

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

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)

Throw-over-board type: HAF-A6, HAF-A10, HAF-A15, HAF-A16, HAF-A20, HAF-A25 and DFN-T6, DFN-T10, DFN-T15, DFN-T16, DFN-T20, DFN-T25

Issued to

Shanghai Haian Lifesaving Equipment Co., Ltd.
Shanghai 020, China

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

Regulation **(EU) 2015/559,**

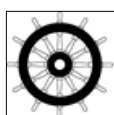
Annex A.1, item No. A.1/1.12 and Annex B, Module B in the Directive; SOLAS 74 as amended, Regulation III/4, III/13, III/21, III/26, III/31, III/34 & X/3, LSA Code, IMO MSC/Circ.811 and 2000 HSC Code 8

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

This Certificate is valid until **2021-10-15**.

Issued at **Hamburg** on **2016-10-16**

DNV GL local station:
Shanghai CMC



for **DNV GL SE**

Approval Engineer:
Michael Oberländer

Notified Body
No.: **0098**

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Sven Dudzsus
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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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:
Certificate No: **MEDB00001W4**

Product description

Inflatable liferafts, throw-over-board type (with SOLAS A and B Pack)

HAF-A6, HAF-A10, HAF-A15, HAF-A16, HAF-A20, HAF-A25

DFN-T6, DFN-T10, DFN-T15, DFN-T16, DFN-T20, DFN-T25

Trade Name: HAF (for HAF-A) and SEAMAN (for DFN-T)

Application/Limitation

Max. drop height: 30m

Technical Data

Conditions of Certification:

Type:	Persons (each 82.5 kg)	Weight [kg] SOLAS A/B	Required bollard pull [kN]		Stowage Height
			(2 kn)	(3 kn)	
HAF-A6 (DFN-T6)	6	75/63	0.66	1.18	30 m
HAF-A10 (DFN-T10)	10	94/69	0.68	1.24	30 m
HAF-A15 (DFN-T15)	15	130/95	0.85	1.40	30 m
HAF-A16 (DFN-T16)	16	132/97	0.87	1.45	30 m
HAF-A20 (DFN-T20)	20	155/110	1.00	1.65	30 m
HAF-A25 (DFN-T25)	25	183/128	1.30	1.90	30 m

- The liferafts are to be serviced annually, provided where in any case this is impracticable, the administration may extend this period to 17 month. They shall be serviced at approved service stations which are authorised 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 96/98/EC as amended.

Type Examination documentation

This certificate replaces 94163-10 HH

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 from GL Shanghai dated 2009-11-30, 2011-09-21 (Ref.11-153105) and 2015-02-11 (Ref.15-020877 for modified boarding platform)

Design Calculation for HAF-A / DFN-T Type Inflatable Liferaft,
Servicing Manual and User Manual

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).