Certificate No: LR2001639TA
Issue Date: 06/11/2019
Expiry Date: 05/11/2024

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	**Japan AMC Ltd.**
Address	13-8, Ichinami-cho, Fukui-shi, 910-2222, Japan
Place of Production	Japan AMC Ltd. 13-8, Ichinami-cho, Fukui-shi, 910-2222, Japan
Type	Compression Fittings
Description	Bite type tube fittings for steel pipe and copper pipe
Trade Name	LLA, LLM for steel tubes LLC for copper pipe
Application	High pressure tube connections for use in marine, offshore and industrial piping systems with lubricating oil, hydraulic oil, air, fresh water, sea water, steam and fuel oil.
Specified Standard	Lloyd's Register (LR) Rules and Regulations for the Classification of Ships, Part 5,Chapter 12, July 2019. IACSUR P2 "Rules for Piping Design, Construction and Testing", Rev.2 Nov. 2001
Additional Tests	Representative samples of joints have been tested in accordance with the requirements as specified in IACS UR, P2.11, Rev.2 Corr.1 Apr. 2007. The following tests have been carried out:- 1) Tightness test

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Yasushi Sawada

Senior Surveyor to Lloyd's Register Group Ltd
A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, UK

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2) Vibration test
3) Pressure pulsation test
4) Burst pressure test
5) Pull-out test
6) Vacuum test
7) Repeated assembly test

Other Conditions

1) The fittings are to be installed in accordance with the manufacturer's instructions.

2) Attention is drawn to Section 1.3.6 of IMOMSC.1/Circ.1321 – Guidelines for Measures to prevent Fires in Engine-Rooms and Cargo Pump-Rooms which describes that compression couplings require careful attention to tightening procedures and torques to avoid leaks or damage to the pipe when subjected to over-tightening and they should not be used in the fuel supply line of the (oil engine) injection pumps and spill system.

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

The Design Appraisal Document No. LR2001639TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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