



Confirmation of Product Type Approval

Company Name: BIP INDUSTRIES CO., LTD.GOSEONG

Address: 67, BAEDUNGONGDAN-GIL, HOEHWA-MYEON, GOSEONG-GUN, GYEONGSANGNAM-DO, Korea, Republic of

Product: Fire Protection Bulkhead

Model(s): BIP D-163, BIP W-106SE(6), BIP W-106SE(A), BIP W-202S, BIP W-251S, BIP W-302E

Endorsements:

Certificate Type	Certificate Number	Issue Date	Expiry Date
Product Design Assessment (PDA)	21-2145677-PDA	29-JUL-2021	28-JUL-2026
Manufacturing Assessment (MA)	20-4416841	07-OCT-2020	06-OCT-2025
Product Quality Assurance (PQA)	NA	NA	NA

Tier

3 - Type Approved, unit certification not required

Intended Service

For use on Ships and Offshore Installations.

Description

1. BIP D-163: B-15 Class Bulkhead: Thickness 0.6 mm galvanized steel sheet (both side), Insulation (Mineral wool, nominal density: 200 kg/m³, Nominal thickness: 15mm) (both side).

- Sound Transmission Class (STC): 44 dB, Rw (C ; Ctr) = 46 (-5 ; -13) dB.

2. BIP W-106SE(6): B-15 Class Bulkhead: Thickness 0.6 mm galvanized steel sheet + 0.4 mm perforated steel sheet (both side), Insulation (Mineral wool, nominal density: 140 kg/m³, Nominal thickness: 2x21 mm) (both side), Air gap 5 mm.

- Sound Transmission Class (STC): 46 dB, Rw (C ; Ctr) = 46 (-2 ; -7) dB.

3. BIP W-106SE(A): B-15 Class Bulkhead: Thickness 0.6 mm galvanized steel sheet + 0.4 mm perforated steel sheet (both side), Insulation (Mineral wool, nominal density: 140 kg/m³, Nominal thickness: 48.5 mm) with cable conduit way (50 mm x 20 mm).

- Sound Transmission Class (STC): 44 dB, Rw (C ; Ctr) = 44 (-2 ; -6) dB.

4. BIP W-202S: B-15 Class Bulkhead: Thickness 0.4 mm galvanized high tensile steel sheet (both side), Insulation (Mineral wool, nominal density: 140 kg/m³, Nominal thickness: 48.5 mm).

5. BIP W-251S: B-0 Class Bulkhead: Thickness 0.4 mm galvanized high tensile steel sheet (both side), Insulation (Mineral wool, nominal density: 140 kg/m³, Nominal thickness: 23.5 mm).

6. BIP W-302E: B-15 Class Bulkhead: Thickness 0.6 mm galvanized steel sheet + 0.4 mm perforated steel sheet (both side), Insulation (Mineral wool, nominal density: 140 kg/m³ + 240 kg/m³, Nominal thickness: 47.7 mm) with cable conduit way (50 mm x 20 mm).

Ratings

" B " Class Division.

Service Restrictions

-. Unit Certification is not required for this product.

-. If the manufacturer or purchaser requests an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

-. The scope of Type Approval is to comply with MSC.1/Circ.1221 dated 11 December 2006.

-. The B Class Bulkheads (BIP W-202S, BIP W-251S and BIP W-302E) cannot be used as a partition between the following spaces:

i) Cabin to Cabin

ii) Mess rooms, recreation rooms, public spaces and entertainment areas to cabins and hospitals

iii) Corridor to Cabin

iv) Cabin to Cabin with communicating door

in the accommodation area on ships covered by the IMO Code on Noise (IMO Resolution MSC.337(91)) since its Weighted Sound Reduction Index (Rw) has not been laboratory tested in accordance with ISO 10140-2:2010.

Comments

-. The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

-. Our approval is based on that the above materials have been tested and certified by the Fire Insurers Laboratories of Korea (FILK) Test Report Nos.: AK2016-0173 dated 6 April 2016, A2012-0931 dated 20 February 2013, AK2012-0185 dated 20 August 2012, AK2016-0171 dated 6 April 2016, AK2016-0172 dated 6 April 2016 and AK2016-0404 dated 8 July 2016.

-. Sound insulation Test Report by Korea Marine Equipment Research Institute (KOMERI), Report Nos. KOMERI-0601-16T1949-1 dated 2 September 2016, KOMERI-0601-1ST3757 dated 19 January 2016 and KOMERI 0601-16T3553 dated 2 December 2016.

-. Unless specially directed by Administration, this approval is not to be construed as a substitute for Flag Administration's approval for the purpose of SOLAS (2020 Consolidated Edition), as amended.

-. This certificate may not be used for EU and US flagged vessels (MED and/or USCG have their own specific/requirements).

Notes, Drawings and Documentation

Drawing No. 10306103, ISO 9001:2015 Certificate by LRQA, Revision: -, Pages: 2

Drawing No. 16-1540920-1-PDA, Certificate of Product Design Assessment, Revision: -, Pages: 3

Drawing No. 16-1555504-1-PDA, Certificate of Product Design Assessment, Revision: -, Pages: 3

Drawing No. F2016-D163-R0, Fire Protection Specimen for BIP D-163, Revision: -, Pages: 6

Drawing No. W-106SE(6)-R0, Fire Test Specimen for BIP W-106SE(6), Revision: -, Pages: 5

Drawing No. W-106SE-R0, Fire Test Specimen for BIP W-106SE(A), Revision: -, Pages: 5

Drawing No. F2016-W202S-R0, Fire Test Specimen for BIP W-202S, Revision: -, Pages: 7

Drawing No. F2016-W251S-R0, Fire Protection Specimen for BIP W-251S, Revision: -, Pages: 7

Drawing No. F2016-W302E-R0, Fire Test for BIP W-302E, Revision: -, Pages: 8

Drawing No. AK2016-0173 dated 6 April 2016, FILK Test Report for BIP D-163, Revision: -, Pages: 22

Drawing No. A2012-0931 dated 20 February 2013, FILK Test Report for BIP W-106SE(6), Revision: -, Pages: 20

Drawing No. AK2012-0185 dated 20 August 2012, FILK Test Report for BIP W-106SE(A), Revision: -, Pages: 21

Drawing No. AK2016-0171 dated 6 April 2016, FILK Test Report for BIP W-202S, Revision: -, Pages: 23

Drawing No. AK2016-0172 dated 6 April 2016, FILK Test Report for BIP W-251S, Revision: -, Pages: 20

Drawing No. AK2016-0404 dated 8 July 2016, FILK Test Report for BIP W-302E, Revision: -, Pages: 25

Drawing No. KOMERI-0601-16T1949-1 dated 2 September 2016, KOMERI Test Report, Revision: -, Pages: 14

Drawing No. KOMERI-0601-1ST3757 dated 19 January 2016, KOMERI Test Report, Revision: -, Pages: 21

Drawing No. KOMERI 0601-16T3553 dated 2 December 2016, KOMERI Test Report, Revision: -, Pages: 16

Term of Validity

This Product Design Assessment (PDA) Certificate remains valid until 28/Jul/2026 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

ABS Rules

2021 Marine Vessel Rules 1-1-4/7.7, 1-1-A3 & 1-1-A4, 4-1-1/7.15.

2021 Offshore Units and Structures Rules 1-1-4/9.7, 1-1-A2 & 1-1-A3, 5-1-1/3.7

International Standards

IMO Resolution MSC.307(88) adopted on 2010, IMO FTP Code 2010 (2012 Edition), Annex 1 Part 3, in conjunction with SOLAS (2020 Consolidated Edition), as amended.

IMO Resolution MSC.337(91) adopted on 2012 - Code on Noise Levels on board Ships.

ISO 10140-2:2021 (Acoustics - Laboratory Measurement of Sound Insulation of Building Elements).

ISO 717-1:2020 (Acoustics - Rating of Sound Insulation in Buildings and of Building Elements).

ASTM E413-16:2016 (Classification for Rating Sound Insulation).

EU-MED Standards

NA

National Standards

NA

Government Standards

NA

Other Standards

NA



Corporate ABS Programs
American Bureau of Shipping
Print Date and Time: 10-Aug-2021 2:39

ABS has used due diligence in the preparation of this certificate, and it represents the information on the product in the ABS Records as of the date and time the certificate is printed.

If the Rules and/or standards used in the PDA evaluation are revised or if there is a design modification (whichever occurs first), a PDA revalidation may be necessary.

The continued validity of the MA is dependent on completion of satisfactory audits as required by the ABS Rules. The validity of both PDA and MA entitles the product to receive a **Confirmation of Product Type Approval**.

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or prior to the effective date of the ABS Rules and standards applied at the time of PDA issuance. ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. The manufacturer is responsible to maintain compliance with all specifications applicable to the product design assessment. Unless specifically indicated in the description of the product, certification under type approval does not waive requirements for witnessed inspection or additional survey for product use on a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.