODULE G)

Certificate No:
MEDG00001BK

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV AS under the authority of the Government of Norway.

This is to certify:

That the Fast rescue boats: (b) rigid

with type designation and serial number
MARE FRB 700 - Yard No. 177

Issued to

Mare Safety AS
ULSTEINVIK, Norway

is, by design assessment and product verification, found to comply with
Regulation (EU) 2023/1667,

item No. MED/1.20b. SOLAS 74 as amended, Regulation III/4, III/26, III/34, LSA Code, IMO MSC/Circ.1016, IMO MSC/Circ.1094, IMO MSC.1/Circ.1631, IMO MSC/Circ.1006

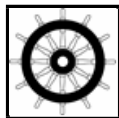
USCG Approval No: **N/A**

Further details of the equipment and conditions for certification are given overleaf.

Issued at **Høvik** on **2024-02-20**

DNV local unit:
Norway NB

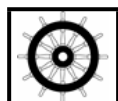
Approval Engineer:
Tessa Biever



for **DNV AS**

Notified Body
No.: **0575**

Mydlak-Röder, Christine
Head of Notified Body



0575/yyyy

0575: Notified Body number undertaking quality surveillance
yyyy: The year in which the mark is affixed



The product liability tests with the manufacturer or his representative in accordance with Directive 2014/90/EU. This certificate remains valid unless suspended, withdrawn, recalled or cancelled, provided this equipment is not modified without the acceptance of the notified body named herein.

This certificate authorises the manufacturer to affix the "Mark of Conformity" (wheelmark) to the product described herein.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

"MARE 700 FRB" – a rigid fast rescue boat with single point lifting hook and inflatable bag for re-righting after capsizes.

Materials:

Glassfiber, CSM 300/450/600 g/m ²	Owens Corning, Belgium
Fire retardent resin, DION FR 820 M878	Reichhold AS, Norway
Gelcoat resin, ENGWARD 329826 (Enguard series based on Aropol C138)	Ashland Poland SP Z.O.O., Polen
Buoyancy materials, Elastopor H 1700/10 – 1700/11 – 1702/4	BASF Polyurethanes Nordic AB, Sweden

Length overall, max: 6.90 m
Beam overall, including fenders, Bmax: 2.42 m
Draught: 1.00 m
Weight of boat, fully equipped: 2200 kg
Weight of boat, fully manned (100 kg/person): 3200 kg

Hook manufacturer and type: H. Henriksen Mek. Verksted A/S, HMK 3.5, off-load
Lifting arrangement max. WL: 3500 kg

Hull material: GRP

Propulsion system: Inboard engine with waterjet
Engine manufacturer and type: STEYR MO236K42

Waterjet type: Alamarin 230

Bollard pull: 5.8 kN

Application/Limitation

This certificate replaces MED-G-853.

The owner/manufacturer needs to do the following:

- 1) manufacturer to update the markings on the rescue boat (number of persons)
- 2) manufacturer to update the approval plate (number of persons)
- 3) owner to ensure that the rescue boat launching and recovery arrangement is approved for handling at least 3200 kg.

Approved engine power: 170 kW

Number of persons, max: 10

Maximum load of persons (100 kg/person): 1000 kg

Fast rescue boat equipment and marking/instructions to be inspected after installation onboard the ship. Equipment shall comply with LSA Code and IMO Res.MSC.81(70).

The fast rescue boat is fitted with a release hook without on-load release capabilities, in accordance with LSA Code 4.4.7.6.17. Hence, if it is to be combined with launching appliances with permanent high speed tensioning device (LSA Code 6.1.7.3), compatibility must be assured.

The normal equipment of the fast rescue boat to include a hands-free and watertight VHF radiocommunication set, in addition to the ones required on the bridge.

The design assessment is based on IMO Res. MSC.48(66) as amended by IMO Res. MSC.207(81), IMO Res. MSC.218(82), IMO Res. MSC.272(85) and IMO Res. MSC.320(89).

Production and installation testing shall be carried out according to IMO Res. MSC.81(70) as amended, Part 2.

Type Examination documentation

Documentation	Date
Technical file West Ocean 700 FRC from OMT AS	2000-01-17
Reports	Date
Prototype tests approved by Norwegian Ship Control	1997-11-28, 1999-08-20
Prototype tests witnessed by DNV (15 persons)	2007-08-28
Laminate strength test report, Journal no. cau-892 for both tensile and flexural strength, Reichhold AS, Laboratory site in Sandefjord, Norway	2016-09-20
Laminate fire test report (IMO MSC/Circ.1006.), test report no. F17 130010-10 Rev.1 from RISE Fire Research, Trondheim, Norway	2017-05-15
Drawings	Date
Drawing No. MS700.000.01.B (Rev.B) – Mare Safety 700 FRB, General Arrangement	2014-01-14
Drawing No. 1007-001-01 (Rev.3) – Lifting Frame Assy (3 pages)	2013-10-15
Drawing No. 1007-001-02 (Rev.1) – Calculation Report, Lifting Frame	2014-05-02
Drawing No. WO700.000.09 - Lines Plan	
Drawing No. WO700.000.11 - Construction	
Drawing No. WO700.000.12 - Sections at 1 to 5 meters from bow	
Drawing No. WO700.000.13 - Midship section	
Drawing No. WO700.000.14 - GRP Laminate Specification	
Drawing No. WO700.000.16 - Fender Construction	
Drawing No. WO700.000.18 - Strength test of lifting arrangements	
Drawing No. WO700.000.50 - Reserve buoyancy foamed sections	
Drawing No. WO700.000.60 - Fuel tank and diagram	
Drawing No. WO700.000.73 - Rightening structure with bag	
Drawing No. WO700.000.80 - 12 VDC On-Line Electric diagram	
Drawing No. WO700.000.81 - Electrical Circuit Diagram	
Drawing No. WO700.000.82 - 42 VAC Electrical diagram	
Drawing No. M700.FRB.02 - Tow. Hook Install	
Drawing No. MS700.000.01 - Seating arrangement 15 persons	2006-02-09
Other	Date
Declaration of Conformity	2024-02-20

Tests carried out

Tests are documented in accordance with recommendation on testing of Lifesaving Appliances, IMO Res. MSC.81(70) Part 1, as amended by IMO Res. MSC.226(82), IMO Res. MSC.274(85), IMO Res. MSC.321(89) and IMO Res. MSC.323(89) and IMO MSC/Circ.1006.

Marking of product

The product is to be indelibly marked with name and address of manufacturer, boat model and serial number, month and year of manufacturer, number of persons approved for and operational restrictions, if any, according to LSA code item 4.4.1.2 and the MED Mark of Conformity (see page 1).

List of fast rescue boat equipment to be posted in the boat.