

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)
Class A-60 Side Scuttle

Issued to

Wuxi Dongzhou Marine Equipment Co., Ltd
Wuxi 100, China

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2017/306**,
item No. MED/3.25. SOLAS 74 as amended, Regulation II-2/9, IMO MSC/Circ.1120 and IMO 2010 FTP Code

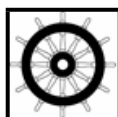
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2023-02-04**.

Issued at **Hamburg** on **2018-02-05**

DNV GL local station:
Jiangyin

Approval Engineer:
Timo Linn



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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

"Class A-60 Side Scuttle"

A-60 class side scuttle with maximum exposed glass (clear view) 450mm diameter and 180mm in depth. Details are described in drawing No. 261WDF072B2-00 to 261WDF072B2-02, 261WDF072B2-04 and 261WDF072B2-07 of the test report .

The 36mm window glass pane is composed of, from (side exposed to fire) which is the side with the bolted retainer frame and deadlight:

- 6 mm thick tempered glass (manufactured by QinhuangIsland Haigang District Yuehua Industrial Technology Glass Factory)
- 15 mm thick fireproof solution . A glass spacer is fitted around the air gap in the periphery of the window pane. Space between is filled with a fire resistant fluid .
- 15 mm thick tempered glass composed (manufactured by QinhuangIsland Haigang District Yuehua Industrial Technology Glass Factory)

The glass pane is installed in a window frame made of 16 mm thick steel profiles welded into the cut-out in the bulkhead.

The tempered glass is laid tight to a glass stopper bar, made of steel, welded to the window frame. A fire and smoke preserving seal strip was utilized in between window pane and window retaining frame as well as between window pane and clamp plate. Ceramic wool was filled at the gap between window pane and window frame, and fireproof boards were utilized in between window frame and window retaining frame for heat insulation.

The glass is fastened to the side scuttle frame by a 10 mm thick L-shaped fire glass steel frame bolted (M6, x 40 mm) to the stopper bar. The clamp plate of the fire side scuttle was fixed to the window frame by twenty-four M6 x 16 steel bolts and the window frame was fixed to the window seat by fifteen M8 x 40 steel bolts. A layer of ceramic wool is fitted between the fire glass and the retaining frame . Ceramic Wool insulation is fitted between the fire glass and the L-shaped frame.

Insulation material

TG-II type ceramic wool produced by Yixing Yuanyang Ship Material Co., Ltd.

Density: 170kg/m³ .

YB type inorganic fireproof board produced by Suzhou Youlian Ship Fitting Co., Ltd.

Density: 1000kg/m³

Fireproof strip provided by Shanghai Jiar Fu Decoration Material Co., Ltd

Application/Limitation

The window is approved for use as an integrated part of fire retarding steel bulkheads of Class A-60. Other applications are subject to case-by-case approval.

Maximum size of exposed fire technical glazing unit: clear diameter: 450 mm.

Fire against insulated side of bulkhead for use on passenger vessels (fire from inside).

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. FT15064 of March 16th, 2015 issued by Far East Fire Testing Centre Shanghai, P.R. China

Tests carried out



Job Id: **344.1-007798-1**
Certificate No: **MEDB00003R0**

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 and the MED Mark of Conformity (see first page).