

EC TYPE EXAMINATION (MODULE B) CERTIFICATE

This is to certify that :

LLOYD'S REGISTER VERIFICATION LIMITED (LRV), specified as a "notified body" under the terms of The Merchant Shipping (Marine Equipment) Regulations S.I. 1999 No. 1957, did undertake the relevant type approval procedures for the equipment identified below which was found to be in compliance with the essential Life Saving Appliance requirements of Marine Equipment Directive (MED) 96/98/EC as modified by Commission Directives 98/85/EC, 2001/53/EC, 2002/75/EC, 2002/84/EC, 2008/67/EC, 2009/26/EC and 2010/68/EU subject to any conditions in the Design Appraisal Document attached hereto.

Manufacturer	Takashina Life Preservers Co., Ltd
Address	1-1-30, Kuboyoshi, Naniwa-Ku Osaka, 556-0028 Japan
Annex A1 Item	A.1/1.5 - IMMERSION SUITS & ANTI-EXPOSURE SUITS NOT CLASSIFIED AS LIFEJACKETS: - INSULATED OR NOT INSULATED
Product Type	IMMERSION SUITS
Product Description	Insulated non-buoyant immersion suit to be worn with an approved lifejacket - Type: "TK-007IN (Adult Universal)"
Specified Standard	IMO Resolution MSC.81(70), as amended by IMO Resolution MSC.200(80)

The attached Design Appraisal Document (schedule) forms part of this certificate.

This certificate remains valid unless cancelled or revoked, provided the conditions in the attached schedule are complied with and the equipment remains satisfactory in service.

Date of issue	12 July 2011	Expiry date	11 July 2016
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Certificate No. MED 1150204

Signed



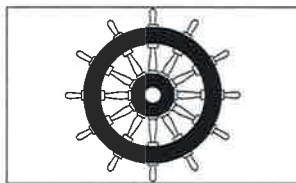
Sheet No 1 of 4

Name

A. Prestigiacomo
For and on behalf of Lloyd's Register Verification
LRV EC Distinguishing No. 0038

Note:

This certificate is not valid for equipment; the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify the notified body named on this certificate of any modification or changes to the equipment in order to obtain a valid Certificate.



0038/yy

Subject to compliance with the conditions in the attached Design Appraisal Document (schedule), which forms part of this certificate, and those of Articles 10.1(i) and 11 of the Directive, the Manufacturer is allowed to affix the "Mark of Conformity" to the Product described herein.

yy Last two digits of year mark affixed.

This certificate is issued under the authority of the MCA.

"Lloyd's Register Verification is the business name of Lloyd's Register Verification Limited, a member of the Lloyd's Register Group.

Registration number 4929226.

Registered office 71 Fenchurch Street, London EC3M 4BS, England

"Lloyd's Register, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as the 'Lloyd's Register Group'. The Lloyd's Register Group assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register Group entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract."

DESIGN APPRAISAL DOCUMENT

Date 12 July 2011	Quote this reference on all future communications LDSO/TA/SFS/AP
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ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS S110081

The undernoted documents have been appraised for compliance with the relevant requirements of International Conventions, and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

<u>Drawing No.</u>	<u>Issue Date</u>	<u>Drawing Title</u>
TK20060117-A01R1	06-07-2006	Bill of materials for TK-007IN (MED) (Outer)
TK20060117-A02R1	-	Bill of materials for TK-007IN (MED) (Inner)
TK011706-C01R0	17-01-2006	III.1 Finished Products (Outer) TK-007IN
TK011706-C02R0	17-01-2006	III.2 Finished Products (Inner) TK-007IN
TK012006-03R0	20-01-2006	Care and Maintenance TK-007IN
TK011706-C03R0	17-01-2006	III.3 Finished products dimensions (Inner)
TK011706-C04R0	17-01-2006	III.4 Finished products dimensions (Inner)
TK011706-C05R1	07-03-2006	III.5 Locations of the welded tapes (Outer shell)
TK-007IN	13-07-2011	Donning Instructions – Product TK-007IN

TEST REPORTS

Prototype Test Report as per Res.MSC.81(70) as amended by Res.MSC.200(80) for Takashina Insulated Immersion Suit Type “TK-007IN”, dated 24 May 2006

CONDITIONS OF CERTIFICATION

1. The measured buoyancy of this immersion suit design is 79.3N.
2. This immersion suit has been satisfactorily tested and found suitable for adult persons within a height range of 1.40 – 2.10 metres (Universal Size).
3. The immersion suit is to be fitted with retro-reflective material in accordance with IMO Resolution A.658 (16), as it may be amended.
4. Each immersion suit and its packaging shall be permanently and clearly marked at least with: identification of the manufacturer and the model designation, the size and height range of persons suitable to wear the immersion suit, instructions that it must be worn in conjunction with an approved lifejacket, simple donning instructions and approval information.

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5. Each immersion suit shall be supplied with an explanatory leaflet containing instructions for care and maintenance of the immersion suit.
6. When required, an approved light and whistle meeting the requirements of LSA Code regulations II/2.2.3 and II/2.2.1.8, respectively, are to be fitted. The light or lights selected to be attached to the immersion suit shall be tested to the requirements of IMO Resolution MSC.81(70), I/10.3.3 to confirm the adequacy of their means of attachment.
7. The on board arrangements and installation of this product are not part of this design appraisal or certificate. All such arrangements are to be to the satisfaction of the Surveyors attending on board.
8. **Variants of the Approved design:** Where this immersion suit is proposed to be supplied to a purchaser's specification which requests omission of one or more of the facilities necessary to meet the SOLAS performance requirements referred to above, the purchaser is required to request the vessel's Flag State to consider issue of an Exemption Certificate for that ship to omit such facilities. Only when the exemption has been granted by the Flag State may a variant of the approved immersion suit be supplied under this certificate.
9. If the specified standards are amended during the validity of this certificate, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply.
10. Production items are to be manufactured in accordance with a quality control system which shall be maintained to ensure compliance with SOLAS Regulation III/5.
11. Production tests are to be conducted in accordance with the applicable requirements of IMO Resolution MSC.81(70), Part 2 and each item, batch, or lot be delivered with an LR Certificate of SOLAS Production Testing issued by the attending LR Surveyors following their witness of the tests. This does not preclude any further testing to additional requirements of the Marine Administration of the country where the ship is registered (i.e. the flag state) or those acting on behalf of that Administration.

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12. Should a change of Place of Production from that stated below be required, i.e. where the final stages of manufacture/assembly/testing of this product take place, the new Place of Production is to be advised to us prior to the change taking place. This Certificate will require to be updated for Approval to be maintained.

PLACE OF PRODUCTION

Shanghai Haishi Sports & Life Preservers Co. Ltd.
266 Rui Xiang Lu
Pudong New Area
Shanghai 201209
People's Republic of China



A. Prestigiacomo
Senior Surveyor
Statutory Fire & Safety
London Design Support Office
Lloyd's Register EMEA

Supplementary Type Approval Terms and Conditions

This certificate and Design Appraisal Document relates to type approval, it certifies that the prototype(s) of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein, it does not mean or imply approval for any other use, nor approval of any products designed or manufactured otherwise than in strict conformity with the said prototype(s).