

**EC-TYPE EXAMINATION  
CERTIFICATE (MODULE B)**

Certificate No:  
**MEDB00001NH**  
Revision No:  
**1**

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL 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)

**CHF (DLR) (SLR) (SCH) (KHF) -A-6, -A-8, -A-10, -A-12, -A-15, -A-16, -A-20, -A-25 (throw-over-board type)**

Issued to

**Shanghai Cunhong Marine Lifesaving Appliance Co., Ltd.  
Shanghai, 020, China**

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

Regulation **(EU) 2018/773,**

**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, IMO MSC/Circ.811 and 2000 HSC Code 8**

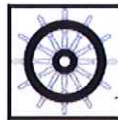
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2024-06-20**.

Issued at **Hamburg** on **2019-06-21**

DNV GL local station:  
**Shanghai**

Approval Engineer:  
**Peter Zell**



Notified Body  
No.: **0098**



for **DNV GL SE**  
Digitally Signed By: Mydlak-Röder, Christine  
Location: DNV GL Hamburg, Germany  
on behalf of

**Gerhard Aubert**  
**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 GL 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.



Job Id: **344.1-006009-2**  
 Certificate No: **MEDB00001NH**  
 Revision No: **1**

### Product description

The liferafts CHF (DLR) (SLR) (SCH) (KHF) -A-6, -A-10, -A-12, -A-15, -A-16, -A-20, -A-25 are throw-over-board, inflatable liferafts packed with cylindrical/round containers and with double cylinders, as specified below, see Table No.1.

The liferafts CHF (DLR) (SLR) (SCH) (KHF) -A-6, -A-8, -A-10, -A-12, -A-15, -A-16, -A-20, -A-25 are also produced as throw-over-board, inflatable liferafts packed with cylindrical/round containers and a single cylinder, as specified below, see Table No.2.

The liferafts CHF (DLR) (SLR) (SCH) (KHF) -A-6, -A-8, -A-10, -A-12, -A-15, -A-16 may be also packed in flat, rectangular containers, as specified below, see Table No.3.

Trade names: CUNHONG, TOKUGAWA, SAFINDO, SAFEGARD, PORTMARINE

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

### Application/Limitation

Table No.1: The liferafts packed in cylindrical/round containers with double cylinders:

Type	Persons (82.5 kg)	Weight [kg] SOLAS A	Weight [kg] SOLAS B	Required bollard pull [kN]		Max. Stowage Height [m]
				2 kn	3 kn	
CHF (DLR, SLR, SCH, KHF) -A-6	6	81	71	0.45	0.98	50
CHF (DLR, SLR, SCH, KHF) -A-10	10	103	83	0.50	1.04	50
CHF (DLR, SLR, SCH, KHF) -A-12	12	123	99	0.20	1.10	50
CHF (DLR, SLR, SCH, KHF) -A-15	15	132	102	0.60	1.22	50
CHF (DLR, SLR, SCH, KHF) -A-16	16	134	102	0.65	1.26	50
CHF (DLR, SLR, SCH, KHF) -A-20	20	168	128	0.85	1.44	50
CHF (DLR, SLR, SCH, KHF) -A-25	25	184	135	1.00	1.53	50

Job Id: **344.1-006009-2**  
 Certificate No: **MEDB00001NH**  
 Revision No: **1**

Table No.2: The liferafts packed in cylindrical/round containers with single cylinder:

Type	Persons (82.5 kg)	Weight [kg] SOLAS A	Weight [kg] SOLAS B	Required bollard pull [kN]		Max. Stowage Height [m]
				2 kn	3 kn	
CHF (DLR, SLR, SCH, KHF) -A-6	6	84	72	0.45	0.98	50
CHF (DLR, SLR, SCH, KHF) -A-8	8	99	82	0.50	1.04	50
CHF (DLR, SLR, SCH, KHF) -A-10	10	104	85	0.50	1.04	50
CHF (DLR, SLR, SCH, KHF) -A-12	12	113	94	0.20	1.10	50
CHF (DLR, SLR, SCH, KHF) -A-15	15	136	107	0.60	1.22	50
CHF (DLR, SLR, SCH, KHF) -A-16	16	139	109	0.65	1.26	50
CHF (DLR, SLR, SCH, KHF) -A-20	20	169	124	0.85	1.44	50
CHF (DLR, SLR, SCH, KHF) -A-25	25	179	129	1.00	1.53	50

Table No.3: The following liferafts may be also packed in flat, rectangular containers with following specifications:

Type	Persons (82.5 kg)	Weight [kg] SOLAS A	Weight [kg] SOLAS B	Packed in flat container drawing no.		Max. Stowage Height [m]
				SOLAS A Pack	SOLAS B Pack	
CHF (DLR, SLR, SCH, KHF) -A-6	6	69	55	FA6-06-01	FA6-06-02	50
CHF (DLR, SLR, SCH, KHF) -A-8	8	88	66	FA8-06-01	FA8-06-02	50
CHF (DLR, SLR, SCH, KHF) -A-10	10	93	70	FA10-06-01	FA10-06-02	50
CHF (DLR, SLR, SCH, KHF) -A-12	12	107	78	FA12-06-01	FA12-06-02	50
CHF (DLR, SLR, SCH, KHF) -A-15	15	125	96	FA15-06-01	FA15-06-02	50
CHF (DLR, SLR, SCH, KHF) -A-16	16	128	97	FA16-06-01	FA16-06-02	50

Job Id: **344.1-006009-2**  
Certificate No: **MEDB00001NH**  
Revision No: **1**

- The liferafts are to be serviced annually, provided where in any case this is impracticable, the administration may extend this to a period to 17 month. They shall be serviced at approved service stations which are authorized by the manufacturer.
- The liferaft 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 15738:2002.
- 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.
- Production tests are to be conducted in accordance with IMO Res. MSC.81(70), Part 2 and recorded by the manufacturer in compliance with the approved Production Quality Assurance System for Module D of the Marine Equipment Directive 96/98/EC as amended.

### **Type Examination documentation**

- Material test reports from Shanghai Institute of Rubber Products Testing Center, W(X)2006-48 dated 2006-02-10 and W(X)2013-791 dated 2013-04-24.  
South-China Testing Center for Textile Industry, 2014FW04916 dated 2014-08-07.  
The National Supervision and Testing Center of Fishery Machinery and Instrument, China 2014YW039 dated 2014-06-16.
- Drawings and technical file for CHF models  
Approval reference no.: 07-004898, 11-099542, 11-153108, 14-027584, 14-088520

### **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.226(82), MSC.295(87) and MSC.323(89), have been witnessed and found to be in compliance.
- Test report SHA 2006-06-23, 2011-11-30, 2014-06-10, 2016-11-08 and 2019-03-27.
- New drop tests for stowage height of 50m were witnessed by DNV GL Shanghai on 2019-03-07.

### **Marking of product**

The product is to be indelibly marked with name and address of the manufacturer, type designation and date of manufacture. The marking shall comply with the LSA Code (IMO Res.MSC48(66) item 4.2.6.3 and 4.2.7.