DNV·GL

Certificate No:
MEDB000048C

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of Norway.

This is to certify:

That the "A" Class divisions, fire integrity

with type designation(s)
A60 Class Bulkhead - DAEHYUP Spray S-B101(AL)

Issued to
Daehyup Spray Co., Ltd.
Ulsan, Republic of Korea

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2018/773,**
item No. MED/3.11a. SOLAS 74 as amended, Regulation II-2/3.2 & II-2/9, IMO 2010 FTP Code, IMO MSC/Circ.1120 and IMO MSC.1/Circ.1434

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

This Certificate is valid until **2023-12-03**.

Issued at **Høvik** on **2018-12-04**

DNV GL local station:
Ulsan

Approval Engineer:
Krzysztof Kolakowski

Notified Body
No.: **0575**

for **DNV GL AS**

Roald Vårheim
Head of Notified Body

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.

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.
This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.
Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

NORWEGIAN ACCREDITATION PROD 019

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Product description

"A60 Class Bulkhead - DAEHYUP Spray S-B101(AL)"
is an aluminium bulkhead that is spray insulated on stiffened side with a continuous layer of insulation type "DAEHYUP SPRAY S" with nominal density of 140 kg/m^3 (produced by Daehyup Spray Co., Ltd.). The insulation layer is covering the bulkhead plate between the stiffeners (min. 50 mm thick) as well as all the sides (min. 30 mm thick) and inside of the stiffeners.

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

Application/Limitation

Approved for use as a vertical fire retarding division of class A-60.

Restricted application: fire against insulated side.

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.

The product is to be supplied with its manual for installation, use and maintenance.

Type Examination documentation

Test report no. KOMERI-0402-18T0371 dated 20 September 2018 from Korea Marine Equipment Research Institute (KOMERI), Busan, Korea.

Drawing no.DHS-S-B101-180517 dated (4 sheets) dated 17 May 2018 from the manufacturer.

Tests carried out

Tested according to IMO 2010 FTP Code part 3.

Marking of product

The product or packing is to be marked with name and address of manufacturer, type designation, firetechnical rating, Mark of Conformity and USCG approval number if applicable (see first page).