



CERTIFIED COPY

## 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	Markus Lifenet Ltd
Address	Breidvangur 30 220 Hafnarfjordur Iceland
Product Type	NOVEL LIFE-SAVING DEVICE
Product Description	Manually deployed man overboard retrieval device - Type: "MS Markusnet"
Specified Standards	SOLAS 74, Ch III, as amended to date, Regulations 4, 34, 35 and 36. The LSA Code Chapters I & VI, Regulations I/1.2 VI/6.1.6 as applicable IMO Resolution A.520(13) Annex 2.1.1.5 and MSC.81(70) Part 1

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 5 August 2010

Expiry Date 4 August 2015

Certificate No. SAS S100116

Signed

Sheet No 1 of 3

Name

A. Prestigiacomo  
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, 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  
5 August 2010Quote this reference on all future communications  
LDSO/TA/SFS/AP**ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS S100116**

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>Date</u>	<u>Title</u>
TD No. 1	-	Markusnet Type MS Components
TD No. 2	1999-09-10	Rescue-net Structure
TD No. 3	1999-09-10	Net Structure and Attached Parts
TD No. 4	-	Container Components
MS Lable 1	-	Container Lable
MS Lable 2	-	Freeboard Lable
MS Lable 3	-	Instruction Lable on Container Lid
MS Lable 4	-	Technical Information on Lid
-	-	Manoverboard Safety & Rescue Guide (Operations & Maintenance)

**TEST REPORTS**

IceTec Tensile & Buoyancy Test Report No. 8HP0047 dated 3 March 2000.  
Netherlands navy Testing Report dated 1 May 1991.

**CONDITIONS OF CERTIFICATION**

1. Instructions for installation, use and maintenance are to be supplied with each device according to its end use.
2. 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.
3. 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.
4. 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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## DESIGN APPRAISAL DOCUMENT

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### ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. SAS S100116

#### NOTE:

The MS Markusnet is manufactured in the following versions:-

<u>Type</u>	<u>For Freeboard up to:</u>
MS.10	10 m
MS.20	20 m
MS.30	30 m
MS.50	50 m
M4.10	10 m (*)
M4.20	20 m (*)

(\* Dimensional differences from the versions above)

#### PLACE OF PRODUCTION

Markus Lifenet Ltd.

Hvaleyrarbraut 3

220 Hafnarfjordur

Iceland



A. Prestigiacomio

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).*