

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MEDB000004X
Revision No:
3

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 **Rigid/inflated rescue boats**

with type designation(s)
Narwhal SV-480

issued to

NARWHAL BOATS, S.L.
Porriño, Pontevedra, Spain

is found to comply with the requirements in the following Regulations/Standards:

Regulation (EU) 2024/1975,

item No. MED/1.43. SOLAS 1974 as amended, Regulation III/4, III/21, III/31, III/34 & X/3 LSA Code, 2000 HSC Code 8, IMO MSC.1/Circ.1631, IMO MSC/Circ.1006 and ISO 15372:2000+A1:2021

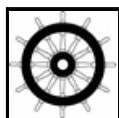
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2030-02-05**.

Issued at **Høvik** on **2025-02-06**

DNV local unit:
NB/CMC Team West

Approval Engineer:
Tessa Biever



Notified Body
No.: **0575**



for **DNV AS**

Digitally Signed By:
Christine Mydlak-Röder
Location: **DNV Høvik, Norway**
Mydlak-Röder, Christine
Head of Notified Body



The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU. This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled. Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

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

'NARWHAL SV-480'

is a rigid/inflatable rescueboat equipped with lifting sling.

Materials used:

Item	Type	Manufacturer
Gelcoat	Neogel 8373	BUFA Composite Systems GmbH & Co. KG
Glassfiber	E-600g/m ²	Jushi Group
	M800	Wanda group
	E-6CR	Jushi Group
	Rovimat	Wanda group
Polyester resin	EMK	Jushi Group
	BUFA Firestop 8175-W-1 (hull)	BUFA Composite Systems GGmbH & Co KG
	SYNOLITE P5410-1 (other than hull)	AOC Resins
Fabric (buoyancy tube)	Orcathane 289 (Yellow or Orange)	Pennel & Flipo
	Chiorino 1P U4-U4 AR/GR (Orange)	Chiorino, S.p.A.
Buoyancy foam	Polyurethane	PLIXXOPOL RF 8222W + DESMODUR 44V20L (Poliol + isocyanathe)

Length overall, hull, max: 4.80 m
 Draught: 1.00 m
 Beam overall, including fenders, Bmax: 2.10 m

Weight of boat type, fully equipped: 473 kg
 Weight of boat type, fully manned (82.5 kg/person): 968 kg

Lifting equipment: 4 polyester slings

Hull material: GRP/Polyurethane foam

Propulsion system: Outboard engine

Engine types:

Yamaha Motor Danmark, Yamaha 40 Hp ^(1a+1b+1c)
 Yamaha Motor Danmark, Yamaha 50 Hp ^(2a+2b+2c)
 Yamaha Motor Danmark, Yamaha 60 Hp ^(3a+3b+3c)
 Mercury Marine - Division of Brunswick, Mercury 40 Hp ⁽⁴⁾
 Mercury Marine - Division of Brunswick, Mercury 60 Hp ^(5a+5b)

Bollard pull (Yamaha 40 Hp, propeller (11 1/8 x 13) x 3): 2.2 kN ^(1a)
 Bollard pull (Yamaha 40 Hp, propeller (11 5/8 x 11) x 3): 2.6 kN ^(1b)
 Bollard pull (Yamaha 40 Hp, propeller (11 3/4 x 10) x 3): 3.0 kN ^(1c)
 Bollard pull (Yamaha 50 Hp, propeller (11 1/8 x 13) x 3): 2.4 kN ^(2a)
 Bollard pull (Yamaha 50 Hp, propeller (11 5/8 x 11) x 3): 3.1 kN ^(2b)
 Bollard pull (Yamaha 50 Hp, propeller (11 3/4 x 10) x 3): 3.9 kN ^(2c)
 Bollard pull (Yamaha 60 Hp, propeller (11 1/8 x 13) x 3): 3.7 kN ^(3a)
 Bollard pull (Yamaha 60 Hp, propeller (11 5/8 x 11) x 3): 4.6 kN ^(3b)
 Bollard pull (Yamaha 60 Hp, propeller (11 3/4 x 10) x 3): 5.3 kN ^(3c)
 Bollard pull (Mercury 40 Hp, propeller (3 x 12 x 10 1/2): 2.6 kN ⁽⁴⁾
 Bollard pull (Mercury 60 Hp, propeller (3 x 12 x 10 1/2): 3.1 kN ^(5a)
 Bollard pull (Mercury 60 Hp, propeller (4 x 10 3/5 x 13): 2.8 kN ^(5b)

Application/Limitation

Approved engine power: 29.4 kW ^(1a)
 29.4 kW ^(1b)
 29.4 kW ^(1c)
 36.8 kW ^(2a)
 36.8 kW ^(2b)
 36.8 kW ^(2c)
 44.1 kW ^(3a)
 44.1 kW ^(3b)
 44.1 kW ^(3c)
 29.4 kW ⁽⁴⁾

44.1 kW ^(5a)
 44.1 kW ^(5b)

Number of persons, max: **6**
 Maximum load of persons 82.5 kg: **495 kg**

Approved colour: **Orange, Red or Yellow**

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 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), IMO Res. MSC.320(89) and IMO Res. MSC. 481(102).

Various components transferring the load ("loose gear") such as shackles, chains, links, blocks etc. shall comply with recognised standard or code and shall be delivered with manufacturer's certificate, confirming a safety factor minimum 6 compared to the sustained load (LSA Code Ch. 6.1.1.6).

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

Type Examination documentation

Drawings	Date
Drawing No. 2389-2005-AQ-BAR-ENAC "DETALLE FIJACIÓN ASIENTOS SV-480C"	2006-06-23
Drawing No. 2389-2005-AQ-BAR-ENAC "POSICIÓN DE LOS PASAJEROS Y HERIDO EN SV 480-C"	2006-06-23
Drawing No. SV 480 8.13 ed. A - Towing and hoisting arrangement	2014-03-21
Drawing No. SV 480 9.13 ed. A - Towing and hoisting arrangement 2	2014-03-21
Drawing No. SV 480 – Hull Scantling	2025-01-05
Reports	Date
NARWHAL Technical Report and Drawings, Report on Raw Materials and Tests and Boat Tests.	2000-07-27
Prototype test reports from prototype tests ref. MSC.1/Circ. 980, witnessed by DNV	2006-03-31 2006-06 Nov. 2008
NARWHAL SV - 480 Rescue Boat, Certification test reports	-
Prototype tests carried out witnessed by Spanish Maritime Authorities	Feb. 1989 Oct. 1990
Seating Space Test according to Res. MSC.226(82) witnessed by DNV	2008-11-27
Liferaft Towing Test witnessed by DNV	2008-11-27
Endurance, Speed & Fuel Consumption Test witnessed by DNV	2008-11-27
Fire test for laminate iaw IMO MSC/Circ. 1006	2014-11-19
Laminate strength report	2010-08-04
Laminate strenght test report No. 1162387.1.0 issued by Aimen, Pontevedra, Spain – signed by DNV	2024-12-20
Laminate strenght test report No. 1162459.1.0 issued by Aimen, Pontevedra, Spain – signed by DNV	2025-01-14
Prototype test report iaw IMO MSC.1/Circ. 1631 - mooring out	July/Aug.2023
Prototype test report iaw IMO MSC.1/Circ. 1631 - additional engines	2024-05-14
Calculations	Date
Calculations sling arrangement SV-480	2014-03-21
Structural analysis of hoisting points to laminate, ISONAVAL Naval architecture office- surveyors, Barcelona, Spain	2014-03-21
Other	
Instruction manual ed. H	2018-08-27

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), IMO Res. MSC.323(89), IMO MSC/Circ. 1006, ISO 15372:2000 and IMO Res. MSC. 481(102) – Type II.

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 rescue boat equipment to be posted in the boat.