



Confirmation of Product Type Approval

Company Name: BIP INDUSTRIES CO., LTD.GOSEONG

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

Product: Fire Protection Bulkhead

Model(s): BIP WA-402S BIP WA-451S

Endorsements:

Certificate Type	Certificate Number	Issue Date	Expiry Date
Product Design Assessment (PDA)	24-00T2540220-PDA	14-MAY-2024	13-MAY-2029
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 WA-402S:

B-15 Class Fire Resistant Bulkhead,

Thickness 0.6 mm Aluminum sheet on both sides,

Insulation (Mineral wool, Nominal density: 140 kg/m³, Nominal thickness: 48.5 mm)

Total panel thickness: 50 mm,

The panels are joined together with spline profile.

2. BIP WA-451S:

B-0 Class Fire Resistant Bulkhead,

Thickness 0.6 mm Aluminum sheet on both sides,

Insulation (Mineral wool, Nominal density: 140 kg/m³, Nominal thickness: 23.5 mm)

Total panel thickness: 25 mm,

The panels are joined together with spline profile.

Ratings

1. BIP WA-402S:

- B-15 Class Fire Resistant Bulkhead
- Sound Transmission Class (STC): 27 dB, Rw (C ; Ctr) = 27 (0 ; -1) dB.

2. BIP WA-451S:

- B-0 Class Fire Resistant Bulkhead
- Sound Transmission Class (STC): 26 dB, Rw (C ; Ctr) = 27 (-1 ; -2) dB.

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 Fire Insurers Laboratories of Korea (FILK), Report Nos.: 2009-0283 dated 21 July 2009 and 2009-0282 dated 21 July 2009.
- . Sound Insulation Test Report by Korea Marine Equipment Research Institute (KOMERI), Report Nos. KOMERI-0601-23T0758(E) dated 18 June 2023 & KOMERI-0601-23T0759(E) dated 18 June 2023.
- . 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 (Consolidated Edition 2020), 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. F2009-WA402S-R0, Drawing for BIP WA-402S (1/5~5/5), Revision: ORI

Drawing No. 2009-0283 dated 21 July 2009, FILK Test Report for BIP WA-402S, Revision: -

Drawing No. KOMERI-0601-23T0758(E) dated 18 June 2023, KOMERI Sound Insulation Test Report of BIP WA-402S, Revision: -

Drawing No. F2009-WA451S-R0, Drawing for BIP WA-451S (1/5~5/5), Revision: ORI

Drawing No. 2009-0282 dated 21 July 2009, FILK Test Report for BIP WA-451S, Revision: -

Drawing No. KOMERI-0601-23T0759(E) dated 18 June 2023, KOMERI Sound Insulation Test Report of BIP WA-451S, Revision: -

Term of Validity

This Product Design Assessment (PDA) Certificate remains valid until 13/May/2029 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

- 2024 Marine Vessels Rules 1-1-4/7.7, 1-1-A3, 1-1-A4
- 2024 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 2020), as amended.

IMO Code on Noise Levels on Board Ships - 2014 Edition (IMO Resolution MSC.337(91) - adopted on 30 November 2012).

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

ISO717-1:2020 (Acoustics - Rating of Sound Insulation in Buildings and of Building Elements).

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

EU-MED Standards

NA

National Standards

NA

Government Standards

NA

Other Standards

NA



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

Corporate ABS Programs
American Bureau of Shipping
Print Date and Time: 20-May-2024 2:14

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.