



Marine & Offshore

Certificate number: 25839/C0 BV

File number: ACI 1000/177/064

Product code: 5030H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

BIP INDUSTRIES CO., LTD.

Gyeongsangnam-do - KOREA (REPUBLIC OF)

for the type of product

B15 CLASS BULKHEADS

B-15 Class Bulkheads

Type "BIP W-302" and "BIP W-302E"

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships Part C, Chapter 4

SOLAS 74 Convention as amended, Regulations II-2/9, II-2/3.4

IMO Resolution MSC.307(88) - (2010 FTP Code)

IMO MSC/Circ.1120

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate is a renewal of certificate N° 25839/B0 BV expiring on 19/10/2021

This certificate will expire on: 19 Oct 2026

For Bureau Veritas Marine & Offshore,

At BV PUSAN, on 07 Sep 2021,

Chang-Uk HONG



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

The electronic version is available at: <http://www.veristarpn.com/veristarnb/jsp/viewPublicPdfTypepec.jsp?id=1moo7odpya>

BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

B-15 Class Bulkheads - Type "BIP W-302"

Composed of insulating core made of 48.5 mm thick mineral wool (nominal density 140 kg/m³, manufactured by KCC Co. Ltd., Korea) glued on both sides with 0.6 mm thick steel sheets.

B-15 Class Bulkheads - Type "BIP W-302E"

Composed of insulating core made of 47.7 mm thick mineral wool (nominal density 140 kg/m³, manufactured by KCC Co., Ltd., Korea) glued on both sides with 0.4 mm thick perforated steel sheets + 0.6 mm thick steel sheets (0.6 mm thick steel sheets are fitted outside the panels). Panels' vertical edges (width 30 mm) are reinforced with mineral wool (nominal density 240 kg/m³, manufactured by KCC Co. Ltd., Korea).

A panel contains openings to allow 5 cable conduit ways, each 20 mm x 50 mm (depth x width) air space, enclosed within the panel.

Panels are connected together with 0.6 mm thick steel cap profiles.

Urethane adhesive "OCUA-1000RC", manufactured by DAI HAN POLYMER Ind. Co., Ltd., or "BNUR-1000", manufactured by BN Chemical Co., Ltd., maximum application rate 200 g/m².

Maximum width of a panel: 550 mm

Total bulkhead thickness: 50 mm.

2. DOCUMENTS AND DRAWINGS :

As per the Manufacturer's drawing;

- Type "BIP W-302", N° F2013-W302-R0 dated July 30, 2013
- Type "BIP W-302E", N° F2016-W302E-R0 dated May 13, 2016

3. TEST REPORTS :

Test reports

- Type "BIP W-302": N° AK2013-0237 dated November 4, 2013 (**testing date: August 30, 2013**)
- Type "BIP W-302E": N° AK2016-0404 dated July 8, 2016 (**testing date: June 17, 2016**)

as per IMO 2010 FTP Code, Annex 1, Part 3 from FILK, Korea.

4. APPLICATION / LIMITATION :

4.1 - The fitting aboard to be the same as used for the test.

4.2 - The following components have to be covered by a valid type approval certificate, issued by the Society:

- the insulating materials "**Mineral wool #140 and #240**"
- the adhesives "**OCUA-1000RC**" and "**BNUR-1000**"
- any added finish surface material(s).

5. PRODUCTION SURVEY REQUIREMENTS :

5.1 - The "**BIP W-302**" and "**BIP W-302E**" are to be supplied by **BIP Industries Co., Ltd.** in compliance with the type described in this certificate.

5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.

5.3 - **BIP Industries Co., Ltd.** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.

5.4 - For information, **BIP Industries Co., Ltd.** has declared to Bureau Veritas the following production site(s):

*BIP Industries Co., Ltd.
67, Baedun-Gongdan-gil,
Heohwa-myeon
GOSEONG-GUN
KOREA (REPUBLIC OF)*

6. MARKING OF PRODUCT :

The product or packing is to be marked with Manufacturer name, type designation and fire-technical rating.

7. OTHERS :

7.1 - It is the Manufacturer's responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

7.2 - This certificate supersedes the Type Approval Certificate N° 25839/B0 BV issued on 19/10/2016 by the Society.

***** END OF CERTIFICATE *****