

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)

KunHao A-60-B-03 A-60 Class Bulkhead

Issued to

Yixing Kunhao Fireproof Material Co., Ltd
Yixing, China

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2015/559,**

Annex A.1, item No. A.1/3.11a and Annex B, Module B in the Directive; SOLAS 74 as amended, Regulation II-2/3.2.5 and IMO 2010 FTP Code.

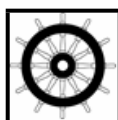
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2022-01-02.**

Issued at **Hamburg** on **2017-01-03**

DNV GL local station:
Jiangyin FiS&CMC

Approval Engineer:
Marius Mørner



Notified Body
No.: **0098**

for **DNV GL SE**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



Job Id:
Certificate No: **MEDB00001TF**

Product description

"KunHao A-60-B-03 A-60 Class Bulkhead"

is composed of a steel bulkhead insulated on stiffened side with 70 mm (2 x 35 mm layers) "LZ-1" rock wool (density 90 kg/m³) manufactured by Yixing Kunhao Fireproof Material Co., Ltd.

Stiffeners are to be covered with one layer of 40 mm "LZ-1" rock wool.

Fixing method:

- steel nails (3mm) with steel washers (30 mm diameter)
- 16 pins/m²
- maximum 60 mm from insulation seams

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

Application/Limitation

Approved for use as a vertical fire retarding steel 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 FT15188 dated 18th May 2015 (with drawings included), issued by Far East Fire Testing Centre, Shanghai, China.

Tests carried out

Tested according to IMO 2010 FTP Code Part 3.

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 front page).