



Certificate no.:
TAF00001W5

TYPE APPROVAL CERTIFICATE

This is to certify:

that the **Class A and B Penetration**

with type designation(s)
XINGHE single plastic pipe penetration

issued to

Jiangsu Xinghe Group Co.,Ltd
ZHENJIANG, Jiangsu, China

is found to comply with

DNV statutory interpretations DNV-SI-0364 – SOLAS interpretations, Edition July 2021
DNV rules for classification – Ships
DNV offshore standards

Application:

Approved for use as a plastic pipe penetration system in class A-60 steel divisions.

This certificate is recognized by Transport Canada.

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

Issued at **Høvik** on **2024-01-30**

This Certificate is valid until **2029-01-29**.

for **DNV**

DNV local unit: **Nanjing NB & CMC**

Approval Engineer: **Helge Bjørnara**

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.

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.



Form code: TA 251

Revision: 2023-09

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Product description

“XINGHE single plastic pipe penetration”,
is a single plastic pipe penetration system composed of a 180 mm long steel sleeve welded symmetrically to the steel division. 140 mm long XINGHE firestop strips are wrapped around the external of plastic pipe inside the sleeve. The sleeve is dammed on both ends with 20 mm thick XINGHE firestop sealant.

For further details, see drawing listed under Type Approval documentation.

Application/Limitation

Approved for use as a plastic pipe penetration system in class A-60 steel divisions. Other applications are subject to case-by-case approval.

Approved for use in class A-0, A-15 and A-30 when the penetration system is insulated as A-60 and in addition the division is to be insulated with A-60 insulation at least 200 mm around the penetration.

Approved plastic pipe penetration in A-60 bulkheads.

Pipe material	Pipe diameter (OD) [mm]	Sleeve diameter (OD) [mm]	Sleeve length [mm]	Sleeve thickness [mm]	Sleeve location	Penetration insulation
PE	20 - 160	60 – 219	180	4.0 – 5.0	Symmetric	Fully insulated + 20 mm along pipe.

Approved plastic pipe penetration in A-60 deck.

Pipe material	Pipe diameter (OD) [mm]	Sleeve diameter (OD) [mm]	Sleeve length [mm]	Sleeve thickness [mm]	Sleeve location	Penetration insulation
PE	20 - 160	60 – 219	180	4.0 – 5.0	Symmetric	Partially insulated on the underside and fully insulated + 20 mm along pipe on the top side.

Approved for water tightness up to a design pressure of 1.67 bar (test pressure 2.5 bar). Approved for air tightness up to a design pressure of 0.67 bar (test pressure 1.0 bar) .

The pipe penetrations are not approved for use in watertight bulkheads on passenger ships and special purpose ships (SPS).

The penetration system is not to be used for penetrating boundaries of tanks.

Each product is to be supplied with its manual for application/installation and maintenance.

Type Approval documentation

Certification in accordance with Class Programme DNV-CP-0338, September 2021.

Test report No. AJFS23120009689FR dated 15 November 2023 from SGS, Anji County, Zhejiang Province, China.

Test report No. AJFS23120009690FR dated 15 November 2023 from SGS, Anji County, Zhejiang Province, China.

Test report water pressure dated 13 July 2023 from manufacturer.

Test report water pressure dated 21 July 2023 from manufacturer.

Test report air pressure dated 13 July 2023 from manufacturer.

Test report air pressure dated 21 July 2023 from manufacturer.

Drawing No. XH001, version 1.1.1 dated 20 July 2021 from manufacturer.

Drawing No. XH003, version 1.1.1 dated 20 July 2021 from manufacturer.

Tests carried out

Tested according to IMO 2010 FTP Code part 3.

Marking of product

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

Transport Canada Approval

Based on the procedures laid down in the Transport Canada publication entitled "Procedures for Approval of Life-Saving Appliances, Fire Safety Systems, Equipment and Products (TP14612)", DNV confirms that the product/s listed in this certificate is/are in accordance with Transport Canada's requirements.

Periodical assessment

DNV'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 DNV-CP-0338 Section 4.