



# APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:  
**AMMM000003X**  
Revision No:  
**3**

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 rules for classification – Ships**

**DNV-OS-E304 – Offshore mooring steel wire ropes, Edition July 2023**

**DNV-ST-0377 – Shipboard lifting appliances**

**DNV-ST-0378 – Offshore and platform lifting appliances**

and the following particulars:

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

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

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

Issued at **Hamburg** on **2025-02-28**

This Certificate is valid until **2027-12-31**.

DNV local unit: **Italy/Malta CMC**

Approval Engineer: **Stefan Röhr**



for **DNV**

This document has been digitally signed and will  
therefore not have handwritten signature

Christian Wildhagen

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") 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.

## Particulars of the approval

### Steel wire ropes for ship toelines & mooring lines and mobile offshore mooring

Rope group	Rope construction	Rope grade [N/mm <sup>2</sup> ]	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
	9xK19S-IWRC	1570-2160	128
8x36	10xK19S-EPIWRC	1570-2160	128
	10xK26WS-EPIWRC	1570-1960	128

Rope group	Rope construction	Rope grade [N/mm <sup>2</sup> ]	Max. Diameter [mm]
	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
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

Rope group	Rope construction	Rope grade [N/mm <sup>2</sup> ]	Max. Diameter [mm]
	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

Remark:

1. Steel wire rope classification as per ISO 17893 or API 9A
2. Raw materials supplied by Voestalpine and British Steel.