EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MEDB00008NN

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)
BSSFB-90K60/25T-FR60

issued to
Weihai Bosheng Advanced Materials Co., Ltd
Weihai, Shandong, China

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2023/1667,**
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 **2028-11-19**.

Issued at **Høvik** on **2023-11-20**

DNV local unit:
Dalian NB & CMC

Approval Engineer:
Helge Bjørnarå

Notified Body
No.: **0575**

for **DNV AS**

Sverre Olav Bergli
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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

"BSSFB-90K60/25T-FR60",
composed of a structural steel bulkhead insulated with a single layer of 60 mm thick BSS type marine rock wool board (density 90 kg/m^3, manufactured by Weihai Bosheng Advanced Materials) applied between stiffeners and 25 mm thick BSS type marine rock wool board (density 90 kg/m^3, manufactured by Weihai Bosheng Advanced Materials) around stiffeners. Stiffener cavities are filled with insulation.

The blankets are held in place using steel pins (Ø 3 mm) welded to the bulkhead and 30 mm washers. The pins are to be installed with an average spacing of 300 mm across the blankets and on average 300 mm along the blankets, whereas pins at the joints between blankets shall have a nominal spacing of 150 mm from the blanket edge.

For further details, see drawings 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. FT23203 dated 19 June 2023 from FEFTC, Shanghai, China.

Drawing No. BS-A60CB1/202305 dated 17 May 2023 from manufacturer.
Drawing No. BS-A60CB1/202305 dated 17 May 2023 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 front page).