



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	Stauff UK Ltd
Address	500 Carlisle Street East, Sheffield, S4 8BS, United Kingdom
Place of Production	Stauff UK Ltd 500 Carlisle Street East, Sheffield, S4 8BS, United Kingdom
Place of Production	Semperit Techn. Produkte GmbH Triester Bundesstrasse 26, Wimpassing, 2632, Austria
Place of Production	Transfer Oil SpA Via Sacca, 64, Colorno, (PR), 43052, Italy
Place of Production	Tieffe S.p.A. Via del Industria 7/11, Cura Carpignano, 27010, Italy
Type	Flexible Hoses
Description	Flexible hose assemblies with permanently attached end fittings TYPE Detailed: 1SN; 2SN; 1SC 2SC Stauff Compact Hose StauffPac 1 SNK;

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

Vahid Saremi Shahab
Lead Offshore Piping Specialist to Lloyd's Register EMEA
A member of the Lloyd's Register group

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.



Type Approval Certificate

Stauff Compact Hose StauffPac 2 SNK;
Stauff Multispiral Hose 4SP;
Stauff Multispiral Hose 4SH;
Stauff Multispiral Hose SAE 100R13;
Stauff Multispiral Hose SAE 100R15;
Stauff Thermoplastic Hose SAE 100R7;
Stauff Thermoplastic Hose SAE 100R8;
Stauff Thermoplastic Hose Multi Purpose 1 Wire.

Trade Name	1SN, 2SN, 1SC, 2SC, 1SNK, 2SNK, 4SP, 4SH, SAE 100R13, SAE 100R15, SAE 100R7, SAE 100R8, Multi Purpose 1 Wire
Application	As short joining lengths of flexible hose to accommodate relative movement between machinery and fixed piping systems.
Specified Standard	Lloyd's Register's Rules and Regulations for the Classification of Ships; BS EN 853:1997 – Rubber hoses and assemblies-wire braid reinforced hydraulic type-specification; BS EN 855:1997 – Plastic hoses and hose assemblies-thermoplastics textile reinforced hydraulic type-specification; BS EN 856:1997 - Rubber hoses and hose assemblies - rubber covered spiral wire reinforced hydraulic type – specification; BS EN 857:1997 – Rubber hoses and hose assemblies-rubber covered spiral wire reinforced hydraulic type-specification.
Ratings	Please refer to the Appendix
Other Conditions	<ol style="list-style-type: none">1. Hoses are to be selected, installed and tested in accordance with the manufacturer's recommendations and Lloyd's Register's Rules and Regulations for the Classification of Ships, Part 5, Chapter 12, Section 7.2. Hoses are not approved for use in with flammable liquids, or for essential services in locations where a source of ignition is present.3. Hoses are not approved for use in piping systems where pressure pulses

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.



Type Approval Certificate

and/or high levels of vibration are expected to occur in service.

4. The each flexible hose with end fittings is to be provided with the manufacturer's pressure test report and conformity of the production and the following details are to be permanently marked:

- Manufacturer's name or trademark.
- Date of manufacture (month/year).
- Designation type reference.
- Nominal diameter.
- Pressure rating.
- Temperature range.

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: 12/00024 (E1)

The Design Appraisal Document LR22340750TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LR22340750TA

Appendix

1SN:

Tube: Oil resistant synthetic rubber
 Cover: Abrasion resistant synthetic rubber
 Reinforcement: 1 high tensile steel braid
 Diameter range (inch): 3/16 to 2
 Max. working pressure (bar): 250 to 40
 Temperature range (°C): -40 to +100

2SN:

Tube: Oil resistant synthetic rubber
 Cover: Abrasion resistant synthetic rubber
 Reinforcement: 2 high tensile steel braids
 Diameter range (inch): 3/16 to 2
 Max. working pressure (bar): 415 to 80
 Temperature range (°C): -40 to +100

Stauff Compact Hose StauffPac 1 SNK:

Tube: Oil resistant synthetic rubber
 Cover: Abrasion resistant synthetic rubber
 Reinforcement: 1 high tensile steel braid
 Diameter range (inch): ¼ to 1¼
 Max. working pressure (bar): 290 to 100
 Temperature range (°C): -40 to +100

Stauff Multispiral Hose 4SP:

Tube: Oil resistant synthetic rubber
 Cover: Abrasion resistant synthetic rubber
 Reinforcement: 4 high tensile steel wire spiral layers
 Diameter range (inch): 3/8 to 2
 Max. working pressure (bar): 445 to 165
 Temperature range (°C): -40 to +121

Stauff Multispiral Hose SAE 100R13:

Tube: Oil resistant synthetic rubber
 Cover: Abrasion resistant synthetic rubber
 Reinforcement: 4 high tensile steel wire spiral layers (up to 1" diameter)
 6 steel wire spirals (1¼" and above)
 Diameter range (inch): ¾ to 2
 Max. working pressure (bar): 350
 Temperature range (°C): -40 to +121

Stauff Thermoplastic Hose SAE 100R7:

Tube: Polyester elastomer or nylon
 Cover: Polyurethane

1SC:

Tube: Oil resistant synthetic rubber
 Cover: Abrasion resistant synthetic rubber
 Reinforcement: 1 high tensile steel braids
 Diameter range (inch): 3/8 to 1 1/4
 Max. working pressure (bar): 180 to 88
 Temperature range (°C): -40 to +100

2SC:

Tube: Oil resistant synthetic rubber
 Cover: Abrasion resistant synthetic rubber
 Reinforcement: 2 high tensile steel braids
 Diameter range (inch): 1/4 to 1
 Max. working pressure (bar): 165 to 400
 Temperature range (°C): -40 to +100

Stauff Compact Hose StauffPac. 2 SNK:

Tube: Oil resistant synthetic rubber
 Cover: Abrasion resistant synthetic rubber
 Reinforcement: 2 high tensile steel braids
 Diameter range (inch): ¼ to 1¼
 Max. working pressure (bar): 450 to 175
 Temperature range (°C): -40 to +100

Stauff Multispiral Hose 4SH:

Tube: Oil resistant synthetic rubber
 Cover: Abrasion resistant synthetic rubber
 Reinforcement: 4 high tensile steel wire spiral layers
 Diameter range (inch): ¾ to 2
 Max. working pressure (bar): 420 to 250
 Temperature range (°C): -40 to +121

Stauff Multispiral Hose SAE 100R15:

Tube: Oil resistant synthetic rubber
 Cover: Abrasion resistant synthetic rubber
 Reinforcement: 4/6 high tensile steel wire spiral layers
 Diameter range (inch): ¾ to 1½
 Max. working pressure (bar): 420
 Temperature range (°C): -40 to +121

Stauff Thermoplastic Hose SAE 100R8:

Tube: Polyester elastomer or nylon
 Cover: Polyurethane



ATTACHMENT TO CERTIFICATE OF TYPE APPROVAL No. LR22340750TA

Reinforcement: 1 polyester yarn braid
Diameter range (inch): 1/8 to 1¼
Max. working pressure (bar): 207 to 70
Temperature range (°C): -40 to +100

Reinforcement: 1 aramid braid
Diameter range (inch): 1/8 to 1¼
Max. working pressure (bar): 420 to 100
Temperature range (°C): -40 to +100

Stauff Thermoplastic Hose Multi Purpose 1 Wire:

Tube: Polyester elastomer or nylon
Cover: Polyurethane
Reinforcement: 1 high tensile steel wire braid
Diameter range (inch): 1/8 to 1
Max. working pressure (bar): 350 to 100
Temperature range (°C): -40 to +100

