

# 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 Lifejackets**

with type designation(s)  
**HWAYAN / HYJ-QA-S1 150N (Inflatable, Adult)**

Issued to

**Jiangsu Huayan Marine Equipment Co., Ltd.**  
**Jiangsu, China**

is found to comply with the requirements in the following Regulations/Standards:  
Regulation **(EU) 2017/306**,  
**item No. MED/1.4. SOLAS 1974 as amended, Reg. III/4, III/7, III/22, III/34 & X3, LSA Code, 2000 HSC Code 8 and IMO MSC/Circ.922.**

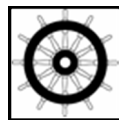
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2020-12-15**.

Issued at **Hamburg** on **2017-07-14**

DNV GL local station:  
**Nanjing CMC**

Approval Engineer:  
**Michael Oberländer**



Notified Body  
No.: **0098**

for **DNV GL SE**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



## Product description

The HWAYAN / HYJ-QA-S1 150N is an inflatable lifejacket for adults and is approved for persons with a weight of 43 kg or more and for a height of 155 cm or more.

Approximately buoyancy when inflated: 150 N

The coated fabric for the inflatable buoyancy chambers can be chosen from 3 alternative suppliers:

- Wenzhou Healthy Family Plastic Co. / China
- Cathay Consolidated, Inc. / Taiwan
- HO YU Textile Co.,Ltd. / Taiwan

## Application/Limitation

- The inflatable adult lifejacket is approved for persons with a weight of 43 kg or more and for a height of 155 cm or more.
- Retro-reflective material and night light shall be approved in accordance with the Marine Equipment Directive and be "wheelmarked".
- The design assessment is based on IMO Res. MSC 48(66) as amended by IMO Res. MSC 207(81), IMO Res. MSC.218(82) and IMO Res.MSC.368(93).
- Production testing shall be carried out according to IMO Res. MSC 81(70), part 2 as amended.

## Type Examination documentation

This certificate is based on the previous EC Type Examination certificate 42166-15 HH issued on 2015-12-16.

Test reports all issued by Wuhan Testing Center of Marine Life-saving Appliance, China:

- no. 2014158, dated 2015-11-24 (main report, including Water performance),
- no. 2014160, dated 2015-01-12 (Coated fabric),
- no. 2015033, dated 2015-06-24 (Structural webbing),
- no. 2015034, dated 2015-06-24 (Sewing thread, blue),
- no. 2015035, dated 2015-06-24 (Sewing thread, black),
- no. 2015036, dated 2015-06-24 (Stainless steel semicircle),
- no. 2015037, dated 2015-06-24 (Stainless steel profile buckle),
- no. 2016104, dated 2016-08-15 (Coated fabric),
- no. 2017030, dated 2017-03-27 (tests with buoyancy chamber),
- no. 2017033, dated 2017-03-28 (tests with buoyancy chamber),
- no. 2017036, dated 2017-03-29 (tests with buoyancy chamber),

Test reports issued by DGUV Test, Germany:

- no. 1310427, dated 2013-11-04 (Coated fabric),
- no. 1510304, dated 2015-07-30 (Coated fabric)

Drawings no "HWAYAN/HYJ-QA-S1" v2.0, dated 2015-03-15 Issued by Jiangsu Huayan Marine Equipment Co., Ltd.

Re.no. 14-053065

## Tests carried out

Tests carried out in accordance with Revised Recommendation on Testing of Life-Saving Appliances, IMO Res. MSC. 81(70), part 1, including IMO Res. MSC 200(80), IMO Res. MSC 226(82), IMO Res. MSC 323(89) and IMO Res. MSC.378(93).

## Marking of product

The product is to be indelibly marked with name and address of the manufacturer, type designation, batch or serial number or other elements allowing their identification. The markings shall comply with the LSA Code (IMO Res. MSC.48(66)), item 1.2.2.9 and 2.2.1.2.