

EC-TYPE EXAMINATION CERTIFICATE

Application of: Council Directive 96/98/EC of 20 December 1996 on Marine Equipment as amended by directive 2013/52/EU, issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Directorate. This Certificate is issued by DNV GL AS under the authority of the Government of the Kingdom of Norway.

This is to certify:**That the "B" Class divisions, fire integrity**

with type designation(s)

BIP W-161: B-0 Class Bulkhead

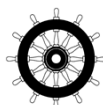
Issued to

**BIP Industries Co., Ltd.
Gyeongsangnam-do, Republic of Korea**

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

Annex A.1, item No. A.1/3.11b and Annex B, Module B in the Directive. SOLAS 74 as amended, Regulation II-2.3.4.4. and IMO 2010 FTP Code.

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

**Høvik, 2015-07-31
for DNV GL AS**This Certificate is valid until
2020-06-03Notified Body No.: **0575**

**Petter Langnes
Head of Department**DNV GL local office:
Pusan

**Silje Helene Waagaard
Surveyor**

Job Id: **344.1-004804-1**
Certificate No: **MEDB000002Y**

Product description

"BIP W-161: B-0 Class Bulkhead"

composed of panels faced on exposed side with 0.6 mm steel sheet, insulated with 15 mm thick mineral wool from KCC Corporation Korea of density 200 kg/m³. Urethane adhesive manufactured by Dae Han polymer Co., Ltd. and BN Chemical Co., Ltd. is used for the fixation of insulation material. The panels are fitted together by Ω-profiles with fitting screws (ø4 x 20L, pitch: 300 mm).

Total thickness of panels: 30 mm (including wrapped edge)

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

Application/Limitation

Approved for use as a fire retarding division of class B-0.

Maximum size of panels: 600 x 2500 mm (W x H).

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 used, if required by relevant rules and regulations.

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

Type Examination documentation

Test report No. AK2013-0461, dated 6th of March 2014 from Fire Insurers Laboratories of Korea (FILK), Korea.

Drawing No. F2013-W161-R0 (6 pages) dated 23rd of December 2013 from the manufacturer.

Tests carried out

Tested according to IMO 2010 FTP Code part 3.

Marking of product

The product is to be marked with name of manufacturer, type designation, fire technical rating, MED Mark of Conformity and USCG approval number if applicable (see below).

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Mark of Conformity

The manufacturer is allowed to affix the Mark of Conformity according to Article 11 in the Council Directive 96/98/EC on Marine Equipment and shall issue a Declaration of Conformity, only when the module D or E or F of Annex B in the same directive is fully complied with.

Module D: The quality system for production and testing shall be approved by the Notified Body.

Module E: The quality system for inspection and testing shall be approved by the Notified Body.

Module F: Compliance of the products to type as described in this EC Type-Examination Certificate must be verified by the Notified Body who also shall issue a Certificate of Conformity.

USCG Approval

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.