

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)
A-60-D-IV

Issued to

Changzhou Thermal Insulation Material Factory Co., Ltd.
CHANGZHOU, JIANGSU, China

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

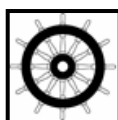
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2023-11-11**.

Issued at **Høvik** on **2018-11-12**

DNV GL local station:
Nanjing

Approval Engineer:
Tessa Biever



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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



Product description

"A-60-D-IV"

composed of structural steel deck insulated below (exposed side) and upon stiffeners with one layer of 25 mm ceramic wool Type TG-2 (manufactured by Chang Zhou Insulation Material Factory Co. Ltd) with density 170 kg/m³. The insulation is fixed to deck with Ø3mm steel pins with Ø30mm steel washers (126 pins , 17.5 sets/m²). The distance between the pins on the core steel plate and the joints of ceramic wool layer is max. 50mm. See test report for details on the spacing between the pins in width and length direction.

For further details see test report and drawings listed under Type Examination documentation.

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: FT12157 dated 06 August 2012 from Far East Fire Testing Centre, Shanghai, China.

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 and fire-technical rating, Mark of Conformity and USCG approval if applicable (see first page).