DNV·GL

Certificate No:
MEDB0000542

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)
PU-D20 Steel System & DLP Floating Floor, PU-D20 Concrete System & DLP Floating Floor, PU-D20 Combi Floor

Issued to
DMS A/S
Esbjerg, Syddanmark, Denmark

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 **2024-04-01**.

Issued at **Høvik** on **2019-04-02**

DNV GL local station:
Fredericia FiS

Approval Engineer:
Danielle Loiselle

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

"PU-D20 Steel System & DLP Floating Floor"
Starting from steel deck and upwards:
Layer No.1: 900 g/m^2 of PU-D20.
Layer No.2, 1.5 mm Steel Tiles.
Layer No.3: Min. 50 mm Searox SL436 with nominal density 140 kg/m^3.
Layer No.4: 3 mm galv. steel plate.
Layer No.5: 900 g/m^2 PU-D20.
Layer No.6: 2 mm galv. steel plate

Layer No. 4, 5 and 6 are fixed together with Ø4.8mm steel pop rivets, along edges and center line of steel plates.

Total thickness: approx. 55 mm.

"PU-D20 Concrete System & DLP Floating Floor"
Starting from steel deck and upwards:
Layer No.1: 900 g/m^2 of PU-D20.
Layer No.2, Min. 10 mm BH 3000.
Layer No.3: Min. 50 mm Searox SL436 with nominal density 140 kg/m^3.
Layer No.4: 3 mm galv. steel plate.
Layer No.5: 900 g/m^2 of PU-D20.
Layer No.6: 2 mm galv. steel plate.

Layer No. 4, 5 and 6 are fixed together with Ø4.8mm steel pop rivets, along edges and center line of steel plates.

Total thickness: approx. 65 mm.

"PU-D20 Combi Floor"
Starting from steel deck and upwards:
Layer no. 1: 900 g/m^2 of PU-D20.
Layer no. 2: Min. 10 mm BH 3000
Layer no. 3: Min. 50 mm Searox SL436 with nominal density 140 kg/m^3.
Layer no. 4: 3 mm galv. steel plate.
Layer no. 5: Min. 15 mm BH 3000.

Total thickness : approx. 70.5 mm.

PU-D20 is a two component damping layer with a nominal density of 1300 kg/m^3.

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

Application/Limitation

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

The insulation materials and adhesives used must 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, use and maintenance.

Type Examination documentation

Tests carried out

Tested according to IMO FTP Code Part 3 and in compliance with IMO 2010 FTP Code Ch. 8.

Marking of product

The product and packaging are 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).