



Certificate no.:
TAK00002EK

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Insulation Materials for Gas Carriers

with type designation(s)
Anchor strips

issued to

Shanghai Xianshan Marine Machinery Co., Ltd
Shanghai, China

is found to comply with

Gaztransport & Technigaz Specification Nr. M3109, Anchor Strips for Primary Barrier, Rev. 3, November 2015

Application:

For use in GTT MK III containment systems built under GTT's license.

Issued at **Hamburg** on **2024-09-13**

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

for **DNV**

DNV local unit: **Shanghai**

Approval Engineer: **Joachim Rehbein**

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 300,000 USD.



Form code: TA 281

Revision: 2023-09

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Page 1 of 2

Product description

Anchor Strips

Place of manufacture

Shanghai Xianshan Marine Machinery Co., Ltd.,
No.495, Jinzhang Road, Zhangyan Town, Jinshan District,
Shanghai
China

Application/Limitation

The material is only approved for use in MARK III containment systems built under licence from GAZTRANSPORT & TECHNIGAZ SA (GTT).

Deliveries to actual shipbuilding projects shall follow:

- GTT Specification Nr. M3109, "Anchor Strips for Primary Barrier", Rev. 3, Nov. 2015,
and the product shall have a valid approval from GTT.

Type Approval documentation

Tests carried out

Type Testing carried out in accordance with **Type Approval documentation**.

Marking of product

Product shall be marked with *manufacturer's name, lot no., size, and type designation*.

The marking is to be carried out in such a way that it is visible, legible and indelible.

Periodical assessment

The scope of the Periodical Assessment is to verify that the conditions stipulated for the Type Approval is complied with and that no alterations are made to the product design or choice of materials.

Periodical assessments (for Certificate Retention / Certificate Renewal) shall be performed according to DNV-CP-0338.

This certificate is only valid if required Periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in <https://approvalfinder.dnv.com>

END OF CERTIFICATE