



Certificate no.:
TAF00001XX

TYPE APPROVAL CERTIFICATE

This is to certify:

that the **Class A and B Penetration**

with type designation(s)
SG-DMT/A60

issued to

Shanghai Siaco New Materials Technology 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 cable penetration system in class A-60 steel bulkheads and decks.

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 **2024-09-25**

This Certificate is valid until **2029-09-24**.

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.



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Product description

“SG-DMT/A60”

is an oval cable penetration composed of a steel sleeve welded to a steel division. The steel sleeve is packed with SG-F fire resistant filler (manufactured by Shanghai Siaco New Materials Technology) and sealed with 25 mm thick SG-E type expansion putty (manufactured by Shanghai Siaco New Materials Technology) on each side of bulkhead or one side of deck.

The minimum distance between cable and sleeve shall be 5 mm and minimum distance between cables shall be 4 mm.

For further details see drawings listed under Type Approval documentation.

Application/Limitation

Approved for use as multi cable penetration system in A-60 steel bulkheads and decks for approved ship cables. 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.

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

Type	Size [mm]	Max. cable diameter [mm]	Filling ratio [%]	Sleeve thickness [mm]	Sleeve length [mm]	Sleeve position	Sleeve insulation
SG-DMT/A60	60x40 – 983x400	95	0 – 39	3-5	140	Symmetric	Partially insulated

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

Type	Size [mm]	Max. cable diameter [mm]	Filling ratio [%]	Sleeve thickness [mm]	Sleeve length [mm]	Sleeve position	Sleeve insulation
SG-DMT/A60	60x40 – 983x400	95	0 – 39	3-5	140	Symmetric	Partially insulated

Approved for water tightness up to a design pressure of 2.7 bar (test pressure 4.0 bar).

Approved for air tightness up to a design pressure of 2.0 bar (test pressure 3.0 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. FT21032 dated 18 February 2021 from FEFTC, Shanghai, China.

Test report No. FT21033 dated 18 February 2021 from FEFTC, Shanghai, China.

Drawing No. SG-DMT/A60-C01 dated 12 September 2020 from maker.

Drawing No. SG-DMT/A60-C02 dated 12 September 2020 from maker.

Drawing No. SG-DMT/A60-C03 dated 12 September 2020 from maker.

Drawing No. SG-DMT/A60-J01 dated 12 September 2020 from maker.

Drawing No. SG-DMT/A60-J02 dated 12 September 2020 from maker.

Drawing No. SG-DMT/A60-J03 dated 12 September 2020 from maker.

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

Test report No. TR-20210108002 dated 8 January 2021 from maker.

Test report No. TR-20210108004 dated 8 January 2021 from maker.

Test report No. TR-20210108005 dated 8 January 2021 from maker.

Tests carried out

Fire tested according to IMO 2010 FTP Code part 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.