DNV·GL

Certificate No:
TAF00000UX

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Horizontal Class A Division

with type designation(s)
YB-JFQ-II, YB-JFQ-III and YB-JFQ-IV

Issued to
Shanghai Yibo Shipping Co., Ltd
Shanghai, China

is found to comply with
DNV GL statutory interpretations DNVGL-SI-0364 – SOLAS interpretations
DNV GL rules for classification – Ships
DNV GL offshore standards

Application :

Approved for use as a horizontal fire retarding division of class A-60.

This certificate is recognised by Transport Canada.

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

Issued at **Høvik** on **2017-12-22**
This Certificate is valid until **2022-12-21**.
DNV GL local station: **Shanghai**

Approval Engineer: **Fryderyk Hoga**

for **DNV GL**

Mårten Schei-Nilsson
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

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Product description

"YB-JFQ-II" Type Class A-60 Floating Deck constructed of a stiffened 5 mm steel deck on upper side insulated with 20 mm ceramic wool (density 170 kg/m^3 type TG manufactured by PUSEN FIRE MATERIAL CO.) + steel mesh + 30 mm thick YB-JFQ-II type deck covering (density 1500 kg/m^3).

Total thickness: 50 mm + steel deck.

"YB-JFQ-III" Type Class A-60 Composite Deck constructed of a stiffened 5 mm steel deck on upper side insulated with 20 mm YB-JFQ-III type deck covering (density 800 kg/m^3) + steel mesh + 20 mm YB-JFQ-II type deck covering (density 1500 kg/m^3).

Total thickness: 40 mm + steel deck.

"YB-JFQ-IV" Type Class A-60 Deck constructed of a stiffened 5 mm steel deck on upper side insulated with 40 mm YB-JFQ-IV type deck covering (density 1000 kg/m^3).

Total thickness: 40 mm + steel deck.

For further details, see Type Approval documentation below.

Application/Limitation

Approved for use as horizontal fire retarding division of class A-60.

Any surface materials used have to be approved for smoke and toxicity and low flame-spread characteristics (IMO 2010 FTP Code Annex 1 Parts 2 and 5) when required according to relevant rules.

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

Type Approval documentation

Test Reports No.

- FT11340 dated 2012-02-07 for "YB-JFQ-II"
- FT11341 dated 2012-02-07 for "YB-JFQ-III"
- FT11342 dated 2012-02-07 for "YB-JFQ-IV"

All test reports from Far East Fire Testing Centre (FEFTC), Shanghai, China.

Drawings No.

- 137YB-82-00 (2 sheets) dated 2011-08-10 for "YB-JFQ-II"
- 137YB-83-00 (2 sheets) dated 2011-08-10 for "YB-JFQ-III"
- 137YB-81-00 (2 sheets) dated 2011-08-10 for "YB-JFQ-IV"

All drawings from manufacturer.

Tests carried out

Tested according to IMO FTPC Part 3 and in compliance with IMO 2010 FTP Code Ch. 8.

Marking of product

The product or packing is to be marked with name of manufacturer, type designation and fire technical rating.

Job Id: **262.1-012899-4**
Certificate No: **TAF00000UX**

Transport Canada Approval

Based on the procedures laid down in the Transport Canada Publication entitled *"Approval Procedures for, Life Saving Equipment and Structural Fire Protection Products (TP 14612)",* DNV GL confirms that the products listed in this certificate are in accordance with Transport Canada's requirements.

Periodical assessment

DNV GL's surveyor is to be given permission to perform Periodical Assessments at any time during the validity of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in Class Programme DNVGL-CP-0338, Section 4.