Certificate No: LR2645337TA
Issue Date: 11/02/2026
Expiry Date: 10/02/2031

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 **Masino Industry Oy**

Address Tulotie 8, Ylöjärvi, 33470, Finland

Type Metal Expansion Joint

Description Multi layered stainless steel (1.4307) expansion joint, consisting of two chambers. Outer chamber is depressurized

Trade Name S-W29, S-W30 and S-W36

Application To be used in fuel gas supply lines on dual fuel engines or gas engines where flexibility in axial and lateral direction is required..

Specified Standard Lloyd's Register Rules and Regulations for the Classification of Ships, Part 5, Chapter 12, July 2025 and EJMA, 10th Edition

Ratings

Nominal Diameter [mm]	Design Pressure [bar]	Design Temperature [°C]	Life Cycles [-]	Axial and Lateral Movement [mm]
DN100/DN150	10	80	1000	±3

Downloaded Copy

Johannes Wiegel

Engineering Piping/Decarbon - Senior Specialist to Lloyd's Register EMEA
A member of the Lloyd's Register group

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

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

Certificate No: LR2645337TA
Issue Date: 11/02/2026
Expiry Date: 10/02/2031

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

Previous Version: LR2147367TA-01

The Design Appraisal Document TSO/25-052002-P-1 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Downloaded Copy

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

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.