



# CONTENTS

TEUFELBERGER Group	4
Products	6
Static ropes	6
Dynamic ropes	16
Throw lines	20
Heat resistant ropes	24
Accessory cords & loops	28
General purpose ropes	36
Rope bags	44
Tech Tips	46
PLATINUM® technology	48
Fiber structures	50
Raw materials	50
Rope constructions	52
Coatings and special treatments	53
Terminations	54
Rope care, safety & usage	55

#### **WARNING**

Using these products can entail risks. Do not use them for any other than the intended purposes. Especially, do not use them for personal protection or lifting purposes as specified in EU Directive 2006/42/EC, unless the products are clearly identified as suitable for such purposes under relevant standards. Customers shall make sure that persons using the products are familiar with their correct use and the necessary safety precautions. Keep in mind that any of these products can cause damage if incorrectly used, stored, cleaned, or overloaded. Check national safety regulations, industry recommendations, and standards for locally applicable requirements (e.g. choice of safety factors).

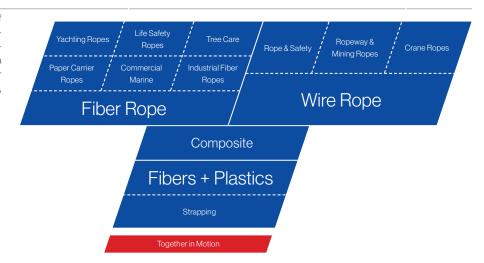
PLATINUM®, STRATOS®, [slaice]®, TEUFELBERGER® and 拖飞宝® are internationally registered trademarks of TEUFELBERGER Group. Further referenced international trademarks: Technora® by Teijin, Nomex® by Dupont, Spectra® by Honeywell, Dyneema® by DSM, Vectran® by Hoechst Celanese, DMM by DMM International Ltd. Subject to technical modifications, typesetting and printing errors.

# EXPERTISE FROM 225 YEARS OF EXPERIENCE

What started back in 1790 with simple hemp ropes has since evolved into a globally successful group of enterprises specializing in the development and production of fiber and steel wire ropes, strapping, and composites.

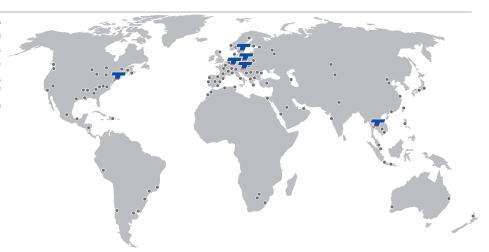
## Vast diversity

Its products are designed for a wide variety of applications ranging from cranes and marine applications to packaging and through to the automotive sector. It is the continuity and stability of a family business that makes us the reliable partner who supports you, competently and effectively, in coping with your daily challenges.



# Global presence ensures customer proximity

Manufacturing operations in various countries allow us to meet local quality and certification standards as well as customer requirements without difficulty. From our sites in Austria, the Czech Republic, the U.S., Sweden, and Thailand, and backed by a close-knit global network of distribution partners, we continue to satisfy the expectations of our customers.



# Innovative solutions through synergies

TEUFELBERGER is a leading specialist for fiber and steel wire ropes, strapping, and fiber composite components. The spectrum of technologies in TEUFELBERGER's portfolio generates various synergies between the extrusion of thermoplastics, braiding of high performance fibers, and processing of wires into ropes, strapping, and lightweight composite components.

Especially fiber and steel wire products brought about valuable synergies with regard to both application and manufacturing technologies, which have benefited our customers tremendously. This makes TEUFELBERGER your ideal partner right from the project planning phase.

5% of TEUFELBERGER's employees are active in research and development and make sure that our customers have access to the latest, innovative rope technologies. 10% of the entire investment volume are committed to development and quality assurance.

# ONE COMPANY – INFINITE POSSIBILITIES

When it comes to your safety, we leave nothing to chance. TEUFELBERGER keeps you safe - always!

For many years, TEUFELBERGER products, including the New England Ropes and MAXIM® range, have been in use in the safety at work, tree care, tactical and rope access segments, at emergency response and rescue organizations and for any type of work at height. The development of our product portfolio is an ongoing process fueled by our innovative spirit, our aspirations for continuous improvement and our passion to develop the best products for work at great heights.

By working together closely with our customers and external partners, we have succeeded in making products that live up to the high expectations of industry professionals. Due to our passion, teamwork and innovative spirit, we have been able to convert groundbreaking ideas such as our innovative PLATINUM® technology into practical solutions.

Field tests constitute a crucial part of the product development process and therefore play an essential role in it. A commitment to the development of new products takes more than just having tensile test certifications conducted by independent third parties. Even though both are obviously important elements, they by themselves are simply not enough. Before we introduce new products in the market, our specialists test prototypes for months in practical use. By joining our rope-making expertise with the feedback from experienced users, we have been able to launch superior products of great benefit to users.

At TEUFELBERGER, product development constitutes a cornerstone for long-term success. This process encompasses fiber research and testing prototype development, in-house testing, testing for compatibility with commercially available products, field testing, and finally the certification of products by independent third parties. Over the last several years, this process has been upgraded and improved, and has been one of the elements that have ensured that TEUFELBERGER plays an important role in the work at height segment. Products from TEUFELBERGER are ideally attuned to your type of use - anywhere and anytime.

#### **Innovative Partner**

Our portfolio is already extensive, nevertheless we continue to develop innovative products that meet your evolving needs and requirements. Together with you, we create superior solutions that live up to future demands. TEUFELBERGER offers comprehensive expertise in various segments of rope engineering, which gives you a decisive advantage in the selection and development of your rope. Our research and development department engineers custom-tailor solutions and implement them in the best possible way. Whatever the requirements and materials, we are the right partner for you!

#### **Quality without Compromises**

At TEUFELBERGER, quality is a key priority. From the receipt of the raw materials to the delivery of the finished product, strict quality checks are standard practice. Each rope, each lanyard, and each sling made by TEUFELBERGER has its individual and unique inspection number which not only indicates the year it was manufactured but also ensures the traceability of the product, from the batch of base material used through to the finished product.





Kernmantle ropes with low elongation designed for general use by persons in rope assisted work activities including all kinds of work positioning and restraint tasks, rescue operations and caving.

## PLATINUM® Offshore Access

MADE IN



PLATINUM® Offshore Access is a rope developed specifically for the harsh conditions encountered during work activities in offshore environments. While exhibiting extremely low elongation, it is still certified to EN 1891 A. PLATINUM® Offshore Access offers good breaking loads as well as advantageous chemical and physical properties such as UV resistance, seawater resistance, and good abrasion strength in both dry and wet conditions. Besides, its innovative color design guarantees excellent visibility. The properties of the fiber combination in connection with our PLATINUM® technology, where the cover and the core are interconnected to each other, result in a rope that is perfectly suited as a work rope for the offshore segment.



## 10.5mm Orange/Grey/White



#### **Features**

- ✓ Extremely low elongation
- ✓ Good resistance to acids
- ✓ Seawater resistance
- ✓ Slight water absorption or wet shrinkage
- ✓ Good visibility
- ✓ Excellent UV protection
- ✓ 10.5mm certified with PETZL ASAP (B71+B71AAA) and ASAP Lock (B71ALU) according to EN 353-2

#### Specifications

 Core:
 Nylon

 Cover:
 Polyester

 Standard:
 EN 1891 A

 NFPA 1983:2012



#### CE test results per EN 1891

Ø		Weight		Shrinkage	Elongation 50-150 kg		Min. breaking strength Free length With figure 8 knot Sewn					Cover
mm	inch	g/m	lbs/100	%	%	daN	lbf	daN	lbf	daN	lbf	<b>%</b>
10.5	13/32	78.0	5.20	2	2	2,800	6,300	1,500	3,375	2,200	4,952	50.5
11.5	7/16	90.0	6.00	2	2	3,300	7,400	1,900	4,275	2,500	5,625	46.0

#### NFPA test results

Ø		Elongation				Approved class
mm	inch	at 1.35 kN (%)	at 2.7 kN (%)	at 4.4 kN (%)	at 10 % of MBL	
10.5	13/32	3.3	6.3	9.4	7.4	Technical use
11.5	7/16	2.8	5.0	8.4	7.4	Technical use

## PLATINUM® Protect PES/PA

MADE IN



The PLATINUM® Protect version featuring a polyester cover has been employed with great success in many domains of work at height. Especially when it comes to rope access procedures at extreme heights (e.g. window cleaning), PLATINUM® Protect PES/PA is a must-have for every industrial climber because of its novel design and low elongation. The PLATINUM® technology with a mechanical connection between the core and the cover enhances your safety and due to the good handling also makes your work easier.



#### Features

- ✓ Extremely low elongation
- ✓ Good resistance to acids
- ✓ Excellent UV stability
- ✓ Stays flexible in wet conditions
- ✓ 10.5mm certified with PETZL ASAP (B71+B71AAA) and ASAP Lock (B71ALU) according to EN 353-2

#### Specifications

Core: Nylon
Cover: Polyester
Standard: EN 1891 A
NFPA 1983:2012

Braid: 32



Green/Grey/White Black/Grey



#### CE test results per EN 1891

Ø		Weight		Shrinkage	<b>Elongation</b> 50-150 kg		Min. breaking strength Free length With figure 8 knot Sewn					Cover
mm	inch	g/m	lbs/100	%	%	daN	lbf	daN	lbf	daN	lbf	1%
10.5	13/32	78.0	5.20	2	2	2,800	6,300	1,500	3,375	2,200	4,950	50.5
11.5	7/16	90.0	6.00	2	2	3,300	7,400	1,900	4,275	2,500	5,625	46.0

#### NFPA test results

Ø		Elongation				Approved class
mm	inch	at 1.35 kN (%)	at 2.7 kN (%)	at 4.4 kN (%)	at 10 % of MBL	
10.5	13/32	3.3	6.3	9.4	7.4	Technical use
11.5	7/16	2.8	5.0	8.4	7.4	Technical use

## PLATINUM® Protect PA

MADE IN



PLATINUM® Protect PA comes in 100% nylon which makes it lighter compared to the PLATINUM® Protect PES/PA. Compared to polyester, nylon is more robust in resisting extreme abrasive forces and thus is especially suitable for use in rough rescue and hoisting equipment scenarios. The permanent mechanical connection between the core and the cover prevents bunching of the cover as the rope runs into the device. The benefit of greater safety and better handling pays off especially when using the rope in training facilities.



10.5mm Blue/Grey/White

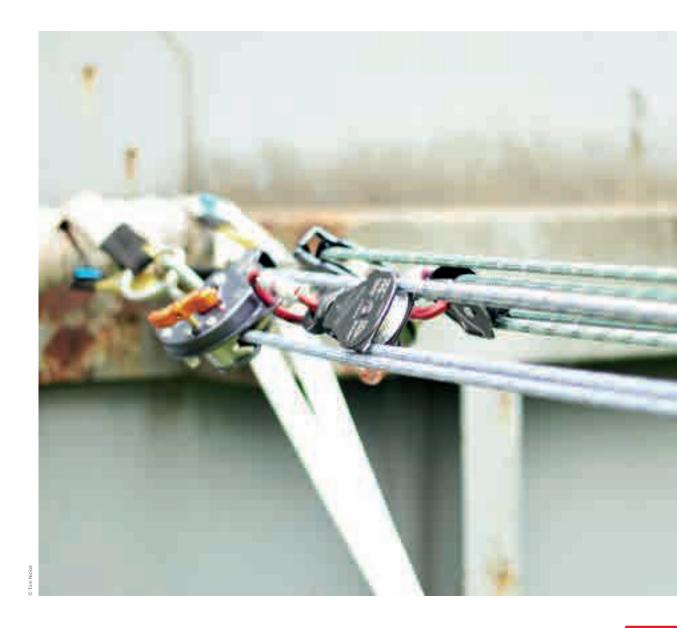
- ✓ Lighter compared to PLATINUM® PES/PA
  ✓ Good abrasion resistance in dry conditions
- ✓ Good ability to absorb shock loads

#### Specifications

Core: Nylon Nylon Cover: Standard: EN 1891 A



Ø		Weight		Shrinkage	Elongation 50-150 kg	Min. brea	aking stren pth	_	ıre 8 knot	Sewn		Cover
mm	inch	g/m	lbs/100	%	%	daN	lbf	daN	lbf	daN	lbf	%
10.5	13/32	72.0	4.80	4	3	2,800	6,300	1,800	4,050	2,200	4,950	46
11.5	7/16	84.0	5.60	4	3	3,300	7,400	1,900	4,275	2,500	5,625	41



MADE IN

Braid: 32



KM-III is an exceptional static rope for rappelling, caving, rescue, top roping, fixed rope applications, hauling, and life safety applications. The unique polyester sheath differentiates KM-III from other static ropes. The polyester sheath is balanced with a nylon core to limit rotation, bouncing, and stretch. Thirty-two strands provide the correct sheath for the unique demands of static rope and the optimum sheath/core ratio. This allows for an incredibly smooth sheath, higher tensile strengths, and superior handling characteristics.



#### Features

- ✓ 32-Strand sheath for optimum sheath / core ratio
- ✓ Polyester over nylon with a balanced torque free construction
- Excellent handling and knot holding characteristics
- High abrasion resistance
- ✓ Excellent UV protection

#### Specifications

Core: Nylon Cover: Polyester Standard: EN 1891 B (8.0mm, 9.5mm) EN 1891 A (10mm,

10.5mm, 11mm, 13mm) NFPA 1983:2012 (8.0mm, 9.5mm, 11.0mm,



















#### CE test results per EN 1891

Ø		Weight		Shrinkage	Elongation Min. breaking strength						Cover	
					50-150 kg	Free leng	gth	With figu	ıre 8 knot	Sewn		
mm	inch	g/m	lbs/100	%	%	daN	lbf	daN	lbf	daN	lbf	%
8.0	5/16	59.5	4.00	< 5	2.00	2,135	4,800	1,200	2,698	1,200	2,698	51
9.5	3/8	65.5	4.40	< 5	3.20	2,700	6,070	1,200	2,698	1,200	2,698	48
10.0	N/A	72.0	4.84	< 5	1.70	2,700	6,070	1,500	3,372	1,500	3,372	48
10.5	N/A	85.0	5.71	< 5	1.60	3,000	6,750	1,500	3,372	1,500	3,372	48
11.0	7/16	86.3	5.80	< 5	1.00	3,514	7,900	1,500	3,372	1,500	3,372	46
13.0	1/2	117.5	7.90	< 5	2.10	4,604	10,350	1,500	3,372	1,500	3,372	47
14.5*	5/8	151.8	10.20	* Not EN 1981	* Not EN 1981	5,100	11,465	1,500	3,372	1,500	3,372	46

<sup>\*</sup> Not CE certified, only NFPA

#### NFPA test results

Ø		Elongation			Approved class
mm	inch	at 1.35 kN (%)	at 2.7 kN (%)	at 4.4 kN (%)	Approved state
8.0	5/16	4.30	7.60	11.30	Escape rope
9.5	3/8	3.50	6.20	9.20	Technical use
10.0	N/A	Not NFPA	Not NFPA	Not NFPA	N/A
10.5	N/A	Not NFPA	Not NFPA	Not NFPA	N/A
11.0	7/16	2.40	4.20	6.30	Technical use
13.0	1/2	2.80	4.50	7.00	General use
14.5	5/8	2.50	3.40	5.20	General use

## KM-III Grip

MADE IN



KM-III grip has all the benefits of traditional KM-III with our new Polygrip(sm) sheath design. The Polygrip sheath provides a better grip for hauling systems without sacrificing the functionality and hand that you expect from KM-III.



## Specifications

Core: Nylon Cover: Polyester Standard: NFPA 1983:2012 -

certification in progress





Ø		Weight		Shrinkage	Elongation	Min. breaking strength						Cover
					50-150 kg	Free length With figure 8 knot Sewn				Sewn		
mm	inch	g/m	lbs/100	%	%	daN	lbf	daN	lbf	daN	lbf	%
13.0	1/2	117.5	7.90	< 5	2.10	4,604	10,350	1,500	3,372	1,500	3,372	47

## KM-III Max

MADE IN



KM-III Max has a well balanced, low rotation, unique twill design. It is a perfect static rope for work placement and smooth descents. Our KM-III Max features our TPT construction that results in a smoother cover reducing drag and creating a finer control on descents. The smooth, low profile sheath allows for better braking, faster ascending, and exceptional abrasion resistance. Originally designed for work placement applications, KM-III Max is an excellent choice for heavy exposure fixed lines, big wall hauling, caving, and a variety of rescue applications.



#### Features

- ✓ TPT construction
- ✓ Exceptional abrasion resistance

#### Specifications

Core: Nylon Polyester Cover: Standard: EN 1891 B (10mm)

EN 1891 A (11mm, 13mm) NFPA 1983:2012 (13mm)

Braid: 32

#### CE test results per EN 1891

Ø	5				<b>Elongation</b> 50-150 kg	Min. bre	Cover					
mm	inch	g/m	lbs/100	%	%	daN	lbf	daN	lbf	daN	lbf	%
10	3/8	65.5	4.40	< 5	3.20	2,700	6,070	1,200	2,698	1,200	2,698	48
11	7/16	87.8	5.90	< 5	1.00	3,514	7,900	1,500	3,372	1,500	3,372	47
13	1/2	116.0	7.80	< 5	2.10	4,604	10,350	1,500	3,372	1,500	3,372	47

#### NFPA test results

Ø		Elongation			Approved class
mm	inch	at 1.35 kN (%)	at 2.7 kN (%)	at 4.4 kN (%)	
10	3/8	3.50	6.20	9.20	Technical use
11	7/16	2.40	4.20	6.30	Technical use
13	1/2	2.80	4.50	7.00	General use

## Patron PLUS





The Patron PLUS was developed specifically to withstand heavy loads in applications such as motor winches. Dirt, climatic influences, heavy loads, and dimensional stability requirements place high demands on a rope. When designing Patron PLUS, we focused on making it extremely robust and compact.



#### Features

- ✓ High-quality nylon
- ✓ High breaking loads compared with extra light weight
- Robust and compact
- Protection against abrasion and ingress of dirt
- Soft handling
- ✓ High comfort in transport and storage
- ✓ 11.0mm certified with CTL Sparrow (2D646) according to EN 341 A

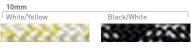
#### Specifications

Core: Nylon Cover: Nylon Standard: EN 1891 A



Braid: 32





Black















Ø		Weight		Shrinkage	Elongation	Min. bre	Cover					
					50-150 kg	Free length With figure 8 knot Sewn						
mm	inch	g/m	lbs/100	%	%	daN	lbf	daN	lbf	daN	lbf	%
10.0	3/8	66.0	4.44	3	3	3,000	6,750	1,600	3,590	2,200	4,940	40
10.5	13/32	72.0	4.85	4	3	3,200	7,190	1,800	4,040	2,300	5,170	46
11.0	7/16	75.0	5.04	4	3	3,200	7,190	1,800	4,040	2,400	5,395	35



The entire Patron series is exceptionally appealing because of its low weight and high breaking strength. Due to the high strength and the low danger of cracking, Patron ropes are the right choice for many different applications. The high-twist 32-strand mantle braid provides for high dirt resistance, better grip and high abrasion protection.



#### Features

- ✓ High-grade nylon
- ✓ Twisted cores
- ✓ Extra light weight at high minimum breaking load
- ✓ High-twist 32-strand mantle braid > dirt resistance, good grip and high abrasion protection
- / High strength
- ✓ 11.0mm certified with PETZL ASAP (B71 + B71AAA) and ASAP Lock (B71 ALU) according to EN 353-2
- ✓ 11.0mm certified with Anthron DSDplus according to EN 341 A

#### Specifications

Core: Nylon Cover: Nylon Standard:

EN 1891 A (10mm, 10.5mm, 11mm, 12mm)

EN 1891 B (9mm)



9mm	10mm		10.5mm			
White/Blue/Red	White/Blue	Red/Black	White/Blue/Red	Red	Orange/Black	Black
er er er er	a de la como	and the		(30,000	157 KY 16	
11mm						
White/Red	Black	Blue	Red	Olive	Red/Black	Black/Grey
		\$\$\$\$\$\$\$	(0)		and the same	***
12mm						
Red/Black	Green/Black					
136	11000					

#### CE test results per EN 1891

Ø		Weight		Shrinkage	<b>Elongation</b> 50-150 kg		Min. breaking strength Free length With figure 8 knot Sewn				Cover	
mm	inch	g/m	lbs/100	%	%	daN	lbf	daN	lbf	daN	lbf	%
9.0	5/16	51.0	3.43	3	3	2,000	4,490	1,300	2,920	-	-	41
10.0	3/8	66.0	4.44	3	3	2,700	6,070	1,600	3,590	2,200	4,940	40
10.5	13/32	72.0	4.84	4	3	3,200	7,190	1,800	4,040	2,200	4,940	46
11.0	7/16	75.0	5.04	4	3	3,200	7,190	1,800	4,040	2,200	4,940	35
12.0	1/2	92.3	6.19	4	3	3,800	8,542	2,200	4,940	2,900	6,519	36



MADE IN



Fly features an ideally balanced structure made up of a polyester cover and a nylon core. Fly is engineered to stay firm and round, which significantly reduces any glazing that can occur when ropes flatten out in hardware. Yet, it remains supple enough to tie into and hold knots well.



#### Features

- ✓ Unique feel and excellent knot holding properties
- Resists flattening and glazing on the rope's surface
- Low stretch
- ✓ Durable polyester cover

#### Specifications

Core: Polyester Cover: EN 1891 A Standard:





A THE WAY	ALM ALM HIS ALM	

Ø		Weight		Shrinkage	Elongation 50-150 kg	Min. brea	nking strer	Cover				
mm	inch	g/m	lbs/100	%	%	daN	lbf	daN	lbf	daN	lbf	%
11	7/16	86.3	5.80	< 5	1.60	2,402	5,400	1,500	3,372	1,500	3,372	56

## Multiline II

MADE IN



Multiline II is a composite rope, constructed by twisting three strands of a blend of spun and filament polyester around cores of fibrillated polyolefin. The polyolefin keeps the strands firm and round without adding weight, which improves abrasion resistance and handling. The spun polyester gives Multiline II its characteristic fuzzy feel and makes it easier to grip, even when wet. Multiline II provides the greatest durability, highest strength, lightest weight, and most consistent supple feel over time of any commercially available composite rope. Multiline is easily identified by its familiar two orange markers.



All diameters
White

#### Features

- Spun polyester improves grip and knot holding even when wet
- Cores of fibrillated polyolefin keep strands firm and round, enhancing knot holding and hand
- Consistently supple feel over the service life of the rope
- Great for natural crotch rigging

#### Specifications

Material: Polyolefin, Polyester



Ø		Weight		Min. breaking strength Free length		
mm	inch	g/m	lbs/100	daN	lbf	
8	5/16	39.6	2.66	827	1,860	
10	3/8	62.5	4.20	1,290	2,900	
11	7/16	69.9	4.70	1,779	4,000	
12	1/2	99.7	6.70	2,269	5,100	
16	5/8	154.7	10.40	3,781	8,500	
19	3/4	215.7	14.50	4,493	10,100	
22	7/8	266.3	17.90	5,783	13,000	
25	1	313.9	21.10	6,895	15,500	
28	1 1/8	447.8	30.10	9,342	21,000	

## Ultrastatic

MADE IN



The Ultrastatic is an exceptional static rope with a polyester sheat over a nylon core. Ultrastatic is certified to EN 1891 A and features exceptionally low stretch along with high static strength and superior handling characteristics. Following these characteristics, the Ultrastatic is a great choice for work and rescue at great heights, use in rough environments of rescue and hoisting equipment, as well as for the use as a rapelling aid.





#### Features

- ✓ Above average breaking strength
- ✓ Exceptionally low stretch
- ✓ Excellent UV stability
- ✓ Good resistance to acids

#### Specifications

Core: Nylon Cover: Polyester Standard: EN 1891 A



Ø				<b>Elongation</b> 50-150 kg		-	-	ıre 8 knot	Cover
mm	inch	g/m	lbs/100	%	daN	lbf	daN	lbf	%
11	7/16	88.0	3.10	2	4,000	8,992	1,800	4,046	40

## Braided Safety Blue



Braided Safety Blue is the trendsetter among 16-strand climbing ropes. It combines features that ensure unparalleled safety, ergonomics, and du bility. The blue core of Braided Safety Blue is exposed when the rope suffers deep damage or has worn down to a point where it should be discarded. As a full 12.7mm rope, Braided Safety Blue goes easy on your hands. This allows you to work longer and avoid injury. Where durability is concerned, Braided Safety Blue's design and detailed workmanship are unrivaled. The additional step of plying the yarns in the strands results in a firmer, rounder, and more durable strand. Other 16-strand ropes skip this step, making them more susceptible to abrasion and shortening their life spans.



#### Features

- ✔ Proprietary "blue" safety core
- Plied strand yarns for improved abrasion
- Coating with a protective finish improves durability and grip
- Easy to splice

#### Specifications

Core: Nvlon Cover: Polyester Standard: EN 1891 A



	mm	
HiVe	е	
	00000000	
-		ı







#### CE test results per EN 1891

Ø		Weight		Min. break	king strength	With [slaid	no]®	
mm	inch	g/m	lbs/100	daN	lbf	daN	lbf	
12.7	1/2	106	7.1	2,580	5,800	1,500	3,372	

## Tachyon

MADE IN



In arborist circles, Tachyon has quickly become the most popular of 24-strand ropes. Thanks to its unparalleled feel and its exceptional performance, it is ideal for use with the latest mechanical systems. Its firm and flexible design features a polyester cover which significantly improves friction hitch performance without "bagginess". The inner core keeps the diameter constant, even under load, for improved grip and less hand fatigue.



#### Features

- ✓ Functions perfectly in combination with standard hardware designed for use with 11mm ropes
- 11.5mm diameter for improved grip and reduced hand fatigue
- ✓ Low stretch at low loads for less bounce while
- ✓ High stretch at high loads to minimize impact in the event of a fall
- Consistent diameter while climbing ensures improved grip
- Easy to splice

#### Specifications

Core: Nylon Cover: Polyester EN 1891 A Standard:





## 55555555







Ø	_		Weight Min. breaking strength Free length With [slaice]*				el®
mm	inch	g/m	lbs/100	daN	lbf	daN	lbf
11.5	7/16	94	6.3	2,625	5,900	1,500	3,372

## TUTOR 12mm HST

MADE IN



The coating of the cover and the core make TUTOR 12mm very supple and water resistant. The highly twined 48-plait cover protects the load-carrying twisted core and strands for ergonomic handling. TUTOR 12mm HST is certified to EN 1891 A and, in defined systems, to EN 353-2.



#### Features

- ✓ High quality nylon
- ✓ Twisted, heat treated core
- ✓ Highly twined 48-plait cover > grippy, dirt resistant, abrasion proof
- ✓ High visibility due to orange coloring
- ✓ Suitable for use with Grip Rescue, Ropstop 2, and ASAP
- Certified with PETZL ASAP (B71 + B71AAA) and ASAP Lock (B71ALU) according to EN 353-2
- ✓ Certified with TEUFELBERGER Ropstop 2+3 according to EN 353-2
- Certified with TEUFELBERGER Grip Rescue according to EN 353-2

#### Specifications

Core: Nylon Cover: Nylon Standard: EN 1891 A





#### CE test results per EN 1891

Ø		Weight		Shrinkage	Elongation	Min. breaking strength						Cover
					50-150 kg	Free length With figure 8 knot Sewn						
mm	inch	g/m	lbs/100	%	%	daN	lbf	daN	lbf	daN	lbf	%
12.0	1/2	91.0	6.12	4	4	2,700	6,060	1,700	3,820	2,500	5,620	42

## Fides III

MADE IN

Braid: 32



This type of rope structure is characterized by a 32-plait braided cover and three braided cores. Its design makes this rope particularly well suited for use around sheaves. Furthermore, it provides above average breaking forces in combination with various types of hardware.



#### **Features**

- ✓ Perfect for the use in devices conforming to EN 341:2011
- Above average braking forces in combination with devices
- Soft in handling
- ✓ High abrasion strength
- ✓ 3 braided cores

#### Specifications

Core: Nylon Cover: Nylon Standard: EN 1891 A













Ø		Weight		Shrinkage	Elongation 50-150 kg		Min. breaking strength Free length With figure 8 knot Sewn			Cover		
mm	inch	g/m	lbs/100	%	%	daN	lbf	daN	lbf	daN	lbf	%
9.6	3/8	61.0	4.10	3	4	2,500	5,630	1,600	3,590	2,000	4,490	40
10.5	13/32	74.0	4.98	3	4	2,800	6,750	1,800	4,050	2,500	5,600	35
11.0	7/16	80.0	5.37	3	3	3,600	8,093	2,200	4,940	3,000	6,744	36
12.0	1/2	95.0	6.38	3	3	4,000	8,992	2,300	5,170	3,000	6,744	37



# DYNAMIC ROPES

Dynamic lines are the standard for situations where a fall is likely. They are designed to offer a stable rope with high-energy absorption. This reduces the impact forces on the climber. Each of our climbing lines offers superior abrasion resistance and high durability.

MADE IN



Our Apex series ropes are designed to provide optimum life safety while permitting the climber to push past his or her personal limits. Apex offers excellent durability with extreme fall protection. Designed to be pushed everyday. Apex ropes provide the long life and safety assurance you have come to expect from MAXIM® Dynamic Ropes. Apex features our proprietary dry treatment process. All of our ropes have dry treated cores. Select styles have a dry core and cover for the ultimate in dry protection.



- ✓ All Apex ropes feature Endura Dry on the core
- ✓ Select models have 2x Endura Dry on the cover
- Designed for big wall and trad climbing
- Great for developing routes

#### Specifications

Core: Nylon Nylon Cover:

Standard: EN 892 **UIAA 101** 

Bipattern





Ø	Weight		Elongation EN	892, UIAA	Max. impact force UIAA	Cover	Numbe	r of falls
mm	g/m	lbs/100	Dynamic (%)	Static (%)	lbf	%	Min.	Avg.
9.9	65.5	4.40	≤ 40	≤ 10	≤ 2,698	35	5	7
10.2	67.0	4.50	≤ 40	≤ 10	≤ 2,698	38	7	9
10.5	74.4	5.00	≤ 40	≤ 10	≤ 2,698	28	10	12
11.0	81.8	5.50	≤ 40	≤ 10	≤ 2,698	29	13	15

## Glider

MADE IN



Glider ropes feature our Twill Pattern Technology (TPT), a unique twill sheath design. This unique braiding technology results in a smoother cover that reduces drag. This gives the feeling of lighter weight as you pull the rope through protection on sport routes. What really separates the Glider from other climbing ropes is the supple feel, easy clips, and superior hand.



#### Features

- ✓ Twill Pattern Technology (TPT)
- Smoother cover that glides through protection
- ✓ Supple feel
- ✓ Easy clips

#### Specifications

Core: Cover:

Nylon EN 892 Standard:

**UIAA 101** 

Nylon

Bipattern



7.7111111						
Teal* 2x-DRY	Moss* 2x-DRY	Peak STD-DRY	Midnight 2x-DRY	Milkyway STD-DRY	Venus STD-DRY	Desert Sun STD-DRY
NAME OF TAXABLE PARTY.			THE REST OF THE PARTY OF	T. T.	and the same of th	20 ( Sec. )
THE PERSON NAMED IN COLUMN	***********	The second secon		Control of the second		19100
		10.2mm				
Smoke 2x-DRY	Fuse 2x-DRY	Green/Yellow 2x-DRY	Red/Black 2x-DRY	Digi/Camo 2x-DRY	Silver* 2x-DRY	Surpass 2x-DRY
	77 - 300000°C	* C * C	122224444		PPPPPPP	The second second
	ALLEY CONTROL STATES			The second second second	33333333	Accompany by the property of
10.5mm						
Sunset 2x-DRY	Camoforest* 2x-DRY	Mystique STD-DRY				
CONTRACTOR OF THE PARTY.	CANADA CONTRACTOR CONTRACTOR	ALCOHOL: SECTION				
THE RESERVE THE PERSON NAMED IN		- 线形并			* Denote	es regular sheath pattern
					2011010	J

Ø	Weight		Elongation EN	892, UIAA	Max. impact force UIAA	Cover	Number	of falls
mm	g/m	lbs/100	Dynamic (%)	Static (%)	lbf	%	Min.	Avg.
9.9	65.5	4.40	≤ 40	≤ 10	≤ 2,698	35	5	7
10.2	67.0	4.50	≤ 40	≤ 10	≤ 2,698	38	7	9
10.5	74.4	5.00	≤ 40	≤ 10	≤ 2,698	28	10	12

Foris

The Foris 10mm rope is a dynamic rope that offers excellent value for the money, being designed to withstand a relatively high number of falls (at least 7 standardized falls). Due to its 40-plait cover that protects the 12 inner cores, this rope is well protected against the ingress of dirt and feels really grippy in your hands.



## Features Features

- Excellent value for the money7 standardized falls
- / standardized fallVery grippy

## Specifications

Core: Nylon
Cover: Nylon
Standard: EN 892
UIAA 101





Ø		Weight		Min. bre	aking strer	ngth		Elongation El	N 892, UIAA	Max. impact force UIAA	Numbe	r of falls
				Free len	gth	With figu	ıre 8 knot					
mm	inch	g/m	lbs/100	daN	lbf	daN	lbf	Dynamic (%)	Static (%)	lbf	Min.	Avg.
10	3/8	67.0	4.50	1,700	3,820	1,400	3,140	39	8	≤ 2,698	7	8

Andy Mann / Climber: Paige Claassen





# THROW LINES

It is their excellent handling characteristics that make throwlines from TEUFELBERGER stand out. Providing unlimited buoyancy, excellent grip, and high strength, they are ideally suited for rescue operations on ice, in fast-flowing waters, or at sea.

## Floating Security Line



Easy to spot XLF security rope Floating Security Line is made of a 16-plait XLF hollow weave. This makes the line buoyant and easy to splice. Its high visibility colors make it easy to see.

✓ Excellent floating characteristics



#### Features ✓ Good handling

Specifications

Material: Polypropylene



All diameters



Ø		Weight		Min. breaki Free length	
mm	inch	g/m	lbs/100	daN	lbf
8	5/16	21.0	1.41	630	1,410
10	3/8	33.0	2.22	810	1,820

## MFP-Throw Line

MADE IN



Single Braid: Multi-Filament Polypropylene 12-strand hollow braid rope of high tenacity polypropylene that flakes easily and resists kinking making it an ideal heaving line. MFP-Throw Line is easily spliced and floats indefinitely. Applications for MFP-Throw Line include: Water Rescue Throw Line, Heaving Line and River Raft Lanyards.

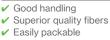


#### Features

Specifications Material:







✓ Excellent float characteristics



Ø		Weigh	t	Min. break	<b>king strength</b> h
mm	inch	g/m	lbs/100	daN	lbf
11	7/16	46.1	3.10	1.335	3.000

## NFPA-Throw Line



The NFPA-Throw Line is a double braid that features a polypropylene cover with a Dyneema® core. This extremely strong and versatile rope has a good hand and a high visibility cover. Designed to be light, strong, and easily packable. The result is a product that is extremely strong and floats indefinitely. Certified to NFPA 1983:2012 for throwlines.



#### **Features**

- ✓ Meets the NFPA Specification for a floating water throwline
- ✔ Double Braid Construction
- Soft hand
- ✓ Good grip
- ✓ Easily packable

#### Specifications

Core: Dyneema® Cover: Polypropylene NFPA 1983:2012 Standard:

Braid: 16



Ø		Weight		Min. breaking Free length	ng strength
mm	inch	g/m	lbs/100	daN	lbf
8	5/16	29.8	2.00	1,223	2,750

## Water Rescue Rope

MADE IN

Water Rescue Rope is a spliceable floating rope for use in swift-water rescue applications. The rope has a durable nylon sheath that protects the braided multifilament polypropylene (MFP) core from damaging UV rays. This combination results in a strong product that floats just under the surface of the water.

The high visibility yellow color (with contrasting red or blue flecks) is easily seen in the water.



#### Features

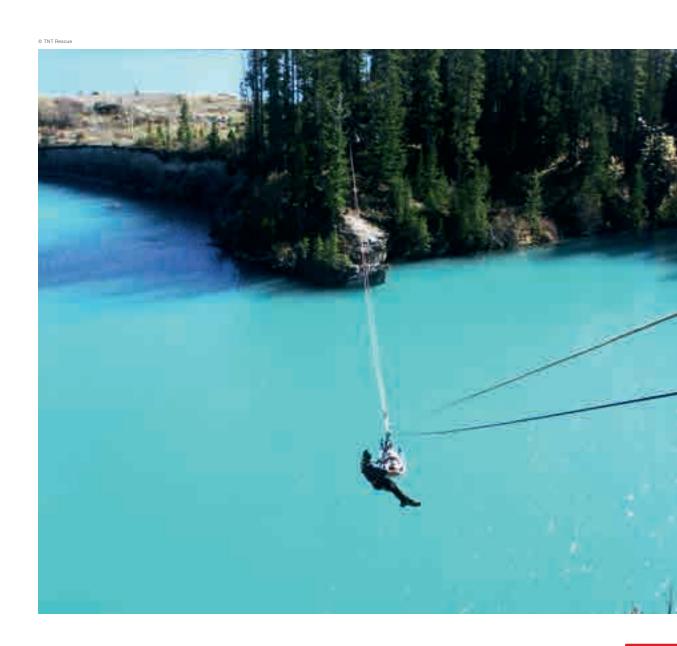
- ✓ High load capacity
- ✓ Floats
- ✓ High visibility
- ✓ Good grip ability

## Specifications

Core: MFP Cover: Nylon Braid: 20



Ø		Weight		Min. breaking	ng strength
mm	inch	g/m	lbs/100	daN	lbf
11	7/16	78.9	5.30	1,646	3,700







# HEAT RESISTANT ROPES

Heat resistant ropes made by TEUFELBERGER were designed specifically for emergency escape or search purposes. Special fibers and designs ensure good heat resistance, abrasion resistance, and higher tensile strength thanks to their compactness, but also good and easy handling characteristics. Each of our climbing lines offers superior abrasion resistance and high durability.

## Aramid Escape

MADE IN



Aramid Escape Line was designed for firefighters, in collaboration with science and safety officers from the country's largest fire departments and the world's leading fiber manufacturers, to improve the safety of firefighters - especially those working in tall buildings. Technora® is a perfect fiber for a fire escape rope for its high decomposition point (500°C / 900°F) and durability, an important consideration in bailout situations where sharp glass or rough exterior building materials threaten the integrity of the escape rope. The supple product packs tightly into a compact bag which can be worn on a belt and deployed instantly if necessary.



All diameters Gold-Technora® nature mus

#### Features

- ✓ Especially designed for firefighters
- Packs tightly into a compact bag
- ✓ High decomposition point and durability due to Technora® fiber
- ✓ Limited UV-resistance

#### Specifications

Core: Technora® Cover: Technora® Standard: NFPA 1983:2012



Ø		Weight		Min. bre	aking strength gth
mm	inch	g/m	lbs/100	daN	lbf
7.5	N/A	45.8	3.08	2,780	6,250
8.0	N/A	52.1	3.50	2,491	5,600

#### NFPA test results

Ø		Elongation			Approved class
mm	inch	at 1.35 kN (%)	at 2.7 kN (%)	at 4.4 kN (%)	
7.5	N/A	1.10	1.40	1.60	Escape rope
8.0	N/A	1.20	1.60	2.00	Escape rope

## Yellowstone





TEUFELBERGER's Yellowstone has a thick Technora® sheath and a Safety Blue core made of high tenacity nylon. Yellowstone has little to no stretch and is highly cut and heat resistant. It is perfect for rappelling in high heat situations or over sharp edges. The Safety Blue nylon core eliminates the bumpiness and "knot memory" that is common to other Technora® ropes. Additionally, it shows easily through any damage to the sheath.



Gold-Technora® nature

#### **Features**

- ✓ High decomposition point (up to 500°C)
- ✓ High firmness and increased resistance to cutting and abrasion
- ✓ Limited UV-resistance

#### Specifications

Core: Nvlon Cover: Technora® Standard: NFPA 1983:2012 -

certification in progress



Ø		Weight		Min. bre	<b>aking strength</b> gth	Cover
mm	inch	g/m	lbs/100	daN	lbf	%
13.0	1/2	98.9	6.65	4,093	9,200	79

## Vulcanos

MADE IN



Vulcanos is according to EN 1891 A and designed as a heat-resistant rope and comes with an aramid cover. Contrary to polyester and nylon, aramids are highly heat resistant. What is more, these fibers exhibit excellent strength and slight elongation at break. Vulcanos results in a rope which features increased resistance to cutting and abrasion. It is well suited as a work rope or work positioning rope for work activities near sources of heat and the probability that it gets in contact with sharp edges. In view of its heat resistance, using it for several fast abseiling procedures in rapid succession is not a problem. Hence, it is also well suited for special intervention units, emergency response organizations, and for use in rescue operations.



#### Features

#### Specifications

- ✓ Fully compliant to EN 1891 A
- ✓ High decomposition point (up to 500°C)
- ✓ High firmness and increased resistance to cutting and abrasion
- ✓ Limited UV-resistance

Core: Nylon Technora® Cover: Standard: EN 1891 A



Braid: 32

Gold-Technora® nature

#### CE test results per EN 1891

Ø		Weight		Elongation 50-150 kg	Min. brea	-	-	ıre 8 knot	Cover
mm	inch	g/m	lbs/100	%	daN	lbf	daN	lbf	9%
10.5	13/32	74.0	4.98	2.5	3,200	7,190	1,800	4,040	36

MADE IN



T 12 is a 12-strand single braid of 100% Technora®. T 12 is characterized by a high breaking force, a very low elongation, little creep, and excellent heat resistance. A special urethane coating improves the abrasion resistance of T 12.



All diameters

#### Features

- ✓ Very high breaking force
- ✓ Very low elongation
- ✓ Very high melting point
- ✓ Urethane coating to improve abrasion strength, and color coding
- ✓ Spliceable
- ✓ Limited UV-resistance

### Specifications

Material: Technora® Braid: 12



Ø		Weight		Min. brea	aking strength gth
mm	inch	g/m	lbs/100	daN	lbf
2	3/32	3.4	0.23	316	710
3	1/8	8.8	0.59	787	1,770
5	3/16	17.7	1.19	1,735	3,900
6	1/4	31.2	2.10	3,292	7,400
8	5/16	46.1	3.10	4,804	10,800
10	3/8	64.0	4.30	6,472	14,550
11	7/16	99.7	6.70	11,210	25,200
12	1/2	119.0	8.00	13,456	30,250
16	5/8	148.8	10.00	19,528	43,900
19	3/4	287.1	19.30	24,021	54,000





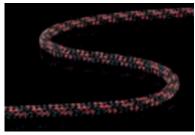
Accessory cords, anchor loops, hitch cords, and multifunctional tools complement our product portfolio.

## Sirius Reep Cord

MADE IN



The accessory cord Sirius Reep Cord is the classic Prusik Cord in European tree care. Its combination of good knot-ability and flexibility ensure supreme ease of handling.



# 8-10mm Black/Red Black/Gre

#### Features

- ✓ High-grade polyester
- ✓ High-twist 32-strand mantle braid
- ✓ Slip-proof, dirt-resistant, abrasion-resistant

#### Specifications

Core: Polyester
Cover: Polyester
Standard: EN 564 (8mm)



Ø		Weight			<b>Min. breaking strength</b> Free length				
mm	inch	g/m	lbs/100	daN	lbf				
8	5/16	50.0	3.4	1,440	3,250				
10	3/8	71.0	4.8	2,400	5,400				

## Nodus

MADE IN



The Prusik Cord is made of high-grade polyester and is used as a Prusik sling and for universal applications. The high-twist 32-strand mantle braid makes the accessory cord immune to dirt and provides for ergonomic handling and high abrasion resistance. The Prusik Cord distinguishes itself by very good knot-ability. High-quality manufacturing provides for high strength and a low danger of cracking.



4-6mm Yellow/Black/White

#### Features

- ✓ High-grade polyester
- ✓ High-twist 32-strand mantle braid
- ✓ Slip-proof, dirt-resistant, abrasion-resistant

### Specifications

Core: Polyester Cover: Polyester Standard: EN 564



Ø		Weight		Min. bre Free leng	aking strength gth
mm	inch	g/m	lbs/100	daN	lbf
4	5/32	12.4	0.8	450	1,010
6	1/4	26.5	1.8	940	2,110

## Nylon Accessory Cord

MADE IN



Our Nylon Accessory Cords feature a kernmantle-construction designed and engineered with the same attention to detail as our dynamic climbing ropes. Nylon Accessory Cord is a perfect multi-purpose line for stringing accessories, keeping personal items off the ground, tie-down ropes, or us a decorative accessory for packs or other gear.



#### **Features**

- Perfect for balancing anchors and creating self-equalizers
- Perfect multi-purpose line for stringing accessories
- ✔ Great for tie-downs
- ✓ Perfect way to keep personal items off the ground

#### Specifications

Core: Cover: Standard:

Nylon Nylon

EN 564 (7mm) UIAA 102 (7mm)





Ø		Weight		Min. bre	gth
mm	inch	g/m	lbs/100	daN	lbf
3	1/8	6.0	0.40	169	380
4	5/32	10.4	0.70	205	460
5	3/16	18.9	1.27	498	1,120
6	1/4	25.3	1.70	778	1,750
7	9/32	28.3	1.90	912	2,050
8	5/16	40.2	2.70	1,379	3,100
9	11/32	52.1	3.50	1,779	4,000

## Prusik Cord

MADE IN



Our Prusik Cord strikes the perfect balance between firm and supple. We engineered Prusik Cord so that the rope has enough give to grip the climbing rope but not be so mushy that the knot locks up. This results in a smooth, controlled movement over the climbing rope and makes untying the Prusik knot easier to manage. Prusik Cord is available in 5mm to 9mm diameters, each diameter available in two reverse light and dark patterns.



#### **Features**

- ✓ Perfect balance between firm and supple
- ✔ Provides the ability to have a great grip on the climbing rope without letting the knot lock up

#### Specifications

Core: Cover: Nylon Nylon Braid: 32





	OIIIIII
Teal	Burgundy

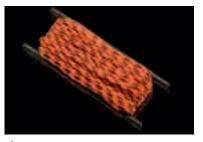
Ø	Ø Weight		Min. bre Free len	<b>aking strength</b> gth	
mm	inch	g/m	lbs/100	daN	lbf
5	1/7	18.9	1.2	500	1,100
6	1/4	25.3	1.7	780	1,750
7	9/32	28.6	1.92	870	1,955
8	5/16	40.2	2.7	1,380	3,100
9	7/20	52.1	3.5	1,780	4,000

## Polyester Accessory Cord

MADE IN



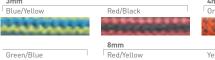
Our Polyester Accessory Cord offers the best of both worlds. Polyester resists water, has less stretch, has super vibrant colors, and has greater UV resistance. Polyester is also more durable than nylon and its lower stretch offers more abrasion resistance. The Polyester Accessory Cord carries UIAA 102 and EN 564 certification.



#### Specifications **Features** Resists water Core: Polyester

✓ Less stretch Cover: ✓ UV resistant Standard:

Braid: 24 EN 564 (4-8mm)





5mm Yellow/Blue	Yellow/Black
STATE OF THE PARTY.	No.
400000000000000000000000000000000000000	

Polyester

**UIAA 102** 

7mm	
Blue/Green	
DESIGNATION OF THE PERSON OF T	COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED STATE OF THE SERVICE STATE OF THE PERSON NAMED STATE OF THE SERVICE STATE O
****	

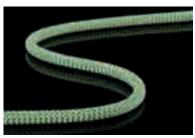
Ø	Weight		<b>Min. breaking strength</b> Free length		
mm	inch	g/m	lbs/100	daN	lbf
3	1/8	6.7	0.45	133	300
4	5/32	12.3	0.83	294	660
5	3/16	18.9	1.27	476	1,070
6	1/4	26.8	1.80	690	1,550
7	9/32	34.2	2.30	934	2,100
8	5/16	46.1	3.10	1,090	2,450

## Dcean Polyester

MADE IN



Ocean Polyester is our response to the high demands of hitch cords. Composed of a polyester/aramid sheath and a polyester core, its construction makes the rope highly abrasion resistant, grippy, and heat resistant. Ocean Polyester is a great value for the money.







#### Features

- ✓ Highly abrasion resistant
- Grippy
- ✓ Heat resistant

Core: Polyester Polyester/Aramid Cover: Standard: EN 564 (8mm)



Ø		Weight	Veight		Weight		aking strength gth
mm	inch	g/m	lbs/100	daN	lbf		
8	5/16	50.0	3.4	2,200	5,000		
10	3/8	72.0	4.8	3,300	7,400		

## Ocean Vectran®

MADE IN



The Ocean Vectran® rope has long become indispensable in the field of hitchcords. Composed of a polyester/aramid sheath, which is already known from the Ocean Polyester, makes the rope highly abrasion resistant, grippy and heat resistant. The load-bearing core of this rope is made of a high-strength Vectran® and allows for very high breaking loads, with a diameter of only 6mm.



## Features

✓ Highly abrasion resistant

Grippy

✓ Heat resistant

#### Specifications

Core: Vectran®
Cover: Polyester/Aramid

Standard: EN 564





Ø	Weight		Min. breaking strength Free length			
mm	inch	g/m	lbs/100	daN	lbf	
6	1/4	32.5	2.2	2,200	5,000	

## Ocean Polyester E2E

MADE IN



The cover of Ocean Polyester E2E consists of braided polyester/aramid, its core of high quality polyester fibers. This mix of materials makes E2E highly heat resistant. The stitched eye-to-eye loops come in diameters of 8 or 10mm and are designed to grip a karabiner. There is no shorter EN-certified stitch pattern on the market. Such is the durability of Ocean Polyester E2E that, after arresting a fall, it may safely be retained in service for the duration of an ongoing rescue (confirmed by TÜV).



#### Specifications

Core: Polyester
Cover: Aramid (8mm)
Polyester/Aramid

(10mm) EN 795 B

Standard: EN 795 B

EN 566 (10mm)



Ø		Weight		Weight		Min. brea	aking strength pth
mm	inch	g/m	lbs/100	daN	lbf		
8	5/16	1,500	3,400	1,800	4,046		
10	3/8	2,200	5,000	2,500	5,620		

## **Tech Cord**

MADE IN



Tech Cord is extremely strong and extremely abrasion resistant. The polyester cover surrounds a parallel fiber core of 100% Technora®, resulting in a cord that gets extremely high tensile strength. The reported tensile strength of Tech Cord, as with any rope, can be significantly reduced when used with a knot. The most recommended knot for this cord is a double fishermans.



#### **Features**

✓ Exceptionally strong

Abrasion resistantPerfect for codelette

## Specifications

Core: Technora® Polyester













Ø	Weight		Min. brea	iking strength th	
mm	inch	g/m	lbs/100	daN	lbf
3	1/8	11.3	0.76	1,335	3,000
5	3/16	23.4	1.57	2,091	4,700

## OD 7mm Loop T

MADE IN



In the tree care segment, the OD Loop with a thimble has already been successful as a Prusik on the pulleySAVER. It is also available for industrial applications, namely, as an anchor point to EN 795B.



#### Specifications

Core: Dyneema®
Cover: Polyester/Aramid
Standard: EN 795 B

ANSI Z133-2012 (Prusik)



Ø		Min. bre Free leng	eaking strength gth	
mm	inch	daN	lbf	
7	9/32	2,450	5,507	

## Sirius Loop

MADE IN



Sirius Loop makes your work easier and safer. The decisive advantage of the stitching of the Sirius Loop as compared to conventional knots is its reliability and compactness. The Sirius Loop is abrasion-resistant and flexible at the same time.



#### Specifications

Core: Polyester
Cover: Polyester
Standard: EN 795 B

ANSI Z133-2012 (Prusik)



Ø		Min. bre	<b>aking strength</b> gth	
mm	inch	daN	lbf	
10	3/8	2,450	5,507	

## Ocean Polyester Loop

MADE IN



Tested to EN 795 B and EN 566, respectively, the Ocean Polyester Loop is suited for a wide range of uses and is a must-have for all industrial climbers. Manufactured on automated machines, the stitched rope connection is of higher quality and less bulky than a knot. The static breaking force of the OP Loop 10mm was determined using the testing method according to EN 566. Tested to EN 795 B, the OP Loop 8mm provides such durability that, after arresting a fall, it may be safely in service for the duration of an ongoing rescue (confirmed by TÜV).



#### Specifications

Core: Polyester Cover: Polyester Standard: EN 795 B

EN 566 (10mm)



Ø		Min. bre Free len	<b>aking strength</b> gth	
mm	inch	daN	lbf	
8	5/16	2,200	5,000	
10	3/8	2,225	5,002	

## HRC (Therma Shield Prusik)

HRC (Therma Shield Prusik) features a heat-resistant cover made from Technora® and spun Nomex® for extreme heat and abrasion resistance.

ThermaShield Prusik has great hand, provides maximum grip, and stays supple in use. A Vectran® core offers the best of high strength and low stretch.



## All diameters White/Brown

#### Features

- ✓ High melting point
- ✓ No "glazing"
- ✓ Soft, no-slip grip
- ✓ Longer life for greater value
- ✓ Limited UV-resistance

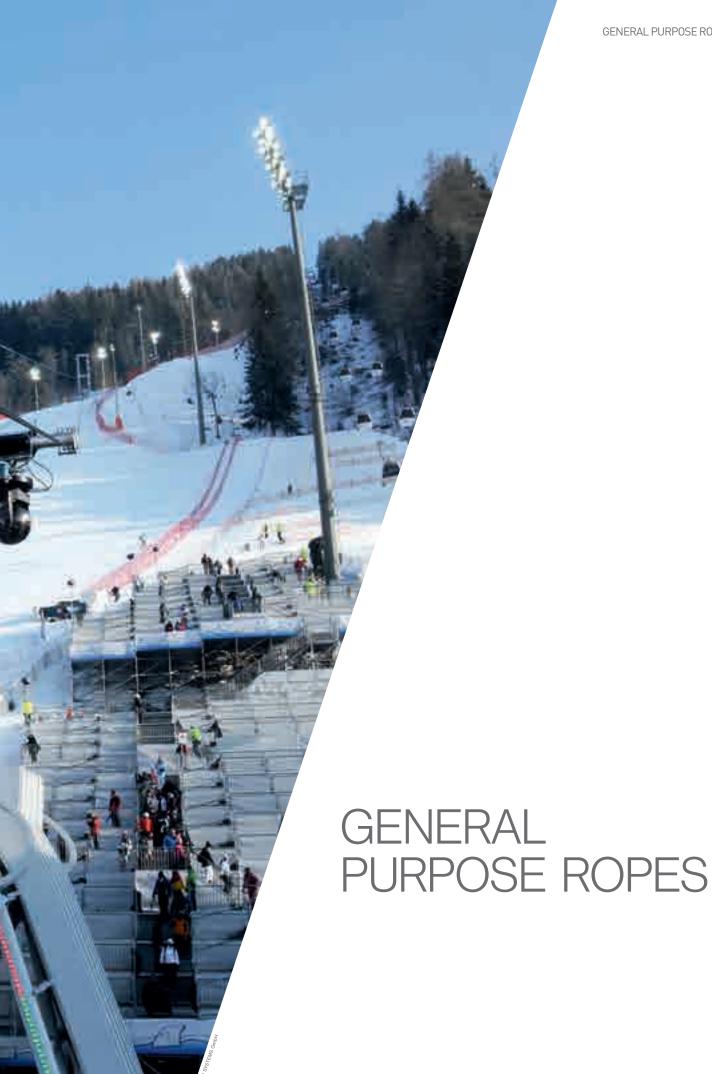
### Specifications

Core: Vectran®
Cover: Technora®/
Nomex®



Ø		Weight		Min. brea	aking strength gth
mm	inch	g/m	lbs/100	daN	lbf
8	5/16	49.1	3.30	2,669	6,000
10	3/8	74.4	5.00	4,893	11,000
12	1/2	108.6	7.30	6,005	13,500
14	9/16	141.3	9.50	8,452	19,000
16	5/8	156.2	10.50	10,676	24,000





### Orion 500

MADE IN



The Polyester "Jack of all Trades". Orion 500 shines in stylish colors! Its 16-plait polyester cover and its 8-plait core ensure good grip and make this rope easy to splice.



#### Specifications

Core: Polyester Cover: Polyester



All diameters Green	Navy	Pink/Black	Neonyellow/Black	Neongreen/Black	Purple/Black	Black
ANANAN	4999999999				2000	



Ø	inch	<b>Weight</b>	lbs/100	Min. bre Free len	eaking strength gth lbf
2	1/16	3	0.20	63	141
3	1/8	6	0.40	135	303
4	5/32	12	0.81	360	810
5	3/16	19	1.28	540	1,215
6	1/4	24	1.61	720	1,620
8	5/16	41	2.76	1,260	2,835
10	3/8	70	4.70	1,800	4,050
12	1/2	89	5.98	2,250	5,060

# 3 Strand Nylon

MADE IN



Premium 3 Strand Nylon gives you the perfect balance of traditional 3 strand construction with a soft free running safety line that will resist jamming and hockling.



All diameters White/Red/Yellow

#### Features

- ✓ Perfect for rope grabs, vertical lifelines and lifeline assemblies supple
- ✓ High strength
- ✓ Good abrasion resistance
- ✓ Easily spliced

#### Specifications

Material: Nylon

Braid: 3



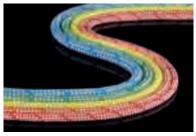
Ø		Weight		Min. bre	aking streng
mm	inch	g/m	lbs/100	daN	lbf
5	3/16	15.3	1.03	445	1,000
6	1/4	22.5	1.51	823	1,850
8	5/16	34.1	2.29	934	2,100
10	3/8	50.6	3.40	1,624	3,650
11	7/16	74.4	5.00	2,335	5,249
12	1/2	90.8	6.10	2,780	6,250
14	9/16	122.0	8.20	3,114	7,000
16	5/8	151.8	10.20	3,915	8,800
19	3/4	205.3	13.80	6,673	15,000
22	7/8	278.2	18.70	8,319	18,700
25	1	 363.0	24.40	10,187	22,900
28	1 1/8	458.2	30.80	13,801	31,025

### Sirius Bull Rope

MADE IN

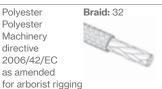


For years now, Sirius Bull Rope has been a must-have for arborists. This is why we expanded and upgraded our Bull Rope line. What is new are the transverse stripes in the cover pattern which indicate when the rope is overloaded. In addition, our Bull Rope series now also includes 18mm and 20mm models. The various diameter versions can now be distinguished easily via differently colored tracer threads. Sirius Bull Rope continues to be a highly abrasion resistant and easy to knot rope offering unmatchable value for money.



#### Specifications

Core: Polyester Cover: Polyester Standard: Machinery directive 2006/42/EC as amended













Ø		Weight		Min. bre	<b>aking strength</b> gth
mm	inch	g/m	lbs/100	daN	lbf
12	1/2	103	7	3,500	7,900
14	9/16	151	10	5,200	11,700
16	5/8	185	12	6,300	14,200
18	23/32	227	15	7,700	17,300
20	25/32	291	20	8,800	19,800

### Endura 12

MADE IN



Endura 12 is manufactured from 100% HMPE fiber. The result is a rope that is extremely high strength, very lightweight, and very low stretch. The 12-strand single braid construction is supple, non-rotational, and easily spliced. Endura 12 is ideally suited for wire replacement and where weight is a primary design consideration.



#### **Features**

- ✓ Excellent strength-to-weight ratio
- ✓ Excellent wet/dry strength retention
- ✓ Will not absorb water
- ✓ Urethane coated for improved abrasion resistance and color coding
- ✓ Spliceable

#### **Applications**

- ✓ Replacement for steel cable
- ✓ Winch lines
- ✓ Helicopter lifting lines
- ✓ Overhead pulling lines
- ✓ Slings
- Tug boat tow lines



All diameters





Ø		Weight		Min. breal	king streng
mm	inch	g/m	lbs/100	daN	lbf
2	3/32	2.98	0.20	400.4	900.0
3	1/8	7.44	0.50	1,023	2,300
4	5/32	9.67	0.65	1,601	3,600
5	3/16	17.85	1.20	1,980	4,450
6	1/4	25.29	1.70	3,536	7,950
8	5/16	37.94	2.55	5,916	13,300
10	3/8	50.59	3.40	7,473	16,800
11	7/16	62.49	4.20	9,875	22,200
12	1/2	91.50	6.15	14,279	32,100
14	9/16	107.12	7.20	17,571	39,500
16	5/8	150.27	10.10	22,598	50,800
18	3/4	219.30	14.74	25,801	58,000

### Endura Braid

MADE IN



Made from Endura Braid, a doublebraid with a very high strength, extremely low stretch HMPE core with a durable polyester cover. Higher strength-todiameter ratio enables smaller diameters to be put into service which can be advantageous when winch drum/take up length is a limiting factor. Eyes can be spliced on one or both ends and are available soft or with your choice of thimbles. We offer galvanized, heavy duty galvanized, bronze, and stainless steel thimbles.



#### Features

✓ Factory spliced Eyes✓ Optional urethane coating can be applied to entire assembly or eyes only

#### Specifications

Core: UHMWPE Polyester Cover:





All diameters						
Black	White	Solid Red	Solid Green	Solid Blue	Red Fleck	Blue Fleck
<u>.</u>		******		****	*****	****



Ø			Weight		Min. brea	aking strengtl
mm	inch		g/m	lbs/100	daN	lbf
4	5/32	·	12.6	0.85	712	1,600
5	3/16		16.4	1.10	1,246	2,800
6	1/4		26.8	1.80	1,868	4,200
8	5/16		44.6	3.00	3,114	7,000
10	3/8		67.0	4.50	4,448	10,000
11	7/16		80.3	5.40	5,738	12,900
12	1/2		98.2	6.60	8,941	20,100
14	9/16		128.0	8.60	10,231	23,000
16	5/8		175.6	11.80	12,011	27,000
19	3/4		235.1	15.80	15,125	34,000
22	7/8		311.0	20.90	21,575	48,500
25	1		403.2	27.10	25,801	58,000
28	11/8		511.8	34.40	38,256	86,000
32	11/4		586.8	39.44	37,811	85,000



### Sta-Set

MADE IN



The industry leading polyester double braid. Low stretch and durable line ideal for all applications requiring control lines, positioning, lifting, or lowering.



#### Features

- ✓ Low stretch
- ✓ Strong
- ✓ Flexible
- ✓ Durable✓ Long wearing

#### Specifications

Core: Polyester
Cover: Polyester

#### Applications

- ✓ Lifting lines
- ✓ Lowering lines
- ✓ Multi-purpose
- ✓ Winch Lines



Braid: 24

















Ø		Weight		Min. brea	aking strength
mm	inch	g/m	lbs/100	daN	lbf
5	3/16	16.4	1.10	534	1,200
6	1/4	29.8	2.00	979	2,200
8	5/16	46.1	3.10	1,557	3,500
10	3/8	64.0	4.30	1,779	4,000
11	7/16	89.3	6.00	2,313	5,200
12	1/2	116.0	7.80	3,937	8,850
14	9/16	150.3	10.10	4,226	9,500
16	5/8	177.0	11.90	5,783	13,000
19	3/4	252.9	17.00	9,786	22,000
22	7/8	352.6	23.70	11,833	26,600
25	1	482.0	32.40	14,858	33,400
28	1 1/8	592.1	39.80	16,681	37,500
32	11/4	732.0	49.20	16,948	38,100

## Safety Pro-12





Safety Pro-12 has a unique design that results in a rope that is easy to knot yet resists flattening which is common on other 12-strand climbing ropes. The difference is in the construction. Each of the twelve strands in Safety Pro-12 consists of a core of lightweight polyolefin surrounded by tough, durable polyester. The twelve strands are then braided around a bundle of our blue nylon core yarns. The result is a hybrid 12-strand kernmantle design that strikes the perfect balance between firm and supple. Safety Pro-12 has minimal bounce so there is little wasted energy when climbing. Its high strength and outstanding abrasion resistance also make Safety Pro-12 a great rigging rope. Safety Pro-12 is available in 1/2" diameter in white with orange and green identifying tracers.



### 12 mm White

#### **Features**

- ✓ Polyester & polyolefin strands surrounding a core of tightly bundled nylon
- ✓ High twist levels in the strands increase abrasion
- ✓ Resistance and lengthens service life
- Stays firm and round, yet is supple for excellent knot holding properties
- ✓ Low elongation
- ✓ Very little bounce

#### Specifications

Core:

Nylon Polyester/ Polyoefin



Ø		Weight		Min. bre	eaking strength
				Free len	ngth
mm	inch	g/m	lbs/100	daN	lbf
12	1/2	113.1	7.60	3,003	6,750

V IZ

12-strand single braid of 100% Vectran\*. Highest strength, lowest stretch and creep of any other 12-strand. V-12 is treated with a proprietary urethane coating for improved abrasion resistance.



#### Features Specifications

- ✓ Good fatigue resistance
- ✓ Easily spliced
- ✓ No creep
- ✓ High temperature resistance

Material: Vectran®















Ø		Weight		Min. bre	<b>aking strengt</b> gth
mm	inch	g/m	lbs/100	daN	lbf
3	1/8	6.8	0.46	712	1,600
4	5/32	11.9	0.80	1,246	2,800
5	3/16	17.9	1.20	1,557	3,500
6	1/4	22.3	1.50	2,580	5,800
8	5/16	49.1	3.30	4,226	9,500
10	3/8	69.9	4.70	6,495	14,600
11	7/16	98.2	6.60	10,454	23,500
12	1/2	111.6	7.50	11,566	26,000
13	19/32	125.0	8.40	12,513	28,130
14	9/16	145.8	9.80	14,146	31,800
16	5/8	183.0	12.30	17,126	38,500
18	23/32	245.5	16.50	27,647	62,150
20	13/16	290.1	19.50	30,783	69,200

### Micro Rappel Kit







Designed in collaboration with the U.S. Army Research, Development and Engineering Center for the U.S. Military Special Forces, the Micro Rappel system is a compact, lightweight two-mode system that converts from a belt to a harness in seconds. The system includes the rappel harness/belt, descender, two carabiners, deployment bag, usage log, instruction sheet, and 82 feet of 5mm tech cord with chafe guard. The leg straps for the harness are stowed in the belt. To deploy, the user pulls the leg loop out of the side pouches in the belt, pulls them down the front, in-between the legs, around the back of the leg, and back up. The leg loops and belay loop are then connected with a carabiner (included). The attached deployment bag holds the rope, carabiners, and descent device. The Micro Rappel Kit provides a quick means of escape from any potentially volatile situation and requires special instruction and training.

#### Specifications

Core: Technora Cover: Polyester Standard: CI 1500

Ø		Weight			<b>/lin. breaking strength</b> free length				
mm	inch	g/m	lbs/100	daN	lbf				
5	3/16	23.4	1.57	2,091	4,700				





# ROPE BAGS

### ropeBUCKET / kitBAG

Keep everything in perfect order and within reach! With TEUFELBERGER's brand-new and unique transport and storage bags. Made of the material of the treeMOTION harness, they are

- Extremely robust
- ✓ Stable
- ✔ Breathable
- ✔ Permeable to moisture and water
- Provided with a system of perforations for the easy and fast attachment of frequently needed work equipment
- ✓ Long-living, with replaceable rope parts

The bags come in four different sizes designed for different combinations of gear. A convenient system of perforations allows users to arrange their equipment systematically according to their own preferences. As a set, the bags can be stacked conveniently inside one another and thus take up little storage space.

ropeBUCKET 80I - The biggest of the bags, with a storage volume of 80 liters. Shoulder straps and a comfort handle make it very easy to carry. ropeBUCKET 50I - This bag also comes with shoulder straps and the comfort handle, which make it easy to carry. It fits into the 80I bag.

**kitBAG 30I** - This bag has the same size bottom as ropeBUCKET 50I. However, stacked on top of the 50I model, it fits into the 80I bag.

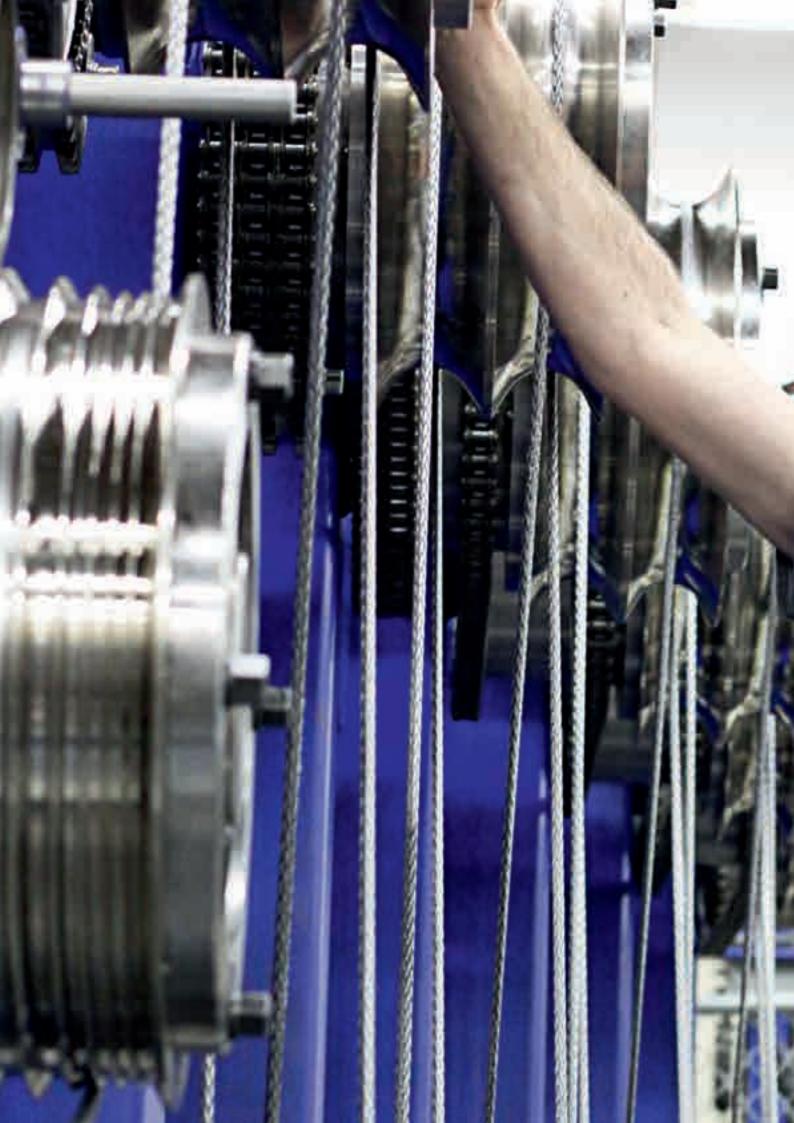
kitBAG 25I - This bag fits into any of the 30I, 50I and 80I bags.

The following parts of bags can be replaced:

- ✓ Rope red/gray
- ✓ Front and rear bottom edges
- ✓ Straps for back and shoulder
- ✓ Carabiners

Load carrying capacity of the bags: 220 lbs Do not use for lifting loads and people.







# **PLATINUM**®

PLATINUM® stands for an entirely novel breed of safety ropes made with cutting-edge technology.

This technology is characterized by the permanent mechanical interconnection between the rope's core and its cover. Core and cover yarns are interlaced with one another at regular intervals, which keeps any core/cover displacement from happening. These interconnection sites effectively stop any bunching of the cover and core. Thus, PLATINUM® enables the excellent transmission of forces from the cover to the core region and, in this way, prevents any overloading of the cover.

In addition, PLATINUM® also includes the mechanical interconnection of the various twisted cores with one another. This optimizes the distribution of the load among the various cores. The outcome is a dimensionally stable, compact core bundle and thus an equally dimensionally stable, compact rope. PLATINUM® technology makes it possible, for the first time ever, to braid compact, and yet soft and flexible ropes that eliminate any core/cover displacement.

- ✓ Better handling
- ✓ Higher safety



### Critical situations

PLATINUM® ensures higher safety and better handling. A direct comparison will make these advantages more clear:

# Coreless end of cover

**Conventional Rope** 



- A surplus length of the cover results in a coreless rope section
- This may be extremely dangerous for inexperienced climbers

#### **PLATINUM®** Rope



PLATINUM® fully avoids displacement at the end of the rope and gurantees greater safety and comfort.

# Pushing together of cover and core

#### **Conventional Rope**



- A cover that has been pushed together on the core will impair the use of climbing devices
- Danger! Climbers are no longer able to rappel down by themselves

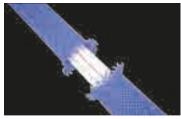
PLATINUM® Rope



 PLATINUM® prevents the cover from being pushed together on the core and ensures greater safety.

#### Sheath break

#### **Conventional Rope**



 If the sheath is cut by abrasion over an edge, it slides down and gathers over some meters. It then becomes very difficult to pass this section, whether ascending or descending.

#### PLATINUM® Rope



If the sheath is cut by abrasion over an edge, the core and sheath remain bonded together due to the mechanical connection between cover and core.

# FIBER STRUCTURES

#### Monofilaments

The yarns consist of one single element of a relatively large diameter and are braided into a rope.

#### Characteristics:

- ✓ Very good abrasion resistance
- ✓ Low dirt take-up
- ✓ Stiff structure

#### Textured fibers

A certain degree of disorder is caused in a formerly straight bundle of synthetic fibers to generate characteristics which are usually seen only on natural fibers.

#### **Characteristics:**

- ✓ Good grip
- ✓ High elasticity
- ✓ Traditional look and feel

#### Multifilaments

A bundle of thin fibers processed into twines which then are braided into a rope. The majority of fiber ropes follow this basic design.

#### **Characteristics:**

- ✓ High flexibility
- ✓ High tensile strength

#### Staple fiber

This type of material consists of spun pieces of short filaments instead of a bundle of long ones.

#### **Characteristics:**

- ✓ Excellent grip
- ✓ Soft handling



# RAW MATERIALS

#### PBO (Polybenzoxazoles, Crystal Polymer)

The generic fiber PBO refers to Zylon® which is a high performance fiber with the highest strength and lowest stretch of any commercially available fiber. It is extremely expensive and experiences progressive strength loss when exposed to UV-rays.

#### **UHMWPE (Ultra High Molecular Weight** Polyethylene)

UHMWPE (also known as UHMPE or HMPE Dyneema®) is an extremely high strength fiber of ultra high molecular polyethylene. For the same weight it has 15 times the tensile strength of steel. Rope made from this type of fiber shows very low elongation and tensile strength. If very high loads are being applied for a long period of time, UHMWPE fiber tends to creep. The rope then is irreversibly extending its length. At the same time, these robust fibers show excellent performance in terms of abrasion resistance and good UV-resistance.

#### **Aramid (Aromatic Nylon)**

Aramid fibers have an extremely high breaking load and show almost no stretch. On the other hand they are sensitive to UV-rays, bending over sharp edges, and abrasion. It is mainly used in places where high temperature resistance is essential, for example on winches, in hot air balloon ropes, or for any other application where heat exposure needs to be considered.

#### LCP (Liquid Crystal Polymer)

LCP (known as Vectran®, a brand name of Hoechst Celanese), combines extremely low elongation with extremely high breaking loads. However, its UV-resistance is not very high. It is heat resistant and not very sensitive to bending over sharp edges. The big advantage of Vectran® is, however, that compared to UHMWPE it does not creep.

#### PES (Polyester)

Static ropes made of polyester fibers are characterized by good breaking loads and low stretch. This material offers both chemical and physical advantages such as UV resistance salt water resistance, and good abrasion strength in both dry and wet conditions. However, the dynamic energy absorption capacity is much lower than that of nylon ropes and therefore only to a limited extent suitable for types of use involving high impact forces.

#### NY (Nylon)

Nylon has a high breaking load as well as high elongation. Preferably, it is used in products that are required to absorb shock loads. The abrasion resistance of nylon is better in wet conditions than in dry conditions because it tends to take up water (up to 7%). Kept in wet conditions for too long, the material can become stiff. Another disadvantage compared to polyester is the lower resistance to UV-radiation in sunlight.

#### PP (Polypropylene)

Due to its limited technical characteristics, polypropylene is only used for simple applications. PP is very light and even buoyant in water. Its abrasion resistance and temperature resistance are lower than those of most other fibers.

#### PLA (Polylactide)

In technical aspects, PLA yarn is not different from regular synthetic fibers: PLA fiber products also look and feel the same. Polylactic acid is derived from natural sugar resources - which are in turn photosynthesized from CO2 in plants. They are biodegradable under a specific industrial process. The material can be regarded as "CO2-neutral" and is therefore renewable.



### Technical properties of available raw materials

Teermined properties of dvalidation and materials								
	РВО	UHMWPE	Armid	LCP	PES	NA	PP	PLA
	Polybenzoxa zoles, Crystal Polymer	Ultra High Molecular Weight Polyethylene	Aromatic Nylon	Liquid Crystal Polymer	Polyester	Nylon	Polypropylene	Polylactide
Typical Marketing Term	Zylon®	Dyneema®	Technora®/ Twaron®/ Kevlar®	Vectran®	PES	PA/Nylon	PP	-
Strength (daN/mm²)	574	345	300	300	110	81	52	51
Specific weight (g/cm³)	1.54	0.97	1.40	1.41	1.40	1.14	0.91	1.25
Water intake (%)	0.5 - 2.0	0	2	<0.1	<0.5	4 - 6	0	0.4 - 0.6
UV-resistance	low	good	limited	limited	very well	average	good	limited
Elongation (%)	2.5 - 3.5	3.5	3.5	3.5	10 – 16	20 - 25	18 – 22	50
Abrasion resistance (dry)	good	very good	limited	very good	good	very good	sufficient	limited
Abrasion resistance (wet)	good	very good	limited	very good	very good	good	good	limited
Creep	almost not measurable	at high loads	almost not measurable	not measurable	almost not measurable	low	at high loads	-
Melting temp.	charred at 650	140	charred at 500	330	260	230	165	170

### ROPE CONSTRUCTIONS

At TEUFELBERGER we go the extra mile to get the maximum performance out of each of our ropes. Whatever you expect from your rope, we have the right product for you.

#### 3-Strand

A special stabilization process and a solid, balanced construction produce a durable, long-lasting, flexible and easy-to-handle rope that won't harden with age.

#### Single braid

A supple construction that absorbs twist and does not kink. This simple construction provides great ease of splicing.

#### Double braid

A braided core inside a braided cover produces an easy-to-handle rope that is strong and very durable. Since the rope consists of two individual parts, it is possible to combine different fibers to create ropes merging specific characteristics of different raw materials. For example, a high tensile core with a heat resistant cover.

#### Kernmantle

Features a 32-carrier, 40-carrier or 48-carrier sheath that protects the core from grit and particle absorption. The sheath is designed to generate some grab and friction for rappelling and lowering operations. The core is comprised of bundles of fiber that are loosely twisted. These bundles help to keep the rope firm yet flexible.

#### PLATINUM®

PLATINUM® is the name of TEUFELBERGER's new and innovative braiding technology. For the first time in the history of rope making, previously independent elements of a rope are interconnected into one unit.

What makes PLATINUM® so special compared to the kernmantle ropes currently available on the market? In conventional kernmantle ropes, there is no connection between the core and the cover. The two components are loose and movable. With the new and innovative PLATINUM® technology, TEUFELBERGER successfully obtained a mechanical and durable connection between the core and the cover. Moreover, PLATINUM® connects parallel cores to one another, thus relieving the load the previously heavily loaded outer yarns are exposed to.

#### Str8 Jacket Core

The Str8 Jacket Core allows the rope to hold its shape and keep the cover and core in balance which virtually eliminates sheath slippage.

#### TPT Technology

Twill Pattern Technology (TPT) is a special cover design resulting in a twill pattern (under two over one) or weave. This design results in a cover/sheath that has a smaller profile in cross-section than plain pattern sheaths – the more traditional-looking climbing rope cover/sheath. For the climber, this means improved abrasion resistance over abrasive surfaces due to the smaller profile, as well as significantly reduced drag in carabiners and mechanical devices.

#### Fides III Technology

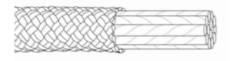
This type of rope structure is characterized by a 32-plait braided cover and three braided cores. Its design makes this rope particularly well suited for use around sheaves. Furthermore, it provides above average breaking forces in combination with various types of hardware.

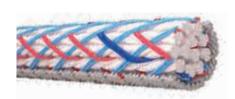




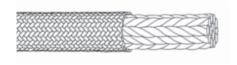














# COATINGS AND SPECIAL TREATMENTS

#### Technique

#### S.Y.I.S. - Single Yarn Impregnation System

Before braiding the rope, all single yarns are being dipped and fixed. Added color pigments allow to apply any desired color.

#### **Rope Coating**

After braiding the rope, the complete construction is dipped in a calibrated procedure. Again, a final fixing step will be carried out to ensure that applied substances remain attached to the rope's fibers as long as possible.

#### Coating materials

We use a huge variety of compositions to influence specific rope properties in a carefully controlled manner. For this purpose, we rely on the following substances:

- ✓ Polyurethane
- ✓ Silicones
- ✓ Wax
- ✓ Acrylates
- ✓ PTFE



These are some of the properties that we are able to improve with coatings and special treatments:

- High yarn on yarn abrasion resistance
- High yarn on metal abrasion resistance
- ✓ UV-resistance
- ✓ Water repellence
- ✓ Mold resistance
- Keeping color
- ✓ Traction
- ✓ Fire retardance
- ✓ Improved CBOS fatigue (cyclic bend-over-sheaves)





# Large variety of compositions.

Our large variety of compositions influences specific rope properties in a controlled manner.

# **TERMINATIONS**



#### Splice

A splice is obtainable for all single and double braids.



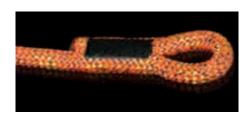
#### **Thimble**

Spliced eyes with thimbles are the most general kind of terminations. Extremely versatile and robust, thimbles are the first choice for numerous applications.



#### End bond

Fitting the end of a fiber rope with a socketing cone is a high tech solution offering both, a maximum of tensile strength and unlimited flexibility in designing the metal end bond. The socketing cone itself features a thread to which any end termination can be connected.



#### Stitched terminations

TEUFELBERGER cuts the rope to the required length and makes stitched terminations meeting individual requirements. By building on decades of sewing experience and a great wealth of expertise in this field, we succeed in maintaining breaking forces at a very high level.



#### Tapered end

Rope and cord which is provided as a component for various pieces of machinery or appliances is often required to be prepared for a final assembly process. Tapered ends are important to facilitate easy mounting procedures.



#### [slaice]®

This unique combination offers its users several significant advantages over conventional splices or stitchings:

Flexible: The end of [slaice] is about as flexible as a rope.

Slim: In the case of [slaice]\*, a thickened portion which standardally occurs on spliced ropes is practically non-existent. The design of this innovative termination hardly exceeds the rope's diameter. The seam is made using TEUFELBERGER's standard resin-based seam protector technology. The result of all these components is an easier-to-handle termination.

**Light:** [slaice]\* technology helps achieve a weight reduction, as the amount of material is reduced compared to a conventional splice.

# ROPE CARE, SAFETY & USAGE

We strive to make only the highest quality ropes. By observing a few fundamental rules for their use, you can prolong the useful life of your ropes and get the best possible performance out of our products.

#### **Abrasion and Sharp Edges**

Abrasion and sharp edges are the worst enemies of your ropes. Check all your pieces of equipment prior to using them in order to verify that they do not have any burrs or sharp edges. Following climbs in highly abrasive environments, be sure to always check the ropes for wear-induced damage.

#### **Checks and Inspections**

Prior to any use, be sure to verify that the ropes are in a proper functional condition. Any abnormalities must be noted on the inspection card accompanying the product. In order to ensure the user's safety, the product must be checked at least once annually by a qualified expert. If there are any doubts about its safety, the product must be retired. For more detailed information, please read the instructions for use accompanying our products.

#### **Damage and Retiring of Products**

Textile products (harnesses, ropes, lanyards) shall generally

- ✓ If straps or seams are damaged
- ✓ Upon contact with chemicals, acids, oils, solvents
- ✓ Upon exposure to heavy mechanical loads (falls)
- ✓ In the event of signs of extreme wear (abrasion, furring)
- ✓ In the event of heavy irreversible contamination (grease, oils, bitumen)
- In the event of fusion or signs of melting (after extreme thermal loads)
- ✓ Contact and friction heat
- ✓ End of permitted maximum service life
- ✓ If exceeded fall rating

#### **Elimination of Twist**

Twist increases the likelihood that a rope will kink and get caught in pieces of equipment. Strong twist can cause the rope's cross-section to become non-round, which accelerates wear and reduces its strength. Eliminating twist from a rope improves its handling comfort and prolongs its life span. To this end, the rope must be unrolled correctly and placed in a straight line and then dragged along while the loose end is allowed to untwist itself freely. Winding it up in figure 8 slings or stowing it in a rope bag prevents the rope from becoming twisted during storage.

#### Rope Storage and Care

Recommended conditions for proper storage:

- ✓ Storage temperature: approx. 68°F
- ✓ Relative humidity: 65% max.
- ✓ No direct exposure to sunlight
- No aggressive chemicals in the rope's vicinity

The best way to store your rope is loosely, in a dry condition in a rope bag, protected against dirt and sunlight. In the case of slight soiling, it will be enough to clean it with clear water. In the case of more severe soiling, clean the rope using a mild soap solution; the use of distilled water is preferred, as upon drying extremely calcareous water causes lime to crystallize inside the rope. Allow the washed ropes to dry slowly in the shade, not in direct sunlight and not near radiators.

#### Service Life

For details regarding the service life of the various products, please see the relevant manufacturer's information documents. The actual useful life depends solely on the condition of the product, which in turn is influenced by various factors (see below). Extreme influences may shorten it to a single use only or to even less if the equipment is damaged prior to its first use (e.g. in transport). Mechanical wear and other influences such as the impact of sunlight will decrease the life span considerably. Bleached or abraded fibers, harness webbing, discoloration, and hardened spots are surefire indicators that the product needs to be retired. It is clearly not possible to offer a general statement about the product's service life, as such life span depends on various factors, e.g., UV light, type and frequency of use, handling, climatic influences such as snow, environments such as salt, sand, battery acid, etc. In general, the following rule applies: if the user, for whatever reason however insignificant it may seem - is uncertain whether or not the product meets all the necessary criteria, its use must be discontinued and it must be handed to a qualified expert for testing and inspection. Retire any product that exhibits signs of wear! Following a fall, it is absolutely necessary that the product be replaced!



#### **TEUFELBERGER Fiber Rope GmbH**

Vogelweiderstraße 50 4600 Wels, Austria Telephone: +43 (0) 7242 413-0 Fax: +43 (0) 7242 413 169 fiberrope@teufelberger.com

www.teufelberger.com

#### TEUFELBERGER Fiber Rope Corp.

848 Airport Road Fall River MA 02720, USA Telephone: 508 678 8200 Fax: 508 679 2363 fiberrope@teufelberger.com

www.teufelberger.com