Marlow®

ARBORICULTURE

FOR LIFE ON THE EDGE

ISSUE 7

TURNING THE TIDE TOWARDS SUSTAINABLE MANUFACTURING

BLUE OCEAN

MADE FROM 100% RECYCLED PLASTIC

MARLOW'S BLUE OCEAN COMMITMENT

At Marlow Ropes we are turning the tide on how we manufacture – the energy we use, the materials we source and the waste we produce. As a leading manufacturer we ensure that we operate an efficient and ethical plant, enabling a sustainable future for manufacturing in the UK.

As a rope-maker, we recognise that our activities will have an effect on both the local and global environment and we are committed to ensuring that the negative effect is minimised as far as is practical. With this in mind, we combine our sustainability actions and the eco-conscious products we develop under the one BLUE OCEAN® brand.

Since 2018, Marlow's ability to innovate has driven our sustainability initiatives, and with the introduction of bio-based Dyneema®, alongside our Blue Ocean® rPET yarn, we are proud to now offer products manufactured using sustainable fibres.

"WE HAVE WORKED HARD OVER THE LAST COUPLE OF YEARS TO ELIMINATE AS MUCH WASTE AND PLASTIC FROM OUR ROPE RANGES AS POSSIBLE. WE ARE ALWAYS LOOKING AT NEW PRODUCTS ON THE MARKET TO HELP US WITH OUR SUSTAINABILITY GOALS, AND ARE PROUD TO BE TO BE HELPING TO DRIVE CHANGE IN THE ROPE MAKING INDUSTRY"

JON MITCHELL,
MANAGING DIRECTOR

BLUE OCEAN INITIATIVES

Our sustainability mission doesn't end with product development. We have made improvements across many areas of our business including:

- **USING RECYCLABLE SUGAR CANE PLASTIC PACKAGING FOR ALL PRODUCT PACKAGING & SHIPPING SUPPLIES**
- **USING FSC CERTIFIED CARD & PAPER IN ALL SHIPPING AND MARKETING SUPPLIES**
- **USING RENEWABLY SOURCED ELECTRICITY TO REDUCE OUR ANNUAL CARBON CONSUMPTION BY 171 TONNES**
- **AIMING TO RECYCLE AT LEAST 70% OF POST-PRODUCTION FIBRE WASTE**
- **SWITCHING TO SEA FREIGHT FOR USA SHIPMENTS THEREBY REDUCING CARBON EMISSIONS BY 24% PER SHIPMENT**

CLIMBING ROPES

NEW PRODUCT

VESPER

NEW for 2022, Vesper is an 11.8mm tree climbing line with an all polyester construction providing a low elongation rope with good friction and heat resistance.

Vesper is fully compliant with EN 1891 as a type A rope and is both CE and UKCA certified. Available in two high visibility colours with or without a ultra low-profile splice termination.

COLOURS ORANGE/BLUE OR PURPLE/GREEN

TERMINATIONS LOW PROFILE SPLICE OR SEWN

THE ULTRA LOW-PROFILE SPLICED EYE ALLOWS EASY THREADING OF APPROVED CLIMBING DEVICES.

GECKO

GECKO FCR ORANGE

BLUE OCEAN® GECKO

Designed as a traditional 13mm climbing rope for double rope technique, the Gecko climbing ropes have a tough and durable 16 plait polyester cover making the rope supple and hardwearing - ideal for use with friction hitches.

Now featuring our sustainable Blue Ocean® Gecko, made from recycled plastic these 13mm diameter ropes are easy to handle and come in a range of colours for identification and safety. Serial numbered factory terminations for regulatory compliance.

COLOURS RED/LIME
TERMINATIONS LOW PROFILE SPLICE OR SEWN

COLOURS ORANGE /WHITE
TERMINATIONS LOW PROFILE SPLICE OR SEWN

COLOURS BLUE/GREY
TERMINATIONS LOW-PROFILE SPLICE OR SEWN

VEGA

Vega is CE EN 1891 certified and conforms to ANSI Z133. This light-weight arborist climbing rope boasts one of the lowest elongations currently on the market (1.2%). Designed specifically for the new generation of mechanical climbing devices and modern climbing techniques.

Vega has a tough polyester core that provides extremely low elongation whilst also being energy absorbing, ideal for SRT climbing. The 24 plait polyester jacket gives a rope with exceptional flexibility and handling without compromising on durability.

*** SEE PAGE 22 FOR MORE TECHNICAL INFORMATION ON TEST STANDARDS**

COLOURS GREEN/GREY OR ORANGE/GREY
TERMINATIONS LOW-PROFILE SPLICE OR SEWN

VENOM

Venom is a lightweight 11.8mm arborist climbing line designed for the new generation of mechanical climbing devices and modern climbing techniques, either on single or doubled rope. Venom has a braided nylon core that works with the 24-plait jacket to give a rope with exceptional flexibility and handling without compromising durability.

Perfect flexibility and diameter for compatibility with the latest climbing devices. Excellent energy absorption for safety. Light-weight for easy handling. Serial numbered factory terminations for regulatory compliance.

COLOURS ORANGE/RED OR BLUE/YELLOW
TERMINATIONS LOW PROFILE SPLICE OR SEWN

SPECIFICATIONS

ROPE NAME	ALL GECKO ROPES	VEGA	VENOM	VESPER
APPLICATIONS	CLIMBING	CLIMBING	CLIMBING	CLIMBING
DIAMETER (mm)	13mm	11.7mm	11.8mm	11.8mm
LENGTHS (m)	25m, 35m, 45m, 200m	25m, 35m, 45m, 200m	25m, 35m, 45m, 200m	25m, 35m, 45m, 200m
WEIGHT (g/m)	125.4g/m	100.9g/m	89.7g/m	107.9g/m
WEIGHT COVER (g/m)	91.4g/m	55.6g/m	37.7g/m	56.3g/m
WEIGHT CORE (g/m)	34.0g/m	45.2g/m	51.8g/m	51.8g/m
AVERAGE BREAKLOAD (kN)	32.1kN	36.8kN	33.5kN	29.7kN
TEST STANDARDS	UKCA CE EN 1891 TYPE A, ANSI Z133	UKCA CE EN 1891 TYPE A, ANSI Z133	UKCA CE EN 1891 TYPE A, ANSI Z133	UKCA CE EN 1891 TYPE A, ANSI Z133
COVER MATERIAL	POLYESTER	POLYESTER	NYLON	POLYESTER
CORE MATERIAL	POLYESTER	POLYESTER	NYLON	POLYESTER

ACCESSORY CORDS

BLUE OCEAN® BOA CORD

The Blue Ocean® Boa is an accessory cord with a hardwearing 16 plait cover made with our sustainably manufactured Blue Ocean® yarn.

The anti-kink construction means Boa is ideal for use as a prussik and other friction hitches, offering easy knot tying and good grip.

SPECIFICATIONS

APPLICATIONS	PRUSSIK
DIAMETER (mm)	9mm
LENGTHS (m)	200m reels
WEIGHT (g/m)	65.1g/m
AVERAGE BREAKLOAD (kN)	20.6kN
TEST STANDARDS	CE APPROVED
COVER MATERIAL	BLUE OCEAN® YARN
CORE MATERIAL	POLYESTER

COLOURS BLUE/BLACK

TERMINATIONS N/A

BLUE OCEAN® BOA LOOP

Factory terminated, CE certified loop made using Blue Ocean® yarn.

High stength termination conforms to CE EN 566. Serial numbered, factory CNC sewn terminations for regulatory compliance.

SPECIFICATIONS

APPLICATIONS	PRUSSIK
DIAMETER (mm)	9mm
LENGTHS (m)	0.5m/0.6m/0.7m
WEIGHT (g/m)	71.6g/84.6g/97.7g
AVERAGE BREAKLOAD (kN)	27.4kN
TEST STANDARDS	CE EN 566
COVER MATERIAL	BLUE OCEAN® YARN
CORE MATERIAL	POLYESTER

COLOURS BLUE/BLACK

TERMINATIONS N/A

Marlow's Blue Ocean® yarn is GRS certified and manufactured from 100% recycled plastic.

BOA CORD

Marlow Boa has a hardwearing 16 plait polyester cover with a braided polyester core. This anti-kink construction means Boa is ideal for use as a prussik and other friction hitches, offering easy knot tying and good grip.

High tenacity polyester balances economy and performance. Tough 16 plait construction for durability and flexibility.

SPECIFICATIONS

APPLICATIONS	PRUSSIK
DIAMETER (mm)	9mm
LENGTHS (m)	200m reels
WEIGHT (g/m)	65.1g/m
AVERAGE BREAKLOAD (kN)	20.6kN
TEST STANDARDS	CE APPROVED
COVER MATERIAL	POLYESTER
CORE MATERIAL	POLYESTER

COLOURS	BLACK/LIME
TERMINATIONS	N/A

BOA LOOP

Factory terminated, CE certified loop made using the tough and proven anti-kink Boa cord.

High stength termination conforms to CE EN 566. Serial numbered, factory CNC sewn terminations for regulatory compliance.

SPECIFICATIONS

APPLICATIONS	PRUSSIK
DIAMETER (mm)	9mm
LENGTHS (m)	50cm / 60cm / 70cm
UNIT WEIGHT (g)	71.6g / 84.6g / 97.7g
AVERAGE BREAKLOAD (kN)	27.4kN
TEST STANDARDS	CE EN 566
COVER MATERIAL	POLYESTER
CORE MATERIAL	POLYESTER

COLOURS	BLACK/ LIME
TERMINATIONS	SEWN LOOP

VIPER CORD

Marlow Viper is a Vectran® / polyester accessory cord designed for use as a high performance friction cord where heat generation is an issue. The high melting point of Vectran® prolongs the working life of the cord in tough or heavy use conditions.

High strength and heat resistant Vectran® cover for longevity in heavy use. 24 plait construction offers easy knotability in a smaller diameter and consistent friction performance.

SPECIFICATIONS

APPLICATIONS	PRUSSIK	PRUSSIK
DIAMETER (mm)	8mm	10mm*
LENGTHS (m)	200m reels	100m reels
WEIGHT (g/m)	44.8g/m	57.0g/m
AVERAGE BREAKLOAD (kN)	18.8kN	27.9kN
TEST STANDARDS	CE EN 564	N/A
COVER MATERIAL	VECTRAN®/ POLYESTER	VECTRAN® / POLYESTER
CORE MATERIAL	POLYPROPYLENE	POLYPROPYLENE

* 10mm is not CE Certified

COLOURS	BLUE/NATURAL	GREY/NATURAL
TERMINATIONS	N/A	N/A

VIPER LOOP

Factory terminated, CE certified loop made using the durable and heat resistant Viper cord.

High stength termination conforms to CE EN 566. Serial numbered, factory CNC sewn terminations for regulatory compliance.

SPECIFICATIONS

APPLICATIONS	PRUSSIK
DIAMETER (mm)	8mm
LENGTHS (m)	50cm / 60cm / 70cm
UNIT WEIGHT (g)	49.3g / 58.2g / 67.2g
AVERAGE BREAKLOAD (kN)	27.2kN
TEST STANDARDS	CE EN 566
COVER MATERIAL	VECTRAN / POLYESTER
CORE MATERIAL	POLYPROPYLENE

COLOURS BLUE/NATURAL

TERMINATIONS SEWN LOOP

VIPER2 SLING

A factory sewn CE certified eye-to-eye sling made using a high strength cord incorporating the proven Viper vectran cover. Viper2 slings have short stitching for efficient technique.

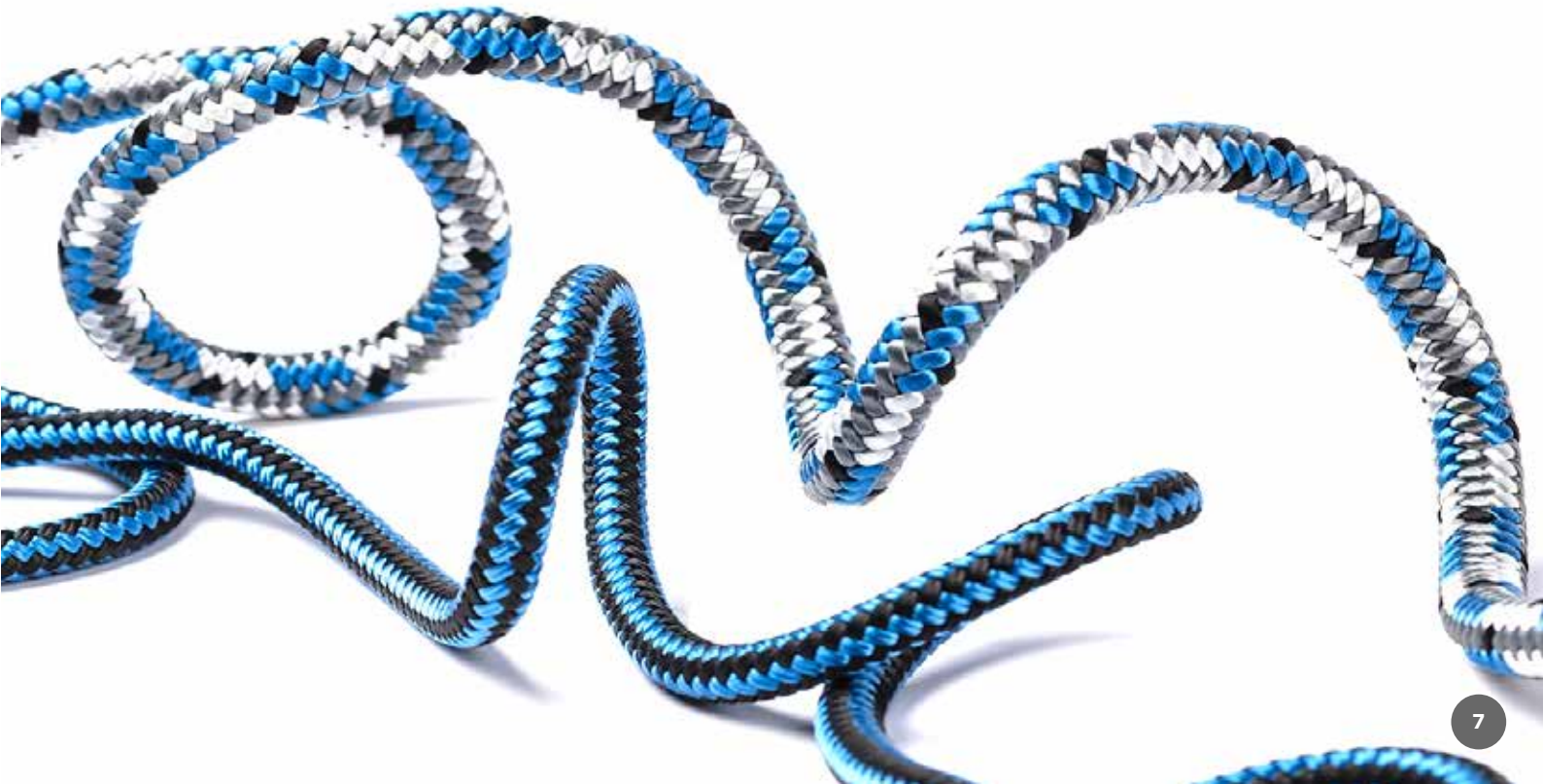
High strength termination conforms to CE EN 566. Serial numbered, factory CNC sewn terminations for regulatory compliance.

SPECIFICATIONS

APPLICATIONS	PRUSSIK
DIAMETER (mm)	8mm
LENGTHS (m)	50cm / 60cm / 70cm / 80cm / 90cm / 1m
UNIT WEIGHT (g)	57.2g / 64.6g / 72g / 75.5g / 80.9g / 86.2g
AVERAGE BREAKLOAD (kN)	23.6kN
TEST STANDARDS	CE EN 566
COVER MATERIAL	VECTRAN / POLYESTER
CORE MATERIAL	VECTRAN

COLOURS PURPLE/NATURAL

TERMINATIONS SEWN LOOP



ACCESSORIES

WIRECORE FLIPLINE

Marlow Fliplines are CE certified work positioning lanyards made using flexible and strong 7x19 galvanised steel wire core with tough 16 plait polyester cover.

Galvanised 7x19 wire provides zero stretch, and is cut resistant. It gives ideal balance of flexibility and weight for improved flip performance. 16 plait polyester cover for excellent abrasion resistance and provides grip against the tree. 13mm diameter compatible with rope grabs and other adjustment methods.

SPECIFICATIONS

APPLICATIONS	WORK POSITIONING
DIAMETER (mm)	13mm
LENGTHS (m)	2m / 3m / 4m / 5m
UNIT WEIGHT (g)	646g/ 864g/ 1082g/ 1300g
AVERAGE BREAKLOAD (kN)	30kN
TEST STANDARDS	CE EN 354
COVER MATERIAL	POLYESTER
CORE MATERIAL	7 X 19 GALVANISED STEEL WIRE

COLOURS ORANGE/BLUE

TERMINATIONS FERRULED EYE WITH OR WITHOUT SNAP HOOKS (FIXED OR SWIVEL) OR GRAB HOOK

SWIVEL HOOK TERMINATION

The swivel hook helps to remove any twist that can get induced during the climb. Available with thimble eyes or with a grab and stopper.

FIXED HOOK TERMINATION

The fixed hook termination reduces weight and clutter on the harness.

FLIPLINE ASSEMBLY WITH ROPE GRAB

Adjustable in length to suit the size of the tree. This system already comes integrated and certified. Available with a fixed eye one end (including fixed or swivel snap hook) and a stopper the other end.

SPECIFICATIONS

APPLICATIONS	WORK POSITIONING
DIAMETER (mm)	13mm
LENGTHS (m)	2m / 3m / 4m / 5m
UNIT WEIGHT (ROPE+ GRAB) (g)	823g/ 1041g/ 1259g/ 1477g
MINIMUM BREAKLOAD (kN)	15kN
TEST STANDARDS	CE EN 358
MAX. USER WEIGHT	140KG
CORE MATERIAL	GALVANISED WIRE

COLOURS ORANGE/BLUE

TERMINATIONS WITH OR WITHOUT SNAP HOOKS (FIXED OR SWIVEL)

SPLIT TAILS

Marlow Split Tails are made from our CE certified Gecko,Venom and Vega climbing ropes. These are finished with strong factory sewn eye termination. Available in 3 lengths.

Serial numbered, factory CNC sewn terminations for regulatory compliance.

GECKO SPECIFICATIONS

APPLICATIONS	CLIMBING SYSTEMS
DIAMETER (mm)	13mm
LENGTHS (m)	1.5m / 3.5m / 5m
UNIT WEIGHT (g)	188g/ 439g/ 627g
AVERAGE BREAKLOAD (kN)	28.3kN
TEST STANDARDS	CE EN 1891 TYPE A, ANSI Z133
COVER MATERIAL	POLYESTER
CORE MATERIAL	POLYESTER

COLOURS RED/LIME

TERMINATIONS SEWN EYE

VEGA SPECIFICATIONS

APPLICATIONS	CLIMBING SYSTEMS
DIAMETER (mm)	11.7mm
LENGTHS (m)	3.5m / 5m
UNIT WEIGHT (g)	373g/525g
AVERAGE BREAKLOAD (kN)	27.8kN
TEST STANDARDS	CE EN 1891 TYPE B, ANSI Z133
COVER MATERIAL	POLYESTER
CORE MATERIAL	POLYESTER

COLOURS GREEN/GREY OR ORANGE/GREY

TERMINATIONS SEWN EYE

VENOM SPECIFICATIONS

APPLICATIONS	CLIMBING SYSTEMS
DIAMETER (mm)	11.8mm
LENGTHS (m)	5m
UNIT WEIGHT (g)	470g
AVERAGE BREAKLOAD (kN)	33.5kN
TEST STANDARDS	CE EN 1891 TYPE A, ANSI Z133
COVER MATERIAL	NYLON
CORE MATERIAL	NYLON

COLOURS ORANGE/RED OR BLUE/YELLOW

TERMINATIONS SEWN EYE

WORK POSITIONING LANYARD

SPECIFICATIONS

DIAMETER (mm)	**11mm**
WEIGHT (g)	188, 261, 355, 409, 517
LENGTHS (m)	2m, 3m, 4m, 5m
AV. BREAKLOAD (kN)	30.9kN
MIN. BREAKLOAD (kN)	22kN
TEST STANDARD	UKCA, CE EN 354
CONSTRUCTION	MULTIPLE TWISTED CORES
COVER CONSTRUCTION	16 PLAIT
CORE MATERIAL	NYLON
COVER MATERIAL	NYLON
TERMINATION OPTIONS	SEWN EYE OR WITH SNAP HOOK (5m ONLY)

MINI SPOOL DISPENSER - RETAIL DISPLAY

Marlow's NEW Mini Spool Dispenser is a great point-of-sale display for till spaces and table-tops, available free of charge when purchased with 16 mini-spool reels from our Throwline range.

Spools can be re-ordered as and when required.

DISPENSER MEASUREMENTS (H X W X D)	200 X 70 X 315mm

THROWLINE

Supplied on handy 50m mini spools, our 2mm Throwline has a smooth and hardwearing polyester cover.

Excellent handling characteristics and excellent longevity. Supplied in multiples of 10.

SPECIFICATIONS

APPLICATIONS	THROWLINE
DIAMETER (mm)	2mm
LENGTHS (m)	50m
WEIGHT (mm)	2.7g/m
MINIMUM BREAKLOAD (kN)	0.97kN
MATERIAL	POLYESTER

COLOUR ORANGE

A BLUE OCEAN® INITIATIVE

SPECIFICATIONS

Dyneema®

APPLICATIONS	THROWLINE
DIAMETER (mm)	1.8mm
WEIGHT (g/m)	2.4g/m
MINIMUM BREAKLOAD (kN)	4.0kN
MATERIAL	BIO BASED DYNEEMA®

COLOUR YELLOW

DYNEEMA® THROWLINE

For easier handling and higher breaking strength, the Dyneema® Throwline is over 3 times as strong as our standard polyester product, but is 12% lighter.

Light, strong and hardwearing. Now made from bio-based Dyneema®.

ROPE BAG

The Marlow rope bag is able to accommodate up to 45m of climbing rope.

COLOUR BLACK

CARGO BACKPACK

40 litre backpack. Features inner zip pocket, Metal hook buckle closure with internal pull cord. Padded shoulder straps. Hauling handle for loads up to 50 kg.

COLOUR BLACK

SEAMLESS TUBE BANDANA

These 100% recycled polyester tubes are the perfect accessory to any arborists tool-kit. Its multi-use function means that it can be used as a bandana, wristband or face mask.

COLOURS	BLACK/RED
LENGTHS	25 x 50cm

RIGGING SLINGS

WHOOPIE EXTREME

Whoopie Extreme is 5x lighter than our equivalent standard Whoopie Sling yet 40% stronger. Lighter handling, increased safety factor and minimal elongation make this the ultimate tree rigging sling.

Very high strength & low stretch, very light weight and does not absorb water. It has excellent abrasion resistance, and is supplied with an adjustable factory splice.

SPECIFICATIONS

APPLICATIONS	SLING
DIAMETER (mm)	10mm
LENGTHS (m)	1.1-3.6m
UNIT WEIGHT (g)	350g
MINIMUM BREAKLOAD (kg)	6690kg
MATERIAL	HMPE

COLOUR GREY

TERMINATIONS FIXED EYE SPLICE ONE END, ADJUSTABLE SPLICE OTHER END

WHOOPIE SLINGS

Whoopie Slings are adjustable in length, with one fixed eye and one adjustable, Marlow Whoopie slings are manufactured using a unique multi-braided construction for improved durability without the need for PU coating.

Unique multi-braided construction that is hardwearing, strong and adjustable, with high elongation for superior energy absorption. Supplied pre-spliced.

SPECIFICATIONS

APPLICATIONS	SLING
DIAMETER (mm)	18mm
LENGTHS (m)	0.9-1.83m, 0.9-2.4m, 0.9-3.6m
UNIT WEIGHT (g)	1079g, 1320g, 2050g
MINIMUM BREAKLOAD (kg)	4740kg
MATERIAL	POLYESTER

COLOURS LIME/BLUE/RED

TERMINATIONS FIXED EYE SPLICE ONE END, ADJUSTABLE SPLICE OTHER END

RAPTOR DEAD-EYE SLINGS

Raptor Dead-Eye Slings are made from our PU coated Raptor and available in two sizes with pre-spliced 100mm eyes.

PU coated, hardwearing, high strength and low stretch. Supplied pre-spliced.

SPECIFICATIONS

APPLICATIONS	SLING
DIAMETER (mm)	16mm, 18mm
LENGTHS (m)	4m/ 5m
UNIT WEIGHT (g)	965g/ 1393g
MINIMUM BREAKLOAD (kg)	5990kg, 6550kg
COVER MATERIAL	POLYESTER
CORE MATERIAL	POLYESTER

COLOURS 16mm RED, 18mm YELLOW

TERMINATIONS SPLICED 100mm CLOTH PROTECTED EYE

LOWERING LINES

RAPTOR

Raptor Rigging line is the next generation of lowering lines from Marlow. Using soft and supple DoubleBraid rope with colour coded ArmourCoat for reduced water uptake. The ArmourCoat also improves abrasion resistance by 30%

Supplied pre-spliced.

SPECIFICATIONS

APPLICATIONS	LOWERING LINE
DIAMETER (mm)	12mm,14mm, 16mm, 18mm
LENGTHS (m)	100m/ 200m
WEIGHT (g/m)	111g/m, 156g/m, 193g/m, 232g/m
MINIMUM BREAKLOAD (kg)	4380kg, 5570kg, 6650kg, 7280kg
COVER MATERIAL	POLYESTER
CORE MATERIAL	POLYESTER
COVER COATING	ARMOURCOAT

COLOURS 12mm BLUE, 14mm GREEN, 16mm RED, 18mm YELLOW

RAPTOR BULL ROPES

Braid on braid construction, easily spliced. ArmourCoated for 30% improvement in abrasion resistance. ArmourCoat reduces water absorption. Raptor Bull Ropes supplied with spliced stainless steel thimble.

Hard wearing abrasion resistant ArmourCoated cover. High strength and low stretch. Supplied pre spliced.

BLUE OCEAN

MADE FROM 100% RECYCLED PLASTIC

SPECIFICATIONS

APPLICATIONS	LOWERING LINE
DIAMETER (mm)	12mm, 14mm, 16mm, 18mm
LENGTHS (m)	50m
UNIT WEIGHT (kg)	5.6kg, 7.8kg, 9.7kg, 11.6kg
MINIMUM BREAKLOAD (kg)	3940kg, 5010kg, 5990kg, 6550kg
COVER MATERIAL	POLYESTER
CORE MATERIAL	POLYESTER

COLOURS 12mm BLUE, 14mm GREEN, 16mm RED, 18mm YELLOW

TERMINATIONS SPLICED STAINLESS STEEL THIMBLE AT ONE END

DRACO

Specially developed for the most demanding arborist rigging applications, Draco's proven 16 plait cover is married with a braided high tenacity core to give a tough but high strength lowering line. The fully braided construction prevents twisting and allows for a supple rope without compromising on durability.

The core/ cover polyester construction ensures performance, durability and economy from a single rope.

SPECIFICATIONS

APPLICATIONS	LOWERING LINE
DIAMETER (mm)	12mm, 14mm, 16mm
LENGTHS (m)	50m/ 200m
WEIGHT (g/m)	100.6g/m, 130.4g/m, 197.0g/m
MINIMUM BREAKLOAD (kg)	3590kg, 5036kg, 7550kg
COVER MATERIAL	POLYESTER
CORE MATERIAL	POLYESTER

COLOURS 12mm BLUE FLECK, 14mm GREEN FLECK, 16mm RED FLECK

A BLUE OCEAN® INITIATIVE

Marlow's Arboriculture accessory range is now sustainably packaged with Polyair™. Made from sugar cane waste, Polyair™ is biodegradable, carbon neutral and 100% recyclable.

Look out for the polyair™ sticker.

NELSON

Nelson 3 strand is a hardwearing, lightweight and economical lowering rope.

Excellent grip, very easily spliced with good abrasion resistance.

SPECIFICATIONS

APPLICATIONS	LOWERING LINE
DIAMETER mm)	14mm, 16mm, 18mm, 20mm
LENGTHS (m)	100m/ 200m/ 220m
WEIGHT (g/m)	90g/m, 115g/m, 148g/m, 180g/m
MINIMUM BREAKLOAD (kg)	2946kg, 3772kg, 4709kg, 5719kg
MATERIAL	POLYPROPYLENE

COLOUR WHITE

ARBOR12

NEW PRODUCT

High strength 12 strand polyester line coated with ArmourCoat for improved abrasion resistance and reduce water absorption.

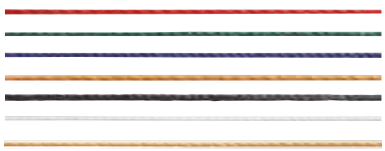
Abrasion resistance, reduced water absorption, very easily spliced - great for on-site splicing.

SPECIFICATIONS

APPLICATIONS	RIGGING LINE
DIAMETER (mm)	9mm, 11mm, 13mm, 16mm, 18mm
LENGTHS (m)	200m
WEIGHT (g/m)	61.3g/m, 92.0g/m, 123g/m, 184g/m
MINIMUM BREAKLOAD (kg)	3090kg, 4550kg, 5960kg, 8780kg
MATERIAL	POLYESTER

COLOUR 9mm ORANGE, 11mm BLUE, 13mm GREEN, 16mm RED, 18mm YELLOW

WHIPPING TWINE



Marlow's Wax Polyester Whipping Twine is widely regarded as the best whipping twine on the market.

Available in 4 sizes and a variety of colours (no.4 only). The waxed finish makes for easier whipping and a better finish. Available in "display boxes" of spools or on 1kg cops.

SPECIFICATIONS

APPLICATIONS	SPLICING
DIAMETER (mm)	0.5mm, 0.8mm, 1.1mm, 1.5mm
SIZE * (see size chart below)	no.2, no.4, no.8, no.16
MATERIAL	POLYESTER
COVER COATING	WAX

*SIZE CHART

SIZE	NO.2 (Thin)	NO.4 (Med.)	NO.4 (Med.)	NO.4 (Med.)	NO.4 (Med.)	NO.4 (Med.)	NO.4 (Med.)	NO.4 (Med.)	NO.8 (Lge)	NO.16 (Lge.)
DIAMETER (mm)	0.5	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.1	1.5
COLOUR	WHITE	WHITE	RED	BLUE	BLACK	GREEN	GOLD	BEIGE	WHITE	WHITE

HARNESS

THE NEW TREE ACCESS EVO

Every feature of the Tree Access Evo has been developed to meet the needs of the most demanding tree climbers. The innovative mobile bridge system is manufactured from 10.5 mm semi-static rope covered with tubular webbing for the best durability. Two loops on the ends of the bridge create extra points for positioning. The adjustable connections to the waist belt allow the user to fine-tune the height of the bridge in order to optimize the position while hanging.

The waist belt and leg loops are made of ergonomic thermoformed padding to offer broad structural support and are connected by optimally spaced connection straps that give the harness a precise and comfortable fit.

Designed for use in combination with the GT Chest (EN 361), with front and back connection points, to make a full body fall arrest harness.

SPECIFICATIONS

APPLICATIONS	TREE CLIMBING
UNIT WEIGHT (g)	S - L 1960g L - XXL 2030g
TEST STANDARDS	CE EN 358 & CE EN 813, ANSI Z133
MATERIAL	VARIOUS
SIZES	1: S - L WAIST 80-120cm / LEGS 50-65cm
	2: L - XXL WAIST 90-140cm / LEGS 60-75cm

COLOURS BLACK/RED/SILVER

GT CHEST ATTACHMENT

A step forward in comfort for technical rope access workers. The structure and padding have been shaped for optimal ergonomics, especially on the neck. Double height adjustment (front and back) allows the worker to perfectly fine-tune the fit. Supplied with the patented HMS Belay Lock connector that features an anti-rotation system for a secure attachment to the sit harness. Equipped with tension strap for securing a chest ascender in a streamlined way.

Aluminum alloy attachment rings.
2 attachment points: 1 front, 1 back.
Designed to be used in combination with the GT Sit, Access Sit and Tree Access harnesses for fall arrest.

UNIT WEIGHT:	550g
SIZES:	1: S-L 55-75cm LENGTH 2: L-XXL 65-85cm LENGTH
TEST STANDARD:	CE EN 361

HERBOL

The Herbol Cambium Saver creates anchor points on tree branches or around horizontal manmade structures. The strap's solidity has been specially studied and designed to meet the needs of tree climbers.
Anodised aluminium alloy rings in different colours to enable easy identification. Comes complete with retriever.

SPECIFICATIONS

APPLICATIONS	CAMBIUM SAVER
LENGTHS (cm)	90cm, 120cm, 150cm
UNIT WEIGHT (G)	240g, 310g
MINIMUM BREAKLOAD (kN)	22kN
TEST STANDARDS	CE EN 795 TYPE B
MATERIAL	POLYESTER AND ALUMINIUM

COLOURS GREY (ORANGE & RED ACCESS RINGS)

CAMP HARD

OVAL PRO 3 LOCK

High strength steel carabiner. The oval shape is ideal for use with pulleys, descenders and ascenders.

Keylock closure prevents snagging during use. Automatic lock requires three actions to open: slide, twist, and pull.

SPECIFICATIONS

APPLICATIONS	CLIMBING
DIAMETER (mm)	109x56mm
UNIT WEIGHT (g)	210g
MINIMUM BREAKLOAD (kN)	30kN
TEST STANDARDS	CE EN 362 & EN 12275
MATERIAL	STEEL

COLOURS SILVER

HMS 3 LOCK

Triple action auto-locking HMS karabiner requires three actions to open the gate making it safer than standard 2Lock karabiners, which require two actions to open. This is the best choice when using an auto-locking karabiner to belay.

Automatic lock requires three actions (slide, twist, and pull) to open, easy to operate with one hand, large opening and keylock nose make clipping ropes and webbing easy.

SPECIFICATIONS

APPLICATIONS	CLIMBING
DIAMETER (mm)	116x73mm
UNIT WEIGHT (g)	86g
MINIMUM BREAKLOAD (kN)	25kN
TEST STANDARDS	CE EN 362 & EN 12275
MATERIAL	ALUMINIUM

COLOURS BLUE

ATLAS 3 LOCK

The Atlas karabiner with an automatic triple-action twist lock closure for maximum security. The new Atlas is notable for its superior strength which approaches the strength of some steel karabiners, but at a fraction of the weight and its oversized design which makes rigging easy, even while wearing gloves. This combination of strength and ease of use makes it an ideal karabiner for search and rescue applications. We recommend the 3Lock system if you intend to use an auto-locker as your general belay biner.

Amazingly strong aluminum karabiner, automatic lock requires three actions (slide, twist, and pull) to open, easy to operate with one hand, large gate opening and keylock nose make clipping ropes and webbing easy.

SPECIFICATIONS

APPLICATIONS	CLIMBING
DIAMETER (mm)	120x68mm
UNIT WEIGHT	92g
MINIMUM BREAKLOAD (kN)	40kN
TEST STANDARDS	CE EN 362 & EN 12275
MATERIAL	ALUMINIUM

COLOURS BLACK

WARE

TURBO CHEST ASCENDER

A revolutionary chest ascender that features two proprietary rollers for a smooth interface with the rope. This not only helps with climbing efficiency by making the upward glide much smoother. It also reduces dangerous wear on the device where the rope tends to rub on the body of a traditional ascender.

The perfectly profiled closure keeps the rope in line with the body of the device and the rollers to prevent the rope from escaping the device during tight pendulums and traverses. The toothed cam is finished with a special anti-wear treatment and features drain holes to help prevent the build up of mud, grit and ice. The main body also features drain holes along the rope path to allow grit and moisture to escape during use for better contact with the rope.

Thicker body plates and a shaped connection point reduce wear on the device caused by shifting between the device and the connector (especially when used with steel connectors). This also keeps the device more in-line with the body during use. The opening mechanism is simple and secure with the ability to lock the device open for easier attachment and a removable pull cord that makes it easier to operate while wearing gloves. The proprietary rollers also allow the Turbochest to be rigged as a locking pulley for light hauling with a max load of 50kg, 110lbs. NOTE: This configuration is not intended for hauling or securing of bodies.

Compact and lightweight, developed rollers for lower friction on the rope which gives improved climbing efficiency, no wear and tear on the rope. Can also be used as a locking pulley, for hauling purposes only.

SPECIFICATIONS

APPLICATIONS	CLIMBING : FOR ROPE DIAMETERS 8mm-13mm
UNIT WEIGHT (g)	110g
TEST STANDARDS	CE EN 12841/B & EN 567
MATERIAL	VERIOUS
COVER COATING	ANTI-WEAR TREATMENT
COLOURS	RED/GREY

TURBO FOOT ASCENDER

Hook these mini ascenders to your feet and climb lines with greater ease than you ever imagined! Proprietary rollers positioned where the rope tends to rub on the body of a traditional ascender ensure smoother action and a longer product life for both the ascender and the rope. The toothed cam is finished with a special anti-wear treatment and features drain holes to help prevent the build up of mud, grit and ice. The innovative strap design provides a secure fit to any kind of boots or shoes and aligns the straps with direction of the forces being applied for optimal comfort and efficiency. The proprietary rollers also allow the Turbofoot to be rigged as a locking pulley for light hauling with a max load of 50kg,110lbs. NOTE: This configuration is not intended for hauling or securing of bodies.

Proprietary rollers increase climbing efficiency and decrease wear and tear on the device and ropes, innovative straps provide a secure and ergonomic fit on boots. Can be rigged as a locking pulley for light hauling (max load 50 kg, 110 lbs). For ropes from 8 to 13 mm, available in right and left versions.

SPECIFICATIONS

APPLICATIONS	CLIMBING FOR ROPE DIAMETERS 8mm-13mm
UNIT WEIGHT (g)	135g
MATERIAL	VARIOUS
COVER COATING	ANTI-WEAR TREATMENT
COLOURS	RED/GREY

GYRO 4

A revolutionary 3D swiveling rigging plate equipped with 4 connection points that rotate independently to allow them to be self-orienting even in the most complex rigging scenarios.

The innovative design prevents the accumulation of dirt and makes inspection easy. Main structural flanges are carbon steel with a double corrosion preventive coating. Swivel balls and attachment points are stainless steel. Includes four removable silicon anti-rotation inserts.

SPECIFICATIONS

HOLE DIAMETER	4 x 16mm
WEIGHT	265g
MIN BREAKING LOAD	26kN
WORKING LOAD LIMIT	3kN
STANDARD	ANSI Z359.12

COLOURS GREY

GYRO 3

The Gyro swivel rotates at all three connection points which allows for countless possibilities of connection between different elements that need freedom of movement.

Just a few possibilities include: self-orienting multi-anchoring, multiple connections to a harness, preventing twisting in Y lanyards, cross-hauling operations, Tyrolean traverses, complex rescue procedures. Main structure is carbon steel with a double corrosion preventive coating. Swivel balls and attachment points are stainless steel. Includes three removable silicon anti-rotation inserts.

SPECIFICATIONS

WIDTH	85mm
LENGTH	37mm
HOLE DIAMETER	3 X 16mm
WEIGHT	155g
MIN BREAKING LOAD	26kN
WORKING LOAD LIMIT	3kN
STANDARD	ANSI Z359.12

COLOURS GREY

TETHYS PULLEY

A compact and lightweight pulley with movable flanges and a large connection point that accommodates two karabiners. For ropes up to 13 mm. Prussik minding, the self-locking knot can be installed on both sides.

Self-lubricated bushings are perfect for light applications at low speed. Efficiency: 80%. Aluminum alloy body and wheel, stainless steel axle.

SPECIFICATIONS

WIDTH	61mm
LENGTH	78mm
THICKNESS	29mm
WEIGHT	100g
MAX BREAKING LOAD	24kN
WORKING LOAD LIMIT	2kN x 2 = 4kN
STANDARD(S)	EN 12278

COLOURS RED

NAIAD PULLEY

High strength multifunctional pulley for block-and-tackle systems and complex operations. Features a large wheel, main attachment hole that accommodates three karabiners, two secondary holes on the sides, and a large becket. For ropes up to 16mm. Prussik minding, the self-locking knot can be installed on both sides.

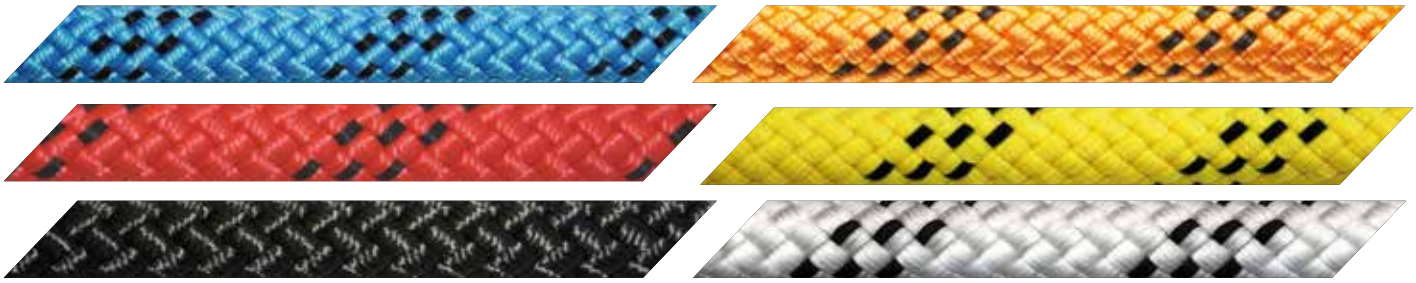
Self-lubricated bushings are perfect for light applications at low speed. Efficiency: 90%. Aluminum alloy body and wheel, stainless steel axle.

SPECIFICATIONS

WIDTH	96mm
LENGTH	149mm
THICKNESS	31mm
WEIGHT	280g
MAX BREAKING LOAD	44kN
WORKING LOAD LIMIT	3.5kN x 2 = 7kN
STANDARD(S)	EN 12278

COLOURS RED

ROPE ACCESS



STATIC LSK

Marlow Static LSK is a low stretch kernmantle rope designed for rope access, work positioning, caving and abseiling. Static LSK ropes are manufactured using high quality high tenacity polyamide and significantly out perform the standard EN 1891 test standards with outstanding dynamic properties.

Compatible with all relevant diameter rope management, climbing and descending devices, Static LSK also comes in a range of flecked or solid colours and have a visible year of manufacture marker as standard.

Applications
Industrial access, work positioning, abseiling, caving.

Key attributes
High strength, high flex / soft handling, CE certified.

Benefits
High strength, high energy absorption, good abrasion resistance, works well with ascenders and descenders, visible year marker.

TEST STANDARD	CE EN 1891 TYPE A (EXCEPT 9MM CERTIFIED EN 1891 TYPE B)
CONSTRUCTION	MULTIPLE TWISTED NYLON CORES
COVER CONSTRUCTION	16 PLAIT
CORE MATERIAL	NYLON
COVER MATERIAL	NYLON
TERMINATION OPTIONS	KNOT, SEWN EYE

SPECIFICATION

STATIC LSK ROPES

COLOURS: WHITE WITH BLACK OR RED FLECK, SOLID BLACK, SOLID RED, SOLID BLUE, SOLID GREEN, SOLID YELLOW, HI-VIS ORANGE

DIAMETER (mm)	9mm	10.5mm	11mm	12mm
WEIGHT (g/m)	53.0	67.2	73.8	90.3
LENGTHS	50m, 60m,100m, 200m	50m, 60m,100m, 200m	50m, 60m,100m, 200m	50m, 60m,100m, 200m
AV. BREAKLOAD (kN)	25.4kN	33.4kN	35.3kN	42.8kN
AV. BREAKLOAD WITH FIG 8 LOOP (kN)	13.7kN	19.5kN	21.1kN	24.3kN

TECHNICAL INFORMATION - TYPE A VS TYPE B CLIMBING ROPES

When the EN 1891 rope standard was written there was no consideration of the arb industry's requirements. However, in most respects the standard is suitable and has been adopted by the industry accordingly. The issue with EN 1891 in respect of tree climbing is with the drop test which is designed to simulate a person falling on a slack length of rope. To pass the requirements of EN 1891 the rope must survive 5 drops of factor 1*, however this does not accurately simulate arb rope use.

In doubled rope technique there's always two strands of rope between the climber and the attachment, not one as stated in the standard test. In SRT climbing the rope is usually secured below the climber, passing through a cambium saver and so a fall of more than factor 0.5 is not possible.

Elsewhere in the world, ropes don't actually need to pass a drop test so there is long history of lower elongation ropes being used safely in the Arb industry outside of Europe.

EN 1891 has a provision for two rope types, Type A and Type B. Type B "has lower performance than type A ropes, requiring greater care in use". Crucially the drop mass used in testing type B is lighter at 80kg and this lower drop mass allows a low elongation rope to pass the type B drop test and so gain certification.

Testing to type B has allowed Marlow to make the whole rope from polyester, reducing the static elongation to less than half that of an equivalent nylon rope. This directly translates into a less fatiguing user experience.

Marlow's type B certified rope still exceeds the type A requirement for strength of 22kN and the ANSI Z133 requirement of 5400 lbs. By reducing the drop mass by 20kg to pass an unrepresentative test. Marlow have created Vega, a rope that is CE certified, ANSI compliant and meets and exceeds the strength requirements of Arb climbing ropes, traditionally used in Europe, but is significantly less fatiguing in use.

* Factor 1 test is when the fall distance and the rope length are the same.

VEGA CLIMBING ROPE SPECIFICATIONS	OUR TESTING RESULTS	EN 1891 TYPE A REQUIREMENTS	EN 1891 TYPE B REQUIREMENTS	ANSI Z133 REQUIREMENTS
DIAMETER (mm)	11,7mm	8.5 -16mm	8.5 -16mm	>11mm
50-150KG ELONGATION (%)	1.2%	< 5%	< 5%	N/A
ELONGATION AT 540lbs (%)	2.6%	N/A	N/A	< 7%
SHRINKAGE (%)	0%	N/A	N/A	N/A
MASS CORE (g/m)	45.2 g/m	N/A	N/A	N/A
MASS COVER (g/m)	55.6 g/m	N/A	N/A	N/A
MASS ROPE (g/m)	36.8kN	N/A	N/A	N/A
AV. STATIC STRENGTH EX TERMINATIONS (kN)	27.8kN	22kN	18kN	24kN
AV. STATIC STRENGTH WITH FIG.8 LOOP (kN)	18.9kN	15kN	12kN	N/A
AV. STATIC WITH LOW-PROFILE SPLICED EYE (kN)	21.2kN	18kN	12kN	N/A
MATERIAL	POLYESTER			
DROP TEST				
FALL FACTOR 1 FALLS. FIG. 8 LOOP	10*	5**	5***	N/A
PEAK FORCE FIG. 8 LOOP (kN)	5.25kN	< 6kN	< 6kN	N/A

* Marlow Drop testing results using 80kg weight

** Drop test type A requires to use 100kg weight

*** Drop test type B requires to use 80kg weight.

COVID 19 DISINFECTION NOTICE

In light of the current situation, regarding the Covid19 pandemic we recognise that our customers are concerned about how they can ensure their ropes are cleaned and disinfected. Marlow have always recommended that ropes are washed in pure soap. Based on the current guidance from the WHO, we believe this will be effective at combating Covid19 as soap breaks down the virus's lipid shell rendering it unviable.

HOW TO WASH YOUR ROPES:

To wash a rope, immerse the rope in soapy water and agitate well. The rope may be left to soak allowing the soap solution to fully penetrate the fibres. After washing, the rope should be rinsed thoroughly to remove any soap residue. The residue will not harm the rope but may alter the friction properties which could cause unintended consequences in use. After rinsing the rope, it should be hung to dry. Elevated temperatures (greater than 40 Deg C) should not be used to dry the rope. A Nylon rope will be weaker when wet than when dry and will have less ability to absorb the energy of a fall. Nylon ropes will shrink and become firmer after washing, this is normal.

WHAT TO USE TO WASH YOUR ROPES:

Normal laundry detergents are not recommended due to the presence of additional chemicals such as surfactants and optical brighteners. If nothing else is available, then detergents can be used as these additives are not anticipated to affect the strength of the rope. However, they could cause the rope to be more susceptible to moisture and other minor effects. Marlow Ropes have tested Isopropyl alcohol (IPA) on type 6 Nylon ropes including Static ropes and brief exposure has been shown to have no detectable effect on the performance. Therefore, it is possible to disinfect ropes with a spray of 70% IPA and water solution. This should not be done on a regular basis as IPA can be absorbed by Nylon fibres and may act as a plasticizer weakening the ropes over prolonged exposure.

Any washing or disinfection of ropes will cause them to be degraded slightly if only by the mechanical action of washing. The process should therefore be done as little as is possible.

DO NOT expose ropes to bleach. This can cause severe damage to rope fibres, in particular the polyester used in in many of Marlow's arborist products.

DO NOT expose ropes to oxidizing agents such as hydrogen peroxide. These can severely damage fibres like Nylon without any visible indication of harm.

DO NOT use UV lights to sterilize ropes, the UV will damage fibres, in particular UVC used in industrial sterilization equipment can be expected to do more harm than other types of UV.

DO NOT use elevated temperatures to sterilize a rope. High temperatures can affect fibres, particularly materials like HMPE's. As always, if there is any reason to think a rope's performance may be in question it is best to retire that rope from service.

CARE IN USE

STORAGE: Ropes should be stored in a suitable clean, dry place out of direct sunlight and away from extreme temperature. Do not store ropes on dirty floors or drag over rough ground – dirt and grit can work between the fibres and cause abrasion damage. Keep ropes away from chemicals and in cases of long term storage, hose down with fresh water to reduce dirt and salt that can affect the life and efficiency.

COILING: 3 Strand ropes may become damaged if they are taken from a coil the wrong way. If this happens turn the coil over and withdraw the rope from the centre – the rope should run correctly without kinking.

Braided ropes can have excessive twist imparted into them by incorrect handling. Ideally these ropes should be "hanked" in a figure of 8 fashion this avoids putting twist in and will ensure free running when deployed. If supplied on a reel, this must be allowed to rotate freely on a central pin so that the rope may be drawn off from the top layer. Never take the rope from a reel lying on its side unless placed onto a turntable.

SHEAVES, PULLEYS AND ROLLERS: When any rope is used around a sheave there will be a reduction in its strength and life. For most non-specialised applications a sheave diameter 8-10 times the rope diameter will suffice, however certain materials such as Aramids may require a sheave size of up to 20 times diameter.

The profile of the groove in a sheave should support the entire rope. Normally a semicircle of 10% greater diameter than that of the rope is appropriate. 'V' groove sheaves should be avoided since they compress the rope and have points of local friction reducing the life of the rope. Sheaves should be maintained so that they rotate freely in use.

WINCHES AND CAPSTANS: When a rope is wound onto a winch it is important that the wraps are neat and tightly wound. This can be achieved by winding the rope on whilst under tension. If the rope is wound on slack then it will be more prone to burying between the turns of the previous layer. Length of rope that can be held on a winch drum or reel can be calculated as follows:

$$\text{LENGTH (m)} = \frac{710000 \times T(F^2-D^2)}{d^2}$$

WHERE: T= Traverse in metres
F= Flange diameter in metres
D= Drum diameter in metres
d= Rope diameter in millimetres

TERMINATIONS

SPLICES: Most Marlow ropes can be spliced, this is normally the preferred method of termination. A good splice using the recommended method should not reduce the strength of a rope by more than 10%.

KNOTS: A knot will reduce the strength of the rope, sometimes very significantly. This loss is caused by the tight bends and compression found in any knot. The amount a rope will be weakened will depend on the knot, type of rope and the material from which it is made but can be up to 60%.

EYE SIZES: Wherever possible the angle formed at the throat of a splice when it is loaded should be 30 degrees or less. This means that the length of the eye when flat must be at least 2.7 times the diameter of the object over which the eye is to be used and the distance from the bearing point to the throat when in use should be at least 2.4 times the diameter. Some materials like Aramids and HMPEs (Dyneema®) will require a larger eye with an angle at the throat of 15 degrees or less.

INSPECTION AND RETIREMENT: It is important that a rope is regularly inspected to ensure that it is undamaged and is still fit for service. The entire length of rope should be examined. The following are some of the points that should be checked. The degree to which any of the following may be allowed before the rope is retired will be dependant on the assumptions made when the rope and safety factors were determined.

EXTERNAL ABRASION: When a multifilament rope is subjected to abrasion the outer filaments will quickly become broken and a furry finish will develop. This furry layer will protect the yarns underneath preventing further abrasion. If this condition does not stabilise and continues to develop then there may be excessive abrasion that could lead to significant strength loss.

INTERNAL ABRASION: The rope should be opened up so that the condition of the internal yarns can be assessed. If they show signs of abrasion then there could be some exposure to abrasive particles or there may be inter yarn abrasion.

GLAZING: If a rope has been subjected to excessive heat then there may be glazed or glossy areas of rope. The glazing is caused when the yarns melt, if this has happened then the nearby yarns will also have been exposed to elevated temperatures and will have been affected. This type of damage is often seen if ropes slip on winch barrels or capstans.

DISCOLOURATION: This could indicate the presence of dirt that may cause internal abrasion or could be an indication of chemical damage. If chemical damage is suspected then the amount that the rope has been weakened is very difficult to assess and the rope should be retired.

INCONSISTENCIES: If any section of the rope is found to contain lumps, flat areas or thin bits then this could indicate that the rope has been damaged internally. This type of damage is often caused by overloading or shock loads.

No rope will last forever and it is important to ensure that if there are any risks if a rope fails then it should be retired after an appropriate period.

IMAGE CREDITS:

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MICHAEL SALVAGE TREE SURGEON

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