

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM000003X
Revision No:
1

This is to certify:

That

Redaelli Tecna S.p.A.

Via Giacomo Matteotti, 311- 25063 Gardone Val Trompia BS, Italy

is an approved manufacturer of
Steel Wire Ropes

in accordance with

DNV GL rules for classification – Ships, Part 3

DNVGL-OS-E304 – Offshore mooring steel wire ropes

DNVGL-ST-0377 – Shipboard lifting appliances

DNVGL-ST-0378 – Standard for offshore and platform lifting appliances

and the following particulars:

Products	Steel wire ropes for ship towlines and mooring lines Steel wire ropes for mobile offshore mooring Steel wire ropes for lifting appliances
Rope class	See page 2
Rope construction	See page 2
Max. diameter	See page 2

Remark: This certificate also includes production at Riva Alvisè Cadamosto, 34148 Trieste TS, Italy

Manufacturer approved by this certificate is accepted to deliver according to DNV GL, DNV and GL rules. Materials to be applied to DNV GL classed object shall fulfill the material requirements in the applicable DNV GL class rules.

Issued at **Høvik** on **2018-01-10**

for **DNV GL**

This Certificate is valid until **2021-12-31**.

DNV GL local station: **Milan**

Approval Engineer: **Shylate Mahachi**

Hanne Anita Hjerpetjønn
Head of Section



Job Id: **263.11-001246-4**
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Particulars of the approval

Steel wire ropes for ship towlines & mooring lines and mobile offshore mooring

Rope group	Rope construction	Rope grade [N/mm ²]	Max. Diameter [mm]
6x19	6x19S-IWRC	1570-2160	56
	6xK19S-EPIWRC	1570-2160	56
	6xK19S-IWRC	1570-2160	56
	6xK19S-SFC	1570-1960	56
	6xK26WS-EPIWRC	1570-2160	56
	6xK26WS-IWRC	1570-1960	56
	6xK26WS-SFC	1570-1960	56
6x36	6x36WS-EPIWRC	1570-2160	86
	6x36WS-IWRC	1570-1960	86
	6x36WS-IWRC	1570-2160	86
	6x41WS-EPIWRC	1570-2160	86
	6x41WS-IWRC	1570-1770	86
	6x41WS-IWRC	1570-2160	86
	6x47WS-IWRC	1570-1770	86
	6xK31WS-EPIWRC	1570-2160	86
	6xK31WS-IWRC	1570-2160	86
	6xK31WS-SFC	1570-1960	86
	6xK36WS-EPIWRC	1570-2160	86
	6xK36WS-IWRC	1570-2160	86
	6xK36WS-IWRC	1570-1960	86
	6xK36WS-IWRC	1570-1770	86
6xK36WS-SFC	1570-1960	86	
8x19	10xK19S-IWRC	1570-2160	128
	10xK26WS-IWRC	1570-1960	128
	7xK19S-EPIWRC	1570-1960	128
	7xK19S-IWRC	1570-2160	128
	7xK19S-IWRC	1570-1960	128
	8x25F-EPIWRC	1570-1960	128
	8x25F-IWRC	1570-1960	128
	8xK26WS-EPIWRC	1570-2160	128
	8xK26WS-EPIWRC	1570-1960	128
	8xK26WS-EPPWRC(K)	1570-2160	128
	8xK26WS-IWRC	1570-2160	128
	8xK26WS-IWRC	1570-1960	128
	9X19S-EPIWRC	1570-1960	128
	9X19S-IWRC	1570-1960	128
	9x25F-EPIWRC	1570-1960	128
9x25F-IWRC	1570-1960	128	
8x19	9xK19S-EPIWRC	1570-2160	128

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Rope group	Rope construction	Rope grade [N/mm ²]	Max. Diameter [mm]
8x36	9xK19S-IWRC	1570-2160	128
	10xK19S-EPIWRC	1570-2160	128
	10xK26WS-EPIWRC	1570-1960	128
	10xK31WS-EPIWRC	1570-1960	128
	10xK31WS-IWRC	1570-1960	128
	10xK36WS-EPIWRC	1570-1960	128
	10xK36WS-IWRC	1570-1960	128
	7xK31WS-EPIWRC	1570-1960	128
	7xK31WS-IWRC	1570-1960	128
	7xK36WS-EPIWRC	1570-1960	128
	7xK36WS-IWRC	1570-1960	128
	8xK19-PWRC (K)	1570-2160	128
	8xK31WS-EPIWRC	1570-1960	128
	8xK31WS-EPIWRC	1570-1960	128
	8xK31WS-IWRC	1570-1960	128
	8xK36WS-IWRC	1570-1960	128
	9x31WS-EPIWRC	1570-1960	128
	9x31WS-IWRC	1570-1960	128
	9xK31WS-EPIWRC	1570-2160	128
	9xK31WS-IWRC	1570-2160	128
	9xK36WS-EPIWRC	1570-2160	128
	9xK36WS-EPIWRC	1570-1960	128
	9xK36WS-EPIWRC	1570-1770	128
	9xK36WS-IWRC	1570-2160	128
	9xK36WS-IWRC	1570-1960	128
	9xK36WS-IWRC	1570-1770	128
35(W)x7	15x7-EPIWRC	1570-2160	128
	15x7-EPIWRC	1570-1960	128
	15x7-IWRC	1570-2160	128
	15x7-IWRC	1570-1960	128
	15xK7-EPIWRC (K)	1570-2160	128
	15xK7-EPIWRC (K)	1570-2160	128
	15xK7-IWRC (K)	1570-2160	128
	18x7-EPIWRC	1570-1960	128
	18x7-IWRC	1570-1960	128
	18x7-WSC	1570-1960	128
	18xK19S-WSC	1570-2160	128
	18xK7-EPIWRC (K)	1570-1960	128
	18xK7-EPIWRC (K)	1570-1770	128
	18xK7-WSC	1570-1960	128
	34(W)K-WSC	1570-2160	128
	34(W)xK7-WSC	1570-2160	128

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Rope group	Rope construction	Rope grade [N/mm ²]	Max. Diameter [mm]
35(W)x7	39(W)xK7-WSC	1570-1960	128
	39(W)xK7-WSC	1570-1770	128
	39(W)xK7-WSC	1570-1960	128
	39(W)xK7-WSC	1570-1960	128
40(W)x7	54(W)xK7-WSC	1570-1960	160
	54(W)xK7-WSC	1570-1960	160
	54(W)xK7-WSC	1570-1960	160
	54(W)xK7-WSC	1570-1770	160
Pack 9	-	-	100

Steel wire ropes for long term offshore mooring

Rope group	Rope construction	Max. Diameter [mm]
Spiral strand	1x217	103