

# DECK MACHINERY

## MOORING - MARINE ROPES





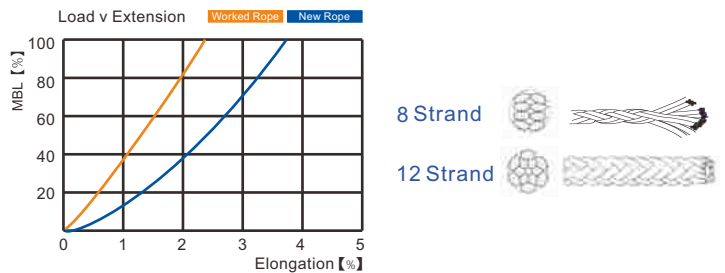
# FMXUPE



FMXUPE high quality UHMWPE rope is used for most demanding mooring, towing and lifting applications. The advanced equipment from Germany and Denmark and the mature technology in rope manufacturing account for its high quality and stability. It is the ideal choice for diversified mooring applications for its properties of high strength, excellent abrasion resistance, high strength-to-weight ratio, extremely low elongation and superior flex fatigue.

- ☉ Coil Length: 220M (Length can be customized)
- ☉ Spliced Strength: ±10% Lower
- ☉ Weight and Length Tolerance: ±5%
- ☉ Colors: yellow, blue, red etc, customized at your requests
- ☉ Physical properties are in accordance with high molecular polyethylene fiber ropes international standard ISO 10325:2009
- ☉ Material: UHMWPE
- ☉ Construction: 8/12 Strand
- ☉ Specific Gravity: 0.97, Floating
- ☉ Elongation: 3-4%
- ☉ Melting Point: 150°C
- ☉ Abrasion Resistance: ★★★★★
- ☉ Chemical Resistance: ★★★★★
- ☉ UV Resistance: ★★★★★
- ☉ Water Absorption: None
- ☉ Dry & Wet Conditions: Wet Strength Equals Dry Strength
- ☉ Non-rotating and Anti-kinking
- ☉ Easy to Handle, Inspect and Repair
- ☉ Longer Service Life

Dia mm	Circ ins	Linear Density Ktex	MBL(KN)	
			Unspliced Rope	Eye-spliced Terminations
16	2	151	260	235
18	2-1/4	190	310	283
20	2-1/2	232	380	340
22	2-3/4	281	450	400
24	3	331	520	470
26	3-1/4	384	600	540
28	3-1/2	445	680	610
30	3-3/4	506	770	690
32	4	575	870	780
34	4-1/4	648	960	860
36	4-1/2	720	1040	940
38	4-3/4	798	1160	1040
40	5	881	1260	1130
44	5-1/2	1060	1460	1310
48	6	1250	1700	1530
52	6-1/2	1460	1970	1770
56	7	1690	2260	2030
60	7-1/2	1930	2530	2280
64	8	2200	2840	2560
68	8-1/2	2480	3170	2850
72	9	2780	3520	3170
76	9-1/2	3090	3890	3500
80	10	3430	4300	3870
88	11	4170	5200	4680
96	12	4970	6180	5560



**Applications:** Mooring/Towing & Tug Lines/Hoisting & Lifting/  
Electrical Utility/Oil Drilling/Marine Rescue

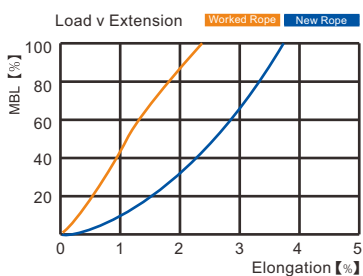
Customized services of mooring tail and adjustable sheath available.

# FMXUPE PLUS



The FMXUPE PLUS is high-end jacketed UHMWPE rope composed of a construction of an independent 12-strand UHMWPE core and high tenacity sheath of polyester. This Double braided rope has higher strength, greater abrasion and UV resistance, lower stretch and creep than pure UHMWPE rope, which makes it ideal for all kinds of mooring applications.

- ☉ Coil Length: 220M (Length can be customized)
- ☉ Spliced Strength:  $\pm 10\%$  Lower
- ☉ Weight and Length Tolerance:  $\pm 5\%$
- ☉ Colors: Yellow, blue, red etc, customized at your requests
- ☉ Physical properties are in accordance with high molecular polyethylene fiber ropes international standard ISO 10325:2009
- ☉ Material: UHMWPE/Polyester
- ☉ Construction: Double Braid
- ☉ Specific Gravity: 0.97, Floating
- ☉ Elongation: 3-4%
- ☉ Melting Point: 150°C(Core)/265°C(Cover)
- ☉ Abrasion Resistance: ★★★★★
- ☉ Chemical Resistance: ★★★★★
- ☉ UV Resistance: ★★★★★
- ☉ Water Absorption: None
- ☉ Dry & Wet Conditions: Wet Strength Equals Dry Strength
- ☉ Non-rotating and Anti-kinking
- ☉ Easier Handling and Longer Service Life



Double Braided 

**Applications:** Mooring/Towing & Tug Lines/Offshore Platform/  
Electrical Utility/Oil Drilling/Marine Rescue

Dia mm	Circ ins	Linear Density Ktex	MBL(KN)	
			Unspliced Rope	Eye-spliced Terminations
8	1	42	49	44.1
12	1-1/2	89	102	91.8
16	2	167	182	163.8
18	2-1/4	211	231	207.9
20	2-1/2	240	271	244
22	2-3/4	290	341	307
24	3	340	402	362
26	3-1/4	400	471	424
28	3-1/2	460	549	494
30	3-3/4	530	637	573
32	4	600	736	662
34	4-1/4	680	824	742
36	4-1/2	770	912	821
38	4-3/4	850	1010	909
40	5	940	1140	1030
44	5-1/2	1150	1380	1240
48	6	1360	1610	1450
52	6-1/2	1600	1920	1730
56	7	1850	2190	1970
60	7-1/2	2120	2520	2270
64	8	2400	2880	2590
68	8-1/2	2720	3260	2930
72	9	3070	3630	3270
76	9-1/2	3400	4020	3620
80	10	3750	4510	4060
88	11	4500	5350	4820
96	12	5300	6280	5650





## FLXTNC

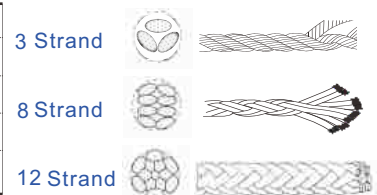
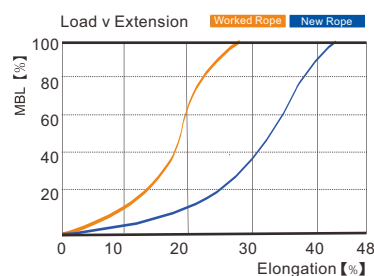


Fountom FLXTNC high strength nylon rope comes with the construction of 3/8/12-strand. It is made of high tenacity polyamide multifilament yarn, with features of excellent flexibility and shock absorption ability, good wear, UV and chemical resistance, which ensures the safety of ships in terrible weather. It is ideal for applications where shock loading is likely to occur, like mooring, climbing, lifting, etc.

- ☉ Coil Length: 220M (Length can be customized)
- ☉ Spliced Strength:  $\pm 10\%$  Lower
- ☉ Weight and Length Tolerance:  $\pm 5\%$
- ☉ Colors: Yellow, blue, red etc, customized at your requests
- ☉ Physical properties are in accordance with polyamide fiber ropes international standard ISO1140:2012
- ☉ Material: High Tenacity Polyamide Multifilament Fiber
- ☉ Construction: 3/8/12 Strand
- ☉ Specific Gravity: 1.14, Non-floating
- ☉ Melting Point: 215°C
- ☉ Abrasion Resistance: ★★★★★(Good Abrasion Resistance When Dry)
- ☉ Chemical Resistance: ★★★★★
- ☉ UV Resistance: ★★★★★
- ☉ Water Absorption: Yes
- ☉ Excellent Shock Absorption

**Applications:** Mooring/Hoisting/Tug line/Commercial Fishing/  
Climbing Rope/Mooring Tail/Single Point Mooring

Dia	Circ	Linear Density	MBL
mm	ins	Ktex	KN
4	1/2	9.87	4.3
8	1	39.5	16
10	1-1/4	61.7	24.5
12	1-1/2	88.8	34.5
14	1-3/4	121	46
16	2	158	57.5
18	2-1/4	200	72.5
20	2-1/2	247	92
22	2-3/4	299	110
26	3-1/4	417	145
30	3-3/4	555	195
36	4-1/2	800	305
40	5	987	360
48	6	1440	520
52	6-1/2	1700	610
56	7	1970	690
60	7-1/2	2260	770
64	8	2570	860
72	9	3250	1100
80	10	4010	1360
88	11	4860	1610
96	12	5780	1950
104	13	6780	2180
112	14	7870	2580
120	15	9030	2880
128	16	10100	3220
136	17	11600	3600
160	20	16100	5180



# FLXTNC ENC6



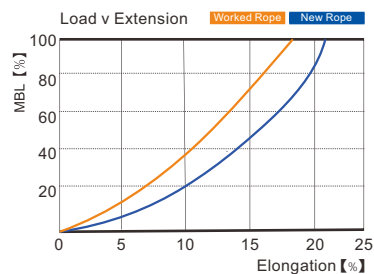
The FLXTNC ENC6 represents six-strand polyamide rope made of 100% high tenacity combined polyamide monofilaments and multifilaments to contribute to its high performance in good resistance, long-term stiffness and high breaking loads.

It is compact, maintenance-free and can be used in wide range of heavy-duty applications like container vessels and bulk carriers.



Dia	Circ	Linear Density	MBL
mm	ins	Ktex	KN
18	2-1/4	220	84.4
20	2-1/2	275	107
22	2-3/4	345	133
24	3	400	154
26	3-1/4	465	179
28	3-1/2	515	197
32	4	650	248
36	4-1/2	832	314
40	5	1000	377
44	5-1/2	1250	491
48	6	1480	579
52	6-1/2	1600	625
56	7	2000	770
60	7-1/2	2170	839
62	7-3/4	2350	910
64	8	2450	952
68	8-1/2	2800	1079
70	8-3/4	3100	1197
72	9	3350	1246
78	9-3/4	3640	1334
84	10-1/2	4250	1550
90	11-1/4	5050	1825
96	12	5850	2109

- ☉ Material: 100% High Tenacity Polyamide
- ☉ Construction: 6-Strand Cross Lay
- ☉ Specific Gravity: 1.14, Non-floating
- ☉ Melting Point: 215°C
- ☉ Abrasion Resistance: ★★★★★
- ☉ High Strength: ★★★★★
- ☉ Chemical Resistance: ★★★★★
- ☉ UV Resistance: ★★★★★
- ☉ Compact, Easy to Handle
- ☉ Maintenance Free
- ☉ Permanent Stiffness



6 Strand



**Applications:** Bulk Carriers/Container Vessels



# FLXTNC PLUS

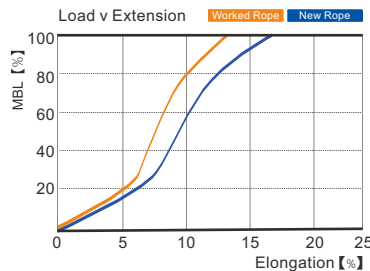


Fountom FLXTNC PLUS double braid rope is made of a 100% high tenacity polyamide core and ultra wear-resistant polyester cover. This construction endows ropes with the advantages of high strength, excellent wear resistance and good shock absorption.

- ☉ Material: High Tenacity Polyamide Multifilament Fiber and Polyester Fiber
- ☉ Construction: Double Braid
- ☉ Specific Gravity: 1.14-1.36, Non-floating
- ☉ Melting Point: 215°C(Core)/265°C(Cover)
- ☉ Abrasion Resistance: ★★★★★(Good Abrasion Resistance When Dry)
- ☉ Chemical Resistance: ★★★★★
- ☉ UV Resistance: ★★★★★
- ☉ Water Absorption: Yes
- ☉ Excellent Shock Absorption

**Applications:** Mooring/Hoisting/Tug line/Commercial Fishing/  
Climbing Rope/Mooring Tail/Single Point Mooring

Dia	Circ	Linear Density	MBL
mm	ins	Ktex	KN
4	1/2	10.3	4.3
6	3/4	23	10
8	1	41	17
10	1-1/4	64	26.5
12	1-1/2	92	38
14	1-3/4	126	52
16	2	164	68
18	2-1/4	207	86
20	2-1/2	255	106
22	2-3/4	309	128
28	3-1/2	501	198
36	4-1/2	828	328
44	5-1/2	1236	483
48	6	1473	575
56	7	2009	795
60	7-1/2	2297	900
64	8	2616	1035
72	9	3306	1250
80	10	4089	1545
88	11	4954	1870
96	12	5892	2240
104	13	6911	2670
112	14	8024	3070
120	15	9198	3500

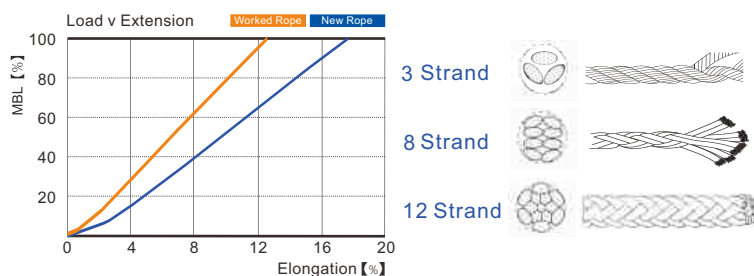


# FPLNE



Fountom FPLNE high strength Polypropylene (PP) ropes (multifilament and monofilament). It is the lightest, most versatile and economical synthetic rope, with approximately twice the tensile strength of Manila rope of same size. PP rope will not rot or mildew, is resistant to most chemicals and acids, floats in water and can be stored in wet conditions, but should avoid direct sunlight.

- ☉ Coil Length: 220M (Length can be customized)
- ☉ Spliced Strength:  $\pm 10\%$  Lower
- ☉ Weight and Length Tolerance:  $\pm 5\%$
- ☉ Colors: Yellow, blue, red etc, customized at your requests
- ☉ Physical properties are in accordance with polypropylene multifilament fiber ropes international standard ISO 1346:2012
- ☉ Material: Polypropylene Multifilament Yarn
- ☉ Construction: 3/8/12 Strand
- ☉ Specific Gravity: 0.91, Floating
- ☉ Melting Point: 165°C
- ☉ Abrasion Resistance: ★★★
- ☉ Chemical Resistance: ★★★
- ☉ UV Resistance: ★★★★★
- ☉ Water Absorption: None
- ☉ Dry & Wet Conditions: Wet Strength Equals Dry Strength
- ☉ Easy to Handle, Inspect and Repair
- ☉ Fair Price



**Applications:** Mooring/Fishing/Farm & Industry/Offshore Leisure/  
Cargo Net

Dia	Circ	Linear Density	MBL
mm	ins	Ktex	KN
4	1/2	7.23	3.2
6	3/4	16.3	7
8	1	28.9	11.5
10	1-1/4	45.2	17.2
12	1-1/2	65.1	24
14	1-3/4	88.6	32
16	2	116	43
18	2-1/4	146	52
20	2-1/2	181	64.5
22	2-3/4	219	77
26	3-1/4	306	103.5
30	3-3/4	407	136
36	4-1/2	586	195
40	5	723	240
48	6	1040	345
52	6-1/2	1220	408
56	7	1420	460
60	7-1/2	1630	520
64	8	1850	575
72	9	2340	725
80	10	2890	920
88	11	3500	1090
96	12	4170	1290
104	13	4890	1510
112	14	5670	1720
120	15	6510	1950
128	16	7410	2300
136	17	8360	2570
144	18	9370	2875
160	20	11600	3450



# FPLNE PLUS

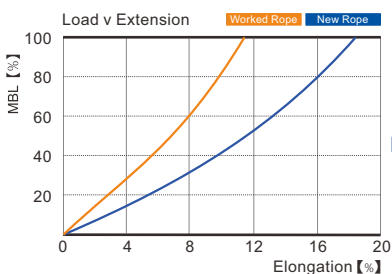


FPLNE PLUS is constructed with a lightweight and high performance multifilament polypropylene core and a super strength and wear-resistant polyester cover. It outperforms non-jacketed ropes on UV & abrasion resistance and service life.

Dia	Circ	Linear Density	MBL
mm	ins	Ktex	KN
4	1/2	8.4	2.8
6	3/4	18.8	6.2
8	1	33	11
10	1-1/4	52	17.2
12	1-1/2	75	25
14	1-3/4	102	33
16	2	133	44
18	2-1/4	168	56
20	2-1/2	208	69
22	2-3/4	252	84
24	3	299	99
28	3-1/2	404	136
32	4	528	177
36	4-1/2	668	224
40	5	825	276
44	5-1/2	1006	338
48	6	1190	407
52	6-1/2	1390	472
56	7	1610	545
60	7-1/2	1850	620
64	8	2090	705
72	9	2640	882
80	10	3290	1075
88	11	3950	1280
96	12	4710	1500
104	13	5480	1740
112	14	6390	1950
120	15	7350	2310



- ☉ Material: Polypropylene Multifilament Yarn and Polyester Fiber
- ☉ Construction: Double Braid
- ☉ Specific Gravity: 0.91-0.98, Floating
- ☉ Melting Point: 165°C(Core)/265°C(Cover)
- ☉ Abrasion Resistance: ★★★★★
- ☉ Chemical Resistance: ★★★★★
- ☉ UV Resistance: ★★★★★
- ☉ Water Absorption: None
- ☉ Dry & Wet Conditions: Wet Strength Equals Dry Strength



**Applications:** Mooring/Fishing/Farm & Industry/Offshore Leisure





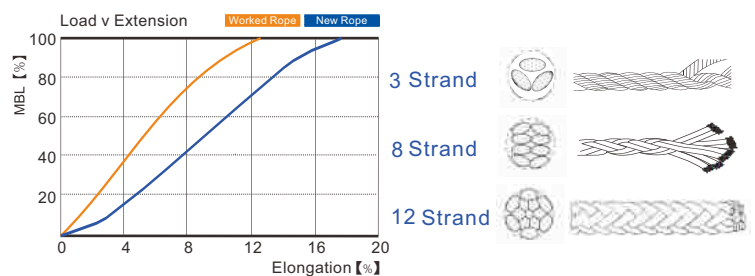
# FPRMIX



FPRMIX represents the high-tenacity mixed ropes, with the construction of 3/6/8/12-strand. It has higher strength, flexibility and wear resistance than conventional composite rope due to special mix-braiding of high tenacity PP and PES. Light weight leads to easier and safer handling for operators, which has been verified by numerous mooring applications.

- ☉ Coil Length: 220M (Length can be customized)
- ☉ Spliced Strength: ±10% Lower
- ☉ Weight and Length Tolerance: ±5%
- ☉ Colors: Yellow, blue, red etc, customized at your requests
- ☉ Physical properties are in accordance with fiber ropes international standard ISO 10556-2009
- ☉ Material: High Tenacity PP Multifilament and Polyester Fibers
- ☉ Construction: 3/8/12 Strand
- ☉ Specific Gravity: 0.95-0.98, Floating
- ☉ Melting Point: 165°C-260°C
- ☉ Abrasion Resistance: ★★★★★
- ☉ Chemical Resistance: ★★★★★
- ☉ UV Resistance: ★★★★★
- ☉ Water Absorption: None
- ☉ Dry & Wet Conditions: Wet Strength Equals Dry Strength
- ☉ Excellent Shock Absorption

Dia	Circ	Linear Density	MBL
mm	ins	Ktex	KN
6	3/4	17.5	7
8	1	31	12.3
10	1-1/4	48.5	18.8
12	1-1/2	69.9	26.5
14	1-3/4	95.1	36
16	2	124	46
18	2-1/4	157	58
20	2-1/2	194	79
24	3	279	110
28	3-1/2	380	149
32	4	479	192
36	4-1/2	629	240
40	5	776	295
48	6	1110	420
52	6-1/2	1320	488
56	7	1520	562
60	7-1/2	1750	640
64	8	1990	725
72	9	2520	907
80	10	3110	1107
88	11	3750	1334
96	12	4470	1575
104	13	5260	1828
112	14	6050	2116
120	15	6980	2415
128	16	7950	2725
136	17	8950	3060
144	18	10100	3415
160	20	12500	4175



**Applications:** Mooring/General Fishing/Messenger Line/Mooring Tail/  
Inland Shipping

# FPRMIX PLUS

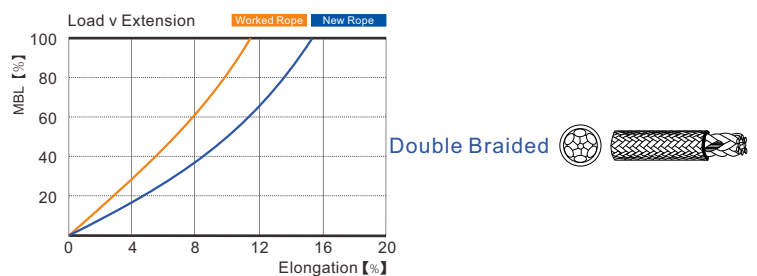


FPRMIX PLUS is made with a high tenacity mixed PP and polyester fiber to provide maximum performance in core and cover. Its biggest advantage of FPRMIX is abrasion resistance, together with other features like high strength, static free, long service life and easy handling, which makes it indispensable in ocean shipping.



Dia	Circ	Linear Density	MBL
mm	ins	Ktex	KN
4	1/2	9	3
6	3/4	20.2	7
8	1	36	12.5
10	1-1/4	56	19
12	1-1/2	81	26.5
14	1-3/4	110	36
16	2	143	47
18	2-1/4	181	60
20	2-1/2	224	80
22	2-3/4	271	90
24	3	325	112
28	3-1/2	430	152
32	4	576	195
36	4-1/2	732	250
40	5	902	305
44	5-1/2	1093	373
48	6	1300	437
52	6-1/2	1525	510
56	7	1773	590
60	7-1/2	2035	670
64	8	2310	764
72	9	2924	973
80	10	3610	1190
88	11	4371	1442
96	12	5207	1726
104	13	6112	2020
112	14	7082	2350
120	15	8127	2677

- 🎯 Material: High Tenacity PP Multifilament and Polyester Fibers
- 🎯 Construction: Double Braid
- 🎯 Specific Gravity: 0.95-0.98, Floating
- 🎯 Melting Point: 165°C-260°C
- 🎯 Abrasion Resistance: ★★★★★
- 🎯 Chemical Resistance: ★★★★★
- 🎯 UV Resistance: ★★★★★
- 🎯 Water Absorption: None
- 🎯 Dry & Wet Conditions: Wet Strength Equals Dry Strength
- 🎯 Excellent Shock Absorption



**Applications:** Mooring/Offshore Platform/General Fishing/  
Messenger Line/Mooring Tail/Inland Shipping

# Marine Rope Instructions

## 1.Storage

**S**ynthetic fiber ropes should be stored in clean, dry and cool areas out of direct sunlight, where possible under deck or under a suitable cover. Rope should be stored off the ground, to allow adequate ventilation. Never store rope on concrete or dirty floors, or drag over rough ground as dirt and grit picked up by the rope can work into strands and cut the inside fibers. Keep away from all types of chemicals and exposure to all forms of heat. In cases of long term storage used ropes should be hosed down with fresh water to reduce salt crystals that affect life and efficiency of the ropes.

## 2.Rope Safety

**N**ever stand in line with a rope under tension. If a rope fails it can recoil with sufficient force to cause serious injury or even death. Ensure all end terminations are adequate to take shock loads. Use correct safety factors. Remember to de-rate rope strengths for incorrect end fitting and wear.

## 3.Rope Installation

**F**ull guidelines for rope installation and operation are available on request from Fountom Rope.

## 4.Sharp Bends

**S**harp bends around any piece of equipment should be avoided. Where a static rope passes around any surface with a deflection of 10 degrees or more then the diameter of the surface should be a minimum of three times the rope diameter. Any sharp bend in a rope under load will substantially decrease its strength and may cause premature damage or failure.

## 5.Eye Splices

**T**he length of an eye in a rope should be a minimum of three times, and preferably five times, the diameter of the item around which it is to be passed. This will ensure that the angle between the two legs of the eye will not cause a tearing action at the throat of the eye. For instance if the eye of a mooring line is passing around a 600mm diameter bollard, then the eye should be a minimum of 1.8 meters and preferably 3 meters.



### 6. Capstans and Winches

**R**opes used on single drum or split drum winches should be installed under tension and the initial layers should be a close tight fit between the flanges to prevent burying into the lower layers. A minimum of eight wraps of rope should be maintained on the drum at all times. Care should be exercised to avoid surging while the capstan or winch head is rotating. Excessive surging or slippage causes localized over heating which can melt or fuse synthetic fibers with resulting loss of strength. The “furry” look of a well used synthetic fiber rope is not necessarily an indication of weakness. In fact the “furry” or hairy surface can serve to protect the rope.

### 7. Handling

**W**hen a rope is supplied in a coil, it should always be uncoiled from the inside so the first turn comes from the bottom in a counterclockwise direction. If a rope is supplied on a reel, this must be allowed to freely rotate on a central pin or pipe so that the rope can be drawn off the rope lay. Never take rope from a reel lying on its side. Braided ropes can not be kinked, but twist can be imparted into the ropes in service. Excessive twist can cause an imbalance between the right and the left hand strands and should therefore be removed as soon as possible by counter-rotating the rope when it is relaxed. Colored tracer can be a helpful reference when removing the excessive twist.

### 8. Rope Inspection

**I**n use, rope should be inspected regularly for evidence of chemical attack (discoloration other than operation soiling), kinking, surface abrasion including major yarn or strand cuts and both external and internal strand heat fusion indicated by glazed areas or heavy fluffing and powdering. Braided rope should be examined along their entire length for areas of stiffening or inconsistent diameter, where the rope has either flattened or has an unusual lump or surface hernia. This can indicate internal damage or core failure due to overloading or severe shock loads. If limited to one small section, the damaged area maybe cut out and re-spliced, otherwise the rope should be discarded. Check splices and tucks for evidence for movement or misalignment. If in doubt, please cut off and re-splice.

### 9. Retiring Ropes

**A**part from rejecting your rope when obviously damaged, it is wise to establish lifetimes of your ropes within the parameters of the use for which it was selected. This will allow you to retire your rope on a regular scheduled basis, provided that your conditions of usage remain unchanged. Remember to re-establish your discard criteria if changing rope type, rope material or rope type breaking load. Safety of life and property is the prime consideration. If in doubt, please contact us for recommendation.

**Stable And Reliable Product Quality**  
**Complete And Authentic Certificates**  
**Strict Control Of Product Testing**

