Certificate no.:
TAF0000218

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Class A and B Penetration

with type designation(s)
HK-25/26 - A0 and A60 Class 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 **2025-09-30**
This Certificate is valid until **2030-09-29**. 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-25/26 - A0 and A60 Class Cable Transits"
is a cable transit system composed of rectangular or circular steel sleeve welded symmetrically to the division. The sleeve is filled with HK-26 ultralight sealing compound and sealed with 20 mm thick HK-25 firestop sealing putty at both ends for bulkheads and underside for decks.

In addition to cable(s), the rectangular cable transit may be equipped with the retrofit cable transit module HK-ONE. This module is 200 mm long and available in two sizes: 40 mm and 70 mm. The smaller HK-ONE module can accommodate a single cable with a diameter ranging from 0 mm to 25 mm, while the larger module supports cables from 0 mm to 50 mm in diameter. To ensure proper fire protection, both ends of the HK-ONE module must be sealed using HK-M intumescent firestop sealant after cable installation.

For further details, see drawing 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 for approved ship cables. Other applications are subject to case-by-case approval.

Approved for use in class A-15 and A-30 when the transit 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 transit in A-60 steel bulkhead.

Type	Sleeve size [mm]	Max. cable diameter (OD) [mm]	Filling ratio [%]	Sleeve length [mm]	Sleeve thickness [mm]	Sleeve position	Transit insulation
HK-25/26/A60/C	156x106 – 1006x356	94	0 – 40	140	3	Symmetric	Partially insulated
HK-25/26/A60/C	Ø32 – Ø300	50	0 – 40	140	3	Symmetric	Partially insulated

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

Type	Sleeve size [mm]	Max. cable diameter (OD) [mm]	Filling ratio [%]	Sleeve length [mm]	Sleeve thickness [mm]	Sleeve position	Transit insulation
HK-25/26/A60/J	156x106 – 1006x356	94	0 – 40	120	3	Symmetric	Partially insulated
HK-25/26/A60/J	Ø32 – Ø300	50	0 – 40	120	3	Symmetric	Partially insulated

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

Type	Sleeve size [mm]	Max. cable diameter (OD) [mm]	Filling ratio [%]	Sleeve length [mm]	Sleeve thickness [mm]	Sleeve position	Transit insulation
HK-25/26/A0/C	156x106 – 1006x356	94	0 – 40	140	3	Symmetric	None
HK-25/26/A0/C	Ø32 – Ø300	50	0 – 40	140	3	Symmetric	None

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

Type	Sleeve size [mm]	Max. cable diameter (OD) [mm]	Filling ratio [%]	Sleeve length [mm]	Sleeve thickness [mm]	Sleeve position	Transit insulation
HK-25/26/A0/J	156x106 – 1006x356	94	0 – 40	120	3	Symmetric	None
HK-25/26/A0/J	Ø32 – Ø300	50	0 – 40	120	3	Symmetric	None

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

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

Approved for water tightness up to a design pressure of 2.00 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. Zb2506070101a-E dated 31 July 2025 from Shanghai Fire Research Institute, Shanghai, China.
Test report No. Zb2506070102a-E dated 31 July 2025 from Shanghai Fire Research Institute, Shanghai, China.
Test report No. Zb2506070103-E dated 31 July 2025 from Shanghai Fire Research Institute, Shanghai, China.
Test report No. Zb2506070104-E dated 31 July 2025 from Shanghai Fire Research Institute, Shanghai, China.
Test report No. Zb2506070105a-E dated 31 July 2025 from Shanghai Fire Research Institute, Shanghai, China.
Test report No. Zb2506070106a-E dated 31 July 2025 from Shanghai Fire Research Institute, Shanghai, China.
Test report No. Zb2506070107a-E dated 31 July 2025 from Shanghai Fire Research Institute, Shanghai, China.
Test report No. Zb2506070108-E dated 31 July 2025 from Shanghai Fire Research Institute, Shanghai, China.
Test report No. Zb2506081808-E dated 3 September 2025 from Shanghai Fire Research Institute, Shanghai, China.

Drawing No. HK-JQTD-25/26-2501 edition A/1 dated 4 August 2025 from manufacturer.

Pressure test report No. WT/AT-2025-0826 dated 26 August 2025 from manufacturer.

Technical Data Sheet No. HK-25/26-TDS0903 version: A/0 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 DNVCP-0338 Section 4.

Manufactured by:
Shanghai Huoke New Material Co., Ltd, Building 13, No.135 Guowei Road, Shanghai, China.