

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MEDB0000AZ4
Revision no.:
0

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

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

with type designation(s)

HYHA-III Type Composite Alumina Blanket "A-60" Class Bulkhead

issued to

Wuxi Haiyue Ship New Material Technology Co., Ltd.
Wuxi, China

is found to comply with the Implementing Regulation (EU) 2024/1975 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.1/Circ.1434, IMO MSC.1/Circ.1616, IMO
MSC.1/Circ.1621, IMO MSC/Circ.1120**

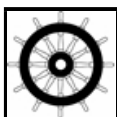
Further details of the equipment and conditions for certification are given overleaf.

Date of issue: **2025-05-07**

Expiry date: **2030-05-06**

DNV local unit:
Jiangyin NB & CMC

Approval Engineer:
Joanna Kowalczuk



Notified Body
no.: **0098**

for **DNV SE**

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 European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment, signed February 27th, 2004, and amended by Decision No 1/2023 dated May 26th, 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 SE 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

"HYHA-III Type Composite Alumina Blanket "A-60" Class Bulkhead"

is composed of a structural steel bulkhead , reinforced with six stiffeners of L65 x 65 x 6 mm along high direction and two flat steels 65 x 6 mm welded on upper and lower ends, insulated with one layers of HYHA-III type composite aluminum blanket produced by WUXI HAIYUE SHIP NEW MATERIAL TECHNOLOGY CO., LTD. with a nominal density of 96 kg/m³ and 40 mm nominal thick. The core steel side (the side without stiffeners) was exposed to fire.

The insulation is fixed to the bulkhead by means of steel nails ø 3 mm and steel pressure ring ø 30 mm.

The nails on bulkhead structural core were distributed in width direction at intervals of 149.5 mm, 300 mm, 150 mm and 234.5 mm, and were distributed in height direction at intervals of 300 mm and 180 mm. The number of nails on bulkhead was 13-15/ m² (including those on stiffeners).

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

Application/Limitation

Approved for use as a vertical 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, use 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).