DNV·GL

Certificate No:
MEDB00005K8

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

That the "B" Class divisions, fire integrity

with type designation(s)
HL-BED-A Class B-15 Stealth Bed Ceiling

Issued to
Jiangsu Hailu Technology Incorporated Corporation
JIANGYIN, JIANGSU, China

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2019/1397,**
item No. MED/3.11b. SOLAS 74 as amended, Regulation II-2/3.4 & II-2/9, IMO 2010 FTP Code, IMO MSC/Circ.1120 and IMO MSC.1/Circ.1581

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

This Certificate is valid until **2024-11-11**.
Issued at **Hamburg** on **2019-11-12**

DNV GL local station:
Jiangyin

Approval Engineer:
Roland Priebe

Notified Body
No.: **0098**

for **DNV GL SE**

Gerhard Aulbert
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 European Community and the United States of America on Mutual Recognition of Certificates of Conformity for Marine Equipment", signed February 27th, 2004.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

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Product description

The **HL-BED-A Class B-15 Stealth Bed Ceiling** consists of compound rock wool plates with a total thickness of 30 mm. This ceiling is provided with a bed box recess with stealth bed.

Construction:
The ceiling panels itself are made of 0.6 mm thick galvanized steel plates + rock wool + 0.6 mm galvanized steel plates. Adhesive is used for bonding the rock wool on the galvanized steel plate. The ceiling panels are wedge jointed. The ceiling construction is suspended from the structural core deck and T shaped steel beams are holding the ceiling panels. The air gap between the A class structural core and the ceiling panels is 600 mm thick.

The bed box recess construction is using the same type of panels used in the ceiling. The internal dimension (clear space) of the bed box recess is 2194 x 1044 x 235 mm (LxBxH). The support for the stealth bed is directly connected to the deck structure. The air gap between the A class structural core and the top of the recessed ceiling is 335 mm thick.

Material:
The insulation material used is AZ type rock wool with a density of 120 kg/m³ and is produced by Jiangyin Anzhou Construction Material Co., Ltd.
The adhesive used is HL-2002X produced by the client itself.

For further details refer to the documentation listed below under "Type Examination documentation".

Application/Limitation

This certificate is based on the previous MED-B 12454-10 HH issued on 2014-06-10.

Approved for use as a horizontal fire retarding division of class B-15.

Max. size of the ceiling panels: 600 mm wide x 2400 mm long x 30 mm thick.

The insulation materials 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, use and maintenance.

Type Examination documentation

Test report No. FT10142 dated 11th May 2010 from Far East Fire Testing Centre, Shanghai, China.

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