Certificate No: LR21185774TA
Issue Date: 13/10/2021
Expiry Date: 09/12/2025

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	**JEIL E&S CO LTD**
Address	309, Chungnyeol-ro, Yangsan-si, Gyeongnam, 50592, Republic of Korea
Type	High Temperature Sheet & Gasket
Description	Flexible Graphite, Mica & Vermiculite sheet & gaskets reinforced with stainless tanged, flat and wire-mesh insert TYPE JIC4201 Series JIC4201 (Graphite, No reinforced), JIC4201-B(Graphite, Tanged Metal) JIC 4201-P(Graphite, Flat Metal), JIC 4201-W(Graphite, Wire-mesh) JIC 4201-HT (Mica, Tanged Metal) JIC 4201-UHT(Vermiculite, Tanged Metal)
Trade Name	JIC4201 Series
Application	Marine, offshore and industrial piping system for oils, water and exhaust gas
Specified Standard	LR Rules and Regulations for the Classification of Ships, Part 5, Chapter 12, July 2020 ASTM F36, Standard Test Method for Compressibility and Recovery of Gasket Materials
Ratings	**JIC 4201, JIC 4201-P, JIC 4201-B, JIC 4201-W**

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Da-Young Kang

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

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

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Short-term peck pressure	: 4.9 MPa
Continuous operating service temperature	
Oxidation resistant grade	: 525°C
Oxidation atmosphere grade	: 450°C
Sheet thickness	: 0.8 ~ 3.2 mm
Density of Graphite	: 1.1 ± 0.1 g/cm2
Compressibility	: 25~50 %
Recovery	: Min. 12 %

JIC 4201-HT

Short-term peck pressure	: 2.9 MPa
Continuous operating service temperature	: 1000°C
Sheet thickness	: 0.8 ~ 3.2 mm
Density of sealing material	: 1.9 ± 0.2 g/cm2
Compressibility	: 25~50 %
Recovery	: Min. 5%

JIC 4201-UHT

Short-term peck pressure	: 10 MPa
Continuous operating service temperature	: 1000°C
Sheet thickness	: 0.8 ~ 3.2 mm
Density of sealing material	: 1.5 ± 2.0 g/cm2
Compressibility	: 30~55%
Recovery	: Min. 7%

Note: The producer's catalogue to be consulted for maximum pressure and temperature rating. The producer's applications are to be complied with.

Other Conditions Gasket materials are to be selected, installed and tested in accordance with the manufacture's instructions and Lloyd's Rules and Regulations

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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 Asia of any modification or changes to the equipment in order to obtain a valid Certificate.

The Design Appraisal Document LR21185774TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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