DNV·GL

Certificate No:
MEDB00006K6

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)
Class A-60 Deck Type THG-170

Issued to
Tianjin Huali Thermal Insulation Building Material Co., Ltd.
TIANJIN, China

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2019/1397,**
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, IMO MSC.1/Circ.1435.

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

This Certificate is valid until **2024-04-04**.
Issued at **Høvik** on **2020-05-12**

DNV GL local station:
Dalian NB & CMC

Approval Engineer:
Helge Bjørnarå

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, and amended by Decision No 1/2019 dated February 22nd, 2019.

NORWEGIAN ACCREDITATION PROD 019

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

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Product description

"Class A-60 Deck Type THG-170",
a steel deck that is insulated with Huali THG-170 ceramic wool insulation plates (nominal density 170 kg/m^3) as follows:

- one layer of 30 mm thickness against the underside of the steel deck (between stiffeners),
- one layer of 30 mm thickness upon the stiffeners (longitudinal strips, 230 mm wide).

The insulation is wrapped in glass fibre cloth. Insulation ends to be laid slightly compressed against each other to ensure tight joints.

Minimum insulation thickness (to deck and stiffeners) at any point is 30 mm.

The insulation is fixed to the deck and stiffeners by means of Ø3 mm welded steel pins and Ø30 washers (14 sets/m^2).

For further details, including handling of insulation joints, see the installation manual.

Application/Limitation

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

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. FT04048 dated 05 April 2004 from FEFTC, Shanghai, China.

Document No. TJHL/QEW-7.5.1-06 Rev.0 "The introduction of bulkhead and deck installation" from the manufacturer.

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 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).