Certificate No: LR2537124TA
Issue Date: 24/03/2025
Expiry Date: 23/03/2030

# 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** | **SWAGELOK COMPANY** |
| **Address** | 29500,Solon Road, Solon, Ohio, 44139, United States |
| **Type** | Compression Fittings |
| **Description** | Two ferrule flareless mechanical grip tube fittings.<br>Swagelok Mechanical Tube Fittings |
| **Trade Name** | Gaugeable tube fittings, in accordance with Swagelok catalogue MS-01-140 Rev AH |
| **Application** | Marine, Offshore and Industrial Applications |
| **Specified Standard** | LR Rules and Regulations for the Classification of Naval Ships 2024<br>LR Rules and Regulations for the Classification of Ships 2024<br>LR Rules and Regulations for Offshore Units 2024<br>IACS UR P.2.7- Rev 11-October 2023 & IACS UR P.2.11- Rev 6-October 2023. |
| **Ratings** | Stainless Steel $^{1}/_{16}$"to 2"<br>2507 Duplex $^{1}/_{4}$"to $^{3}/_{4}$"<br>400/R-405 Alloy-Monel $^{1}/_{8}$" to 1"<br>360 and /or 377 Brass$^{1}/_{8}$" to 1 $^{1}/_{8}$" |

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**Gopal Nair**

Piping & Pressure System Principal Specialist
to Lloyd's Register North America, Inc.
A member of the Lloyd's Register group

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# Type Approval Certificate

Alloy C-276(Hastelloy C) $^1/_4$" to $^1/_2$"
Alloy 600(Inconel) $^1/_4$"to $^1/_2$"
Alloy 800(Inconel) $^1/_4$"to $^1/_2$"
Titanium$^1/_4$" to $^1/_2$"

Ratings as per Swagelok Document MS-01-107 Rev W

**Additional Tests**

ASTM F1387 -99 shock tests
IACS UR P 2.7- 2025 - Tightness Test, Burst Test, Vibration test, Pressure Pulsation Test, Repeated Assembly test and Pull out test - see DAD for all test details.

**Other Conditions**

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

2. The manufacturer's recommendations with respect to rated temperature, pressure and fluid compatibility are to be strictly adhered.

3. Refer to IACS UR P.2.11- Rev 6-October 2023 table 9 footnote 3, as per this fire test is not required for metal-to-metal seated tube fittings. However, brass fittings are not to be used in oil systems, carbon dioxide lines and similar fire control lines where minimum melting point of 925 degree C is required as per table 7 of IACS UR P.2. 7.

4. Fittings which include any components which readily deteriorate in case of fire such as O-rings are not to be used in systems where fire tests requirements are specified in Part 5 Chapter 12 table 12.2.8 and IACS UR P.2.11- Rev 6-October 2023 table 9.

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# Type Approval Certificate

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 North America, Inc. of any modification or changes to the equipment in order to obtain a valid Certificate.

**Previous Version:** LR2002498TA-01 issued 26 March 2020.

The Design Appraisal Document LR2537124TA/ TSO24-024147/ PRJ11100476983/001/GN and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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