



EC TYPE EXAMINATION (MODULE B) CERTIFICATE

No.	01-013286/017938
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THIS IS TO CERTIFY:

That Croatian Register of Shipping did undertake the relevant type approval procedures for the equipment identified below which was found to be in compliance with requirements of Marine Equipment Directive (MED) 2014/90/EU, subject to any conditions in the schedule attached hereto.

TYPE AND DESCRIPTION OF PRODUCT

YL-MES-S (III) Vertical single chute marine evacuation system
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NUMBER AND ITEM DESIGNATION (in accordance with Annex of Regulation (EU) 2018/773)

MED/1.27 - Marine evacuation systems

MANUFACTURER:

SHANGHAI YOULONG RUBBER PRODUCTS CO., Ltd. 20 Xinchun Rd., Chuansha, Pudong Shanghai 201205 People's Republic of CHINA
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REGULATIONS AND STANDARDS (in accordance with Annex of Regulation (EU) 2018/773)

<i>SOLAS 1974 as amended, Reg. III/4, III/15, III/26, III/34 and X/3,</i> <i>IMO Res. MSC.36(63)-(1994 HSC Code) 8,</i> <i>IMO Res. MSC.48(66)-(LSA Code) I and VI,</i> <i>IMO Res. MSC.97(73)-(2000 HSC Code) 8.</i>
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NOTICE:

- Further details of the product and conditions for certification are given overleaf.
- This certificate will not be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with the notified body named on this certificate.
- Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply.
- The Mark of Conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-control phase module (D, E, or F) of Annex II of the Directive is fully complied with and controlled by a written inspection agreement with a notified body.
- In case limitations of use apply, these should be indicated of in the Schedule of Approval.

Issued by Croatian Register of Shipping, notified body number 2489.

This certificate is valid until: **2023-04-16**

Place and date: **Split, 2019-04-16**

Seal

Signature

Marinko Popović, dipl.ing.

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION

YL-MES-S (III) vertical single chute is a Marine Evacuation System (MES) with a single vertical chute where evacuation takes place directly into a YOULONG KHR-100 or KHK-100 or KHK-152 (as main "mother" liferaft).

Installation heights: 4,5m – 25m

Max evacuation capacity:

- 250 persons in 17 min. 40 sec. according to the HSC code (incl. cut free of liferafts)
- 462 persons in 30 min. (incl. cut free of liferafts)

2. APPLICATION/LIMITATION OF USE

The MES and its arrangement onboard any vessel, including the passageway and embarkation areas, are subject to approval by the Flag Administration to ensure that the flow rate is such to allow for the evacuation of the number of persons for which the MES is certified for within the required time.

Accepted with KHR-100 as main ("mother") liferaft and associated drop-down liferafts with KHZ-100, KHZ-50 and smaller capacity drop down liferafts provided that the line attachment arrangement is the same as for as arranged for KHZ-100 or KHZ-50.

Accepted also with KHK-152, KHK-100 as main ("mother") liferaft and associated same drop-down liferafts (KHK-100 and KHK-152) or smaller capacity (KHK-50, KHK-65) liferafts provided that the line attachment arrangement is the same as arranged for KHK-152 or KHK-100 liferafts.

It shall be verified that the ship on which the MES is installed is equipped with a sufficient number of rescue boats to satisfactory marshal and support the bowing and tow away, as applicable, of all the associated life rafts within the times allowed for embarkation as per SOLAS Ch.III/Reg. 21.1.3 and 31.1.5.

Production and installation testing shall be according to IMO Res. MSC. 81(70), part 2.

The chute materials are subject to annual service according to manufacturer's procedures in order to verify elastic and strength properties.

3. DESIGN DRAWINGS AND SPECIFICATIONS

Assembly drawing no. 502-301,

MES-vertical single chute with KHR-100&KHZ100 deployed and KHK152&KHR100 drawing no. 502-302/A,

Passage height determination drawing no. 502-303,

Deployment procedure of MES-vertical single chute with KHR100&KHZ100&KHK152 liferafts drawing no. 502-304 and

Operating and maintenance manual, rev 2.

4. TYPE TEST RECORDS/LABORATORY RECOGNITION STATUS

Test documentation in accordance with recommendation on testing of Lifesaving Appliances, IMO Res. MSC 81(70), Part 1 (Test protocol no. 101-102 dated 2018-06-03).

5. MATERIALS OR COMPONENTS REQUIRED TO BE TYPE APPROVED OR TYPE TESTED

The associated drop-down liferafts shall have separate MED Approval and be wheelmarked.

Gas cylinders and components in the pressure gas systems shall be of an approved type.

6. OTHER MATERIALS AND/OR COMPONENT

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7. PRODUCTION SURVEY REQUIREMENTS

The manufacturer is allowed to affix the Mark of Conformity to equipment referred and to issue a Declaration of Conformity as long as either of the following is fulfilled:

Module D - The quality system for production and testing shall be approved by the Notified Body or,

Module F - Compliance of the products in this EC Type-Examination Certificate is to be verified by the Notified Body who shall also issue a Certificate of Conformity.

8. ONBOARD INSTALLATION AND MAINTENANCE REQUIREMENTS

Installation shall be performed according to manufacturer's instruction.

Each product is to be supplied with its manual for installation and maintenance.

The marking shall be according to IMO Res. MSC 48(66) - LSA Code, item 6.2.4 and 6.2.5.

9. MARKING AND IDENTIFICATION



Subject to compliance with the conditions in this Schedule of Approval which forms part of certificate, and those of Articles 9, 10 and 15 of the Directive, the Manufacturer is allowed to affix the "Mark of Conformity" to the Product described herein.

xxxx/yy

*xxx - the number of the Notified Body undertaking surveillance module (2489 in case of CRS)
yy - the last two digits of year mark affixed*

10. OTHER

This approval is given with the understanding that the manufacturer will accept full responsibility for informing shipbuilders, shipowners or their sub-contractors of the proper methods of fitting and general maintenance of the approved equipment and the conditions of this approval.

- END OF CERTIFICATE -