

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MEDB000092X

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 divisions.**

with type designation(s)
Class A60 Bulkhead (HYSF-64-BHD)

issued to

Zibo Huayuan New Materials Co., Ltd.
Zibo, Shandong, China

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2024/1975,**

item No. MED/3.11a. SOLAS 74 as amended, Regulation II-2/3.2 & II-2/9, IMO 2010 FTP Code, IMO MSC/Circ.1120 and IMO MSC.1/Circ.1434,1435; IMO MSC.1/Circ.1616, 1621

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

This Certificate is valid until **2029-10-08.**

Issued at **Høvik** on **2024-10-09**

DNV local unit:
Qingdao NB & CMC

Approval Engineer:
Marta Kropiwnicka



for **DNV AS**

Notified Body
No.: **0575**

Mydlak-Röder, Christine
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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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 300,000 USD.



Product description

“Class A60 Bulkhead (HYSF-64-BHD)”

Is a bulkhead composed of single layer of 40 mm thick HYSF type Huayuan Marine Super Fireproof Wool (density 64 kg/m³, produced by Zibo Huayuan New Materials) applied on a structural core steel plate containing the angle stiffeners in size L65 x 65 x 6 mm, spaced 600 mm apart. A flat steel sheet of 65 mm x 6 mm dimension is welded in horizontal direction at upper and lower ends of the bulkhead respectively.

The insulation is fixed by means of steel pins (Ø3 mm) and steel fastening washers (Ø30 mm).

The pins between stiffeners are to be installed with maximum longitudinal and horizontal distance of 300 mm. The pins on stiffeners are positioned at nominal spacing of 160 mm from the insulation edge. The maximum distance between pins on the stiffeners and pins on the structural core steel plate is 150 mm.

For further details see drawing listed under Type Examination documentation.

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 and maintenance.

Type Examination documentation

Test report No. AJFS2406007117FR dated 13 August 2024 from SGS-CSTC Standards Technical Services, Anji Branch, China.

Drawing No. BHD-HYSF-64 dated 12 April 2024 from manufacturer.

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).