



Certificate no.:
TAF000021G

TYPE APPROVAL CERTIFICATE

This is to certify:

that the **Class A and B Penetration**

with type designation(s)
TSWS and TCWS

issued to

Shenzhen Testeck Technology Co., Ltd.
Shenzhen, Guangdong Province, 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 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 **2025-11-18**

This Certificate is valid until **2030-11-17**.

for **DNV**

DNV local unit: **China South NB**

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.

Product description

"TSWS and TCWS"

TSWS consist of TSWF rectangular steel frame made of 6 mm in sizes welded to the division and filled with TSC-M series type sealing module made of EPDM rubber, Tensioner-120-316L type tensioning blocks used as fillers and partition plate. Frame is welded on the top side of the deck and on the insulated side of the bulkhead.

TCWS consist of TCWF circular steel frame made of 4.25 mm in sizes welded to the division and filled with TSR series circular sealing module made of EPDM rubber and pressure plate. Frame is welded on the top side of the deck and on the insulated side of the bulkhead.

Application/Limitation

Approved for use as a cable penetration system in class A-60 bulkheads or 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 Class A-60 and in addition the division is to be insulated at least 200 mm around the penetration.

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

Type	Size	Sleeve/Frame type	Max. cable diameter [mm]	Sleeve/Frame Length [mm]	Sleeve/Frame Thickness [mm]	Sleeve/Frame position	Sleeve/Frame insulation
TSWS	2x1 – 8+8x4	TSWF	48	60	6 – 10	Symmetric	Partially insulated on the insulated side
TCWS	52 – 113	TCWF	65	75	4.25 – 6	Symmetric	Partially insulated on the insulated side

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

Type	Size	Sleeve/Frame type	Max. cable diameter [mm]	Sleeve/Frame Length [mm]	Sleeve/Frame Thickness [mm]	Sleeve/Frame position	Sleeve/Frame insulation
TSWS	2x1 – 8+8x4	TSWF	48	60	6 – 10	Symmetric	Partially insulated on the underside
TCWS	52 – 113	TCWF	65	75	4.25 – 6	Symmetric	Partially insulated on the underside

TCWS type approved for penetration in steel bulkheads or steel decks limited to a pressure of 2.7 bar watertightness (tested pressure 4 bar) and 2.7 bar gastightness (tested pressure 4 bar).

TSWS type approved for penetration in steel bulkheads or steel decks limited to a pressure of 2 bar watertightness (tested pressure 3 bar) and 2 bar gastightness (tested pressure 3 bar).

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

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

Type Approval documentation

Test report No. FT25036 dated 4 March 2025 from FEFTC, Shanghai, China.

Test report No. FT24370 dated 25 October 2024 from FEFTC, Shanghai, China.

Test report No. FT24433 dated 26 November 2024 from FEFTC, Shanghai, China.

Test report No. FT24348 dated 24 October 2024 from FEFTC, Shanghai, China.

Tightness test report No. TST202403001 dated 22 March 2024 from manufacturer.

Tightness test report No. TST202510001 dated 22 March 2025 from manufacturer.

Drawing No. 2024-02-CTFSY-003 dated 12 June 2024 from manufacturer.

Drawing No. 2024-02-CTFSY-004 dated 12 June 2024 from manufacturer.

Drawing No. 2024-02-CTFSY-006 dated 12 January 2024 from manufacturer.

Drawing No. 2024-02-CTFSY-007 dated 18 December 2024 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:

Hanzhong Testeck Technology Co., Ltd., Plant No.6, Jiangwan Industrial Park, Bowang Town, Chenggu
Country, Hanzhong City, Shaanxi Province, P.R.China.