EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00007SB

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 AS under the authority of the Government of Norway.

This is to certify:

That the Fire Doors

with type designation(s)
A-60 Fireproof Door

Issued to
Wuxi MNET Equipment Tech Co., Ltd.
Wuxi, Jiangsu, China

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2021/1158,**
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 **2027-04-19**.

Issued at **Høvik** on **2022-04-20**

DNV local station:
Jiangyin NB & CMC

Approval Engineer:
Thorvald Furuseth

Notified Body
No.: **0575**

for **DNV AS**

Sverre Olav Bergli
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.

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 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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 AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") 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.

Product description

"A60 Fireproof Door"
consisting of a single leafed hinged door with a door blade composed of:

- 1.5 mm thick stainless steel plate (exposed side)
- 8 mm thick inorganic fireproof board type YP (manufacturer by Suzhou Youlian Ship Fitting Co., Ltd with density 1200-1350 kg/m^3).
- 63.5 mm thick insulation material type TG-2 ceramic wool (manufacturer by Yixing Marine insulation Material Factory with nominal density of 170 kg/m^3) fixed to the door with adhesive.
- 8 mm thick inorganic fireproof board type YP (manufacturer by Suzhou Youlian Ship Fitting Co., Ltd with density 1200-1350 kg/m^3).
- 4 mm thick stainless steel plate

The door leaf is fitted with four vertical and one horizontal 50 x 71.5 x 1.5 mm stainless steel stiffener.
The three hinges door leaf is fitted with fireproof seal gasket of specification 36 x 20 mm, installed in contiguous groove at the perimeter of the door leaf.

Total door leaf thickness is 85 mm.

The insulated door frame is made of 2 and 4 mm thick steel plates, fitted with a fireproof seal strip of specification 20 x 14 mm and is fixed to the bulkhead by M8 x 35 screws.

The doors may also be fitted with observation window and nominal thickness 60 mm, composed of 19 mm toughened glass, 22 mm fireproof solution and 19 mm toughened glass (manufactured by Qinhuangdao Yuehua Glass Co., Ltd) and door lock F608 (manufactured by Shanghai ChenXian Industrial Co. Ltd.).

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

Application/Limitation

The 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.

Maximum clear opening:	1100 x 2200 mm (W x H)
Maximum size of door leaf:	1204 x 2304 mm (W x H)
Maximum size of observation window:	400 x 600 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.

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

Type Examination documentation

Test report No. FT14165 dated 17 July 2014 from FEFTC, Shanghai, China.

Drawing Nos.:
- 262WHL052-00 (2 pages) dated 25 March 2014,
- 262WHL052-01 dated 25 March 2014,
- 262WHL052-02 dated 25 March 2014,
- 262WHL052-03 dated 25 March 2014,
- 262WHL052-00-MIN (2 pages)dated 25 March 2014,

All from Wuxi Delin Marine and Ocean Technology (Group)Co.,Ltd., Wuxi, 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 first page).

USCG approval limitations

The approval is limited to fire doors without windows and doors with total window area of 645 cm^2, or less, in each door leaf. For larger windows, USCG shall be contacted.