

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Council Directive 96/98/EC of 20 December 1996 on Marine Equipment as amended by directive (EU) 2015/559, 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 Lifeboats: Davit-launched lifeboats: partially enclosed/totally enclosed

with type designation(s)
HLB 1050 /18

Issued to

Oceanwide S.a.S.
Rotterdam Zuid-Holland, Netherlands

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

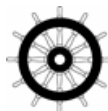
Annex A.1, item No. A.1/1.17a and Annex B, Module B in the Directive; SOLAS 74 as amended, Regulation III/4, III/21, III/31, III/34 & X/3, LSA Code, IMO MSC/Circ. 1006 & 1423, and 2000 HSC Code 8

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

This Certificate is valid until **2019-09-23**.

Issued at **Høvik** on **2016-06-27**

DNV GL local station:
**Rotterdam, Product Certification
/Verification**



for **DNV GL AS**

Approval Engineer:
Tessa Bieber

Notified Body
No.: **0575**

Vidar Dolonen
Head of Notified Body

Job Id: **344.1-000558-47**
Certificate No: **MEDB00000T0**

Product description

Totally enclosed hyperbaric lifeboat. Fire-protected and with self-contained air support system. The lifeboat is approved with entrance to hyperbaric chamber from below and on the side.

Length:	10.50 m
Breadth:	3.35 m
Depth:	1.28 m
Weight of boat, fully equipped:	
- below trunk	17150 kg
- side trunk	16036 kg
Weight of boat, fully manned (82.5 kg/per person):	
- below trunk	18965 kg
- side trunk	17851 kg
Hook manufacturer and type:	Norsafe TOR MKII 14T, on-load
Hook SWL Norsafe TOR MKII	14000 kg
Hull material:	GRP
Propulsion system:	Inboard engine
Engine manufacturer and type:	Steyr MO144M38 106 kW
Bollard pull:	5.2 kN
Hyperbaric chamber	Diving Decompression Chamber IHC Hytech B.V., Type: DDV18 Length: 5500mm, I.D.: 1750mm Volume: 12000L

Application/Limitation

Approved engine power:	106 kW
Maximum number of persons (82.5 kg/per person):	18 divers and 4 crew
Maximum load of persons (82.5 kg/per person):	1815 kg

- For hyperbaric evacuation this lifeboat shall also hold (or be part of) a Certificate stating conformity to the relevant IMO publications regarding Hyperbaric Escape Units or equivalent Class publications as e.g. DNV-RP-E403.
- The lifeboat shall only be operated onboard ships with a Contingency Plan for hyperbaric evacuation developed by the shipowner and approved by the ship's Flag Administration or designated Recognized Organization.
- Lifeboat 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

Drawinglist HLB1050-2016 (our ref. 344.1-000558 J458)	2016-06-28
Prototype test report witnessed by DNV	2009-07-09 2009-12-23 2010-04-01
Prototype test reports witnessed by DNV GL – new hook / change of material	2012-06-28 (towing release test) 2016-06-07 (simultaneous release)
Test report no. 102010.80/08.101 (IMO MSC/Circ.1006 fire test), SINTEF NBL, Trondheim, Norway	2008-09-10
Test report no. E08-0525 (laminare mechanical properties), TNO, Eindhoven, The Netherlands	2008-07-25
Additional drawings for side entrance: - dwg. no. HLB1050-8121-01-01, Rev.E, Hyperbaric Lifeboat with Side Entrance - dwg. no. HLB1050-8121-02-01, Rev.0, Laminates - dwg. no. HLB1050-8121-02-02, Rev.0, Laminates - dwg. no. HLB1050-8121-02-03, Rev.0, Laminates - dwg. no. HLB1050-8121-02-04, Rev.0, Laminates - drawing "HLB10.50 Side Trunk VCG" - calculations "Inclining experiment and stability calculations H99 - Side mating"	2010-12-23 2010-06-24 2010-06-24 2010-06-24 2010-06-24 - -
Additional/ updated drawings for enlarged coxwain cabin and electrical diagram: - dwg. no. HLB 1050-STD-00-00, Rev.0 (Lines plan) - dwg. no. HLB 1050-STD-01-01, Rev. A (General arrangement) - dwg. no. HLB 1050-STD-06-01, Rev.0 (Spray tubes) - dwg. no. HLB-STD-22-00 (8 sheets), Rev. M (Electrical diagram) - dwg. no. HLB-STD-40-00, Rev. B (Chiller and heater system)	2014-07-08 2014-05-16 2013-04-25 2016-03-19 2014-10-24
Revised drawing list wrt hook/material hook foundation change: - General arrangement – HLB1050-STD-01-01 Rev.A - Hook foundation FRONT – HLB-STD-17-01-00 Rev. A - Hook foundation AFT – HLB-STD-17-01-02 Rev. A - FEM- calculation hook foundation FRONT and AFT - Operation manual	2014-05-16 2014-09-22 2014-09-21 - April 2016 Rev. 1.0.3

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. MSC323(89) and IMO MSC/Circ. 1006.

Marking of product

The product is to be indelibly marked with name of manufacture, type designation, dimensions and date of manufacture, according to LSA code item 4.4.1.2.
List of lifeboat equipment to be posted in the boat.