Certificate no.:
TAK00002F3

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Insulation Materials for Gas Carriers

with type designation(s)
Reinforced Polyurethane Foam (R-PUF): Y-HF-S4-150 (210mm, 8 layers of CSM)

issued to

Jiangsu Yoke Technology Co.,Ltd

Yixing, Jiangsu, **China**

is found to comply with

Gaztransport & Technigaz Specification Nr. M3045, High Density Reinforced Polyurethane Foam 150kg/m3 (HD R-PUF 150), Rev. 01, June 2021

Application:

For the use in Gaztransport & Technigaz (GTT) NO96 Super+ Cargo Containment System (CCS) technologies of Liquefied Gas (LG) carriers.

Issued at **Hamburg** on **2024-10-28**

This Certificate is valid until **2029-10-27**.

for **DNV**

DNV local unit: **Jiangyin NB & CMC**

Approval Engineer: **Gisle Hersvik**

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.

Product description

Y-HF-S4-150
Reinforced Polyurethane Foam (R-PUF), which contains 8 layers CSM of 450 g/m^2 each, 210 mm board thickness.
Blowing agent: HFC-245fa
Nominal density: 150 kg/m^3

Application/Limitation

For use in NO96 Super+ Cargo Containment System (CCS) technologies.

The material is only approved for use in Cargo Containment System (CCS) technologies of Liquefied Gas (LG) carriers built under license from GAZTRANSPORT & TECHNIGAZ SAs (GTT).

Deliveries to actual shipbuilding projects shall be in compliance with GTT Specification Nr. M3045 "High Density Reinforced Polyurethane Foam 150 kg/m^3 (HD R-PUF 150)", Rev. 01 dated June 2021, 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/package shall be marked with the *manufacturer's name*: **Jiangsu Yoke Technology Co., Ltd., China**, or *manufacturer's identification letter(s)*, *Lot No.*, *Size*, *Quantity*, 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