



Certificate no.:
TAF00001XZ

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Class H Penetration

with type designation(s)
SG-MT01/H60

issued to

Shanghai Siaco New Materials Technology Co., Ltd.
Shanghai, China

is found to comply with

DNV offshore standards

Application:

Approved for use as cable penetration system in H-60 class bulkheads.

Issued at **Høvik** on **2024-09-13**

This Certificate is valid until **2029-09-12**.

for **DNV**

DNV local unit: **Shanghai**

Approval Engineer: **Marcin Tobiasz**

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.



Form code: TA 251

Revision: 2023-09

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Product description

"SG-MT01/H60"

is an oval cable penetration composed of a steel sleeve welded to a steel division. The steel sleeve is packed with SG-T dilatant fire sleeves and SG-D dilatant fire belt (manufactured by Shanghai Siaco New Materials Technology) and sealed with 20 mm thick SG-M type fire expansion sealing adhesive (manufactured by Shanghai Siaco New Materials Technology) on each side.

The minimum distance between cable and sleeve and between cables shall be 6 mm.

For further details see drawings listed under Type Approval documentation.

Application/Limitation

Approved for use as a cable penetration system in H-60 steel bulkheads as per table below. Other applications are subject for case by case approval.

Table 1: Approved cable penetration in H-60 steel bulkhead.

Type	Size [mm]	Max. cable diameter [mm]	Filling ratio [%]	Sleeve thickness [mm]	Sleeve length [mm]	Sleeve position	Sleeve insulation
SG-SG-MT01	160x80 – 800x400	110	0 – 31	3-5	200	Symmetric	Partially insulated

Approved for water tightness up to a design pressure of 3.0 bar (test pressure 4.5 bar).

Approved for air tightness up to a design pressure of 2.3 bar (test pressure 3.5 bar).

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

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. FT24077 dated 20 March 2024 from FEFTC, Shanghai, China.

Drawing No. SG-MT/H60-C01 dated 3 July 2023 from maker.

Drawing No. SG-MT/H60-C02 dated 3 July 2023 from maker.

Drawing No. SG-MT/H60-C03 dated 3 July 2023 from maker.

Gas tightness and water tightness test(s) witnessed by DNV:

Test report No. TR-20230906001 dated 6 September 2023 from maker.

Test report No. TR-20230906002 dated 6 September 2023 from maker.

Test report No. TR-20230906003 dated 6 September 2023 from maker.

Tests carried out

Tested according to IMO 2010 FTP Code Part 3 and in compliance with the hydrocarbon time-temperature curve specified in ISO 834-3.

Pressure tested according to Class Programme DNV-CP-0165 (Water and gas tightness).

Marking of product

The product or packing shall be marked with the name of the 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.