

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

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 GL AS under the authority of the Government of Norway.

This is to certify:

That the "B" Class divisions, fire integrity

with type designation(s)

BIP-G162-B15: B-15 Class Bulkhead

Issued to

BIP Industries Co., Ltd.

Yangsan-si, Gyeongsangnam-do, Republic of Korea

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

Regulation **(EU) 2019/1397,**

item No. MED/3.11b. SOLAS 74 as amended, Regulation II-2/3.4 & II-2/9, IMO 2010 FTP Code, IMO MSC/Circ.1120 and IMO MSC.1/Circ.1581

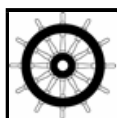
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2025-03-30.**

Issued at **Høvik** on **2020-03-31**

DNV GL local station:
Gimhae Station

Approval Engineer:
Helge Bjørnarå



Notified Body
No.: **0575**

for **DNV GL AS**

Roald Vårheim
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 1/2019 dated February 22nd, 2019.

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 GL 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.



Product description

"BIP-G162-B15: B-15 Class Bulkhead",

Composed of a 2.5 mm thick GRP board (manufactured by Dong-EE TCS Co., Ltd.), a 0.7 mm thick expanded metal sheet and two 15 mm thick insulation layers (density 180 kg/m³) manufactured by KCC, and an expanded metal sheet. The insulation and expanded metal sheet is fastened to the GRP board by metal pins and clips with a maximum transverse spacing of 600 mm and a maximum longitudinal spacing of 790 mm. A 100 mm wide tape strip made of aluminium foil with glass cloth is fitted over the pins and insulation joints in both transverse and longitudinal direction.

Total thickness of bulkhead is 35 mm.

For further details, see drawings listed in Type Examination documentation below.

Application/Limitation

Approved for use as a vertical fire retarding division of class B-15.

The bulkhead may be fire exposed from either sides.

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 and the combustible veneer (GRP boards) used, if required by relevant rules and regulations (SOLAS Regulation II-2/5.3).

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

Type Examination documentation

Test report No. AK2014-0066 dated 11 April 2014 from FILK, Gyeonggi-do, Korea.

Test report No. AK2014-0067 dated 11 April 2014 from FILK, Gyeonggi-do, Korea.

Drawing No. BIP-G162-B15-01 (4 pages) dated 13 January 2014 from manufacturer.

Drawing No. BIP-G162-B15-02 (4 pages) dated 13 January 2014 from manufacturer.

Tests carried out

Tested according to IMO 2010 FTP Code part 3.

Marking of product

The product or packing is to be marked with name and address of manufacturer, type designation, fire-technical rating, Mark of Conformity and USCG approval (see first page).