Certificate No: LR2197770TA
Issue Date: 12/03/2021
Expiry Date: 11/03/2026

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer	**Jiangsu Taili Mechanical Technology Co., Ltd**
Address	Industrial Concentration Area, Dalun Town, Jiangyan District, Taizhou, 225500, China
Place of Production	Jiangsu Taili Mechanical Technology Co., Ltd Industrial Concentration Area, Dalun Town, Jiangyan District, Taizhou, 225500, China
Type	Non-Asbestos Gasket & Pipe Strap
Description	TLG404: Metal Spiral-Wound Gasket with centre ring and inner ring (Stainless steel plate and graphite material) TL-203B: Feber Rubber Gasket Sheet (Aramid fiber and NBR cement material) TL-BA/UB: Feber Rubber Gasket Sheet (Aramid fiber and NBR cement material) TL-GEM: Reinforced Flexible Graphite Gasket (Graphite, Stainless steel plate ASI316L) TL-2020: Modified PTFE Gasket Sheet (Teflon, SiO2 material) TL-900E : Expanded PTFE Gasket Sheet (Teflon material)
Application	Marine Piping Systems:- TLG404: LNG ship cryogenic pipeline system TL-203B: Fuel system, lubricating oil system & drainage system TL-BA/UB: Fuel system, lubricating oil system, drinking water system & compressed air system TL-GEM: Steam, gas, chemical industry, petrochemical industry, Heating system, high temperature field & LNG shipbuilding and storage transportation

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Mohamed Mohamed Rila

Senior Specialist to Lloyd's Register EMEA
A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

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equipment
TL-2020: LNG ship cryogenic pipeline system
TL-900E: LNG ship cryogenic pipeline system

Specified Standard

Lloyd's Register's Rules and Regulations for the Classification of Ships, Part 5, Chapter 12, 2020
DIN 28090-2 "Static gaskets for flange connections - Part 2: Gaskets made from sheets; special test procedures for quality assurance"
ASTM F152-95 "Standard Test Methods for Tension Testing of Non-metallic Gasket Materials"
ASTM F36-99 "Standard Test Method for Compressibility and Recovery of Gasket Materials"
GB/T20671.3-2006"Standard Test Methods for Fluid Resistance of Gasket Materials"
GB/T20671.5-2006"Classification system and test method of non-metallic gasket materials"
GB/T 12385 -2008 "Standard test method for sealability of gaskets for pipe flanges"
GB/T 12622- 2008 "Standard test method for compressibility and recovery of gaskets for pipe"
Q/SY 1828-2015 "Gaskets for LNG pipeline and equipment"

Ratings

- TLG404:
  Short-term peak Temperature Range: -196℃~450℃
  Short term peak Pressure: 66bar~300bar
  Thickness: 3.2~4.5mm
- TL-203B:
  Short-term peak Temperature Range: -196℃~250℃
  Short term peak Pressure: ≤50bar
  Thickness; 1.0~3.0mm
- TL-BA/UB:
  Short-term peak Temperature Range: -196℃~250℃
  Short term peak Pressure: ≤100bar
  Thickness: 1.0~3.0mm

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Type Approval Certificate

• TL-GEM;
Short-term peak Temperature Range: -196℃~450℃
Short term peak Pressure: ≤200bar
Thickness: 1.0~3.0mm
• TL-2020:
Short-term peak Temperature Range: -196℃~260℃
Short term peak Pressure: ≤80bar
Thickness: 1.0~3.0mm
• TL-900E:
Short-term peak Temperature Range: -196℃~260℃
Short term peak Pressure: ≤100bar
Thickness: 1.0~5.0mm

See the Design Appraisal Document for the detail Technical data

Other Conditions

1. Gasket Materials are to be selected, installed and tested in accordance with the manufacturer's instructions and Lloyd's Register's Rules and Regulations for the Classification of Ships, Part 5, Chapter 12, Section 8.
2. Gasket Materials are to be used in machinery space are to be of fire tested type.
3. The following details are to be permanently marked:
• Manufacturer's name or trademark
• Type designation
• Material
• Pressure & Temperature ratings

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document LR2197770TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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