DNV·GL

Certificate No:
MEDB000031C

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 "A" Class divisions, fire integrity

with type designation(s)
Marine TKAB-2B Type Class A-60 Bulkhead

Issued to
Shanghai ABM Rock Wool Co., Ltd.
Shanghai, China

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2017/306,**
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 **2018-01-16**.

Issued at **Hamburg** on **2017-08-01**

DNV GL local station:
Nantong

Approval Engineer:
Timo Linn

Notified Body
No.: **0098**

for **DNV GL SE**

Sven Dudszus
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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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
"Marine TKAB-2B Type Class A-60 Bulkhead" Consisting of 4.5 mm steel bulkhead suitable stiffened, insulated on exposed side with one layer (thickness: 40 mm). Marine Rockwool (density: 120 kg/m³) on plate between stiffeners, 40 mm Marine Rockwool surround the stiffeners and two layers of rock wool (40 mm + 25 mm in thickness) horizontally inboard the stiffener angle steel, acc. to figure 2, page 6 of test report. The class A-60 Bulkhead type TKAB-2B is applicable for "restricted application".

Insulation material:
Mineral wool, type ABM-FR60, density: 120 kg/m³

For further details see test report stated under "Type Examination documentation" below.

Application/Limitation
Approved for use as a vertical 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, use and maintenance.

Type Examination documentation
Test Report No. FT11002 dated 2011-01-31 issued by Far East Fire Testing Centre, Shanghai, China. (GL ref.-no.: 12-088980, 16-001491)

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, fire-technical rating, the MED Mark of Conformity and USCG approval number, if applicable (see page 1).