EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00008K2

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 'A' and 'B' class fire proof windows and side scuttles

with type designation(s)
Class A-60 Fireproof Fixed Rectangular Window 261WHH068-00

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/3.25. SOLAS 74 as amended, Regulation II-2/9, IMO MSC/Circ.1120 and IMO 2010 FTP Code, IGC Code 3

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

This Certificate is valid until **2029-01-06**.

Issued at **Høvik** on **2024-01-07**

DNV local unit:
Jiangyin NB & CMC

Approval Engineer:
Joanna Kowalczuk

Notified Body
No.: **0575**

for **DNV AS**

Mydlak-Röder, Christine
Head of Notified Body

NORWEGIAN ACCREDITATION PROD 019

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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 Fireproof Fixed Rectangular Window 261WHH068-00"
Is a fire window constructed of window frame, fireproof glass, stainless steel press plate and seal material:

- Window pane assembly with total thickness of 30 mm thick produced by Yixing Yu's Special Glass or Qinhuangdao City Haigang District Yuehua Industrial Technical Factory
  The fire window is composed of 10 mm thick tempered glass + 5 mm thick fireproof layer + 5 mm thick tempered glass + 5 mm thick fireproof layer + 5 mm thick tempered glass. Both sides could be exposed to fire.
- Press plate: 6 mm thick stainless steel plate fixed to the window frame by M6x40 mm stainless steel bolts spaced maximum 75 mm apart.
- Window frame is made of 12 mm thick stainless steel.
- Flame retardant adhesive tape of 16x28 mm thick (manufactured by Jiangyin Dingyan Seals) is used for thermal insulation between window frame and window seat.

The window frame is fixed to the bulkhead by welding.

For further details, see also Type Examination documentation below.

Application/Limitation

The window is approved for installation in steel bulkheads of class A-60. Other applications are subject to case-by-case approval.

Maximum size of window: 2280 x 2580 mm (W x H).
Maximum clear light size: 2200 x 2500 mm (W x H).

The window has only been evaluated with respect to fire technical properties (e.g. strength requirements have not been considered). Arrangement and location of any window is subject to approval from relevant authorities in each case.

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

Type Examination documentation

Test report no. FT23114 dated 7 April 2023 from "FEFTC" Far East Fire Testing Centre, Shanghai, China.

Drawing No. 261WHH068-NHBZ(1), dated 1 November 2022 from manufacturer,
Drawing No. 261WHH068-NHBZ(2), dated 1 November 2022 from manufacturer,
Drawing No. 261WHH068-00, dated 1 November 2022 from manufacturer,
Drawing No. 261WHH068-NHBZ-TAD, dated 1 November 2022 from manufacturer,
Drawing No. 261WHH068-01, dated 1 November 2022 from manufacturer,
Drawing No. 261WHH068-02, dated 1 November 2022 from manufacturer,
Drawing No. 261WHH068-03, dated 1 November 2022 from manufacturer.

Test report no. FT23010 dated 13 February 2023 from "FEFTC" Far East Fire Testing Centre, Shanghai, China.

Drawing No. 261WHH068-NHBZ(1), dated 1 November 2022 from manufacturer,
Drawing No. 261WHH068-NHBZ(2), dated 1 November 2022 from manufacturer,
Drawing No. 261WHH068-00, dated 1 November 2022 from manufacturer,
Drawing No. 261WHH068-NHBZ-TAD, dated 1 November 2022 from manufacturer,
Drawing No. 261WHH068-01, dated 1 November 2022 from manufacturer,
Drawing No. 261WHH068-02, dated 1 November 2022 from manufacturer,
Drawing No. 261WHH068-03, dated 1 November 2022 from manufacturer.

Test report no. FT23013 dated 31 January 2023 from "FEFTC" Far East Fire Testing Centre, Shanghai, China.

Drawing No. 261WHH068-NHBZ(1), dated 1 November 2022 from manufacturer,
Drawing No. 261WHH068-NHBZ(2), dated 1 November 2022 from manufacturer,
Drawing No. 261WHH068-00, dated 1 November 2022 from manufacturer,
Drawing No. 261WHH068-NHBZ-TAD, dated 1 November 2022 from manufacturer,
Drawing No. 261WHH068-01, dated 1 November 2022 from manufacturer,
Drawing No. 261WHH068-02, dated 1 November 2022 from manufacturer,
Drawing No. 261WHH068-03, dated 1 November 2022 from manufacturer.

Test report no. FT23113 dated 6 April 2023 from "FEFTC" Far East Fire Testing Centre, Shanghai, China.

Drawing No. 261WHH068-NHBZ(1), dated 1 November 2022 from manufacturer,
Drawing No. 261WHH068-NHBZ(2), dated 1 November 2022 from manufacturer,

Drawing No. 261WHH068-00, dated 1 November 2022 from manufacturer,
Drawing No. 261WHH068-NHBZ-TAD, dated 1 November 2022 from manufacturer,
Drawing No. 261WHH068-01, dated 1 November 2022 from manufacturer,
Drawing No. 261WHH068-02, dated 1 November 2022 from manufacturer,
Drawing No. 261WHH068-03, dated 1 November 2022 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 (see first page).