EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MEDB0000BRG
Revision no.:
0

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as “Forskrift om Skipsutstyr” by the Norwegian Maritime Authority. This Certificate is issued by DNV AS under the authority of the Government of Norway.

This is to certify:

that the **A’ & ’B’ Class divisions fire integrity: - ’A’ class division**

with type designation(s)
LH Spray R-D101 Type Class A-60 Deck

issued to
Shanghai Lihui Marine Equipment Co., Ltd.
Shanghai, **China**

is found to comply with the Implementing Regulation **(EU) 2025/1533** for
Item no. **MED/3.11a** (Row **2 of 2**)
according to the following requirements:
SOLAS 74 Reg. II-2/3.2, SOLAS 74 Reg. II-2/9, IMO MSC/Circ.1120, IMO MSC.1/Circ.1434, IMO MSC.1/Circ.1616, IMO MSC.1/Circ.1621, IMO MSC/Circ.1120

Further details of the equipment and conditions for certification are given overleaf.

Date of issue: **2025-11-17**

Expiry date: **2030-11-16**

DNV local unit:
Shanghai

Approval Engineer:
Joanna Kowalczuk

Notified Body
no.: **0575**

for **DNV AS**

Christine Mydlak-Röder
Head of Notified Body

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the Agreement between the United States of America and the EEA EFTA states on the mutual recognition of Certificates of Conformity for Marine Equipment signed 17 October 2005, and amended by Decision No 1/2023 dated August 21st, 2023.

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-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.
This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.
Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees (“DNV”) arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to USD 300 000.

Product description

"LH Spray R-D101 Type Class A-60 Deck"
is a heat insulation material applied on the stiffener side of a steel structural core deck. The core steel plate is 5 mm thick and reinforced with stiffeners of L100 x 70 x 8 mm.

The insulation material is LH Spray R-D101 type marine rock wool layer with a density of 140 kg/m³, a moisture content of 0.5% and a nominal organic content of 1.6%.
It is applied on the steel structural core and on the stiffeners with one layer of 40 mm nominal thickness and on surface of stiffener, there was another layer of heat-insulating material of 25mm in thickness. LH Spray R type is a dualcomponent adhesive sprayed on the surface by a special spraying device, thus the close coating layer is formed.

For further details refer to the documentation listed below under “Type Examination documentation”

Application/Limitation

Approved for use as a horizontal fire retarding division of class A-60.

The insulation materials and adhesives used have to be approved according to the Marine Equipment Directive and bear the Mark of Conformity. This requirement may also be applicable for surface materials used, if required by relevant rules and regulations.

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

Type Examination documentation

Tests carried out

Tested according to IMO 2010 FTP Code Part 3

Marking of product

The product is to be marked with name and address of manufacturer, type designation, fire technical rating, the MED Mark of Conformity and USCG Approval Number if applicable (see first page).