DNV·GL

Certificate No:
MEDB00005KM

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)
DAEHYUP SPRAY S-D201

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 **2024-07-02**.

Issued at **Høvik** on **2019-07-03**

DNV GL local station:
Ulsan

Approval Engineer:
Nanna Martine Jacobsen

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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
"DAEHYUP SPRAY S-D201"
Composed of structural steel deck insulated from below with a continuous layer of minimum 20 mm thick spray insulation of type "Daehyup Spray S" manufactured by Daehyup Spray Co., Ltd. with nominal density 120 kg/m^3 (dry weight). The insulation is applied between and around the stiffeners following their countours, as well as filling the cavity of the stiffeners.

For further details see drawings listed under Type Examination documentation.

Application/Limitation
Approved for use as horizontal fire retarding steel division of class A-30.

The insulation materials and any 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. KOMERI-0402-13T2019, dated 26 March 2014 from KOMERI, Ulsan, Korea.

Drawing No. SPRAY S-D201-01 (4 sheets) dated 23 February 2017 from Manufacturer.

Installation and Maintenance manual for DAEHYUP SPRAY dated 2 January 2019 from 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, fire technical rating, the MED Mark of Conformity and USCG approval number if applicable (see first page).