



CERTIFICATE OF TYPE APPROVAL

This is to certify that

The product detailed below will be accepted for compliance with the applicable Lloyd's Register Rules and Regulations and with the International Convention for the Safety of Life at Sea, (SOLAS), 1974, as amended, for use on ships and offshore installations classed with Lloyd's Register, and for use on ships and offshore installations when authorised by contracting governments to issue the relevant certificates, licences, permits etc.

Manufacturer Survitec Services & Distribution Ltd. trading as Crewsaver

Address Survitec House
Lederle Lane
Gosport
PO13 0FZ

Product Type IMMERSION SUITS

Product Description Insulated immersion suit to be worn together with an approved lifejacket - Type: "Crewsaver 8800 Child"

Specified Standards IMO Resolution MSC.81 (70), Part 1 as amended by Resolution MSC.226 (82) and MSC.323 (89)

The attached Design Appraisal Document forms part of this certificate.

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

Date of issue 16 March 2016

Expiry date 15 March 2021

Certificate No. SAS S160018

Signed

Sheet No 1 of 4

Name

N. Ramos
Surveyor to Lloyd's Register EMEA
A Member of the Lloyd's Register Group

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 Lloyd's Register of any modification or changes to the equipment in order to obtain a valid certificate.

Lloyd's Register Group Limited, 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'. Lloyd's Register 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 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.



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DESIGN APPRAISAL DOCUMENT

Date 16 March 2016	Quote this reference on all future communications MTES/SFS/TA/NR/WP22951507
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ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS S160018

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.

EXAMINED DOCUMENTATION

Plan/Doc No	Issue No.	Plan Date	Title or Description
00109-0905	001	Nov 2005	SCOT Device
00109-0905	GA/PA-0001	Nov 2005	Parts Assembly
00109-0905	GA/P-0001	Nov 2005	Patterns
00109-0905	-SD 0001	Nov 2005	Screen printing
00109-Child Ga Dim	001	10 April 2006	Child Overall dimensions
00109-Child Con 001	001	10 April 2006	Child Immersion Suit Seam Construction
00109-Child Pat 001	001	10 April 2006	Child Immersion Suit Crewsaver Immersion Suit Pattern Child
00109-Scot Device Ga 001	-	10 April 2006	Child Immersion Suit 'Buoyancy Plus' scot device dimensions
00566 BPCON2-U1	1	March 2006	Child Immersion Suit 'Buoyancy Plus' scot device construction
00566 BPCON3-U1	1	March 2006	Child Immersion Suit 'Buoyancy Plus' scot device construction
00566-BPPATS-A1	1	March 2006	Child Immersion Suit 'Buoyancy Plus' scot device patterns
00566-bagprnt-1	1	March 2006	Donning instruction sheet
00109-1205 - Sheets 1-23	05	12 March 2007	Revere Immersion Suit 8811
00109-30 - Sheets 1-42	30	3 April 2012	Product Specification (Product Code 8800)

This Certificate is the renewal of Certificate No SAS S110044/M2.

TEST REPORTS

Report Title	Report No.	Date
Testing of Crewsaver Immersion Suit fitted with 'SCOT' device was conducted at:		25/11/05
Andark Diving Centre	unnumbered	02/11/05
Fleetwood Testing Laboratory	NRG/FTL/1029	22/11/05
DERA Centre for human sciences, Physiology Department letter reference PLSD/CHS5/5.06/3/13.	PLSD/CHS5/5.06/3/13	29/04/97
AMTAC Laboratories Ltd report	ALC.T.9045.1296	25/04/97
BTIG, Shirley testing services report	07/4834/KP/SAM	15/06/99
Fleetwood Testing Laboratory	BLS/FTL/2460a	06/06/12
Fleetwood Testing Laboratory	NRG/FTL/1029	22/11/05
INTERTEK test report - (Thermal resistance-two plate)	LECFI00323338	28/02/12
INTERTEK test report	LECFI00323638	28/02/12



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CONDITIONS OF CERTIFICATION

1. Each immersion suit and its packaging shall be marked with the size range of persons for whom it is approved CHILD, for chest measurement 59 - 90 cm & height 110 cm - 150 cm, Product Code 8800-SC (Child)
2. Each immersion suit and its packaging shall be permanently and clearly marked at least with: identification of the manufacturer and the model designation, simple donning instructions, approval information and text *"To be worn in conjunction with a compatible lifejacket"*
3. Each immersion suit shall be supplied with an explanatory leaflet containing instructions for care and maintenance of the immersion suit. When carrying out the inspection of immersion suits as required by SOLAS regulation III/20.7.2 consideration should be given to IMO MSC/Circ.1047 on Guidelines for Monthly Shipboard Inspection of Immersion Suits and Anti-exposure Suits by the Ship's Crew
4. The immersion suit is to be fitted with retro-reflective material in accordance with IMO Resolution A.658 (16), as it may be amended
5. When required, an approved light and whistle meeting the requirements of LSA Code regulations II/2.2.3 and II/2.2.1.14, 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
6. 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
7. If the specified standards are amended during the validity of this certificate, this product type is to be re-approved prior to it being supplied to vessels to which the amended standards apply
8. 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
9. 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
10. Should a change of Place of Production from that stated below be required i.e. where the 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



Lloyd's
Register

Lloyd's Register EMEA

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PLACE OF PRODUCTION

Survitec Services & Distribution
Ltd. trading as Crewsaver
Survitec House
Lederle Lane
Gosport
PO13 0FZ

Suzhou Betacera Technology CO., Ltd
No.500 Ganquan West Road
Economic Development Zone
Wujiang city
Jiangsu Province China
215200

Winning Industrial Co, Ltd
SHa Jing Keng Industrial Zone
Fu Shan District
Liao Bu
Dong Guan
Guangdong
People's republic of China

N. Ramos
Specialist
Fire & Safety
Marine Technology and Engineering Services
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).