DNV·GL

Certificate No:
MEDB000004X

EC-TYPE EXAMINATION CERTIFICATE

Application of: Council Directive 96/98/EC of 20 December 1996 on Marine Equipment as amended by directive 2013/52/EU, issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Directorate. This Certificate is issued by DNV GL AS under the authority of the Government of the Kingdom 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.
Mos (Mos) Pontevedra, Spain

is found to comply with the requirements in the following Regulations/Standards:
Annex A.1, item No. A.1/1.43 and Annex B, Module B in the Directive. SOLAS 1974 as amended, Regulation III/4, III/21, III/31, III/34 &X/3 LSA Code and 2000 HSC Code 8

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

Høvik, 2015-08-01
for **DNV GL AS**

This Certificate is valid until
2020-08-01

Notified Body No.: **0575**

Petter Langnes
Head of Department

DNV GL local office:
Vigo

Tessa Biever
Surveyor

Job Id: **344.1-000329-5**
Certificate No: **MEDB000004X**

Product description

NARWHAL SV-480 is a rigid/inflatable rescueboat with lifting sling.

Length over all, 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:	968 kg
Lifting equipment:	4 polyester slings
Hull material:	GRP/Polyurethane foam
Propulsion system:	Outboard engine
Engine types:	Yamaha 40 hp, 50 hp, 60 hp and 75 hp
Bollard pull (Yamaha 40 hp, propeller (11 1/8 x 13) x 3):	2.2 kN
Bollard pull (Yamaha 40 hp, propeller (11 5/8 x 11) x 3):	2.6 kN
Bollard pull (Yamaha 40 hp, propeller (11 3/4 x 10) x 3):	3.0 kN
Bollard pull (Yamaha 50 hp, propeller (11 1/8 x 13) x 3):	2.4 kN
Bollard pull (Yamaha 50 hp, propeller (11 5/8 x 11) x 3):	3.1 kN
Bollard pull (Yamaha 50 hp, propeller (11 3/4 x 10) x 3):	3.9 kN
Bollard pull (Yamaha 60 hp, propeller (11 1/8 x 13) x 3):	3.7 kN
Bollard pull (Yamaha 60 hp, propeller (11 5/8 x 11) x 3):	4.6 kN
Bollard pull (Yamaha 60 hp, propeller (11 3/4 x 10) x 3):	5.3 kN
Bollard pull (Yamaha 75 hp, propeller (13 1/2 x 15) x 3):	6,3 kN

Applications/Limitations

Approved engine power:	29.4 - 55.2 kW
Number of persons, max:	6
Maximum load of persons 82.5 kg:	495 kg

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) and IMO Res. MSC.320(89).

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

Type Examination documentation

Basis for approval:

DNV Test an Evaluation Report	
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
Reports from prototype tests witnessed by DNV	2006-03-31 and 2006-06
Seating Space Test according to Res. MSC.226(82) witnessed by DNV	dated 2008-11-27
Liferaft Towing Test witnessed by DNV	2008-11-27
Endurance, Speed & Fuel Consumption Test witnessed by DNV	2008-11-27
Drawing Towing and hoisting arrangement	2014-03-21
Drawing Towing and hoisting arrangement 2	2014-03-21
Calculations sling arrangement SV-480	2014-03-21
Structural analysis of hoising points to laminate, ISONAVAL Naval	2014-03-21

architecture office- surveyors, Barcelona, Spain

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).

Marking of product

The product is to be indelibly marked with name of manufacturer, type designation, dimensions and date of manufacture, according to LSA code item 4.4.1.2 and the mark of conformity. In addition, the manufacturer shall affix the Mark of Conformity followed by DNV Notified Body No. and the two last digits of the production year.

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

Mark of Conformity

The manufacturer is allowed to affix the Mark of Conformity according to Article 11 in the Council Directive 96/98/EC on Marine Equipment and shall issue a Declaration of Conformity, only when the module D or F of Annex B in the same directive is fully complied with.

Module D: The quality system for production and testing shall be approved by the Notified Body.

Module F: Compliance of the products to type as described in this EC Type-Examination Certificate must be verified by the Notified Body who also shall issue a Certificate of Conformity.