DNV·GL

Certificate No:
MEDB00005AX

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

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: flexible pipe assemblies

with type designation(s)
R1K, R2K, 4ST, 4ST+, 6ST, HST

Issued to
Intertraco (Italia) S.p.a.
Suzzara MN, Italy

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2018/773,**
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 **2024-07-18**.

Issued at **Høvik** on **2019-07-19**

DNV GL local station:
Milan

Approval Engineer:
Adel Samiei

Notified Body
No.: **0575**

for **DNV GL AS**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.

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Job Id: **344.1-009297-1**
Certificate No: **MEDB00005AX**

Product description

Six types of hose assemblies with synthetic rubber inner tube, reinforced by steel wires braids (one or two) or spirals (four or six) and synthetic rubber cover

Coupling designations:

Hose size			R1K		R2K		4ST+	
inch	DN	Dash	One piece	Two pieces	One piece	Two pieces	One Piece	Two Pieces
¼	6	-04	K series	B+SCX0T	K series	B+SN03T	-	-
5/16	8	-05	-	-	K series	B+SN03T	-	-
3/8	10	-06	K series	B+SCX0T	K & J series	B+SN03T	J Series	B+S312T B+S0420
½	12	-08	K series	B+SCX0T	K & J series	B+SN03T	J Series	
5/8	16	-10	K series	B+SCX0T	K & J series	B+SN03T	J Series	
¾	19	-12	K series	B+SCX0T	K & J series	B+SN03T	J Series	B+S312T B+S0420/ I+S004I
1	25	-16	K series	B+SCX0T	K & J series	B+SN03T	J Series	
1 ¼	31	-20	-	-	-	-	J Series	B+S0420/ I+S004I

Hose size			4ST		6ST		HST
inch	DN	Dash	One Piece	Two Pieces	One Piece	Two Pieces	Two Pieces
5/8	16	-10	J Series	B+S3212T B+S0420	-	-	-
¾	19	-12	J Series		-	-	S+S004I
1	25	-16	J Series	B+S3212T B+S0420 I+S004I	-	-	S+S004I
1 ¼	31	-20	J Series		H Series	I+S006I	S+S006I
1 ½	38	-24	J Series		H Series	I+S006I	-
2	51	-32	J Series		H & HLZ Series	I+S006I	-
2 ½	63	-40	J Series	-	-	I+S006I	-

Coupling Material: 11SMnPb30 EN 10277-3, 11SMnPb37 EN 10277-3, 36SMnPb14 EN 10277-3, C45 EN 10277-2, S355J2 EN 10277-2, X2CrNiMo 17-12-2 EN 10088-3 (AISI 316)

Couplings Manufacturer: INTERTRACO ITALIA SPA, Suzzara MN, Italy

Application/Limitation

Hose assemblies covered by this certificate are tested according to:

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

Maximum working pressure (in bar):

Hose size			R1K	R2K	4ST	4ST+	6ST	HST
inch	DN	Dash						
¼	6	-04	250	420				
5/16	8	-05	-	380				
3/8	10	-6	210	350	-	450	-	-
½	12	-8	180	350	-	420	-	-
5/8	16	-10	150	250	350	420	-	-
¾	19	-12	140	250	350	420	-	500
1	25	-16	120	210	350	420	-	500
1 ¼	31	-20	-	-	350	420	450	500
1 ½	38	-24	-	-	300	-	420	-
2	51	-32	-	-	250	-	420	-
2 ½	63	-40	-	-	140	-	350	-

Type Examination documentation

Tests carried out

Fire testing according to ISO 15540 and ISO 15541

Marking of product

For traceability to this certificate, each hose is marked with:

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