

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 Fire Doors

with type designation(s)

Class A-60 Double Leaf Door Type CGFM-1E

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/3.16. SOLAS 74 as amended, Regulation II-2/9, IMO 2010 FTP Code and IMO MSC.1/Circ.1511, IMO MSC.1/Circ.1319

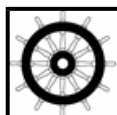
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2024-10-22**.

Issued at **Hamburg** on **2019-10-23**

DNV GL local station:
Jiangyin

Approval Engineer:
Timo Linn



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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



Product description

"CGFM-1E" type door is a double leaved hinged door both with door leaves of same size and basically same constructional details. Each door is fitted with four hinges and a door lock system. Insulation and structure is illustrated in drawing No. 267HL-38E-00, 267HL-38E-01, 267HL-38E-02-L, 267HL-38E-02-R, 267HL-38T-01, 267HL-38E-02-02 and in test report No. FT14153.

The total thickness of a door is 57 mm composed of 0,6 mm thick steel sheets, a 6 mm thick inorganic fireproof boards on both sides, and with a layer of rock wool insulation in between. Adhesive of approved type is used between the steel sheets and the rock wool insulation. Stiffeners made of steel channels are fitted inside the door along the edges.

Maximum door leaf size is 1016 x 2257 (width x height).

The doors may incorporate a window on the upper part of the door. The window, manufactured by Jiangsu Hailu, with clear opening dimensions of 400 x 400 mm. Total thickness of the window pane is 32 mm. The window frame, made of 1,5 mm steel profiles, is fastened to the door leaf by screws.

One of the doors may incorporate a fire hose port of maximum size 150 x 150 mm.

The door is installed in a hollow frame made of 1,2 mm thick steel plates. The frame may be welded or bolted to the bulkhead.

A 20 x 15 mm fireproof strip (manufactured by Jiangyin Lide Accessories Co., Ltd) is fitted in a groove along the entire perimeter of the door and the frame.

Insulation details:

The rock wool insulation used in the door has a nominal density of 120 kg/m³, manufactured by Tianchang Kangmeida New Insulation Material Co., Ltd.

The calcium silicate board used in the door is of type YB with a nominal density of 1000 kg/m³, manufactured by Suzhou Youlian Ship's Equipment Co., Ltd.

For further details, see drawings mentioned under Type Examination documentation below.

Application/Limitation

The double leave door is approved for installation in steel bulkheads of class A-60. Installation of the door in bulkheads made of other materials (aluminium FRP, etc.) are subject to case-by-case approval.

Max. clear opening of door: 2000 x 2250 mm (W x H)

Maximum door leaf size: 1016 x 2257 mm (W x H)

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.

This certificate is replacing the previous MED-B 11368-14 HH issued on 2014-11-20.

Each product is to be supplied with its manual for installation, use and maintenance.

Type Examination documentation

Test report No. FT14153 dated 2014-07-03 from Far East Fire Testing Centre (FEFTC), Shanghai, China.

Tests carried out

Tested according to IMO 2010 FTP Code part 3.

Marking of product



Job Id: **344.1-009753-1**
Certificate No: **MEDB00005VZ**

The product or packing is to be marked with name and address of manufacturer, type designation, fire technical rating, Mark of Conformity and USCG marking if applicable (see first page).

USCG approval limitations

The approval is limited to fire doors without windows and doors with total window area of 645 cm², or less, in each door leaf. For larger windows, USCG shall be contacted.