EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00008K6

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)
Class A-60 Fire Door, Type 262WHL005X-00

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) 2023/1667,**
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 **2028-10-29**.

Issued at **Høvik** on **2023-10-30**

DNV local unit:
Jiangyin NB & CMC

Approval Engineer:
Joanna Kowalczuk

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 1/2023 dated August 21st, 2023.

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

"Class A-60 Fire Door, Type 262WHL005X-00"
A single leaf hinged fire door composed of door leaf and frame and various fittings.

The door leaf is composed of 1 mm thick steel plate + 8 mm thick fireproof board (YB type with 1000 kg/m³ nominal density, produced by Suzhou Youlian Ship Equipment Co., Ltd.) + layer of ceramic wool insulation (TG-2 type with 170 kg/m³ nominal density and 38 mm nominal thickness, produced by Yixing Ocean Ship Material Co., Ltd.) + 8 mm thick fireproof board (YB type with 1000 kg/m³ nominal density, produced by Suzhou Youlian Ship Equipment Co., Ltd.) + 1 mm thick steel plate. The door leaf is internally reinforced with horizontal and vertical stiffeners made by 1.5 mm thick steel plate. One layer of 1 mm thick stainless steel edge cover is fixed at the perimeter of door leaf and adhesive (PAPU-30 type, produced by Jingjiang Green Functional Material Co., Ltd.) is used in the interior of door leaf for the fixation of insulation.

The door leaf is connected to the four-sided frame (made by 1.5 mm steel plate and insulated inside with ceramic wool insulation of TG-2 type with 170 kg/m³ nominal density and 38 mm nominal thickness, produced by Yixing Ocean Ship Material Co., Ltd.) by 3 steel hinges at one of its vertical edge and is fitted with C1 type lock at the other edge. The door frame is fixed to the steel bulkhead by bolts M5x25 mm spaced maximum 110 mm apartor can be welded.

The door may be optionally fitted with:
- Fireproof rectangular glass window, composed (from the side exposed to fire) of 6 mm toughened glass layer + 20 mm fireproof solution + 8 mm toughened glass layer (total thickness: 34 mm), provided by Qinghuangdao City Haigang District Yuehua Industrial and Technical Glass Factory. Window frame and fixing details acc. to drawing no. 262WHL005X-03-0 Rev.A;
- Self-closing (fitted with unidirectional spring hinge) hose port with 150 mm square clear opening when door closed and inset into the lower edge of the door, opposite the door hinges. Construction acc. to drawing no. 262WHL005X-04-0.

Seal strips of specification 10 mm x 2.5 mm (provided by Shanghai Jia Fu Decoration Material Co., Ltd.) are fitted at the perimeter of the glazed opening.

Seal strips of specification 14 mm x 21 mm and 22 mm x 26 mm (all provided by HeBei DeBang Special Sealing Strip Co., Ltd.) are fitted in way of the fire hose port and at the inner side of the door frame, respectively.

Total door leaf thickness (not including the edge cover): 41 mm.

For further details see test report and drawing 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.

Max. size of door leaf:	1336 mm x 2336 mm (w x h)
Max. clear opening of door leaf:	1300 mm x 2300 mm (w x h)
Max. clear opening of window:	400 mm x 600 mm (w x h).

The insulation materials and adhesives and gaskets 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 door is to be supplied with its manual for installation, use and maintenance.

Type Examination documentation

Test report no. FT16410 dated 26 October 2016, issued by Far East Fire Testing Centre (FEFTC), Shanghai, China.

Drawing no. 262WHL005X-NHBZ, dated 6 September 2016 from manufacturer,
Drawing no. 262WHL005X-01-0, dated 6 September 2016 from manufacturer,
Drawing no. 262WHL005X-02-0, dated 6 September 2016 from manufacturer,
Drawing no. 262WHL005X-04-0, dated 6 September 2016 from manufacturer,
Drawing no. 262WHL005X-00 Rev.A, dated 5 of June 2018 from manufacturer,
Drawing no. 262WHL005X-03-0 Rev.A dated 5 of June 2018 from manufacturer.

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, or less, in each door leaf. For larger windows, USCG shall be contacted.