

# AMSTEEL-BLUE: THE BEST ALL-AROUND DYNEEMA ROPE, A DIRECT REPLACEMENT FOR WIRE ROPES PROVEN TO REDUCE TUG ASSIST AND MOORING COSTS.

## FEATURES:

- Uses Dyneema® SK-75 HMPE fiber
- A size for size strength replacement for wire rope at only 1/7th the weight
- Torque-free, very flexible, easy to handle
- Similar elastic elongation to wire rope
- Easily inspected or field spliced
- Floats

## APPLICATIONS:

- Primary vessel mooring lines
- Tractor tug working lines off winch drum
- Face and wing wires for push tugs
- Emergency and seismic tow lines

**For More Information Contact;  
American Rigging Supply, Inc.**

**AMSTEEL®-BLUE IS A PROVEN COST-SAVING REPLACEMENT FOR WIRE ROPE IN KEY APPLICATIONS WHERE STRENGTH, WEIGHT AND SAFETY ARE IMPORTANT.**

Recognized worldwide as the standard for single braid HMPE ropes, AmSteel-Blue is easily spliced and inspected. These features, with the superior wear and flex fatigue of Dyneema SK-75 fiber and Samthane™ coating, are combined in a torque-free 12-strand single braid design. The result is an industry leading braided synthetic rope that outlasts wire rope and has proven operator cost saving benefits.

AmSteel-Blue, at only 1/7th the weight of wire, requires less committed crew for mooring operations, significantly reduces mooring times and tug costs, and improves crew safety. The reduced weight, high strength and low stretch also make it ideal for Tug Assist/maneuvering lines, resulting in quick, efficient connections and control response. AmSteel-Blue is proven to provide longer service life and reduced costs in a variety of applications.

Standardized working pendants are available for mooring and tug assist lines, see page (14 & 17).

Recommended for split drum winch applications; not recommended for use on H-bitts, capstans or cleats if surging or rendering the rope is required.



**12-STRAND**

AMSTEEL®-BLUE

Size Dia. Inches	Size Circ. Inches	Weight lbs. Per 100 FT.	SRT MBS/lbs.	Size Dia. mm	Weight KG Per 100 M	SRT MBS/Metric Tonnes	ISO/BS EN919 Strength/Metric Tonnes
3/16"	9/16"	1.0 lbs.	4,900 lbs.	5mm	1.5 kg	2.2 MT	2.4 MT
1/4"	3/4"	1.6 lbs.	7,700 lbs.	6mm	2.4 kg	3.5 MT	3.9 MT
5/16"	1"	2.7 lbs.	12,300 lbs.	8mm	4.0 kg	5.6 MT	6.2 MT
3/8"	1-1/8"	3.6 lbs.	17,600 lbs.	9mm	5.4 kg	8.0 MT	8.9 MT
7/16"	1-1/4"	4.2 lbs.	21,500 lbs.	11mm	6.2 kg	9.8 MT	10.9 MT
1/2"	1-1/2"	6.4 lbs.	30,600 lbs.	12mm	9.5 kg	13.9 MT	15.4 MT
9/16"	1-3/4"	7.9 lbs.	36,500 lbs.	14mm	11.8 kg	16.6 MT	18.4 MT
5/8"	2"	10.2 lbs.	47,500 lbs.	16mm	15.2 kg	21.5 MT	23.9 MT
3/4"	2-1/4"	13.3 lbs.	58,000 lbs.	18mm	19.8 kg	26.3 MT	29.2 MT
7/8"	2-3/4"	19.6 lbs.	81,700 lbs.	22mm	29.2 kg	37.1 MT	41.2 MT
1"	3"	21.8 lbs.	98,100 lbs.	24mm	32.4 kg	44.5 MT	49.4 MT
1-1/16"	3-1/4"	27.5 lbs.	118,000 lbs.	26mm	40.9 kg	53.6 MT	59.6 MT
1-1/8"	3-1/2"	31.9 lbs.	133,000 lbs.	28mm	47.5 kg	60.4 MT	67.1 MT
1-1/4"	3-3/4"	36.2 lbs.	149,000 lbs.	30mm	53.9 kg	67.5 MT	75.0 MT
1-5/16"	4"	41.8 lbs.	166,000 lbs.	32mm	62.2 kg	75.2 MT	83.5 MT
1 3/8"	4-1/8"	45.0 lbs.	185,000 lbs.	34mm	67.0 kg	83.9 MT	93.2 MT
1-1/2"	4-1/2"	51.7 lbs.	205,000 lbs.	36mm	76.9 kg	92.9 MT	103.0 MT
1-5/8"	5"	65.2 lbs.	255,000 lbs.	40mm	97.0 kg	116.0 MT	128.0 MT
1-3/4"	5-1/2"	78.4 lbs.	302,000 lbs.	44mm	117.0 kg	137.0 MT	152.0 MT
2"	6"	87.0 lbs.	343,000 lbs.	48mm	130.0 kg	155.0 MT	173.0 MT
2-1/8"	6-1/2"	109.0 lbs.	411,000 lbs.	52mm	162.0 kg	186.0 MT	207.0 MT
2-1/4"	7"	116.0 lbs.	483,000 lbs.	56mm	173.0 kg	219.0 MT	244.0 MT
2-1/2"	7-1/2"	148.0 lbs.	529,000 lbs.	60mm	220.0 kg	240.0 MT	267.0 MT
2-5/8"	8"	167.0 lbs.	596,000 lbs.	64mm	249.0 kg	270.0 MT	300.0 MT
2-3/4"	8-1/2"	187.0 lbs.	662,000 lbs.	68mm	278.0 kg	300.0 MT	333.0 MT
3"	9"	206.0 lbs.	748,000 lbs.	72mm	307.0 kg	339.0 MT	377.0 MT
3-1/4"	10"	240.0 lbs.	906,000 lbs.	80mm	357.0 kg	411.0 MT	457.0 MT

## AMSTEEL-BLUE

**PRODUCT CODE:** 872

### TECHNICAL SPECIFICATIONS:

**CLASS II ROPE**

**SPECIFIC GRAVITY:**  
.98 (floats)

**ELASTIC ELONGATION PERCENTAGE:**  
At % of break strength  
10% ..... 0.46%  
20% ..... 0.70%  
30% ..... 0.96%

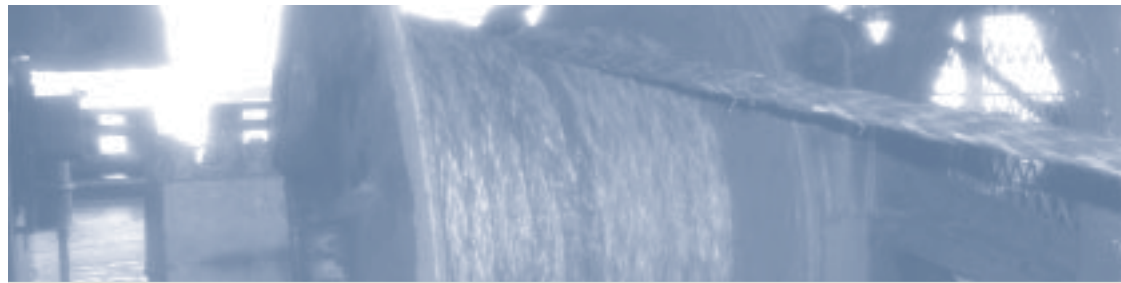
### SPLICING PROCEDURES REQUIRED:

- EYE SPLICE –  
12-Strand/Class II Rope
- END FOR END SPLICE –  
12-Strand/Class II Rope

SAMSON



8x3-STRAND™



## FORCE-8: A UNIQUE, PATENTED CONSTRUCTION DYNEEMA MOORING LINE WITH A FIRM CROSS SECTION SPECIALLY DESIGNED FOR SINGLE/SPLIT DRUM WINCH APPLICATIONS.

### FEATURES:

- 8x3™ Torque-free braided construction minimizes drum compression
- A floating, flexible Dyneema SK-75 HMPE fiber rope
- Lightweight handling for crews with increased safety
- Ease of splicing and excellent UV resistance

### APPLICATIONS:

- Primary vessel mooring line
- Face and wing wires for push tugs
- First line ashore salvage line
- Small vessel emergency tow line
- Deep water lifting line

The unique, patented construction has a firm cross-section designed for single drum and split drum winch applications. The firm construction results in reduced compression and minimizes diving on the drum, while still providing the high strength, low weight, and excellent flex fatigue resistance of a Dyneema rope.

The Samthane coating applied to the rope gives added wear protection without impacting flexibility or ease of splicing. Force-8™ is available in long continuous production block creel lengths to meet the needs of deep water mooring or lifting projects. The design of Force-8 allows for easy visual inspection and verification of internal and external strand wear.

Recommended for split drum or single drum winch applications; not recommended for use on H-bitts, capstans or cleats if surging or rendering the rope is required.

## FORCE-8

PRODUCT CODE: 871

### TECHNICAL SPECIFICATIONS:

CLASS II ROPE

SPECIFIC GRAVITY:

.98 (floats)

### ELASTIC ELONGATION PERCENTAGE:

At % of break strength

10% ..... 0.70%

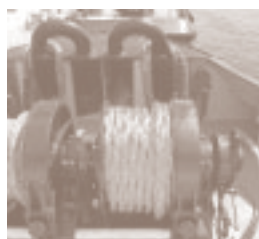
20% ..... 0.90%

30% ..... 1.20%

### SPLICING PROCEDURES REQUIRED:

- EYE SPLICE –  
8x3-Strand/Class II Rope
- END FOR END SPLICE –  
8x3-Strand/Class II Rope

Size Dia. Inches	Size Circ. Inches	Weight lbs. Per 100 FT.	SRT MBS/lbs.	Size Dia. mm	Weight KG Per 100 M	SRT MBS/Metric Tonnes	ISO/BS EN919 Strength/Metric Tonnes
1"	3"	21.6 lbs.	85,100 lbs.	24mm	32.1 Kg	38.6 MT	42.9 MT
1-1/16"	3-1/4"	25.3 lbs.	98,100 lbs.	26mm	37.6 Kg	44.5 MT	49.5 MT
1-1/8"	3-1/2"	29.2 lbs.	113,000 lbs.	28mm	43.4 Kg	51.3 MT	56.6 MT
1-1/4"	3-3/4"	33.4 lbs.	127,000 lbs.	30mm	49.7 Kg	57.7 MT	64.0 MT
1-5/16"	4"	37.9 lbs.	143,000 lbs.	32mm	56.4 Kg	64.7 MT	71.9 MT
1-3/8"	4-1/8"	41.0 lbs.	152,000 lbs.	34mm	61.0 Kg	68.9 MT	76.6 MT
1-1/2"	4-1/2"	47.6 lbs.	176,000 lbs.	36mm	70.8 Kg	80.0 MT	88.9 MT
1-5/8"	5"	58.5 lbs.	213,000 lbs.	40mm	87.0 Kg	96.7 MT	107.0 MT
1-3/4"	5-1/2"	70.4 lbs.	253,000 lbs.	44mm	105.0 Kg	115.0 MT	127.0 MT
2"	6"	83.4 lbs.	296,000 lbs.	48mm	124.0 Kg	134.0 MT	149.0 MT



### PRODUCT SPOTLIGHT

Samson uses Dyneema SK-75 HMPE (High Modulus PolyEthylene) fiber for high performance ropes to maximize strength and minimize weight. Dyneema SK-75 represents the most technically advanced "virgin" HMPE fiber available for rope manufacturing. Since it is not a "post-drawn" or "heat-set" HMPE fiber, SK-75 translates into Samson ropes with the highest flex-fatigue resistance and longest service life; superior to other synthetics such as nylon, olefins, polyester or aramids.

FORCE-8™



## NEUTRON-8: THE STRONGEST ROPE MADE BY SAMSON. PATENTED 8x3-STRAND™ DYNEEMA CONSTRUCTION WITH A FIRM CROSS SECTION FOR USE ON WINCHES.

### FEATURES:

- Firm shape retention on single drum winch applications
- Available in large diameter sizes and long lengths without internal braider splices
- Low stretch, high durability and easy to splice
- A flexible Dyneema SK-75 HMPE fiber rope
- A floating wire rope replacement

### APPLICATIONS:

- Tractor Tug single drum assist/ Maneuvering Lines
- Specialized deep water mooring or lifting projects
- First line ashore/emergency tow line
- Wire rope lifting sling replacement

Neutron-8™ is an excellent floating replacement for large diameter wire rope or chain. The unique, patented Dyneema construction results in the highest strength to weight ratio, with reduced compression and less diving on winch drums. Neutron-8's features make it ideal for tractor tug working lines and a variety of specialty deep water applications where long lengths, high strength and low weight are critical.

If high strength, flexibility and lightweight are the prime performance requirements for your application, Neutron-8 sets the standard.

Recommended for split drum or single drum winch applications; not recommended for use on H-bitts, capstans or cleats if surging or rendering the rope is required.



8x3-STRAND™

NEUTRON-8™

Size Dia. Inches	Size Circ. Inches	Weight lbs. Per 100 FT.	SRT MBS/lbs.	Size Dia. mm	Weight KG Per 100 M	SRT MBS/Metric Tonnes	ISO/BS EN919 Strength/Metric Tonnes
2"	6"	89.8 lbs.	405,000 lbs.	48mm	134.0 Kg	184.0 MT	204.0 MT
2-1/8"	6-1/2"	101.0 lbs.	441,000 lbs.	52mm	151.0 Kg	200.0 MT	222.0 MT
2-1/4"	7"	114.0 lbs.	491,000 lbs.	56mm	169.0 Kg	223.0 MT	247.0 MT
2-1/2"	7-1/2"	140.0 lbs.	596,000 lbs.	60mm	209.0 Kg	270.0 MT	300.0 MT
2-5/8"	8"	155.0 lbs.	652,000 lbs.	64mm	230.0 Kg	296.0 MT	328.0 MT
2-3/4"	8-1/2"	170.0 lbs.	711,000 lbs.	68mm	253.0 Kg	322.0 MT	358.0 MT
3"	9"	202.0 lbs.	835,000 lbs.	72mm	301.0 Kg	379.0 MT	421.0 MT
3-1/4"	10"	237.0 lbs.	998,000 lbs.	80mm	353.0 Kg	453.0 MT	503.0 MT
3-5/8"	11"	295.0 lbs.	1,185,000 lbs.	88mm	439.0 Kg	538.0 MT	597.0 MT
4"	12"	359.0 lbs.	1,422,000 lbs.	96mm	535.0 Kg	645.0 MT	717.0 MT
4-1/4"	13"	406.0 lbs.	1,591,000 lbs.	104mm	603.0 Kg	722.0 MT	802.0 MT
4-5/8"	14"	480.0 lbs.	1,861,000 lbs.	112mm	715.0 Kg	844.0 MT	938.0 MT
5"	15"	561.0 lbs.	2,150,000 lbs.	120mm	835.0 Kg	975.0 MT	1,084.0 MT
5-1/4"	16"	619.0 lbs.	2,354,000 lbs.	128mm	921.0 Kg	1,068.0 MT	1,186.0 MT
5-1/2"	17"	679.0 lbs.	2,565,000 lbs.	136mm	1010.0 Kg	1,163.0 MT	1,293.0 MT
6"	18"	808.0 lbs.	3,013,000 lbs.	144mm	1200.0 Kg	1,367.0 MT	1,519.0 MT

## NEUTRON-8

PRODUCT CODE: 867

### TECHNICAL SPECIFICATIONS:

CLASS II ROPE

SPECIFIC GRAVITY:

.98 (floats)

ELASTIC ELONGATION PERCENTAGE:

At % of break strength

10% ..... 0.70%

20% ..... 0.90%

30% ..... 1.20%

SPlicing PROCEDURES REQUIRED:

- EYE SPLICE – 8x3-Strand/Class II Rope
- END FOR END SPLICE – 8x3-Strand/Class II Rope

### PRODUCT SPOTLIGHT



Samson pioneered the implementation of HMPE tug assist lines with Amsteel-Blue. The extremely lightweight, low water absorbing braided Dyneema ropes have replaced wire rope or other larger circumference and heavier polyester working lines. Products such as Amsteel-Blue, Neutron-8, and Proton 8 allow tug operators to handle lines with fewer crew members, thus saving money.

SAMSON



8-STRAND



## PROTON 8: THE GRIP NEEDED FOR H-BITT OPERATIONS, WITH THE STRENGTH OF DYNEEMA IN A FIRM YET FLEXIBLE ROPE.

### FEATURES:

- High grip and heat resistance
- High strength to weight ratio with low water absorption for lightweight handling
- Flexible, torque-free 8-strand with a firm cross-section
- Easy to field splice

### APPLICATIONS:

- Tug Assist/Maneuvering Lines on H-bitts
- Primary or secondary vessel mooring lines
- Ship “tug” lines – stored on winch drum or faked on deck
- Barge tie-up lines

PROTON® 8 IS AN EXCELLENT VERSATILE DYNEEMA HMPE ROPE WHICH PROVIDES COST SAVING BENEFITS IN A MULTITUDE OF MARINE APPLICATIONS.

Proton 8 uses Dyneema SK-75 for high strength and low weight with a polyester overlay to provide the heat resistance and grip necessary for use on bitts and capstans. Its firm, flexible, torque-free construction performs well on both single and split drum winches.

Compared to all polyester or polyester/polypro combo ropes, Proton 8 is over twice as strong and weighs less size for size. It provides substantially better service life, is almost neutrally buoyant, and has low water absorption for ease and speed of handling during deployment and retrieval. The yellow Samthane coating insures maximum wear resistance and service life while making Proton 8 highly visible.

This unique Dyneema working line is a proven solution to the problem of large, heavy ropes that are difficult to manage, and add opportunity for crew injury.

Designed for use on H-bitts and capstans for surging and rendering.

## PROTON 8

PRODUCT CODE: 830

### TECHNICAL SPECIFICATIONS:

CLASS II ROPE

SPECIFIC GRAVITY:

1.09

### ELASTIC ELONGATION PERCENTAGE:

At % of break strength

10% ..... 0.58%

20% ..... 0.87%

30% ..... 0.96%

### SPLICING PROCEDURES REQUIRED:

- EYE SPLICE –  
8-Strand/Class II Rope
- END FOR END SPLICE –  
8-Strand/Class II Rope

Size Dia. Inches	Size Circ. Inches	Weight lbs. Per 100 FT.	SRT MBS/lbs.	Size Dia. mm	Weight KG Per 100 M	SRT MBS/Metric Tonnes	ISO/BS EN919 Strength/Metric Tonnes
1"	3"	25.0 lbs.	54,900 lbs.	24mm	37.2 Kg	24.9 MT	27.7 MT
1-1/8"	3-1/2"	30.5 lbs.	68,900 lbs.	28mm	45.4 Kg	31.3 MT	34.7 MT
1-1/4"	3-3/4"	38.5 lbs.	86,900 lbs.	30mm	57.3 Kg	39.4 MT	43.8 MT
1-5/16"	4"	41.5 lbs.	104,000 lbs.	32mm	61.8 Kg	47.2 MT	52.4 MT
1-3/8"	4-1/8"	46.0 lbs.	108,000 lbs.	34mm	68.4 Kg	48.8 MT	54.2 MT
1-1/2"	4-1/2"	55.4 lbs.	125,000 lbs.	36mm	82.4 Kg	56.7 MT	63.0 MT
1-5/8"	5"	68.0 lbs.	140,000 lbs.	40mm	101.0 Kg	63.5 MT	70.6 MT
1-3/4"	5-1/2"	74.8 lbs.	190,000 lbs.	44mm	111.0 Kg	86.0 MT	95.5 MT
2"	6"	99.0 lbs.	238,000 lbs.	48mm	147.0 Kg	108.0 MT	120.0 MT
2-1/8"	6-1/2"	112.0 lbs.	277,000 lbs.	52mm	167.0 Kg	126.0 MT	140.0 MT
2-1/4"	7"	125.0 lbs.	316,000 lbs.	56mm	186.0 Kg	143.0 MT	159.0 MT
2-3/8"	7-1/8"	140.0 lbs.	383,000 lbs.	57mm	208.0 Kg	173.0 MT	193.0 MT
2-1/2"	7-1/2"	149.0 lbs.	396,000 lbs.	60mm	222.0 Kg	180.0 MT	200.0 MT
2-5/8"	8"	172.0 lbs.	436,000 lbs.	64mm	257.0 Kg	198.0 MT	219.0 MT
2-3/4"	8-1/2"	188.0 lbs.	468,000 lbs.	68mm	280.0 Kg	212.0 MT	236.0 MT
3"	9"	198.0 lbs.	542,000 lbs.	72mm	294.0 Kg	246.0 MT	273.0 MT
3-1/4"	10"	254.0 lbs.	628,000 lbs.	80mm	378.0 Kg	285.0 MT	317.0 MT



## DPX-75: THE BEST JACKETED DYNEEMA MOORING LINE AVAILABLE, WITH OVER TWICE THE SERVICE LIFE OF WIRE ROPES.

### FEATURES:

- DPX fiber jacket provides excellent grip on winch drums and heat resistance
- One-sixth the weight of wire rope and it floats
- Firm round cross-section for superior winch performance
- Lightweight handling performance reduces mooring related injuries

### APPLICATIONS:

- Primary mooring lines for single or split drum winches
- Winch line for deep water lifting projects

DPX-75 WAS CREATED THROUGH AmSTEEL-BLUE 12-STRAND CORE TECHNOLOGY COMBINED WITH A PROPRIETARY BRAIDED JACKET DESIGN OF DYNEEMA AND POLYESTER FIBERS.

A unique bonding material combines the cover and 12-strand core of Dyneema SK-75 to insure no movement between the two components. This construction creates a very firm round rope that will have minimal flattening under load and little tendency to dive or jam on winch drums.

DPX-75™ was designed to replace wire rope on winch drums but not to serve as a marine working rope. This firm construction works extremely well as a mooring or winch line.

When a jacketed mooring line is preferred, DPX-75 will give the maximum mooring line performance on the market.

A standard cover repair kit is available and easy to field apply. This product design requires a specialized splicing technique that does not facilitate field splicing.



CORE DEPENDANT

Size Dia. Inches	Size Circ. Inches	Weight lbs. Per 100 FT.	SRT MBS/lbs.	Size Dia. mm	Weight KG Per 100 M	SRT MBS/Metric Tonnes	ISO/BS EN919 Strength/Metric Tonnes
1-1/8"	3-1/2"	33.0 lbs.	113,000 lbs.	28mm	49.1 Kg	51.3 MT	56.7 MT
1-1/4"	3-3/4"	36.0 lbs.	135,000 lbs.	30mm	53.6 Kg	61.2 MT	68.0 MT
1-5/16"	4"	42.0 lbs.	149,000 lbs.	32mm	62.5 Kg	67.6 MT	74.8 MT
1-3/8"	4-1/8"	45.0 lbs.	167,000 lbs.	34mm	67.0 Kg	75.7 MT	83.9 MT
1-1/2"	4-1/2"	51.5 lbs.	189,000 lbs.	36mm	76.6 Kg	85.7 MT	95.3 MT
1-5/8"	5"	58.0 lbs.	225,000 lbs.	40mm	86.3 Kg	102.0 MT	113.0 MT
1-11/16"	5-1/4"	65.0 lbs.	252,000 lbs.	42mm	96.7 Kg	114.0 MT	127.0 MT
1-3/4"	5-1/2"	69.5 lbs.	275,000 lbs.	44mm	103.0 Kg	125.0 MT	138.0 MT
2"	6"	84.5 lbs.	329,000 lbs.	48mm	126.0 Kg	149.0 MT	166.0 MT

## DPX-75

PRODUCT CODE: 865

### TECHNICAL SPECIFICATIONS:

CLASS II ROPE

SPECIFIC GRAVITY:  
1.00

### ELASTIC ELONGATION PERCENTAGE:

At % of break strength  
10% ..... 0.33%  
20% ..... 0.49%  
30% ..... 0.76%

### SPLICING PROCEDURES REQUIRED:

- EYE SPLICE – Product specific

DPX-75™



### PRODUCT SPOTLIGHT

Samson engineering has significantly increased the COF (coefficient of friction) of Dyneema HMPE fiber through the creation of DPX fiber. DPX is a unique blend of Dyneema (high strength, lightweight, high cut and abrasion resistance) and polyester (high heat resistance and higher COF) DPX provides a "prefuzzed" fiber appearance which wears well and grips winch drums. DPX – another Samson innovation.

SAMSON



CORE DEPENDANT



## TURBO-75: A ROBUST, BRAID ON BRAID CONSTRUCTION, 100% HMPE FIBER WINCH LINE DESIGNED TO REPLACE WIRE ROPE IN MOORING OR TRAWL SYSTEMS.

### FEATURES:

- Excellent single drum spooling capabilities
- Lightweight flexible handling
- Superior drum compression resistance
- Retains hard round shape during use
- Stout Dyneema HMPE fiber protective cover provides superior wear characteristics

### APPLICATIONS:

- Single or split drum winch primary mooring lines for ATBs or other vessels
- Wire rope replacements in commercial fishing trawl systems
- "Tugger" winch lines for AHVs
- Deep water lifting projects

### PROVEN EFFECTIVE AS A GILSON WIRE ROPE REPLACEMENT IN THE TOUGHEST TRAWL COMMERCIAL FISHING APPLICATIONS.

Turbo-75 has the relative firmness and low stretch of wire, yet only 1/6th the weight. The durable "turbo" Dyneema braided jacket is very cut and abrasion resistant, and protects the strength member 12-strand single braid Dyneema core. For tough winch rope applications where the weight and inflexibility of wire rope is a problem, Turbo-75 is ideal. It spools on winches very well, does not rust or "fish hook" like wire rope, and it floats!

Both cover and core are coated with a proprietary Samthane coating. The superior fiber, design, and construction all create a rope which can have a service life 2-3 times that of wire rope.

A standard cover repair kit is available and easy to field apply. This product design requires a specialized splicing technique that does not facilitate field splicing.

## TURBO-75

PRODUCT CODE: 864

### TECHNICAL SPECIFICATIONS:

CLASS II ROPE

SPECIFIC GRAVITY:  
.98

### ELASTIC ELONGATION PERCENTAGE:

- At % of break strength
- 10% ..... 0.33%
- 20% ..... 0.49%
- 30% ..... 0.76%

### SPLICING PROCEDURES REQUIRED:

- EYE SPLICE – Product specific

Size Dia. Inches	Size Circ. Inches	Weight lbs. Per 100 FT.	SRT MBS/lbs.	Size Dia. mm	Weight KG Per 100 M	SRT MBS/Metric Tonnes	ISO/BS EN919 Strength/Metric Tonnes
1"	3"	25.0 lbs.	87,300 lbs.	24mm	37.2 Kg	39.6 MT	44.0 MT
1-1/8"	3-1/2"	29.5 lbs.	113,000 lbs.	28mm	43.9 Kg	51.3 MT	56.7 MT
1-1/4"	3-3/4"	38.5 lbs.	135,000 lbs.	30mm	57.3 Kg	61.2 MT	68.0 MT
1-3/8"	4-1/8"	48.0 lbs.	167,000 lbs.	34mm	71.4 Kg	75.7 MT	83.9 MT
1-1/2"	4-1/2"	59.5 lbs.	189,000 lbs.	36mm	88.5 Kg	85.7 MT	95.3 MT
1-5/8"	5"	67.0 lbs.	225,000 lbs.	40mm	99.7 Kg	102.0 MT	113.0 MT
1-3/4"	5-1/2"	80.5 lbs.	275,000 lbs.	44mm	120.0 Kg	125.0 MT	138.0 MT
2"	6"	93.0 lbs.	329,000 lbs.	48mm	138.0 Kg	149.0 MT	166.0 MT
2-1/8"	6-1/2"	105.0 lbs.	351,000 lbs.	52mm	156.0 Kg	159.0 MT	177.0 MT
2-1/4"	7"	120.0 lbs.	405,000 lbs.	56mm	179.0 Kg	184.0 MT	204.0 MT

TURBO-75

# VALIDATOR I2: DESIGNED FOR DEEP WATER LIFTING PROJECTS AND TOWED OR SUB SURFACE TAUT ARRAY SYSTEMS THAT REQUIRE A NON-FLOATING ROPE.

### FEATURES:

- Very high strength with low stretch
- Non rotational/free running flexible construction
- High wear and heat resistance
- Fast easy splicing

### APPLICATIONS:

- Towed or taut array systems
- Deep water lowering and retrieval lines

Validator 12™ is an extremely high strength, low stretch, non rotational 12-strand braid of Samthane coated Vectran® fiber. It is designed to meet the needs of deep water lifting projects and towed or sub surface taut array systems that require a non-floating rope. Based on its strength, size can be minimized to reduce drag and vortex strumming effects.



12-STRAND

Size Dia. Inches	Size Circ. Inches	Weight lbs. Per 100 FT.	SRT MBS/lbs.	Size Dia. mm	Weight KG Per 100 M	SRT MBS/Metric Tonnes	ISO/BS EN919 Strength/Metric Tonnes
7/64"	5/16"	0.5 lbs.	1,800 lbs.	2.5mm	0.7 kg	0.8MT	0.9 MT
1/8"	3/8"	0.6 lbs.	2,400 lbs.	3mm	0.9 kg	1.1MT	1.2 MT
3/16"	9/16"	1.3 lbs.	5,000 lbs.	5mm	1.9 kg	2.3MT	2.5 MT
1/4"	3/4"	2.2 lbs.	8,500 lbs.	6mm	3.3 kg	3.9MT	4.3 MT
5/16"	1"	3.6 lbs.	12,600 lbs.	8mm	5.4 kg	5.7MT	6.4 MT
3/8"	1-1/8"	4.6 lbs.	17,600 lbs.	9mm	6.8 kg	8.0MT	8.8 MT
7/16"	1-1/4"	6.1 lbs.	21,200 lbs.	11mm	9.1 kg	9.6MT	10.7 MT
1/2"	1-1/2"	8.8 lbs.	31,500 lbs.	12mm	13.1 kg	14.3 MT	15.9 MT
9/16"	1-3/4"	10.8 lbs.	38,700 lbs.	14mm	16.1 kg	17.6 MT	19.5 MT
5/8"	2"	14.0 lbs.	49,500 lbs.	16mm	20.8 kg	22.5 MT	24.9 MT

### TECHNICAL SPECIFICATIONS:

#### CLASS II ROPE

**SPECIFIC GRAVITY:** 1.40

#### ELASTIC ELONGATION PERCENTAGE:

At % of break strength

10% ..... 0.49%

20% ..... 0.78%

30% ..... 0.98%

#### SPLICING PROCEDURES REQUIRED:

- EYE SPLICE – 12-Strand/Class II Rope
- END FOR END SPLICE – 12-Strand/Class II Rope

# TECH-I2: HIGH STRENGTH AND HEAT RESISTANCE, WITH LOW STRETCH AND SUPERIOR FLEX-FATIGUE CHARACTERISTICS.

### FEATURES:

- High strength/low stretch
- Flexible non rotational construction
- High heat resistance
- Easy to splice • Negligible creep/cold flow

### APPLICATIONS:

- Deep water lift lines
- Towed or taut moored array systems

Tech-12™ is a very high strength and heat resistant, non-rotational Samthane coated 12-strand single braid rope that offers the low stretch of an aramid fiber but with superior flex-fatigue. This Technora® fiber rope construction has negligible creep or cold flow characteristics and yields excellent control stability for equipment installations over a long period of time.



12-STRAND

Size Dia. Inches	Size Circ. Inches	Weight lbs. Per 100 FT.	SRT MBS/lbs.	Size Dia. mm	Weight KG Per 100 M	SRT MBS/Metric Tonnes	ISO/BS EN919 Strength/Metric Tonnes
1/8"	3/8"	0.6 lbs.	2,500 lbs.	3mm	0.9 kg	1.1 MT	1.3 MT
3/16"	9/16"	1.3 lbs.	5,000 lbs.	5mm	1.9 kg	2.3 MT	2.5 MT
1/4"	3/4"	1.9 lbs.	7,400 lbs.	6mm	2.8 kg	3.4 MT	3.7 MT
5/16"	1"	3.2 lbs.	11,700 lbs.	8mm	4.8 kg	5.3 MT	5.9 MT
3/8"	1-1/8"	4.3 lbs.	16,200 lbs.	9mm	6.4 kg	7.3 MT	8.2 MT
7/16"	1-1/4"	6.7 lbs.	25,200 lbs.	11mm	10.0 kg	11.4 MT	12.7 MT
1/2"	1-1/2"	8.0 lbs.	29,700 lbs.	12mm	11.9 kg	13.5 MT	15.0 MT
5/8"	2"	13.5 lbs.	38,700 lbs.	16mm	20.1 kg	17.6 MT	19.5 MT
3/4"	2-1/4"	19.3 lbs.	58,500 lbs.	18mm	28.7 kg	26.5 MT	29.5 MT
7/8"	2-3/4"	25.3 lbs.	75,600 lbs.	22mm	37.6 kg	34.3 MT	38.1 MT
1"	3"	31.1 lbs.	91,800 lbs.	24mm	46.3 kg	41.6 MT	46.3 MT

### TECHNICAL SPECIFICATIONS:

#### CLASS II ROPE

**SPECIFIC GRAVITY:**

1.39

#### ELASTIC ELONGATION PERCENTAGE:

At % of break strength

10% ..... 0.63%

20% ..... 0.96%

30% ..... 1.20%

#### SPLICING PROCEDURES REQUIRED:

- EYE SPLICE – 12-Strand/Class II Rope
- END FOR END SPLICE – 12-Strand/Class II Rope

VALIDATOR I2™

TECH-I2™