



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	Land and Marine Products Limited
Address	9-10 Redfields Industrial Park, Church Crookham, Fleet, Hampshire, GU52 0RD, United Kingdom
Type	Means of Recovery of Persons
Description	Man over board rescue and retrieval manual system
Trade Name	Jason's Cradle
Specified Standard	LSACode Regulation I/1.2, IMO Resolution MSC.81 (70) Part 1 Section 1.2 & 1.4 ISO4892-2 Part 1 & 2 SAEJ 1960 MSC.1/Circular.1447 SOLAS III Regulation17-1

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 EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

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.

Lijo Thomas

Fire & Safety - Senior Surveyor to Lloyd's Register EMEA
A member of the Lloyd's Register group



ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LR2484362SS

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.

This Design Appraisal Document forms part of the Certificate.

This is renewal of certificate No: LR1900495SS

APPROVAL DOCUMENTATION

Jason's Cradle Product Specification Standard Cradle components
Jason's Cradle Format Manual Operations

TEST REPORTS

Results of a Tensile Test, performed at the Engineering Materials Department of the University of Southampton Report No EM/2356/98 & dated 19/11/1998

Temperature Cycling Test, performed at Russell House Laboratories Ltd., Meedus Division, Report No 1894 & dated 08/02/1999

Weathering Test performed at Alphas Technology Ltd., Report No 13-2077 & dated 13/02/1999

Tensile testing of Jason's Cradle MOB Systems as received and after pre conditioning, performed at Materials Technology Ltd Report No E3695 & dated 29/04/2014

Operational/Functional Test (scramble net, recovery device and stretcher), conducted at Fleetwood Testing Laboratory, Report No BLS/FTL/2634 and dated 23rd April 2014

Tensile testing of Jason's Cradle components after pre conditioning to salt spray, diesel immersion and thermal cycling, performed at Materials Technology Ltd, Report No J6998 dated 13/08/2019

CONDITIONS OF CERTIFICATION

1. This device has been examined and tested to be used as:
 - a) Casualty recovery in horizontal position from water to survival craft
 - b) Stretcher for use in horizontal position
 - c) Scramble net
- 1.1 A staged demonstration of compatibility of the recovery cradle and survival craft by way of function test to be carried out to the satisfaction of the attending Surveyor
- 1.2 A staged demonstration of compatibility of the scramble net and survival craft and/or the ship by way of function test to be carried out to the satisfaction of the attending Surveyor



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2. Device dimension when used as scramble net:
 - a) Length: 2.010 metres
Width: 0.530 metres
Weight: 11.8 kg
 - b) Length: 6.870 metres
Width: 2.1metres
Weight: 174.7 kg
3. Safe Working Load, SWL: 248 kg
4. When the Equipment is used as a scramble net the vessel freeboard should be within a minimum freeboard of 1 metres and a maximum of 5.0 metres
5. When the equipment is used as recovery device the survival craft or vessel freeboard should be within a minimum freeboard of 0.5 metres and a maximum of 5.0 metres
6. The equipment satisfies the objectives required by LSA Code, Regulation I/1.2 in matter of strength and suitability for marine environment. However it is to be confirmed that the use of this Life-Saving Appliance is acceptable to the Flag Administration (of the vessel on which the Life-Saving Appliance is installed) on an installation-by-installation basis
7. For each installation of the equipment the "Company" (Ship Owner/Vessel Operator) should conduct and document a Risk Assessment that take into account the anticipated condition and ship specific characteristic and/or survival craft specific characteristic. Based on risk assessment,, the vessel shall have plan and procedure for recovery of person(s) from water in horizontal or deckchair position. The recovery plans and procedures should facilitate the transfer of persons from the water to the ship while minimizing the risk of injury from impact with the ships side or other structures, including the recovery appliances itself
8. Ship specific plan and procedure for recovery of persons from the water should be developed in accordance with MSc.1/Circ 1447 and MSC.1/Circ 1182. The recovery operation to be conducted without causing undue hazard to the ship and the ship's crew, taking into account, but not limited to:
 - .1 manoeuvrability of the ship;
 - .2 freeboard of the ship;
 - .3 points on the ship to which casualties may be recovered;
 - .4 characteristics and limitations of equipment intended to be used for recovery operations;
 - .5 available crew and personal protective equipment (PPE);
 - .6 wind force, direction and spray;
 - .7 significant wave height (Hs);
 - .8 period of waves;



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- .9 swell; and
- .10 safety of navigation.
9. On board drills should be conducted to ensure that the crew are familiar with this equipment and Ship's recovery procedures
 10. The equipment should be clearly marked with the maximum number of persons it can accommodate, based on a weight of 82.5 kg per person
 11. Recovery operations should be conducted at a position clear of the ship's propellers and, as far as practicable, within the ship's parallel mid-body section
 12. A source of illumination and, where required, a source of power should be available for the area where the recovery operation is conducted
 13. Before the delivery, each unit is to be subject to a static proof load test of not less than 2.2 times the safe working load, visual inspection and unrolling. The particulars of the tests are to be clearly and durably marked on the unit
 14. The equipment has to be clearly marked with the name and address of manufacturer, the manufacturer's model designation, the year of assembly of the equipment, the maximum length and the maximum safe loading
 15. For compliance with SOLAS Regulation III/35 & III/36 fully detailed operations and maintenance manuals shall be supplied with each equipment
 16. Installation on board: The installation of the equipment is not part of this Design Appraisal or Certificate. All such arrangements are to be to the satisfaction of the vessel's Administration and/or RO acting on their behalf on an installation-by-installation basis
 17. 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
 18. Production items are to be manufactured in accordance with the quality control system which shall be maintained to ensure compliance with SOLAS Regulation III/5
 19. 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
 20. Should a Place of Production from the one stated below be required i.e. where the stages of manufacture/assembly/testing/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



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PLACE OF PRODUCTION

Land and Marine Products Ltd
Redfields Industrial Park
Church Crookham
Fleet
Hampshire
GU52 ORD

Lijo Thomas
Senior Specialist
Fire & Safety, Statutory Discipline Team
UK&I Technical Support Office, Marine & Offshore
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)