

TYPE APPROVAL CERTIFICATE

This is to certify:

**That the Immersion suits and anti-exposure suits designed to be worn WITHOUT a lifejacket:
Immersion suit with inherent insulation**

with type designation(s)

HYF-2

Issued to

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

is found to comply with

**SOLAS 74 as amended, Regulation III/4, III/7, III/22, III/32, III/34 & X/3, LSA Code and
2000 HSC Code 8**

Application :

This certificate is recognized by Transport Canada.

**Product(s) approved by this certificate is/are accepted for installation on all vessels classed
by DNV GL.**

Issued at **Hamburg** on **2017-06-30**

for **DNV GL**

This Certificate is valid until **2022-06-29**.

DNV GL local station: **Nanjing**

Approval Engineer: **Michael Oberländer**

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Antje Fleischhauer
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



Job Id: **262.1-024562-1**
Certificate No: **TALB000001M**

Product description

The HYF-2, pillow type with full CR material, is an inherently insulated immersion suit, designed to be worn without a lifejacket.

Main fabric:	CR	Changzhou Chengjiali Polymer Materials Co.,Ltd
Zipper:	Watertight zipper closure	Wuxi Hailong Airtight Technology Co.,Ltd

Application/Limitation

- Position indicating light to be approved in accordance with LSA Code Ch.2.2.3 and IMO Res. MSC.81(70), Part 1, Ch.10.3.
- Retro-reflective materials to be approved in accordance with IMO Res. 658(16).
- The design assessment is based on IMO LSA Code Res.MSC.48(66) as amended by MSC.207(81) and MSC.218(82).
- Production tests shall be conducted for each suit in accordance with IMO Res. MSC.81(70), Part 2.

Type Approval documentation

Certification in accordance with Class Programme DNVGL-CP-0338, October 2015.

The following documentation is basis for the approval:

Test reports No. 2004056 dated 2005-02-01, No. 2009027 dated 2009-05-26 and No.2013103 dated 2013-10-10 from Wuhan Marine Lifesaving Equipment Quality Inspection Centre.

Evaluation and test reports of GL-Jiangyin dated 2005-01-10.

This immersion suit is based on the MED approved version, certified with MEDB000010Y.

Tests carried out

Tests are documented in accordance with recommendation on testing of Lifesaving Appliances, IMO Res. MSC.81(70) part 1, including IMO Res. MSC.200(80), MSC.226(82) and MSC.323(89).

Marking of product

The product is to be indelibly marked with the name and address of the manufacturer, seizing information, date of manufacture or lot number, model designation and approval, file or certificate number. The labelling shall comply with the LSA Code (IMO Res. MSC.48(66)), item 1.2.2.9. and Transport Canada Ship Safety Bulletin 05/2014 and shall be both in English and French.

Transport Canada Approval

This immersion suit is approved on behalf of Transport Canada by DNV GL.

Based on the procedures laid down in the Transport Canada Publication entitled "Approval Procedures for Life Saving Equipment and Structural Fire Protection Products" (TP 14612) Ch.2.2.1.3, DNV GL confirms that the product/s listed in this certificate is/are in accordance with Transport Canada's requirements as laid down in Transport Canada Bulletin 05/2014.

Periodical assessment

DNV GL's surveyor is to be given permission to perform periodical assessments at any time during the validity of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in Class Programme DNVGL-CP-0338, Section 4.