

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MEDB0000B9W
Revision no.:
0

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV AS under the authority of the Government of Norway.

This is to certify:

that the **Penetrations through 'A' class divisions: - pipe, duct, trunk, etc. penetrations**

with type designation(s)

HK-Antifire Type A-60 Class Metallic Pipe Penetration

issued to

Shanghai Huoke New Material Co., Ltd.
Shanghai, China

is found to comply with the Implementing Regulation (EU) 2024/1975 for
Item no. **MED/3.26b** (Row **1 of 1**)

according to the following requirements:

SOLAS 74 Reg. II-2/9, IMO MSC.1/Circ. 1276

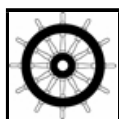
Further details of the equipment and conditions for certification are given overleaf.

Date of issue: **2025-05-30**

Expiry date: **2030-05-29**

DNV local unit:
Shanghai

Approval Engineer:
Marcin Tobiasz



Notified Body
no.: **0575**

for **DNV AS**

Christine Mydlak-Röder
Head of Notified Body

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the Agreement between the United States of America and the EEA EFTA states on the mutual recognition of Certificates of Conformity for Marine Equipment signed 17 October 2005, and amended by Decision No 1/2023 dated August 21st, 2023.



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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

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-Antifire Type A-60 Class Pipe Penetration"

is a single circular pipe penetration composed of a steel sleeve (110-180 mm long) welded to the steel bulkhead/deck.

The sleeve is packed with HK-T type intumescent firestop sleeve (manufactured by Shanghai Huoke New Material) and sealed at both ends with 15 mm thick Antifire type firestop sealant (manufactured by Shanghai Huoke New Material).

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

Application/Limitation

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

Class A-0, A-15 and A-30 shall be insulated as for A-60 and the division is to be fitted with A-60 insulation for a minimum distance of 200 mm around the penetration.

Insulation around pipe penetration system to be fixed to steel core.

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

Please see Appendix: Application/Limitation

Type Examination documentation

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 and address of manufacturer, type designation, fire-technical rating, MED Mark of Conformity and USCG approval number if applicable (see first page).

APPENDIX

Application/Limitation

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

Type	Pipe material	Pipe diameter (OD) [mm]	Sleeve size [mm]	Sleeve length [mm]	Sleeve Thickness [mm]	Sleeve position	Penetration insulation
HK-Antifire/C	Steel pipe	6 - 610	42.2 - 711	110 - 180	3.5 -12	Symetric	Fully insulated with additional insulation along pipe ^{1), 2)}
	Copper pipe	6 - 108	Ø42.2 – Ø168.3	110 - 160	3.5 – 7.1	Symetric	Fully insulated with additional insulation along pipe ³⁾

¹⁾ steel pipe to be insulated underside along pipe with A-60 insulation with length as follow: Ø34 with 300 mm, above Ø34 to Ø219.1 with 600 mm

²⁾ steel pipe Ø610 to be insulated along pipe with A-60 insulation with length 800 mm. In addition, penetration system to be fully insulated from both sides.

³⁾ copper pipe to be insulated underside along pipe with A-60 insulation with length as follow: from Ø20 to Ø76.1 with 400 mm, above Ø76.1 to Ø108 with 600 mm

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

Type	Pipe material	Pipe diameter (OD) [mm]	Sleeve size [mm]	Sleeve length [mm]	Sleeve Thickness [mm]	Sleeve position	Penetration insulation
HK-Antifire/J	Steel pipe	6 - 610	42.2 - 711	110 - 180	3.5 -12	Symetric	Fully insulated with additional insulation along pipe ^{1), 2)}
	Copper pipe	6 - 108	Ø42.2 – Ø168.3	110 - 160	3.5 – 7.1	Symetric	Fully insulated with additional insulation along pipe ³⁾

¹⁾ steel pipe to be insulated underside along pipe with A-60 insulation with length as follow: from Ø34 to Ø89 with 300 mm, above Ø89 to Ø168.3 with 500 mm, above Ø168.3 to Ø219.1 with 600 mm

²⁾ steel pipe Ø610 to be insulated along pipe with A-60 insulation with length 400 mm from both sides of pipe penetration. In addition, penetration system to be fully insulated from both sides.

³⁾ copper pipe to be insulated underside along pipe with A-60 insulation with length as follow: Ø20 with 200 mm, above Ø20 to Ø76.1 with 400 mm, above Ø76.1 to Ø108 with 600 mm

Additional application/information for Watertightness/gastightness (Not part of the Marine Equipment Directive requirement)

Product description

"HK-Antifire Type A-60 Class Pipe Penetration" is a single circular pipe penetration composed of a steel sleeve (110-180 mm long) welded to the steel bulkhead/deck. The sleeve is packed with HK-T type intumescent firestop sleeve (manufactured by Shanghai Huoke New Material) and sealed at both ends with 15 mm thick Antifire type firestop sealant (manufactured by Shanghai Huoke New Material).

Application/Limitation

Approved for penetration in steel bulkheads or steel decks limited to a pressure of 2 bar watertightness (tested pressure 3.0 bar) and 1.34 bar gastightness (tested pressure 2.0 bar).

Penetration systems are not to be used for penetrating boundaries of tanks.

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

Type Approval documentation

Watertight/Airtight test report No. WT/AT-2023-0401 dated 20 April 2023 from the manufacturer.

Tests carried out

Pressure tests according to DNV-CP-0165.