



# BNK MOORING ROPE LEADING THE WORLD

Innovation and pragmatism have propelled BNK Rope to rapid development in the 21st century. With many years of experience in cable manufacturing research and development, sales, and service, the company has assembled a team of industry elites. Over the years, BNK has adhered to a culture of innovation and pursuit of excellence, earning recognition from multinational classification societies and garnering praise from customers both domestically and internationally.

The company boasts comprehensive production and testing equipment, with rigorous testing of raw materials to ensure stable product performance and robust specifications. Leading the industry trends, BNK Rope has always been at the forefront of cable high-tech advancements. The product range includes three, six, eight, twelve, sixteen, twenty-four, thirty-two, and forty eight strand structures. Materials used include polypropylene fiber, ethylene-fiber, polypropylene filament, polyester polyamide composite fiber, ultra-high molecular weight polyethylene, aramid, and beef tendon, among others.

Upholding the value concept of quality and win-win, BNK has created a new business model. The company, based at mestically but with a global outlook, has established numerous business institutions both at home and abroad. BNK 's products cover key international markets, and the company collaborates with major aviation and shipping companies worldwide. This ensures the swift delivery of high-quality cables to meet global customer demands, significantly enhancing customer operation efficiency and reducing operational costs. BNK has become the preferred brand in fields such as ship equipment, ocean transportation, marine engineering, national defense, oil exploration, wharf and port operations, fishing, and specialized industries.

In the realm of cable sales and service, BNK has cultivated an experienced, technically proficient, dedicated, and patient high -quality service team. This team provides real-time tracking of rope product usage, professional advice, and comprehensive technical support, aiming to extend the service life of products and continuously meet customer needs.

To accelerate market expansion, BNK Rope consistently studies high-tech cable advancements both domestically and internationally. The company continuously builds and strengthens its scientific research team, overcoming challenges through technological and product innovations. BNK develops various high-tech, high-quality cable products, providing solid technical support for customized cable solutions for global customers.

)3 PA 3/8/12 Strand

04 PA 6 Strand

05 PA Double Braided

06 PP 3 / 8 / 12 Strand

07 PP Double Braided

08 PP/PET 3 / 8 / 12 Strand

09 PP/PET Double Braided

1 MOORING TAILS

] | SINGLE POINT MOORING HAWSER

12 HELIDECK LANDING NETS CARGO NETS SLING

13 ROPE LADDER MANILA ROPE SLEEVES



# High strength nylon cab twelve strands and doul filament fiber, has good has excellent wear resis resistance, these chara

# PA 3/8/12 Strand

High strength nylon cable, its structure has three strands, eight strands, twelve strands and double braided it is made of high strength nylon filament fiber, has good flexibility and impact resistance, at the same time has excellent wear resistance, UV resistance, linear and corrosion resistance, these characteristics ensure the safety of the ship in the harsh environment.

| Dia   | Circ       | Linear Density | Weight    | MBL        |        |
|-------|------------|----------------|-----------|------------|--------|
| mm    | ins        | Ktex           | KG/220mtr | KN         | Tonf   |
| 0.04- |            |                |           |            |        |
| 3 Sti | ranu       |                |           |            |        |
|       | 1.0        |                | 2.17      | 4.3        | 0.44   |
| 4     | 1/2        | 9.87           | 8.69      | 16         | 1.63   |
| 8     | ]          | 39.5           | 13.57     | 24.5       | 2.50   |
| 10    | 1-1/4      | 61.7           | 19.54     | 34.5       | 3.52   |
| 12    | 1-1/2      | 88.8           | 26.62     | 34.3<br>46 | 4.69   |
| 14    | 1-3/4      | 121            |           |            |        |
| 16    | 2<br>2-1/4 | 158            | 34.76     | 57.5       | 5.87   |
| 18    | 2-1/4      | 200            | 44.00     | 72.5       | 7.40   |
| 20    | ,          | 247            | 54.34     | 92         | 9.39   |
| 22    | 2-3/4      | 299            | 65.78     | 110        | 11.22  |
| 26    | 3-1/4      | 417            | 91.74     | 145        | 14.80  |
| 30    | 3-3/4      | 555            | 122.10    | 195        | 19.90  |
| 36    | 4-1/2      | 800            | 176.00    | 305        | 31.12  |
| 0.0-  |            | <u> </u>       |           |            |        |
| 8 Sti | 'ana       |                |           |            |        |
|       |            |                |           |            |        |
| 40.0  |            | 40a ~~         | ·····     | ~~~~       |        |
| 12 51 | trand      |                |           |            |        |
|       |            |                |           |            |        |
| 40    | 5          | 987            | 217.14    | 360        | 36.73  |
| 48    | 6          | 1420           | 312.40    | 520        | 53.06  |
| 52    | 6-1/2      | 1700           | 374.00    | 610        | 62.24  |
| 56    | 7          | 1970           | 433.40    | 690        | 70.41  |
| 60    | 7-1/2      | 2260           | 497.20    | 770        | 78.57  |
| 64    | 8          | 2570           | 565.40    | 860        | 87.76  |
| 72    | 9          | 3250           | 715.00    | 1100       | 112.24 |
| 80    | 10         | 4010           | 882.20    | 1360       | 138.78 |
| 88    | 11         | 4860           | 1069.20   | 1610       | 164.29 |
| 96    | 12         | 5780           | 1271.60   | 1950       | 198.98 |
| 104   | 13         | 6780           | 1491.60   | 2180       | 222.45 |
| 112   | 14         | 7870           | 1731.40   | 2580       | 263.27 |
| 120   | 15         | 9030           | 1986.60   | 2880       | 293.88 |
| 128   | 16         | 10100          | 2222.00   | 3220       | 328.57 |
| 136   | 17         | 11600          | 2552.00   | 3600       | 367.35 |
| 160   | 20         | 16100          | 3542.00   | 5180       | 528.57 |
|       |            |                |           |            |        |

# General:

- > Coil Length: 220M (Length can be customized)
- > Spliced Strength: 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

### Characteristics:

- > Material: High Tenacity Polyamide Multifilament Fiber
- > Construction: 3/8/12 Strand
- > Specific Gravity: 1.14, Non-floating
- > Melting Point: 215℃
- > 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

# PA 6 Strand

Made from high strength nylon, the combination of nylon monofilament and nylon composite filament provides excellent wear resistance and high breaking force.

| Dia  | Circ   | Linear Density | Weight    | N    | 1BL     |
|------|--------|----------------|-----------|------|---------|
| mm   | ins    | Ktex           | KG/220mtr | KN   | Tonf    |
| 6 St | rand   |                |           |      |         |
| 18   | 2-1/4  | 220            | 48.40     | 84.4 | 8.61    |
| 20   | 2-1/2  | 275            | 60.50     | 107  | 10.92   |
| 22   | 2-3/4  | 345            | 75.90     | 133  | 13.57   |
| 24   | 3      | 400            | 88.00     | 154  | 15.71   |
| 26   | 3-1/4  | 465            | 102.30    | 179  | 18.27   |
| 28   | 3-1/2  | 515            | 113.30    | 197  | 20.10   |
| 32   | 4      | 650            | 143.00    | 248  | 25.31   |
| 36   | 4-1/2  | 832            | 183.04    | 314  | 32.04   |
| 40   | 5      | 1000           | 220.00    | 377  | 38.47   |
| 44   | 5-1/2  | 1250           | 275.00    | 491  | 50.10   |
| 48   | 6      | 1480           | 325.60    | 579  | 59.08   |
| 52   | 6-1/2  | 1600           | 352.00    | 625  | 63.78   |
| 56   | 7      | 2000           | 440.00    | 770  | 78.57   |
| 60   | 7-1/2  | 2170           | 477.40    | 839  | 85.61   |
| 62   | 7-3/4  | 2350           | 517.00    | 910  | 92.86   |
| 64   | 8      | 2450           | 539.00    | 952  | 97.14   |
| 68   | 8-1/2  | 2800           | 616.00    | 1079 | 110.10  |
| 70   | 8-3/4  | 3100           | 682.00    | 1197 | 122.14  |
| 72   | 9      | 3350           | 737.00    | 1246 | 127.147 |
| 78   | 9-3/4  | 3640           | 800.80    | 1334 | 136.12  |
| 84   | 10-1/2 | 4250           | 935.00    | 1550 | 158.16  |
| 90   | 11-1/4 | 5050           | 1111.00   | 1825 | 186.22  |
| 96   | 12     | 5850           | 1287.00   | 2109 | 215.20  |

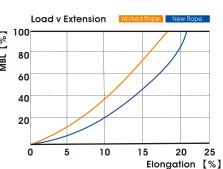


## Characteristics:

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

# Applications: Bulk Carriers/ Container Vessels





20

40 48

Elongation [%]

10

Load v Extension Work

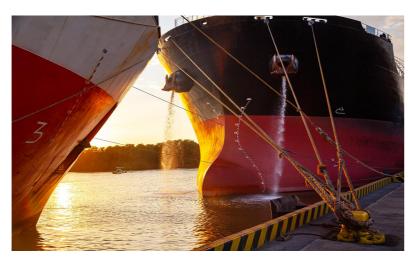


# Load v Extension Worked Rope New Rope 80 60 40 20 5 10 15 20 25 Elongation [%]

# PA Double Braided

It is made of 100% high strength nylon compound silk as the inner core and super wear-resistant polyester as the sheath. The structure makes the rope has the characteristics of high strength, excellent wear resistance and strong impact resistance

| Dia | Circ                  | Linear Density | Weight    | MBL  |        |
|-----|-----------------------|----------------|-----------|------|--------|
| mm  | ins                   | Ktex           | KG/220mtr | KN   | Tonf   |
| Dou | <b>Double Braided</b> |                |           |      |        |
| 4   | 1/2                   | 10.3           | 2.27      | 4.3  | 0.44   |
| 6   | 3/4                   | 23             | 5.06      | 10   | 1.02   |
| 8   | 1                     | 41             | 9.02      | 17   | 1.73   |
| 10  | 1-1/4                 | 64             | 14.08     | 26.5 | 2.70   |
| 12  | 1-1/2                 | 92             | 20.24     | 38   | 3.88   |
| 14  | 1-3/4                 | 126            | 27.72     | 52   | 5.31   |
| 16  | 2                     | 164            | 36.08     | 68   | 6.94   |
| 18  | 2-1/4                 | 207            | 45.54     | 86   | 8.78   |
| 20  | 2-1/2                 | 255            | 56.10     | 106  | 10.82  |
| 22  | 2-3/4                 | 309            | 67.98     | 128  | 13.06  |
| 28  | 3-1/2                 | 501            | 110.22    | 198  | 20.20  |
| 36  | 4-1/2                 | 828            | 182.16    | 328  | 33.47  |
| 44  | 5-1/2                 | 1236           | 271.92    | 483  | 49.29  |
| 48  | 6                     | 1473           | 324.06    | 575  | 58.67  |
| 56  | 7                     | 2009           | 441.98    | 795  | 81.12  |
| 60  | 7-1/2                 | 2297           | 505.34    | 900  | 91.84  |
| 64  | 8                     | 2616           | 575.52    | 1035 | 105.61 |
| 72  | 9                     | 3306           | 727.32    | 1250 | 127.55 |
| 80  | 10                    | 4089           | 899.58    | 1545 | 157.65 |
| 88  | 11                    | 4954           | 1089.88   | 1870 | 190.82 |
| 96  | 12                    | 5892           | 1296.24   | 2240 | 228.57 |
| 104 | 13                    | 6911           | 2114.42   | 2670 | 272.45 |
| 112 | 14                    | 8024           | 1765.28   | 3070 | 313.27 |
| 120 | 15                    | 9198           | 2023.56   | 3500 | 357.14 |



# Characteristics:

- > 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)
- $\gt$  Abrasion Resistance:  $\star\star\star\star\star$  (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

# PP 3/8/12 Strand

As the lightest, most widely used, the most economical chemical fiber rope . Strength is about twice the Manila rope of the same specification, polypropylene rope does not mold, has good chemical corrosion resistance, float in water but does not absorb water, can be stored in humid environment, but to avoid direct sunlight.

| Dia  | Circ  | Linear Density   | Weight   | MBL   |   |
|--|---|--|--|---|---|
| mm   | ins   | Ktex   | KG/220mtr  | KN  | Tonf  |
| O C+-  | ond   |  |  | ~~  |   |
| 3 Sti  |   |  |  |   |   |
| 4  | 1/2   | 7.23   | 1.59   | 3.2   | 0.33  |
| 6  | 3/4   | 16.3   | 3.59   | 7   | 0.71  |
| 8  | 1   | 28.9   | 6.36   | 11.5  | 1.17  |
| 10   | 1-1/4   | 45.2   | 9.94   | 17.2  | 1.76  |
| 12   | 1-1/2   | 65.1   | 14.32  | 24  | 2.45  |
| 14   | 1-3/4   | 88.6   | 19.49  | 32  | 3.27  |
| 16   | 2   | 116  | 25.52  | 43  | 4.39  |
| 18   | 2-1/4   | 146  | 32.12  | 52  | 5.31  |
| 20   | 2-1/2   | 181  | 39.82  | 64.5  | 6.58  |
| 22<br>26   | 2-3/4<br>3-1/4  | 219<br>306   | 48.18<br>67.32   | 77<br>103.5   | 7.86<br>10.56   |
| 30   | 3-1/4   | 407  | 89.54  | 136   | 13.88   |
| 36   | 4-1/2   | 586  | 128.92   | 195   | 19.90   |
|  |   |  |  | .,,   |   |
| 0 C+   | ond   | 88 ~   |  |   |   |
| 8 Str  |   |  | リンシス   |   |   |
|  |   |  |  |   |   |
|  |   |  |  |   |   |
| 40.0   | hrond   |  |  |   |   |
| 12 St  | trand   |  |  |   |   |
| <b>12 S</b> 1  | trand<br>5  | 723  | 159.06   | 240   | 24.49   |
|  |   | 723<br>1040  | 159.06<br>228.80   | 240<br>345  | 24.49<br>35.20  |
| 40   | 5   |  |  |   |   |
| 40<br>48   | 5<br>6  | 1040   | 228.80   | 345   | 35.20   |
| 40<br>48<br>52   | 5<br>6<br>6-1/2   | 1040<br>1220   | 228.80<br>268.40   | 345<br>408  | 35.20<br>41.63  |
| 40<br>48<br>52<br>56   | 5<br>6<br>6-1/2<br>7<br>7-1/2   | 1040<br>1220<br>1420   | 228.80<br>268.40<br>312.40   | 345<br>408<br>460   | 35.20<br>41.63<br>46.94   |
| 40<br>48<br>52<br>56<br>60   | 5<br>6<br>6-1/2<br>7<br>7-1/2<br>8  | 1040<br>1220<br>1420<br>1630   | 228.80<br>268.40<br>312.40<br>358.60   | 345<br>408<br>460<br>520  | 35.20<br>41.63<br>46.94<br>53.06  |
| 40<br>48<br>52<br>56<br>60<br>64   | 5<br>6<br>6-1/2<br>7<br>7-1/2<br>8<br>9                                     | 1040<br>1220<br>1420<br>1630<br>1850   | 228.80<br>268.40<br>312.40<br>358.60<br>407.00   | 345<br>408<br>460<br>520<br>575   | 35.20<br>41.63<br>46.94<br>53.06<br>58.67   |
| 40<br>48<br>52<br>56<br>60<br>64<br>72   | 5<br>6<br>6-1/2<br>7<br>7-1/2<br>8<br>9                                     | 1040<br>1220<br>1420<br>1630<br>1850<br>2340   | 228.80<br>268.40<br>312.40<br>358.60<br>407.00<br>514.80   | 345<br>408<br>460<br>520<br>575<br>725  | 35.20<br>41.63<br>46.94<br>53.06<br>58.67<br>73.98<br>93.88   |
| 40<br>48<br>52<br>56<br>60<br>64<br>72<br>80   | 5<br>6<br>6-1/2<br>7<br>7-1/2<br>8<br>9                                     | 1040<br>1220<br>1420<br>1630<br>1850<br>2340<br>2890   | 228.80<br>268.40<br>312.40<br>358.60<br>407.00<br>514.80<br>635.80   | 345<br>408<br>460<br>520<br>575<br>725<br>920   | 35.20<br>41.63<br>46.94<br>53.06<br>58.67<br>73.98  |
| 40<br>48<br>52<br>56<br>60<br>64<br>72<br>80<br>88                                   | 5<br>6<br>6-1/2<br>7<br>7-1/2<br>8<br>9<br>10<br>11                         | 1040<br>1220<br>1420<br>1630<br>1850<br>2340<br>2890<br>3500   | 228.80<br>268.40<br>312.40<br>358.60<br>407.00<br>514.80<br>635.80<br>770.00   | 345<br>408<br>460<br>520<br>575<br>725<br>920<br>1090   | 35.20<br>41.63<br>46.94<br>53.06<br>58.67<br>73.98<br>93.88<br>111.22<br>131.63   |
| 40<br>48<br>52<br>56<br>60<br>64<br>72<br>80<br>88<br>96                             | 5<br>6<br>6-1/2<br>7<br>7-1/2<br>8<br>9<br>10<br>11<br>12                   | 1040<br>1220<br>1420<br>1630<br>1850<br>2340<br>2890<br>3500<br>4170                                 | 228.80<br>268.40<br>312.40<br>358.60<br>407.00<br>514.80<br>635.80<br>770.00<br>917.40   | 345<br>408<br>460<br>520<br>575<br>725<br>920<br>1090<br>1290                                 | 35.20<br>41.63<br>46.94<br>53.06<br>58.67<br>73.98<br>93.88<br>111.22   |
| 40<br>48<br>52<br>56<br>60<br>64<br>72<br>80<br>88<br>96<br>104<br>112               | 5<br>6<br>6-1/2<br>7<br>7-1/2<br>8<br>9<br>10<br>11<br>12<br>13             | 1040<br>1220<br>1420<br>1630<br>1850<br>2340<br>2890<br>3500<br>4170<br>4890<br>5670                 | 228.80<br>268.40<br>312.40<br>358.60<br>407.00<br>514.80<br>635.80<br>770.00<br>917.40<br>1075.80                                  | 345<br>408<br>460<br>520<br>575<br>725<br>920<br>1090<br>1290<br>1510                         | 35.20<br>41.63<br>46.94<br>53.06<br>58.67<br>73.98<br>93.88<br>111.22<br>131.63<br>154.08<br>175.51                     |
| 40<br>48<br>52<br>56<br>60<br>64<br>72<br>80<br>88<br>96<br>104<br>112<br>120        | 5<br>6<br>6-1/2<br>7<br>7-1/2<br>8<br>9<br>10<br>11<br>12<br>13<br>14       | 1040<br>1220<br>1420<br>1630<br>1850<br>2340<br>2890<br>3500<br>4170<br>4890<br>5670<br>6510         | 228.80<br>268.40<br>312.40<br>358.60<br>407.00<br>514.80<br>635.80<br>770.00<br>917.40<br>1075.80<br>1247.40<br>1432.20            | 345<br>408<br>460<br>520<br>575<br>725<br>920<br>1090<br>1290<br>1510<br>1720<br>1950         | 35.20<br>41.63<br>46.94<br>53.06<br>58.67<br>73.98<br>93.88<br>111.22<br>131.63<br>154.08<br>175.51<br>198.98           |
| 40<br>48<br>52<br>56<br>60<br>64<br>72<br>80<br>88<br>96<br>104<br>112<br>120<br>128 | 5<br>6<br>6-1/2<br>7<br>7-1/2<br>8<br>9<br>10<br>11<br>12<br>13<br>14<br>15 | 1040<br>1220<br>1420<br>1630<br>1850<br>2340<br>2890<br>3500<br>4170<br>4890<br>5670<br>6510<br>7410 | 228.80<br>268.40<br>312.40<br>358.60<br>407.00<br>514.80<br>635.80<br>770.00<br>917.40<br>1075.80<br>1247.40<br>1432.20<br>1630.20 | 345<br>408<br>460<br>520<br>575<br>725<br>920<br>1090<br>1290<br>1510<br>1720<br>1950<br>2300 | 35.20<br>41.63<br>46.94<br>53.06<br>58.67<br>73.98<br>93.88<br>111.22<br>131.63<br>154.08<br>175.51<br>198.98<br>234.69 |
| 40<br>48<br>52<br>56<br>60<br>64<br>72<br>80<br>88<br>96<br>104<br>112<br>120        | 5<br>6<br>6-1/2<br>7<br>7-1/2<br>8<br>9<br>10<br>11<br>12<br>13<br>14       | 1040<br>1220<br>1420<br>1630<br>1850<br>2340<br>2890<br>3500<br>4170<br>4890<br>5670<br>6510         | 228.80<br>268.40<br>312.40<br>358.60<br>407.00<br>514.80<br>635.80<br>770.00<br>917.40<br>1075.80<br>1247.40<br>1432.20            | 345<br>408<br>460<br>520<br>575<br>725<br>920<br>1090<br>1290<br>1510<br>1720<br>1950         | 35.20<br>41.63<br>46.94<br>53.06<br>58.67<br>73.98<br>93.88<br>111.22<br>131.63<br>154.08<br>175.51<br>198.98           |

# General:

- > Coil Length: 220M (Length can be customized)
- > Spliced Strength: 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

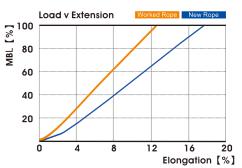
# Characteristics:

- > Material: Polypropylene Multifilament Yarn
- > Construction: 3/8/12 Strand
- > Specific Gravity: 0.91, Floating
- > Melting Point: 165℃
- > 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



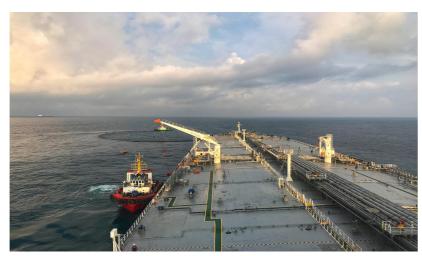




# PP Double Braided

The inner core is made of polypropylene filament, and the outer sheath is made of polyester material, which has good wear resistance. Compared with wire rope without sheath protection, its UV and wear resistance is more prominent, so the service life is longer.

| Dia | Circ    | Linear Density | Weight    | М    | BL     |
|-----|---------|----------------|-----------|------|--------|
| mm  | ins     | Ktex           | KG/220mtr | KN   | Tonf   |
| Dou | ble Bra | ided (         |           |      |        |
| 4   | 1/2     | 8.4            | 1.85      | 2.8  | 0.29   |
| 6   | 3/4     | 18.8           | 4.14      | 6.2  | 0.63   |
| 8   | 1       | 33             | 7.26      | 11   | 1.12   |
| 10  | 1-1/4   | 52             | 11.44     | 17.2 | 1.76   |
| 12  | 1-1/2   | 75             | 16.50     | 25   | 2.55   |
| 14  | 1-3/4   | 102            | 22.44     | 33   | 3.37   |
| 16  | 2       | 133            | 29.26     | 44   | 4.49   |
| 18  | 2-1/4   | 168            | 36.96     | 56   | 5.71   |
| 20  | 2-1/2   | 208            | 45.76     | 69   | 7.04   |
| 22  | 2-3/4   | 252            | 55.44     | 84   | 8.57   |
| 24  | 3       | 299            | 65.78     | 99   | 10.10  |
| 28  | 3-1/2   | 404            | 88.88     | 136  | 13.88  |
| 32  | 4       | 528            | 115.50    | 177  | 18.06  |
| 36  | 4-1/2   | 668            | 146.96    | 224  | 22.86  |
| 40  | 5       | 825            | 181.50    | 276  | 28.16  |
| 44  | 5-1/2   | 1006           | 221.32    | 338  | 34.49  |
| 48  | 6       | 1190           | 261.80    | 407  | 41.53  |
| 52  | 6-1/2   | 1390           | 305.80    | 472  | 48.16  |
| 56  | 7       | 1610           | 354.20    | 545  | 55.61  |
| 60  | 7-1/2   | 1850           | 407.00    | 620  | 63.27  |
| 64  | 8       | 2090           | 459.80    | 705  | 71.94  |
| 72  | 9       | 2640           | 580.80    | 882  | 90.00  |
| 80  | 10      | 3290           | 723.80    | 1075 | 109.69 |
| 88  | 11      | 3950           | 869.00    | 1280 | 130.61 |
| 96  | 12      | 4710           | 1036.20   | 1500 | 153.06 |
| 104 | 13      | 5480           | 1205.60   | 1740 | 177.55 |
| 112 | 14      | 6390           | 1405.80   | 1950 | 198.98 |
| 120 | 15      | 7350           | 1617.00   | 2310 | 235.71 |



# ₹ 100 80 60 40

16

Elongation [%]

Load v Extension

20

#### Characteristics:

- > 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

# PP/PET 3/8/12 Strand

Structure: three strand, six strand, eight strand, twelve strand and double weave. It is made of a mixture of polyester and polypropylene fibers. Compared with the traditional hybrid chemical fiber rope, it has higher strength, better elasticity and excellent wear resistance.

| Dia  | Circ  | Linear Density   | Weight   | MBL  |  |
|--|---|--|--|--|--|
| mm   | ins   | Ktex   | KG/220mtr  | KN   | Tonf   |
| 9 6+   | and   |  |  |  |  |
| ง จน   | rand  |  |  |  |  |
| 6  | 3/4   | 17.5   | 3.85   | 7  | 0.71   |
| 8  | 1   | 31   | 6.82   | 12.3   | 1.26   |
| 10   | 1-1/4   | 48.5   | 10.67  | 18.8   | 1.92   |
| 12   | 1-1/2   | 69.9   | 15.38  | 26.5   | 2.70   |
| 14   | 1-3/4   | 95.1   | 20.92  | 36   | 3.67   |
| 16   | 2   | 124  | 27.28  | 46   | 4.69   |
| 18   | 2-1/4   | 157  | 34.54  | 58   | 5.92   |
| 20   | 2-1/2   | 194  | 42.68  | 79   | 8.06   |
| 24   | 3   | 279  | 61.38  | 110  | 11.22  |
| 28   | 3-1/2   | 380  | 83.60  | 149  | 15.20  |
| 32   | 4   | 479  | 105.38   | 192  | 19.59  |
| 36   | 4-1/2   | 629  | 138.38   | 240  | 24.49  |
| 00   |   |  |  |  |  |
|  | _   | ~  |  |  | //>  |
|  | and   | <b>\$ \$</b>   |  |  |  |
|  | rand  | <b>\$</b> \$   |  |  |  |
| 8 Sti  |   | <b>8 2</b>   |  |  |  |
| 8 Sti  | rand<br>trand   |  |  |  |  |
| 8 Sti  |   | 776  | 170.72   | 295  | 30.10  |
| 8 Sti<br>12 St   | trand   | 776  | 170.72<br>244.20   | 295<br>420   | 30.10<br>42.86   |
| 8 Sti<br>12 St   | trand<br>5  |  |  |  |  |
| 8 Sti 12 Si 40 48  | trand   | 1110   | 244.20   | 420  | 42.86  |
| 8 Str<br>12 St<br>40<br>48<br>52   | 5<br>6<br>6-1/2   | 1110<br>1320   | 244.20<br>290.40   | 420<br>488   | 42.86<br>49.80   |
| 8 Str<br>12 St<br>40<br>48<br>52<br>56   | 5<br>6<br>6-1/2<br>7<br>7-1/2   | 1110<br>1320<br>1520   | 244.20<br>290.40<br>334.40   | 420<br>488<br>562  | 42.86<br>49.80<br>57.35  |
| 8 Sti 12 St 40 48 52 56 60   | 5<br>6<br>6-1/2<br>7  | 1110<br>1320<br>1520<br>1750   | 244.20<br>290.40<br>334.40<br>385.00   | 420<br>488<br>562<br>640   | 42.86<br>49.80<br>57.35<br>65.31   |
| 8 Sti<br>12 St<br>40<br>48<br>52<br>56<br>60<br>64   | 5<br>6<br>6-1/2<br>7<br>7-1/2<br>8<br>9                                     | 1110<br>1320<br>1520<br>1750<br>1990   | 244.20<br>290.40<br>334.40<br>385.00<br>437.80   | 420<br>488<br>562<br>640<br>725  | 42.86<br>49.80<br>57.35<br>65.31<br>73.98  |
| 8 Sti<br>12 St<br>40<br>48<br>52<br>56<br>60<br>64<br>72   | 5<br>6<br>6-1/2<br>7<br>7-1/2<br>8<br>9                                     | 1110<br>1320<br>1520<br>1750<br>1990<br>2520   | 244.20<br>290.40<br>334.40<br>385.00<br>437.80<br>554.40   | 420<br>488<br>562<br>640<br>725<br>907   | 42.86<br>49.80<br>57.35<br>65.31<br>73.98<br>92.55   |
| 8 Sti<br>12 St<br>40<br>48<br>52<br>56<br>60<br>64<br>72<br>80   | 5<br>6<br>6-1/2<br>7<br>7-1/2<br>8<br>9<br>10                               | 1110<br>1320<br>1520<br>1750<br>1990<br>2520<br>3110   | 244.20<br>290.40<br>334.40<br>385.00<br>437.80<br>554.40<br>684.20   | 420<br>488<br>562<br>640<br>725<br>907<br>1107   | 42.86<br>49.80<br>57.35<br>65.31<br>73.98<br>92.55<br>112.96   |
| 8 Sti<br>12 St<br>40<br>48<br>52<br>56<br>60<br>64<br>72<br>80<br>88                                   | 5<br>6<br>6-1/2<br>7<br>7-1/2<br>8<br>9                                     | 1110<br>1320<br>1520<br>1750<br>1790<br>2520<br>3110<br>3750   | 244.20<br>290.40<br>334.40<br>385.00<br>437.80<br>554.40<br>684.20<br>825.00   | 420<br>488<br>562<br>640<br>725<br>907<br>1107<br>1334   | 42.86<br>49.80<br>57.35<br>65.31<br>73.98<br>92.55<br>112.96<br>136.12   |
| 8 Sti<br>12 St<br>40<br>48<br>52<br>56<br>60<br>64<br>72<br>80<br>88<br>96                             | 5<br>6<br>6-1/2<br>7<br>7-1/2<br>8<br>9<br>10<br>11<br>12                   | 1110<br>1320<br>1520<br>1750<br>1990<br>2520<br>3110<br>3750<br>4470                                 | 244.20<br>290.40<br>334.40<br>385.00<br>437.80<br>554.40<br>684.20<br>825.00<br>983.40   | 420<br>488<br>562<br>640<br>725<br>907<br>1107<br>1334<br>1575                                 | 42.86<br>49.80<br>57.35<br>65.31<br>73.98<br>92.55<br>112.96<br>136.12<br>160.71   |
| 8 Sti<br>12 St<br>40<br>48<br>52<br>56<br>60<br>64<br>72<br>80<br>88<br>96<br>104                      | 5<br>6<br>6-1/2<br>7<br>7-1/2<br>8<br>9<br>10<br>11<br>12<br>13<br>14       | 1110<br>1320<br>1520<br>1750<br>1990<br>2520<br>3110<br>3750<br>4470<br>5260                         | 244.20<br>290.40<br>334.40<br>385.00<br>437.80<br>554.40<br>684.20<br>825.00<br>983.40<br>1157.20<br>1331.00                       | 420<br>488<br>562<br>640<br>725<br>907<br>1107<br>1334<br>1575<br>1828                         | 42.86<br>49.80<br>57.35<br>65.31<br>73.98<br>92.55<br>112.96<br>136.12<br>160.71<br>186.53                               |
| 40<br>48<br>52<br>56<br>60<br>64<br>72<br>80<br>88<br>96<br>104<br>112<br>120                          | 5<br>6<br>6-1/2<br>7<br>7-1/2<br>8<br>9<br>10<br>11<br>12<br>13<br>14<br>15 | 1110<br>1320<br>1520<br>1750<br>1990<br>2520<br>3110<br>3750<br>4470<br>5260<br>6050<br>6980         | 244.20<br>290.40<br>334.40<br>385.00<br>437.80<br>554.40<br>684.20<br>825.00<br>983.40<br>1157.20                                  | 420<br>488<br>562<br>640<br>725<br>907<br>1107<br>1334<br>1575<br>1828<br>2116                 | 42.86<br>49.80<br>57.35<br>65.31<br>73.98<br>92.55<br>112.96<br>136.12<br>160.71<br>186.53<br>215.92                     |
| 8 Sti<br>12 St<br>40<br>48<br>52<br>56<br>60<br>64<br>72<br>80<br>88<br>96<br>104<br>112               | 5<br>6<br>6-1/2<br>7<br>7-1/2<br>8<br>9<br>10<br>11<br>12<br>13<br>14       | 1110<br>1320<br>1520<br>1750<br>1990<br>2520<br>3110<br>3750<br>4470<br>5260<br>6050                 | 244.20<br>290.40<br>334.40<br>385.00<br>437.80<br>554.40<br>684.20<br>825.00<br>983.40<br>1157.20<br>1331.00<br>1535.60            | 420<br>488<br>562<br>640<br>725<br>907<br>1107<br>1334<br>1575<br>1828<br>2116<br>2415         | 42.86<br>49.80<br>57.35<br>65.31<br>73.98<br>92.55<br>112.96<br>136.12<br>160.71<br>186.53<br>215.92<br>246.43           |
| 8 Sti<br>12 St<br>40<br>48<br>52<br>56<br>60<br>64<br>72<br>80<br>88<br>96<br>104<br>112<br>120<br>128 | 5<br>6<br>6-1/2<br>7<br>7-1/2<br>8<br>9<br>10<br>11<br>12<br>13<br>14<br>15 | 1110<br>1320<br>1520<br>1750<br>1990<br>2520<br>3110<br>3750<br>4470<br>5260<br>6050<br>6980<br>7950 | 244.20<br>290.40<br>334.40<br>385.00<br>437.80<br>554.40<br>684.20<br>825.00<br>983.40<br>1157.20<br>1331.00<br>1535.60<br>1479.00 | 420<br>488<br>562<br>640<br>725<br>907<br>1107<br>1334<br>1575<br>1828<br>2116<br>2415<br>2725 | 42.86<br>49.80<br>57.35<br>65.31<br>73.98<br>92.55<br>112.96<br>136.12<br>160.71<br>186.53<br>215.92<br>246.43<br>278.06 |

# General:

- > Coil Length: 220M (Length can be customized)
- > Spliced Strength: 10% Lower
- > Weight and Length Tolerance:  $\pm 5\%$
- > Colors: Yellow, blue, red etc, customized at your requests
- > Physical properties are in accordance with fiber ropes international
- > standard ISO 10556-2009

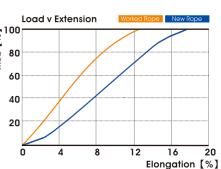
# Characteristics:

- > Material: High Tenacity PP Multifilament and Polyester Fibers
- > Construction: 3/8/12 Strand
- > Specific Gravity: 0.95-0.98, Floating
- > Melting Point: 165℃-260℃
- > Abrasion Resistance: \*\*\*\*
- > Chemical Resistance: ★★★
- > UV Resistance: \*\*\*
- > Water Absorption: None
- > Dry & Wet Conditions: Wet Strength Equals Dry Strength
- > Excellent Shock Absorption

#### Applications

Mooring/ General Fishing/ Messenger Line/ Mooring Tail/ Inland Shipping





8



Load v Extension

40

20

# PP/PET Double Braided

he inner core is made of polypropylene filament and the outer sheath is made of polyester. Compared with the rope without sheath protection, its UV resistance and wear resistance is more prominent, so the service life is

| Dia   | Circ   | Linear Density   | Density Weight MI   |  | BL   |
|---|--|--|---|--|--|
| mm  | ins  | Ktex   | KG/220mtr   | KN   | Tonf   |
| Dou   | ble Bra  | ided @   |   |  |  |
| 4<br>6<br>8<br>10<br>12<br>14<br>16<br>18<br>20<br>22<br>24<br>28<br>32<br>36<br>40<br>44<br>48<br>52<br>56<br>60<br>64<br>72<br>80<br>88 | 1/2<br>3/4<br>1<br>1-1/4<br>1-1/2<br>1-3/4<br>2<br>2-1/4<br>2-1/2<br>2-3/4<br>3<br>3-1/2<br>4<br>4-1/2<br>5<br>5-1/2<br>6<br>6-1/2<br>7<br>7-1/2<br>8<br>9<br>10<br>11 | 9 20.2 36 56 81 110 143 181 224 271 325 430 576 732 902 1093 1300 1525 1773 2035 2310 2924 3610 4371 | 1.98<br>4.44<br>7.92<br>12.32<br>17.82<br>24.20<br>31.46<br>39.82<br>49.28<br>59.62<br>71.50<br>94.60<br>126.72<br>161.04<br>198.44<br>240.46<br>286.00<br>335.50<br>390.06<br>447.70<br>508.20<br>643.28<br>794.20<br>961.62 | 3<br>7<br>12.5<br>19<br>26.5<br>36<br>47<br>60<br>80<br>90<br>112<br>152<br>195<br>250<br>305<br>373<br>437<br>510<br>590<br>670<br>764<br>973<br>1190<br>1442 | 0.31<br>0.71<br>1.28<br>1.94<br>2.70<br>3.67<br>4.80<br>6.12<br>8.16<br>9.18<br>11.43<br>15.51<br>19.90<br>25.51<br>31.12<br>38.06<br>44.59<br>52.04<br>60.20<br>68.37<br>77.96<br>99.29<br>121.43<br>147.14 |
| 96<br>104<br>112<br>120   | 12<br>13<br>14<br>15   | 5207<br>6112<br>7082<br>8127   | 1145.54<br>1344.64<br>1558.04<br>1787.94  | 1726<br>2020<br>2350<br>2677   | 176.12<br>206.12<br>239.80<br>273.16   |



## Characteristics:

- > 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

16

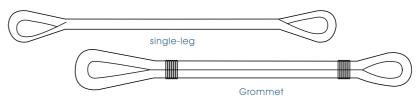
Elongation [%]

Mooring/ Offshore Platform/ General Fishing/ Messenger Line/ Mooring Tail/ Inland Shipping

# **MOORING TAILS**

Using synthetic mooring tails is the most common method of decreasing loads in the mooring System . Tails are typically used with our UHMWPE ROPE to improve mooring system in integrity by reducing mean and peak loads . When used , tails serve as an integral part of the mooring system and should not be considered a weak link with the system's design

# TAIL TYPE:



- Mooring tail has 2mtr soft eye at both ends .(That can be designed according to your requests)
- Hardware and chafe protection can be added upon your requests.
- Grommet strength is 1.6x the single-leg rope strength.
- The Tail Design Break Force (TDBF) needs to be higher than the LDBF , because the tail experiences more wear in service than line.
- The TDBF of tails should be 125%-130% of ship design MBL.

#### **COW HITCH CONNECTION:**



After properly installing the mooring lines on the winch drum, the tails should be attached to the working end of the mooring line. This is done by cow hitch connection per MEG4 guidelines.

# PA mooring-tail

| Dia | Circ  | Linear Density | Weight    | MBL(MT) |         |
|-----|-------|----------------|-----------|---------|---------|
| mm  | ins   | Ketx           | Kg / 100m | Single  | Grommet |
| 48  | 6     | 1420           | 142.00    | 56.20   | 89.92   |
| 52  | 6-1/2 | 1700           | 170.00    | 65.90   | 105.44  |
| 56  | 7     | 1970           | 201.00    | 75.60   | 120.96  |
| 60  | 7-1/2 | 2260           | 226.00    | 86.40   | 138.24  |
| 64  | 8     | 2570           | 257.00    | 97.30   | 155.68  |
| 68  | 8-1/2 | 2860           | 286.00    | 109.80  | 175.68  |
| 72  | 9     | 3270           | 327.00    | 122.40  | 195.84  |
| 80  | 10    | 4030           | 403.00    | 149.40  | 239.04  |
| 88  | 11    | 4860           | 486.00    | 180.40  | 288.64  |
| 96  | 12    | 5790           | 579.00    | 212.90  | 340.64  |

# Features and Benefits: > High cow-hitch efficiency per MEG4 guidelines

- > Higher residual strength than parallel-core constructions
- > Good flex-fatigue resistance
- > Good shock absorption
- > Easy to inspect and splice

# Construction:

- > 8/12-strand Nylon
- > Fiber: Nylon
- > Colors: White

# Applications:

- > Mooring tail
- > Shock absorbing pendant
- > Tug assist working line

# PP/PET mooring-tail

| Dia | Circ  | Linear Density | Weight    | MBL(MT) |         |
|-----|-------|----------------|-----------|---------|---------|
| mm  | ins   | Ketx           | Kg / 100m | Single  | Grommet |
| 48  | 6     | 1110           | 111.00    | 42.90   | 68.64   |
| 52  | 6-1/2 | 1320           | 132.00    | 49.80   | 79.68   |
| 56  | 7     | 1520           | 152.00    | 57.40   | 91.84   |
| 60  | 7-1/2 | 1750           | 175.00    | 66.00   | 105.60  |
| 64  | 8     | 1990           | 199.00    | 74.00   | 118.40  |
| 72  | 9     | 2520           | 252.00    | 93.00   | 148.80  |
| 80  | 10    | 3110           | 311.00    | 113.00  | 180.80  |
| 88  | 11    | 3750           | 375.00    | 136.00  | 217.60  |
| 96  | 12    | 4470           | 447.00    | 161.00  | 257.60  |

# Features and Benefits:

- > High strength
- > Shock mitigation
- > Excellent wet strength retention
- > Durable in wet conditions
- > Easy to splice
- > Single-leg or strop (grommet) configurations
- > 11/18/22-meter lengths
- > Meets MEG4 guidelines

# Construction:

- > 8/12-strand PP & PES Mixed
- > Fiber: PP & PES Mixed
- > Colors: White

## Applications:

- > Traditional mooring tail
- > Exposed terminal moorings

NYLON DOUBLE BRAID ROPES LOAD EXTENSION CURYES

Dry and Wet worked ropes

Extension (%)

Double Braid Nylon WET 1 st Loading Cycle to 50% - DRY

1 st Loading Cycle to 50% - WET

100 90

80

50

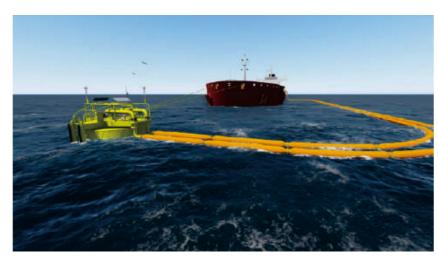
20 10

# SINGLE POINT MOORING HAWSER

significantly changing the primary characteristics. It is a logical development from the double braid, where the outer protects the inner and both contribute to the strength. In circular braided rope design this duality has been abandoned. The cover is optimized for strength. This results in both a higher strength and a better life expectancy.

| Dia | Circ   | Weight   | NDBS(KN) |         | NWBS       | (KN)    |
|-----|--------|----------|----------|---------|------------|---------|
| mm  | ins    | kg/ 100m | Single   | Grommet | Single Leg | Grommet |
| Do  | uble B | raided   |          |         |            |         |
| 80  | 10     | 397      | 1442     | 2452    | 1370       | 2329    |
| 88  | 11     | 481      | 1746     | 2969    | 1659       | 2820    |
| 96  | 12     | 572      | 2040     | 3469    | 1938       | 3295    |
| 104 | 13     | 671      | 2443     | 4153    | 2321       | 3945    |
| 112 | 14     | 779      | 2825     | 4803    | 2684       | 4563    |
| 120 | 15     | 893      | 3208     | 5453    | 3047       | 5181    |
| 128 | 16     | 1020     | 3610     | 6137    | 3430       | 5830    |
| 136 | 17     | 1150     | 4110     | 6988    | 3905       | 6638    |
| 144 | 18     | 1280     | 4611     | 7838    | 4380       | 7446    |
| 152 | 19     | 1425     | 5111     | 8689    | 4855       | 8254    |
| 160 | 20     | 1580     | 5670     | 9639    | 5387       | 8254    |

- > Rope is in compliance with OCIMF Equipment Guidelines & ISO 2307
- > Other sizes can be provided as per the requirement



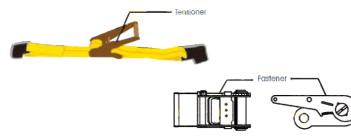
# Property:

- > Approx Spec Density: 1.14 non floating
- > Melting Point: 215℃
- > Abrasion Resistance: Excellent
- > UV Resistance: Excellent due to jacket
- > Temperature: 80°C max continuous
- > Chemical Resistance: Reasonable. Acids, oxidisers & solvents will affect nylon
- > Dry & Wet Conditions: Wet strength is 5% lower than dry strength
- > Diameter: 80mm-160mm



SPM rope is a circular braid design developed to give the rope extra protection against wear and tear, without

# ACCESSORIES:



| Net Size       | 9m*9m  | 12m*12m        | 14m*14m         | 15m*15m     | 20m*20m    |
|----------------|--------|----------------|-----------------|-------------|------------|
| Mesh Rope Size |        |                | 16mm-25mr       | m           |            |
| Mesh Size      | 100mm* | 100mm          | 150mm*150n      | nm 200      | mm*200mm   |
| Type of Rope   |        | Ма             | nila Rope/ Sisa | I Rope      |            |
| Remark         | Nets   | of other sizes | can be provid   | ed upon you | ır request |
|                |        |                |                 |             |            |

- > Net is in compliance with CAP437
- > Other sizes can be provided as per the requirement

# **HELIDECK LANDING NETS**



#### Features and Benefits:

- > Long durability, usable in low temperature
- > Good impact resistance
- > Hold knots firmly and stretch very little
- > Package for easy handling and transportation via road, ship or helicopter
- > Manufactured to CAP 437 standard
- > High quality materials
- > Does not obstruct helideck markings
- > Low profile design

# **CARGO NETS**

Application Scope: aviation, railway, ships, steel industry, mining, oil field, ports, chemical industry, power, machinery, harbor handling, warship, offshore platform, lifting and hoisting of large ships etc.

Environmental Condition: ambient temperature < 100℃

- > Advantage: good abrasion resistance and UV resistance, long work life
- > Standard Color: white (Other color can be customized at client's request.)

| Net Size       | 2m*2m | 2.5m*2.5m | 3m*3m    | 4m*4m | 2.5m*2.5m | 3m*3m |
|----------------|-------|-----------|----------|-------|-----------|-------|
| Mesh Size      |       | 200m*20   | 10mm     |       | 200m*20   | 0mm   |
| Rim Rope Size  |       | 24mm dia  | ımeter   |       | 12mm dia  | meter |
| Mesh Rope Size |       | 18mm dia  | 9mm diar | meter |           |       |
| Material       |       | Polyprop  | ylene    |       | Wire Ro   | pe    |



> Other sizes can be provided as per the requirement

# **SLING**

| Standard         | JB/ T8521-2007   | Length | 0.5M-100M                  |  |  |
|------------------|--|--------|----------------------------|--|--|
| Material         | Polyester, Polypropylene, Nylon, Synthetic fiber                       | Туре   | Webbing sling, Round sling |  |  |
| Work Temperature | -40°C-100°C  | Weight | Accordingly                |  |  |
| WLL              | 0.5T-100T  | Width  | 25mm-600mm                 |  |  |
| Safety Factor    | Soft and easy handling.     Not hurt the surface of the lifting items. |        |                            |  |  |
| Advantage        |  |        |                            |  |  |

> Other rspecial size can be provided upon your request

# **ROPE LADDER**

Rope ladder, also called Jacob's ladder, is widely used as chain ladder or decending ladder on ships (for example in containers). They are made of wood steps, synthetic or Manila side rope. It is finished with eye on top for easy mounting, an ideal product for general purposes and different sizes are available.

| Туре       | Flat Step                                  | Round                                      | d Step       |  |
|------------|--|--|--------------|--|
| Size       | L460*W100*T22mm                            | φ36mm*L460mm                               | φ35mm*L400mm |  |
| Step Space | 350mm                                      | 400mm                                      | 330mm        |  |
| Side Rope  | Manila: 2*φ16mm<br>Synthetic Rope: 2*φ14mm | Manila: 2*φ18mm<br>Synthetic Rope: 2*φ18mm |              |  |
| Length     | Upon user's request                        |  |              |  |



# **MANILA ROPE**

Manila rope is made of natural Manila hemp featuring good wear performance, heat resistance, knotting tight, low stretch and free of static, They are popular at oil drilling, sealing as well as marine transportation of LNG and gasoline tankers for its lack of static electricity, and also hot sales in gardening, packing as well as construction fields. It is widely used in chemical vessels and LNG carriers. Since it is natural fiber rope, it is often used for construction, packaging and decoration.



#### Characteristics:

- > UV Resistance: good
- > Handle: easy to knot firm
- > Feeling: rough
- > Chemical Resistance: average
- > Store: keep in cool places to avoid mildew
- > Material: Natural Manila hemp, biodegradable
- > Specific Gravity: 1.38, non-floating, increased strength after getting wet
- > Wear Resistance: ★★★★
- > Elongation: 4% elongation under 20% MBL

# Features:

> Low Stretch > Abrasion resistance > Environmental

| Dia | Circ  | Linear Density |      | М     | BL    |
|-----|-------|----------------|------|-------|-------|
| mm  | ins   | Ktex           |      | KN    | Tons  |
| 6   | 3/4   | ±10%           | 29   | 2.3   | 0.23  |
| 8   | 1     | ±10%           | 54   | 4.25  | 0.43  |
| 10  | 1-1/4 | ±10%           | 68   | 5.6   | 0.57  |
| 12  | 1-1/2 | ±8%            | 105  | 8.4   | 0.86  |
| 14  | 1-3/4 | ±8%            | 140  | 11.3  | 1.15  |
| 16  | 2     | ±8%            | 190  | 15.9  | 1.62  |
| 18  | 2-1/4 | ±8%            | 220  | 18.9  | 1.93  |
| 20  | 2-1/2 | ±8%            | 275  | 25.1  | 2.56  |
| 22  | 2-3/4 | ±8%            | 330  | 30.1  | 3.07  |
| 24  | 3     | ±8%            | 400  | 35.9  | 3.66  |
| 26  | 3-1/4 | ±8%            | 470  | 41.8  | 4.27  |
| 28  | 3-1/2 | ±8%            | 530  | 47    | 4.80  |
| 30  | 3-3/4 | ±5%            | 625  | 53.8  | 5.49  |
| 32  | 4     | ±5%            | 700  | 60.6  | 6.18  |
| 36  | 4-1/2 | ±5%            | 890  | 76.8  | 7.84  |
| 40  | 5     | ±5%            | 1100 | 95.9  | 9.79  |
| 44  | 5-1/2 | ±5%            | 1340 | 112.5 | 11.48 |
| 48  | 6     | ±5%            | 1580 | 130.5 | 13.32 |
| 52  | 6-1/2 | ±5%            | 1870 | 153   | 15.61 |
| 56  | 7     | ±5%            | 2150 | 175.5 | 17.91 |
| 60  | 7-1/2 | ±5%            | 2480 | 199.8 | 20.39 |

# **SLEEVES**

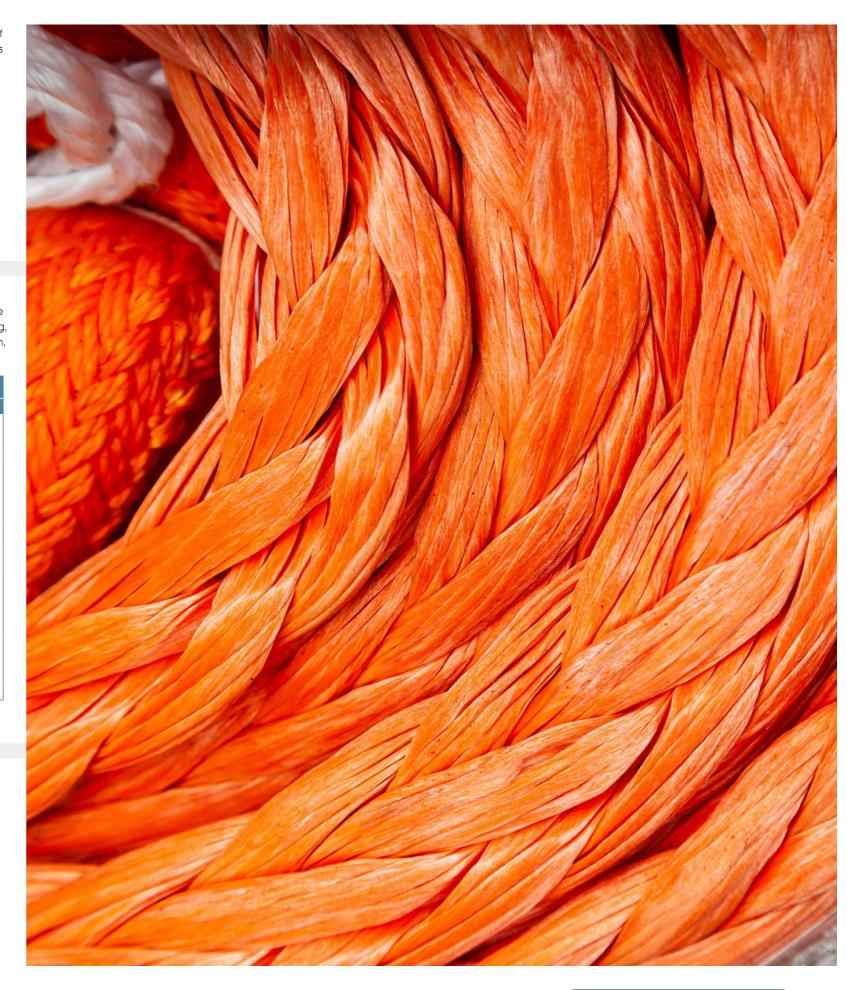
## General:

- > Length: 1m to 10m
- > Width: 30mm to 500mm
- > Thickness: 3mm

# Characteristics:

- > Made by robust material (flat Polyester webbing pad)
- > Prevent the cable from being worn out by the fairlead
- > Easy operation
- > Magic tape (Easy to disassemble)





<sup>&</sup>gt; Other special sizes can be provided upon your requests

# **CAUTIONS**

# 1. Storage

Synthetic 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

Never 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

Full guidelines for rope installation and operation are available on request from Xinglun Rope.

# 4. Sharp Bends

Sharp 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

The 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

Ropes 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

When 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 a 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

In 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

Apart 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.















