

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB0000250
Revision No:
1

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of Norway.

This is to certify:

That the Materials other than steel for pipes conveying oil or fuel oil

with type designation(s)

Trale® SAE 100 R1AT - EN853 1SN, Trale® SAE 100 R2AT - EN853 2SN, Trale® SAE 100 R9R (4SP) - EN856 4SP, Trale® EN856 4SH, Trale® EN857 1SC, Trale® EN857 2SC, Trale® (EN853 2SNK)

Issued to

DISTRIBUIDORA INTERNACIONAL CARMEN, S.A.U.
Zaragoza, Spain

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2019/1397,**

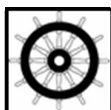
item No. MED/3.15c. SOLAS 74 as amended, Regulation II-2/4 & X/3 and 2000 HSC Code 7 & 10 and IMO MSC/Circ.1120

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

This Certificate is valid until **2025-05-27.**

Issued at **Høvik** on **2020-05-28**

DNV GL local station:
Area NB/CMC Iberia



for **DNV GL AS**

Approval Engineer:
Adel Samiei

Notified Body
No.: **0575**

Roald Vårheim
Head of Notified Body



The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.

Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Job Id: **344.1-004686-3**
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Product description

Seven types of flexible hoses of non-metallic material with permanently fitted couplings.
Hoses (Semperit hoses) Branded TrAle® and Semperit:

TrAle® SAE 100 R1AT (EN853 1SN), TrAle® SAE 100 R2AT (EN853 2SN), TrAle® (EN853 2SNK), TrAle® SAE 100 R9R (4SP) (EN856 4SP), TrAle® (EN856 4SH), TrAle® (EN857 1SC), TrAle® (EN857 2SC)

DISCA Couplings made of stainless steel (AISI 316L / 1.4404) and carbon steel (EN 10277-3, 1.0737).

Hose manufacturing location:

Semperit Technische Produkte Gesellschaft m.b.H., Triester Bundesstr. 26, 2632 Wimpassing, Austria

End couplings manufacturing location:

DISTRIBUIDORA INTERNACIONAL CARMEN, S.A.U., Zaragoza, Spain

Application/Limitation

Hose assemblies covered by this certificate are tested according to:

- 1) NS-EN ISO 15540:2016 - Fire resistance of hose assemblies- Test methods
- 2) NS-EN ISO 15541:2016 - Fire resistance of hose assemblies - Requirements for the test bench

Maximum working pressure (bar) as below:

Hose size			EN853	EN853	EN 856	EN 856	EN857	EN857	EN 857
DN	Inch	Dash	1SN	2SN	4SP	4SH	1SC	2SC	2SNK
6	¼	-04	225	400	-	-	225	400	450
8	5/16	-05	215	350	-	-	215	350	420
10	3/8	-06	180	330	445	-	180	330	385
12	½	-08	160	275	415	-	160	275	345
16	5/8	-10	130	250	350	-	130	250	290
19	¾	-12	105	215	350	420	105	215	280
25	1	-16	88	165	280	380	88	165	200
31	1-¼	-20	63	125	210	325	-	-	-
38	1-½	-24	50	90	185	290	-	-	-
51	2	-32	40	80	165	250	-	-	-

Type Examination documentation

DICSA Catalogue for 'Hydraulic and Pneumatic Connectors'

Dicsa_Hose_Catalogue_2019_page 66 to 67;

Dicsa_Hose_Catalogue_2019_page 55 to 58;

TrAle 'Serie Standard' Fitting details

Coupling Drawings :

ZA610101200-V2 / ZA610102400 rev.1 / ZPF1224004 rev.3 / ZPF1224006 rev.3 / ZPF1224008 rev.3 / ZPF1224016 rev.3 / ZPF1224032 rev.3 / ZPF122401200_V1 / ZPF122402400_V1 / ZPF122403200-V1 / ZPF2212004 rev.12 / ZPF2212008 rev.7 / ZPF2212016 rev.5 / ZPF221203200_V5

DI221201600 Ed. 1 / KZPF221201600 Ed. 1 / KZPF221200400 Ed. 1 / DI221200400 Ed. 4 / DI221200800 Ed. 4 / KZPF221200800 Ed. 9 / 241000804 Ed. 2 / K241000804 Ed. 3 / 841001208 / K841001208 Ed. 1 / K241001208 Ed. 1 / 241121616 Ed. 1 / 841000604 / K841000604 Ed. 1 / K841121616 Ed. 4 /

SEMPERPAC 2 SN-K hose datasheet dated July 2016;

EN 853 2SNK hose datasheet (page 50);

'Declaration of Consent' and 'Hose branding TrAle from Semperflex dated 06.03.2019;

Fire test report for SAE 100 R1AT/ EN853 1SN (Stainless steel fitting):

- 307/0IS0110/14 dated 20/03/2014 (DN06)
- 091/0IS0110/14 dated 13/02/2014 (DN19)
- 308/0IS0110/14 dated 20/03/2014 (DN51)

Fire test report for SAE 100 R1AT/ EN853 1SN (Carbon steel fitting):

- 1097. 0IS0110/16, dated 24/06/2016 (DN06)

- 1098. 0IS0110/16, dated 24/06/2016 (DN19)
- 1099. 0IS0110/16, dated 24/06/2016 (DN51)
- Fire test report for SAE 100 R2AT/ EN853 2SN (Stainless steel fitting):
 - 311.0IS0110/14 dated 20/03/2014 (DN06)
 - 093.0IS0110/14 dated 13/02/2014 (DN19)
 - 1053.0IS0110/14 dated 08/07/2014 (DN51)
- Fire test report for SAE 100 R2AT/ EN853 2SN (Carbon steel fitting):
 - 1100. 0IS0110/16, dated 24/06/2016 (DN06)
 - 1101. 0IS0110/16, dated 24/06/2016 (DN19)
 - 1102. 0IS0110/16, dated 24/06/2016 (DN51)
- Fire test report for SAE 100 R9R/EN856 4SP (Stainless steel fitting):
 - 1054. 0IS0110/14 dated 08/07/2014 (DN10)
 - 094. 0IS0110/14 dated 13/02/2014 (DN19)
 - 1329. 0IS0110/14 dated 29/08/2014 (DN51)
- Fire test report for SAE 100 R9R/EN856 4SP (Carbon steel fitting):
 - 1408. 0IS0110/16 dated 25/08/2016 (DN10)
 - 1409. 0IS0110/16 dated 25/08/2016 (DN19)
 - 1410. 0IS0110/16 dated 25/08/2016 (DN151)
- Fire test report for SAE 100 EN856 4SH (Stainless steel fitting):
 - 095. 0IS0110/14 dated 13/02/2014 (DN19)
 - 315. 0IS0110/14 dated 20/03/2014 (DN31)
 - 316. 0IS0110/14 dated 20/03/2014 (DN51)
- Fire test report for SAE 100 EN856 4SH (Carbon steel fitting):
 - 1405. 0IS0110/16 dated 25/08/2016 (DN19)
 - 1406. 0IS0110/16 dated 25/08/2016 (DN31)
 - 1407. 0IS0110/16 dated 25/08/2016 (DN151)
- Fire test report for EN857 1SC (Carbon steel fitting):
 - 812. 0IS0110/16, dated 03/05/2016 (DN06)
 - 813. 0IS0110/16, dated 17/05/2016 (DN12)
 - 814. 0IS0110/16, dated 17/05/2016 (DN25)
- Fire test report for EN857 1SC (Stainless steel fitting):
 - 704. 0IS0110/16, dated 28/04/2016 (DN06)
 - 705. 0IS0110/16, dated 28/04/2016 (DN12)
 - 706. 0IS0110/16, dated 28/04/2016 (DN25)
- Fire test report for EN857 2SC (Stainless steel fitting):
 - 707. 0IS0110/16, dated 28/04/2016 (DN06)
 - 708. 0IS0110/16, dated 28/04/2016 (DN12)
 - 709. 0IS0110/16, dated 28/04/2016 (DN25)
- Fire test report for EN857 2SC (Carbon steel fitting):
 - 815. 0IS0110/16, dated 17/05/2016 (DN06)
 - 816. 0IS0110/16, dated 17/05/2016 (DN12)
 - 1103. 0IS0110/16, dated 24/06/2016 (DN25)
- Fire test report for 2SNK (Carbon steel fittings):
 - 242.0ISO110/19, dated 15/02/2019 (DN06)
 - 243.0ISO110/19, dated 18/02/2019 (DN12)
 - 244.0ISO110/19, dated 18/02/2019 (DN25)
- Fire test report for EN857 2SNK (Stainless steel fittings):
 - 245.0ISO110/19, dated 19/02/2019 (DN06)
 - 246.0ISO110/19, dated 19/02/2019 (DN12)
 - 247.0ISO110/19, dated 19/02/2019 (DN25)


Tests carried out

Fire tests carried out according to ISO 15540/15541

Marking of product

As a minimum, the final products (hoses with couplings) are to be marked with:

- Manufacturers name or trademark



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- Manufacturer's address
- Specification or hose name
- Hose size (inside diameter in inches)
- Data code (quarterly and daily production code)