

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

with type designation(s)

Class A-60 Rectangular Window

Issued to

Jingjiang Jinzhou Marine Equipment Co., Ltd.
JINGJIANG, 100, China

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

Regulation **(EU) 2019/1397,**

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

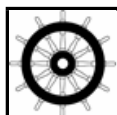
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2025-04-05.**

Issued at **Hamburg** on **2020-04-06**

DNV GL local station:
Jiangyin

Approval Engineer:
Karolina Kusmider



Notified Body
No.: **0098**

for **DNV GL SE**

Gerhard Aulbert
Head of Notified Body

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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 Rectangular Window",

a rectangular window constructed of window base, window frame, fireproof glass, fix plate, insulation and seal materials.

- 43 mm glass assembly consisting of two glass panes (15+6 mm) with fireproof liquid in between (produced by Qinhuangdao Xingyang Special Glass Co., Ltd.).
- insulation is a LZ-2 type ceramic wool (density 170 kg/m³, produced by Yixing City Kun Hao Fire Resistant Materials Co.,Ltd.).
- Seal is an expanded graphite bar and heat resistant rubber tape placed between glass and window frame as well between window glass and fix plate
- Fix plate made of 8 mm stainless steel plate, fixed to the window frame by 56 pcs of M6 x 70 mm steel countersunk head screws (max spacing 75 mm).
- Window base made of 10 mm steel and window frame made of 16 mm steel joined together by M6 x 70 mm steel countersunk head screws (max spacing 75 mm).

The window frame is fixed to the bulkhead by welding.

For further details see drawings listed under 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.

Restricted application: fire against fireproof glass (from the inside)

Maximum size of fire window: 1690 mm x 1290 mm (W x H)
Maximum clear light size: 1600 mm x 1200 mm (W x H)
Maximum size of glass pane: 1640 mm x 1240 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 authority in each case.

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

Type Examination documentation

Test report no. FT09270 dated 10th November 2009 from Far East Fire Testing Centre, Shanghai, China.
Drawing No. 261.2TT01-00 dated 27th July 2009 from the manufacturer.

Tests carried out

Tested according to IMO Res. MSC.307(88) - 2010 FTP Code, Annex 1, 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).