



Certificate no.:
TAF000020Y

TYPE APPROVAL CERTIFICATE

This is to certify:

that the **Class A and B Penetration**

with type designation(s)
HK-MA type cable transits

issued to

Shanghai Huoke New Material Co., Ltd.
Shanghai, 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 cable penetration system in A-class steel bulkheads and decks.

This certificate is recognized by Transport Canada.

Products approved by this certificate are accepted for installation on all vessels classed by DNV.

Issued at **Høvik** on **2025-08-25**

This Certificate is valid until **2030-08-24**.

for **DNV**

DNV local unit: **Shanghai**

Approval Engineer: **Katarzyna Baczewska**

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 USD 300 000.

Product description

“HK-MA type cable transits”

is a penetration system composed of rectangular or circular steel sleeve with thickness 3 mm welded symmetrically to the division. Cables are wrapped inside frame with the HK-G type fireproof sleeves and the remaining space is filled with the HK-A type fireproof blanket. The HK-M firestop sealant with thickness of 15 mm is applied on both ends.

For further details, see drawings mentioned under Type Approval documentation below.

Application/Limitation

Approved for use as a cable penetration system in class A-0 and A-60 steel bulkheads and decks. Other applications are subject to case-by-case approval.

Approved for use in class 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.

Table 1 Approved cable penetration in A-60 steel bulkhead.

Type	Sleeve size [mm]	Max. cable diameter (OD) [mm]	Filling ratio [%]	Sleeve length [mm]	Sleeve Thickness [mm]	Sleeve position	Penetration insulation
HK-MA/A60/C	106 x 56 – 1006 x 306	110	0 - 40	130	3	Symmetric	Partially insulated
HK-MA/A60/C	Ø 40 – Ø 300	59	0 - 40	130	3	Symmetric	Partially insulated

Table 2 Approved cable penetration in A-60 steel deck.

Type	Sleeve size [mm]	Max. cable diameter (OD) [mm]	Filling ratio [%]	Sleeve length [mm]	Sleeve Thickness [mm]	Sleeve position	Penetration insulation
HK-MA/A60/J	106 x 56 – 1006 x 306	110	0 - 40	130	3	Symmetric	Partially insulated
HK-MA/A60/J	Ø 40 – Ø 300	59	0 - 40	130	3	Symmetric	Partially insulated

Table 3 Approved cable penetration in A-0 steel bulkhead.

Type	Sleeve size [mm]	Max. cable diameter (OD) [mm]	Filling ratio [%]	Sleeve length [mm]	Sleeve Thickness [mm]	Sleeve position	Penetration insulation
HK-MA/A0/C	106 x 56 – 1006 x 306	110	0 - 40	130	3	Symmetric	None
HK-MA/A0/C	Ø 40 – Ø 300	59	0 - 40	130	3	Symmetric	None

Table 4 Approved cable penetration in A-0 steel deck.

Type	Sleeve size [mm]	Max. cable diameter (OD) [mm]	Filling ratio [%]	Sleeve length [mm]	Sleeve Thickness [mm]	Sleeve position	Penetration insulation
HK-MA/A0/J	106 x 56 – 1006 x 306	110	0 - 40	130	3	Symmetric	None
HK-MA/A0/J	Ø 40 – Ø 300	59	0 - 40	130	3	Symmetric	None

Minimum distance between cables and between cable and sleeve is 3 mm.

Approved for water tightness up to a design pressure of 0.67 bar.

Approved for air tightness up to a design pressure of 0.67 bar.

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

Type Approval documentation

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

Test report no. FT24297 dated 1 August 2024 from Far East Fire Testing Centre (FEFTC), Shanghai, China.
Test report no. FT24205 dated 20 June 2024 from Far East Fire Testing Centre (FEFTC), Shanghai, China.
Test report no. FT24303 dated 5 August 2024 from Far East Fire Testing Centre (FEFTC), Shanghai, China.
Test report no. FT24471 dated 25 December 2024 from Far East Fire Testing Centre (FEFTC), Shanghai, China.
Test report no. FT24472 dated 31 December 2024 from Far East Fire Testing Centre (FEFTC), Shanghai, China.
Test report no. FT24473 dated 25 December 2024 from Far East Fire Testing Centre (FEFTC), Shanghai, China.
Test report no. FT24474 dated 31 December 2024 from Far East Fire Testing Centre (FEFTC), Shanghai, China.

Test report no. WT/AT-2025-0101 dated 15 May 2025 from the manufacturer.

Technical Data Sheet no. HK-MA-TDS0211 version: A/1 from the manufacturer.

Drawings no. HK-JQTD-MA-2401, version: A/1 dated 9 January 2025 from the 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 DNVCP-0338 Section 4.

Manufactured by:

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