

# STAUFF hose assemblies ... certified for Offshore Oil and Marine applications



STAUFF were recently granted type approval by Norway's Det Norske Veritas (DNV GL) for hose assemblies.

The approval, which involved in excess of 12 months extensive auditing and testing at both our Sheffield and Aberdeen facilities allows us to manufacture and distribute the following hose assemblies under the approved heading:

- 1SN & 2SN
- 1SNK & 2SNK
- 4SH & 4SP
- R13 & R15

DNV GL provide classification and technical assurance along with software and independent expert advisory services to the maritime, oil and gas, and energy industries in over 100 countries. The world's largest ship and offshore classification society, DNV GL is the leading technical advisor to the global oil and gas industry, and a leading expert for the energy value chain including renewable and energy efficiency.

DNV GL are held in high regard and are one of the top three certification bodies in the world, STAUFF are constantly striving to maintain these high standards.





# DET NORSKE VERITAS

## EC TYPE EXAMINATION CERTIFICATE

Application of: Council Directive 96/98/EC of 20 December 1996 on Marine Equipment as amended by directive 2011/75/EU, issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Directorate. This Certificate is issued by Det Norske Veritas under the authority of the Government of the Kingdom of Norway.

CERTIFICATE NO. **MED-B-8647**

This is to certify that the  
**Materials other than steel for pipes conveying oil or fuel oil**

with type designation(s)  
**EN 853 1SN, EN 853 2SN, EN 857 1SNK, EN 857 2SNK, 4SH, 4SP, R13 and R15**

Manufacturer  
**STAUFF UK LTD**  
**SHEFFIELD, United Kingdom**

is found to comply with the requirements in the following Regulations/Standards:  
**Annex A.1, item No. A.1/3.15c and Annex B, Module B in the Directive. SOLAS 74 as amended, Regulation II-2/4.2.2.5.1, II-2/4.2.2.5.6 & X/3 and 2000 HSC Code 7.5.4.**

Further details of the equipment and conditions for certification are given overleaf.

**Høvik, 2014-01-20**  
for **Det Norske Veritas AS**



This Certificate is valid until  
**2019-01-20**

Notified Body No.: **0575**

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**Marianne Strand Valderhaug**  
**Head of Department**

DNV local office:  
**Sheffield**

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**Tom Berg-Nielsen**  
**Surveyor**



The Certificate is subject to terms and conditions overleaf. Any significant changes in design or construction of the product, or amendments to the Directive or Standards referenced above may render this Certificate invalid. The product liability rests with the manufacturer or his representative in accordance with Council Directive 96/98/EC, as amended. The Mark of Conformity may only be affixed to the product and a Declaration of Conformity may only be issued when the production/product assessment module referred to in the council directive, is fully complied with.

## Product description

Design:

Type 1SN: Synthetic rubber hose with one internal steel wire braid according to SAE 100 R1AT or DIN 853.

Type 1SNK: Synthetic rubber hose with one internal steel wire braid.

Type 2SN: Synthetic rubber hose with two internal steel wire braids according to SAE 100 R2AT or DIN 853.

Type 2SNK: Synthetic rubber hose with two internal steel wire braids.

Type 4SP: according to EN 856 and 4SH according to EN856. Inner tube and cover of synthetic rubber reinforced with 4 spirally wrapped steel plies.

Type R13: F According to EN856. Inner tube of synthetic rubber with reinforcement of four high tensile steel spirals up to DN25, six spirals for DN31 and up.

Type R15: Synthetic rubber inner tube reinforced by 4 (sizes 12 and 16) or 6 (all other sizes) steel wire spirals, synthetic rubber cover according to EN856

Hose manufacturer: Semperit Technische Produkte GmbH

Coupling manufacturer: Tieffe S.r.L., Italy

## Application/Limitation

The hoses may be used for oil or fuel oil.

Maximum working pressure:

DN Size (mm)	Pressure (bar)							
	1SN	1SNK	2SN	2SNK	4SP	4SH	R13	R15
5	-	-	415	-	-	-	-	-
6	225	290	400	450	-	-	-	-
8	215	250	350	420	-	-	-	-
10	180	230	330	385	445	-	-	-
12	160	200	275	345	425	-	-	-
16	130	150	250	290	350	-	-	-
20	105	125	215	280	350	420	350	420
25	88	110	165	200	320	380	350	420
32	63	100	125	175	210	350	350	420
40	50	-	90	-	185	290	350	420
50	40	-	80	-	165	250	350	420

Temperature range: -40°C to + 121°C

The hoses may not be used in vacuum systems.

For compressed air and/or gases above 16 bar the cover is to be pin prickled.

The hoses are not to be used in systems where pressure impulses may occur.

## Type Examination documentation

### Tests carried out

Fire test according to ISO 15540 and ISO 15541

## Marking of product

Certificate No.: MED-B-8647  
Item No.: A.1/3.15  
Job Id.: 344.1-004108-1

For traceability to this type approval, the final products (hoses with couplings) are to be marked:

- Manufacturers name or trademark
- Type designation

Additional marking at manufacturer's option.

In addition to the marking given above, each hose assembly is to be marked with 0575, and year of production.

### **Mark of Conformity**

The manufacturer is allowed to affix the Mark of Conformity according to Article 11 in the Council Directive 96/98/EC on Marine Equipment and shall issue a Declaration of Conformity, only when the module D of Annex B in the same directive is fully complied with.

Module D:       The quality system for production and testing shall be approved by the Notified Body.