

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 Windows and side scuttles

with type designation(s)

A-60 Class Refractory Rectangular Window

Issued to

QINHUANGDAO XINGYANG MARINE FITTING CO., LTD.
Qinhuangdao, China

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

Regulation **(EU) 2018/773**,

item No. MED/3.25. SOLAS 74 as amended, Regulation II-2/9, IMO MSC/Circ.1120 and IMO 2010 FTP Code

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

This Certificate is valid until **2023-08-23**.

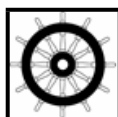
Issued at **Hamburg** on **2018-08-24**

DNV GL local station:

Tianjin

Approval Engineer:

Pavel Golyshev



Notified Body
No.: **0098**

for **DNV GL SE**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



Product description

"A-60 Class Refractory Rectangular Window"

Constructed of 19 mm thick toughened glass, 22 mm thick refractory gel and 6 mm thick toughened glass from Qinhuangdao Xingyang Special Glass Co., Ltd. Total glass thickness is 47 mm.

The window pane is fitted between the main frame (8 mm thick steel) and press plate (6 mm thick steel). The mid frame is fitted in between the press plate and the main frame. Sealing strip, from Jiangyin Junshan Marine Fittings Co., Ltd, is used between the glass and the main frame, and between the glass and the press plate. The press plate is fixed to the mid frame with M6 steel bolts at every 75 mm. The mid frame is fixed to the main frame with M6 steel bolts at every 75 mm. Ceramic wool, of type LYHX-816T from Shandong Luyang Share Co., Ltd (density 160 kg/m³), is filled in the gap between the window glass and the frame. Calcium Silicate board, of type YGB-W-0 Suzhou City Weiyu Marine Material Decoration Co., Ltd (density 720 kg/m³) is installed between the main frame and the mid frame. The main frame is welded to the bulkhead.

For further details, see the approved drawing 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.

Maximum size of exposed fire technical glazing unit : 2000 mm x 1500 mm (HxW).

Fire against uninsulated bulkhead side (weather side) and 19 mm thick toughened glass.

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.

The insulation materials used have to be approved according to the Marine Equipment Directive and bear the Mark of Conformity.

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

Type Examination documentation

Test Report No. FT13008 dated 15th of January 2013 from Far East Fire Testing Centre (FEFTC), Shanghai, China.

Drawing No. XY0113B dated 29th of September 2012 from the manufacturer.

Tests carried out

Tested according to IMO Resolution 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).