

# EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:  
**MEDB000028B**  
Revision No:  
**5**

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

## This is to certify:

**that the Inflatable liferafts**

with type designation(s)

**KHA-6/8/10/12/15/16/20/25/30/35 with brand names: HERO, SEA DYNASTY**

issued to

**Shanghai Youlong Rubber Products Co., Ltd.**  
**Shanghai, 020, China**

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

Regulation (EU) 2023/1667,

**item No. MED/1.12. SOLAS 74 as amended, Regulation III/4, III/13, III/21, III/26, III/31, III/34 & X/3, LSA Code I, V, IMO Res. MSC.481(102), IMO MSC/Circ.811, IMO MSC.1/Circ.1630 and 2000 HSC Code 8**

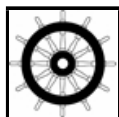
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2029-05-02**.

Issued at **Hamburg** on **2024-05-03**

DNV local unit:  
**Shanghai**

Approval Engineer:  
**Michael Oberländer**



Notified Body  
No.: **0098**



for **DNV SE**

Digitally Signed By:  
Christine Mydlak-Röder  
Location: DNV Hamburg,  
Germany

**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 SE 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

KHA-6, KHA-8, KHA-10, KHA-12, KHA-15, KHA-16, KHA-20, KHA-25, KHA-30, KHA-35 are throw over board, inflatable liferafts packed in cylindrical or flat, rectangular containers, as specified below.

All these liferaft designs are complying with the LSA-Code as amended, including MSC.293(87).

Trade name: HERO, SEA DYNASTY

## Application/Limitation

Max. Stowage Height: 50 m (cylindrical container)

Type	Persons (82.5 kg each)	Weight [kg]		Required bollard pull [kN]	
		SOLAS A	SOLAS B	(2 kn)	(3kn)
KHA-6	6	75	60	0,50	0,70
KHA-8	8	88	68	0,60	0,80
KHA-10	10	98	78	0,67	0,90
KHA-12	12	109	78	0,55	0,90
KHA-15	15	127	97	0,85	1,40
KHA-16	16	132	102	0,65	0,95
KHA-20	20	162	120	0,85	1,50
KHA-25	25	183	139	0,90	1,65
KHA-30	30	198	152	0,95	1,70
KHA-35	35	223	158	1,00	1,80

- The liferafts shall be packed with a SOLAS A Pack or SOLAS B Pack.
- Gas cylinders shall be of an approved type.
- Components in the gas inflation system should be approved according to ISO 15738:2019.
- The liferaft is intended to be installed with external weak link and a hydrostatic release unit. Float free arrangement to be checked upon installation on board.
- The liferafts are to be serviced annually, provided where in any case this is impracticable, the administration may extend this to a period of 17 months. They shall be serviced at approved service stations which are authorized by the manufacturer.
- Production tests are to be conducted in accordance with IMO Resolution MSC.81(70) Part 2 and recorded by the manufacturer in accordance with the approved Production Quality Assurance system for Module D of the Marine Equipment Directive 2014/90/EC as amended.
- The liferafts KHA-30 (SOLAS A pack) and KHA-35 (SOLAS A pack) have a mass above 185 kg and may not be used for positions where side to side transfer is necessary.

The liferafts KHA-6/8/10/12/15/16 may be also packed in flat, rectangular containers with following specifications:

Max. Stowage height: 30 m (flat, rectangular container)

Type	Persons (82.5 kg each)	Weight [kg]		Packed in flat container dwg.no.	
		SOLAS A	SOLAS B	SOLAS A Pack	SOLAS B Pack
KHA-6	6	65	49	SP-1-044	SP-1-043
KHA-8	8	73	54	SP-1-045	SP-1-044
KHA-10	10	87	59	SP-1-015	SP-1-045
KHA-12	12	97	66	SP-1-015	SP-1-045
KHA-15	15	115	78	SP-1-016	SP-1-015
KHA-16	16	116	78	SP-1-016	SP-1-015

## Type Examination documentation

Drawings: KHA-6-00/01/02/03, KHA-8-00/01/02/03, KHA-10-00/01/02/03, KHA-12-00/01/02/03, KHA-15-00/01/02/03, KHA-16-00/01/02/03, KHA-20-0000, KHA-25-0000, KHA-30-0000, KHA-35-0000

Technical file verified with ref.: 12-124976, 13-054586 and 13-029220.14-042425

This certificate replaces the previous certificates MEDB000028B Rev.1 and MEDB00004C7.

## Tests carried out

Prototype tests and test reports in accordance with the Recommendations on Testing of Life-Saving Appliances, IMO Res. MSC.81(70)Part 1, including IMO Res. MSC.218(82), MSC.226(82), MSC.295(87) and MSC.323(89), have been witnessed and found to be in compliance.

Test reports:

- For KHA-6/8/10/15/20/25/30/35: Germanischer Lloyd Shanghai 62842 SHA of 2002-01-22 and 2002-02-05, 2006-03-20, 2007-04-05, 2007-07-12, 2008-07-21, 11653 SHA of 2010-05-14, GL SHA of 2011-07-11 and 2013-02-01, 92598 SHA of 2007-06-21, W(x)2012-230.
- For KHA-12/16: Germanischer Lloyd Shanghai 80623 SHA of 2003-12-18, 93309 SHA of 2007-07-12, 97424 SHA of 2008-07-21, 11680 SHA 09. GL SHA dated 2010-05-14, 2011-07-11 and 2013-11-13.
- Drop test with round containers for stowage height of 50m was witnessed by DNV GL Shanghai on 2017-01-17.
- Tests for the stowage of the liferafts in flat containers with a max. stowage height of 30m have been witnessed by DNV GL Shanghai on 2017-11-21 (No. YL/QI/091001-TR-201711).
- New towing test in accordance with MSC.81(70) Part 1, 5.4 for a speed of 2kn and 3kn, witnessed by DNV GL Shanghai 2019-02-15.

### Marking of product

The product is to be indelibly marked with the name and address of the manufacturer, type designation, date of manufacture and the MED Mark of Conformity (see page 1). The marking shall comply with the LSA Code (IMO Res.MSC.48(66)) item 4.2.6.3 and 4.2.7.