Certificate No: LR25114917TA
Issue Date: 21/02/2025
Expiry Date: 20/02/2030

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	**HKS GmbH**
Address	,Schonenfahrerstr. 1, Rostock, 18057, Germany
Type	Flexible Hoses
Description	Corrugated stainless steel hoses (1.4541, 1.4404, 1.4571), with high alloy steel single braided type SE or double braided type SZ and welded flange of screw connection
Trade Name	SE, SZ
Application	General use in marine, offshore and industrial piping systems classed or intended for classification with Lloyd's Register.
Specified Standard	Lloyd's Register Rules and Regulations for the Classification of Ships, 2024 DIN EN ISO 10380
Ratings	Type SE and type SZ: DN 6 to DN 250 Temperature range: -196 up to 550°C Pressure range SE: 140 to 15 bar / vacuum Pressure range SZ: 250 to 12,5 bar / vacuum De-rating factors at elevated temperatures are to be observed acc. ISO 10380 depending on hose material.
Other Conditions	For Application in Reformat systems material grades 316L or 316Ti only

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Torsten Schroeder

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

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

Previous Version: LR2001907TA-01

The Design Appraisal Document TSO/25-033885, (previous HTS/ENS 40468-20, Issue No. 1) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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