



Confirmation of Product Type Approval

Company Name: BIP INDUSTRIES CO., LTD.GOSEONG

Address: 67, BAEDUNGONGDAN-GILHOEHWA-MYEON GYEONGSANGNAM-DO Korea, Republic of

Product: Fire Protection Bulkhead

Model(s): BIP W-106S, BIP W-163, BIP W-E80S, BIP W-162

Certificate Type	Certificate Number	Issue Date	Expiry Date
Product Design Assessment (PDA)	20-2027457-PDA	28-AUG-2020	27-AUG-2025
Manufacturing Assessment (MA)	20-4416841	07-OCT-2020	06-OCT-2025
Product Quality Assurance (PQA)	NA	NA	NA

Tier

3

Intended Service

For use on Ships and Offshore Installations

Description

BIP W-106S (B-15 Class Bulkhead): Thickness 0.6 mm galvanized steel sheet, Insulation (Mineral wool, nominal density: $140\text{kg/m}^3 + 240\text{kg/m}^3$, Nominal thickness: 50mm).

-Sound Transmission class (STC): 41 dB, R_w (C;Ctr) = 41(-2;-7) dB

BIP W-163 (B-15 Class Bulkhead): Thickness 0.6 mm galvanized steel sheet, Insulation (Mineral wool, nominal density: 200kg/m^3 , Nominal thickness: 15mm + 15mm).

-Sound Transmission class (STC): 41 dB, R_w (C;Ctr) = 43(-4;-11) dB

BIP W-E80S (B-15 Class Bulkhead): Thickness 0.6 mm galvanized steel sheet, Insulation (Mineral wool, nominal density: 140kg/m^3 , Nominal thickness: 50mm).

-Sound Transmission class (STC): 35 dB, R_w (C;Ctr) = 35(0;-3) dB

BIP W-162 (B-15 Class Bulkhead): Thickness 0.6 mm galvanized steel sheet, Insulation (Mineral wool, nominal density: 200kg/m^3 , Nominal thickness: 15mm + 15mm).

-Sound Transmission class (STC): 33 dB, R_w (C;Ctr) = 33(-2;-5) dB

Ratings

" B " Class Division

-. Sound Insulation:

-Sound Transmission class (STC): 41 dB, R_w (C;Ctr) = 41(-2;-7) dB for W-106S

- Sound Transmission class (STC): 41 dB, Rw (C;Ctr) = 43(-4;-11) dB for W-163
- Sound Transmission class (STC): 35 dB, Rw (C;Ctr) = 35(0;-3) dB for W-E80S
- Sound Transmission class (STC): 33 dB, Rw (C;Ctr) = 33(-2;-5) dB for W-162

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

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.: AK2013-0460 & AK2014-0615 & A2012-0932 dated 6 March 2014 & 2 January 2015 & 20 February 2013 and has been tested and certified by the Korea Marine Equipment Research Institute (KOMERI) Test Report No.: KOMERI-0402-12T579 dated 5 September 2012, Sound Test Reports Nos.: KOMERI-0601-14T0838, KOMERI-0601-20T2083(E), KOMERI-0601-16T1948-1, KOMERI-0601-20T2084(E) dated 19 June 2014, 27 July 2020, 2 September 2016, 29 July 2020.
- 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 1974 (2014 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. 15-BK1381017-PDA, dated 7 July 2015, ABS PDA Cert., Revision: -, Pages: 1
- Drawing No. 10277215, dated 2 July 2020, ISO 9001:2015 by LR Cert., Revision: -, Pages: 1
- Drawing No. F2013-W106S-R0, dated 16 December 2013, DRAWING FOR BIP W-106S, Revision: ORI, Pages: 1
- Drawing No. F2014-W163-R0, dated 20 August 2014, DRAWING FOR BIP W-163, Revision: ORI, Pages: 1
- Drawing No. F2012-WE80S-R0, dated 2 November 2012, DRAWING FOR BIP W-E80S, Revision: ORI, Pages: 1
- Drawing No. W-162-B15-R0, dated 6 March 2012, DRAWING FOR BIP W-162, Revision: ORI, Pages: 1
- Drawing No. AK2013-0460, dated 6 March 2014, FILK Test Report for BIP W106S, Revision: -, Pages: 1
- Drawing No. AK2014-0615, dated 2 January 2015, FILK Test Report for BIP W163, Revision: -, Pages: 1
- Drawing No. A2012-0932, dated 20 February 2013, FILK Test Report for BIP WE80S, Revision: -, Pages: 1
- Drawing No. KOMERI-0402-12T579, dated 5 September 2012, KOMERI Test Report for BIP W-162, Revision: -, Pages: 1
- Drawing No. KOMERI-0601-14T0838, dated 19 June 2014, KOMERI Sound Test Report for BIP W-106S, Revision: -, Pages: 1

Drawing No. KOMERI-0601-20T2083(E), dated 27 July 2020, KOMERI Sound Test Report for BIP W-162, Revision: -, Pages: 1

Drawing No. KOMERI-0601-16T1948-1, dated 2 September 2016, KOMERI Sound Test Report for BIP W-E80S, Revision: -, Pages: 1

Drawing No. KOMERI-0601-20T2084(E), dated 29 July 2020, KOMERI Sound Test Report for BIP W-163, Revision: -, Pages: 1

Term of Validity

This Product Design Assessment (PDA) Certificate remains valid until 27/Aug/2025 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

- 2020 Marine Vessels Rules 1-1-4/7.7, 1-1-A3, 1-1-A4
- 2020 Mobile Offshore Units Rules 1-1-4/9.7, 1-1-A2, 1-1-A3

International Standards

IMO Resolution MSC.307(88) adopted on 2010, IMO FTP Code 2010 (2012 Edition), Annex 1 Part 3, in conjunction with SOLAS (Consolidated Edition 2014), as amended

EU-MED Standards

NA

National Standards

NA

Government Standards

NA

Other Standards

NA



A handwritten signature in black ink, appearing to read 'Joseph W. ...', is written over the printed text.

Corporate ABS Programs
American Bureau of Shipping
Print Date and Time: 13-Oct-2020 1:56

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.