



STRATOS[®]

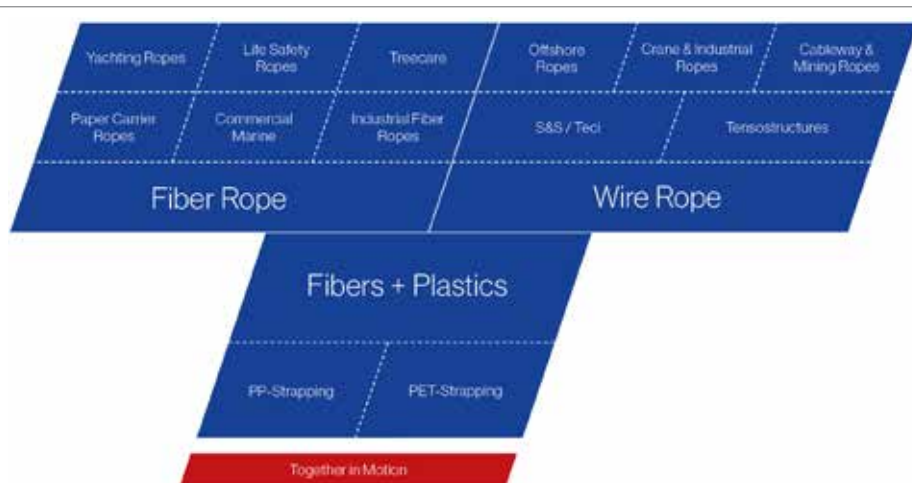
High performance fiber ropes for logging applications

EXPERTISE FROM MORE THAN 230 YEARS OF EXPERIENCE

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

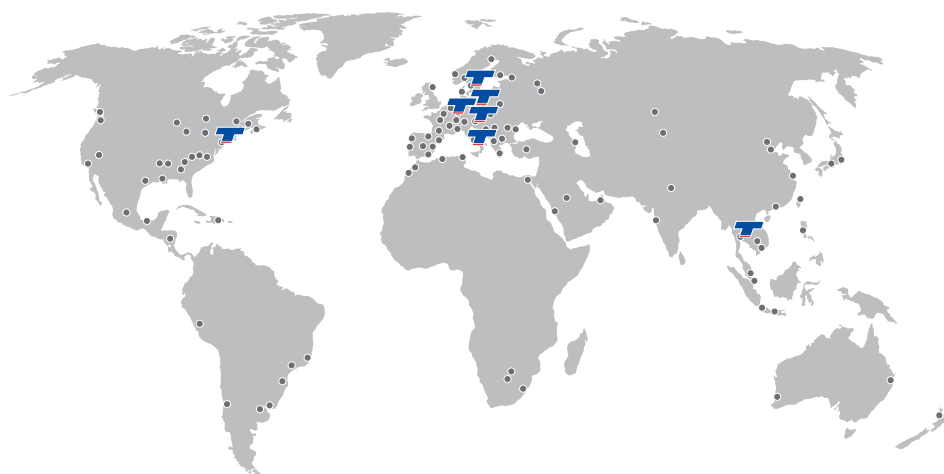
Great diversity

TEUFELBERGER's products and services are designed for a wide variety of uses ranging from cranes and marine applications to packaging and through to personal protection. The continuity and stability of a family enterprise makes us a reliable partner who, competently and effectively, supports you in mastering your day-to-day challenges.



Global presence and 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., Italy, 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 as well as strapping. The spectrum of technologies in TEUFELBERGER's portfolio generates various synergies between the extrusion of thermoplastics, the braiding of high performance fibers, and the processing of wires into ropes and strapping.

Especially fiber and steel wire products have 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 in innovative rope technologies. 10% of the entire investment volume is committed to development and quality assurance.

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⚠ WARNING!

Using these products may involve hazards. Therefore, never use our products for any purposes other than those they are designed for. In particular, do not use them for lifting purposes as defined by EU Directive 2006/42/EC (except STRATOS® Lift). Customers shall make sure that all users are familiar with their correct use and the necessary safety precautions. Please keep in mind that any of the products may cause damage or harm if wrongly used, stored or cleaned, or overloaded. Check national safety regulations, industry recommendations and standards for locally applicable requirements.

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YOUR BENEFITS WITH STRATOS® ROPES

The benefits of STRATOS® forest ropes are obvious. Their lower weight results in ergonomic, effort-saving and fast work processes that increase productivity and make your timber harvest much more economical. Long-standing experience gained in extremely rough commercial work environments and continuous developing and upgrading guarantee that your STRATOS® ropes offer you the best in quality and longevity.

BENEFITS OF STRATOS® FIBER ROPES



Less weight:

STRATOS® is about 80 % lighter than a comparable steel wire rope. STRATOS® Extension can easily be both carried and readied for assembly by only one person. With steel ropes at least three persons are required.

More timber:

Due to a substantial reduction in weight, several work steps can be performed at the same time. Only one person is needed for dragging the rope uphill. The once hard work of pulling up or carrying ropes has now been reduced or even fully eliminated.

Ergonomic work:

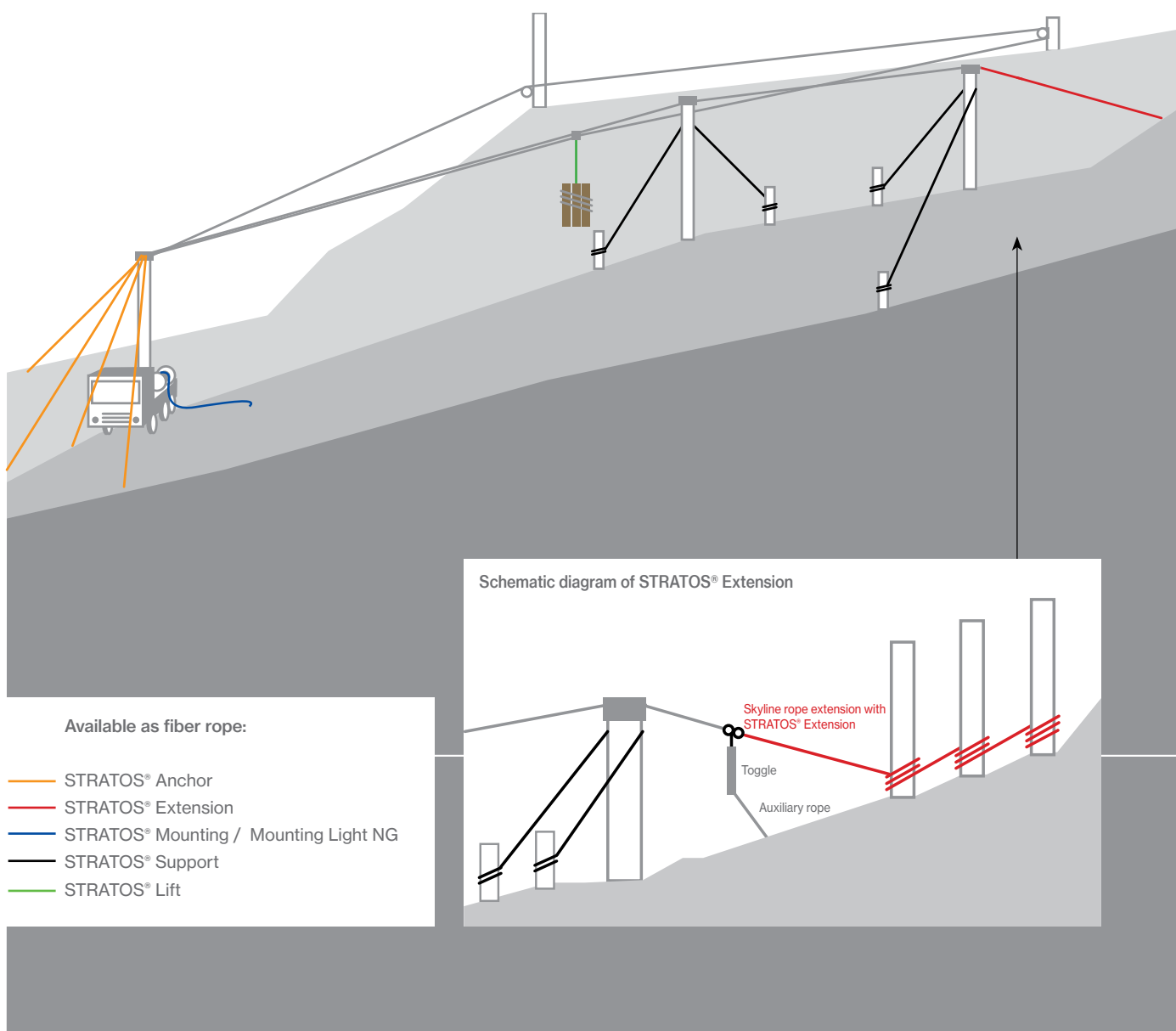
The reduction in weight means that your body, especially your spinal discs, is subjected to a considerably smaller load. Physical injury (e.g., by protruding steel wires), stress and fatigue are reduced significantly. This helps boost your workforce's productivity.

COST-EFFECTIVE AND SAFE.

STRATOS® – Less weight. More timber. In forestry, the use of cable yarding procedures with tower yarders is key in areas of difficult access. STRATOS® kicks off a new era of timber harvesting – lugging heavy steel wire ropes is now a thing of the past.

ROPE LAYOUT WITH CABLE CRANES OR TOWER YARDERS

The following figure provides a color-highlighted view of those ropes that TEUFELBERGER offers as fiber ropes for yarder-assisted timber harvests.





Our technology. Your benefit.

STRATOS® ANCHOR

Our STRATOS® Anchor is the textile, lightweight guyline for cable cranes or tower yarders. Its unique rope construction features a tightly braided, abrasion resistant and UV stable polyethylene-monofil cover. Made of UHMWPE fibers, its highly stretched core provides breaking forces that match those of a steel wire rope, this at 80% less weight.

Applications

Guyline for cable cranes, tower yarders and long distance ropeways

Benefits

- very lightweight
- extremely stable
- easy to handle
- no risk of injury due to protruding wires
- minimal stretch
- excellent abrasion resistance

Technical data

Rope Ø	Core-Ø	Min. breaking force	Weight
mm	mm	kN	g/m
20	16	280	260
22	18	355	330
26	22	505	420

*Other diameters upon request. Lengths: standard lengths 55, 60, 65, 70, 75, 80, 85 m - Special lengths can be produced on request.



STRATOS® EXTENSION

The safe anchoring of skyline ropes for cable cranes, long-distance ropeways and tower yarders is a necessary, but time-consuming and labor-intensive procedure. STRATOS® Extension makes this task much more economical and ergonomic. Skyline extensions are frequently exposed to tensile and friction loads. The patented STRATOS® Extension kernmantle rope satisfies these demands due to its UHMWPE protective cover and ensures a long, worry-free service life.

Applications

Anchoring of cable cranes, skyline ropes for tower yarders and long distance ropeways

Benefits

- very lightweight
- extremely stable
- easy to handle
- no risk of injury due to protruding wires
- minimal stretch
- excellent abrasion resistance
- does not damage the tree when wrapped around it

Technical data

Rope Ø	Core-Ø	Min. breaking force	Weight
mm	mm	kN	g/m
23	18	355	332
25	20	440	395
29	24	600	547

Lengths: 40, 50 and 60 m, supplied on wooden spool with two stainless steel cable eye stiffeners including splice and highly-resistant splice protection made from UHMWPE.



STRATOS® LIFT

STRATOS® LIFT is the textile, lightweight hoist rope for cable cranes. Its unique design features a thermally pre-stretched UHMWPE core and an immensely abrasion-resistant, coated UHMWPE cover. At 1/5th the weight of a conventional steel wire rope, this rope allows transporting a higher payload and makes work in difficult terrain much easier. Optimum spooling behavior and avoidance of injuries caused by protruding wires make this rope an ideal and safe working tool for forestry professionals.



Applications

Hoist rope for cable cranes

Benefits

- 80 % lighter than comparable steel wire ropes
- higher payload on rope cranes due to lower empty weight
- best spooling behavior on drums
- easy pull-out
- best handling, especially in difficult terrain
- "cut-ins", i.e., a scenario where in multilayer winding the rope forces its way in between lower winding layers on the drum, are largely no problem for the rope
- no injury hazard due to protruding wires
- minimal elongation; hence, exact positioning of loads
- high abrasion resistance and lifetime
- certified to Machinery Directive 2006/42/EC for the lifting of loads

Technical data

Rope-Ø	Core-Ø	Min. breaking force	Weight
mm	mm	kN	g/m
13.0	11.0	145	102
15.0	12.0	180	150

STRATOS® SUPPORT

STRATOS® Support facilitates securing of support trees. Its low weight and special mounting loops speed up the installation process and considerably shorten the time needed for installation. Cloth bags used to transport the rope protect it from abrasion.



Applications

Securing of support trees

Benefits

- extremely lightweight
- easy to handle
- no risk of injury due to protruding wires
- very short installation time
- easy to shorten with mounting loops

Supplied on rings, with two stainless steel cable eye stiffeners including splice.

Optional transportation bag and protection covers for spanning loops (for 10 loops) can be ordered. To ensure the technical functioning of STRATOS® Support, a protection rope is obligatory (protection rope 3 m). Shackles are not included in delivery.

Technical data

Designation	Rope Ø	Min. breaking force	Weight	Tensioning loop
	mm	kN		kN
STRATOS® Support Rope	14	85	125 g/m	20
STRATOS® Support Fixation	14	-	580 g/pce	20

STRATOS® MOUNTING

Our mounting rope STRATOS® Mounting facilitates the installation of steel wire ropes along cable cranes. Thanks to its UHMWPE kernmantle construction, a significantly higher tensile strength can be achieved, size for size, when compared to common fiber ropes – at a fraction of the weight of a steel wire rope.

Applications

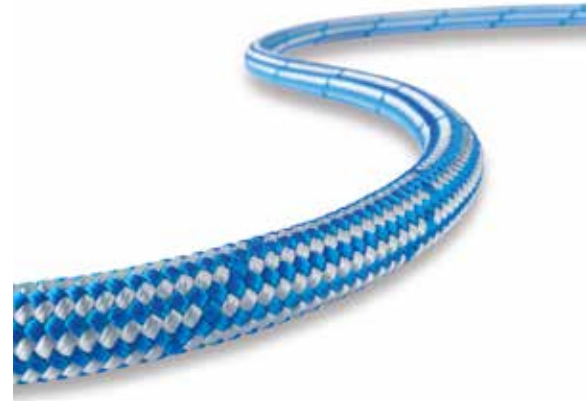
Lightweight and stable pull-on rope for steel wire ropes along cable cranes, tower yarders and long distance ropeways

Benefits

- very lightweight
- easy to handle
- no risk of injury due to protruding wires
- best protection against damage through kernmantle construction

Technical data

Rope Ø	Min. breaking force	Weight
mm	kN	g/m
9.5	35	65



STRATOS® MOUNTING LIGHT NG

The STRATOS® Mounting Light NG auxiliary and mounting rope is a super-lightweight fiber rope. The high density UHMWPE fiber makes this rope highly resistant to abrasion and durable. This rope's benefits include extremely high breaking loads and low weight, great ease of splicing, and low investment costs.

Applications

Extremely lightweight and high-strength pull-in rope for steel wire ropes along cable cranes, tower yarders and long distance ropeways

Benefits

- extremely lightweight
- easy to handle
- no risk of injury due to protruding wires
- great ease of splicing
- low investment costs

Technical data

Rope Ø	Min. breaking force	Weight
mm	kN	g/m
5	40	19
6	50	26
7	70	36
8	90	49



STRATOS® WINCH PRO

The STRATOS® Winch Pro kernmantle rope made of UHMWPE is TEUFELBERGER's winch rope for professional users. The tightly braided UHMWPE cover protects the load-bearing UHMWPE fibers from abrasion, the ingress of dirt and chafing and, as a result, increases the rope's lifetime by severalfold. Dimensioned and used correctly, this long-established and proven winch rope will last significantly longer than a steel rope of the same size.



Applications

- Extremely long-lived, high-density high performance fiber rope with protective cover for use on tractor winches or skidders
- The professional rope for commercial use (forestry companies, full-time foresters)

Benefits

- very lightweight
- same breaking force as a steel rope, despite protective cover
- easy to handle, especially for downhill yarding
- no risk of injury due to protruding wires
- best spooling behavior on drum
- "cut-ins", i.e., a scenario where in multilayer winding the rope forces its way in between lower winding layers on the drum, are largely no problem for the rope.
- easy pull-out does not require a rope ejection system (however, it works with rope ejection systems of the most common winches)
- excellent abrasion resistance
- long service life

Technical data

Rope Ø	Core-Ø	Min. breaking force	Weight
mm	mm	kN	g/m
8	6	50	44
10.5	8	90	72
12	10	115	96
13	11	135	124
15	12	180	151
17	14	235	188
20	16	280	224
23	18	355	301



STRATOS® WINCH LIGHT

Our STRATOS® Winch Light, the alternative for your forest winches offering you unbeatable value for money. In addition to the highly abrasion resistant STRATOS® Winch Pro, TEUFELBERGER offers a rope variant without cover for lower investment costs. This product is therefore ideal for discerning part-time foresters and hobby users with high expectations in terms of quality, performance, and lifetime.

STRATOS® Winch Light consists of 12-strand braided UHMWPE. You can choose from two categories: 'Standard Construction' (S) and 'Highly Compact' (H). The highly compact winch rope type delivers maximum rope length and breaking strength in combination with excellent resistance to abrasion.

STRATOS® WINCH LIGHT H

Applications

- extremely long-lived, high-density fiber rope for use on tractor winches or skidders
- the top rope for the discerning part-time forester

Benefits

- extremely lightweight
- higher breaking force than a steel wire rope; this makes using larger rope lengths possible
- easy to handle, especially for downhill yarding
- no risk of injury due to protruding wires

- best spooling behavior on drum
- "cut-ins", i.e., a scenario where in multilayer winding the rope forces its way in between lower winding layers on the drum, are largely no problem for the rope
- easy pull-out makes the use of a rope unwinding device unnecessary
- highly abrasion resistant
- excellent longevity
- great ease of splicing
- low investment costs



STRATOS® WINCH LIGHT S

Applications

- long-lived fiber rope for use on tractor winches or skidders
- the economical high-performing rope for discerning hobbyists

Benefits

- extremely lightweight
- same breaking force as a steel wire rope
- easy to handle, especially for downhill yarding
- no risk of injury due to protruding wires
- best spooling behavior on drum
- "cut-ins", i.e., a scenario where in multilayer winding the rope forces its way in between lower winding layers on the drum, are largely no problem for the rope
- easy pull-out makes the use of a rope unwinding device unnecessary
- good abrasion resistance
- excellent longevity
- great ease of splicing
- excellent value for money

Technical data

STRATOS® Winch Light H			STRATOS® Winch Light S		
Rope Ø	Min. breaking force	Weight	Rope Ø	Min. breaking force	Weight
mm	kN	g/m	mm	kN	g/m
5	40	20	5	21	15
6	48	25	6	35	20
7	70	36	7	43	27
8	90	47	8	55	34
9	105	59	9	72	44
10	120	65	10	85	54
11	145	73	11	107	65
12	180	101	12	125	76
14	235	130	14	160	107
15	270	146	16	220	144
16	300	176			
18	355	215			
20	440	253			
22	500	270			
24	600	350			



STRATOS® VGE Winch Pro end bond

The patented VGE Winch Pro end bond is the ideal rope end termination and protects rope and cover along the rope's entire length. The fact that the protective cover extends all the way into the interior of the end bond ensures ideal protection, especially at the end of the STRATOS® Winch Pro rope – where the high loads caused by twitch hooks occur. STRATOS® VGE Winch Pro has a connection feature for choker chains or choker ropes. Use this connection feature in your winching operations in order to ensure the long service life of your STRATOS® Winch Pro. The "straight pull" on the winch rope resulting thanks to this feature helps prevent severe bending of your STRATOS® Winch Pro due to the twitch hooks and can be cast by the user without great effort. Grouting set and inner cone are available as separate items.

Technical data

Possible combinations	Rope diameter STRATOS® Winch Pro in mm							
	8	10	12	13	15	17	20	23
Chain lug for 7 & 8 mm chain	x	x	x	x	x			
Chain lug for 10 mm chain						x	x	x
Steel rope up to 11 mm	x	x	x	x	x			
Steel rope up to 14 mm						x	x	x



STRATOS® splice end bonds

This patented splice end bond permits fast on-site repairs suited for heavy-duty use with rope gliders. With a splice of the STRATOS® Winch Pro or also of the STRATOS® Winch Light and the easy installation of the end piece by means of a screwable, captive bolt, the fast resumption of the work in the field becomes possible.

Total weight 1.3 kg, can be used for all types of STRATOS® Winch Pro and STRATOS® Winch Light up to a diameter of 17 mm.



STRATOS® rope puck

The unique design of our new STRATOS® Rope Puck brings significant advantages for heavy-duty use in forests. The main advantages are:

- light-weight design
- tool-free installation
- a deep rope groove to avoid rope squeeze caused by gliders

Suited for use with STRATOS® Winch Pro and STRATOS® Winch Light up to a diameter of 15 mm.

Total weight: 0.5 kg

Diameter: 100 mm

Width: 80 mm

STRATOS® Easyglide

Rope glider made of high-strength plastic material

STRATOS® Easyglide is the cutting-edge rope glider par excellence from TEUFELBERGER. It impresses us with its low weight accomplished by using high-strength plastic material and a rope sling made of UHMWPE material. Compared to other commercially available rope gliders, STRATOS® easyglide provides a large entrance radius which prevents any squeeze of the winch rope by the choker. As a consequence, the main cause of ruptured synthetic ropes is now a thing of the past. STRATOS® Easyglide can be used for 7, 8 & 10 mm choker chains on all STRATOS® winch ropes. Its individual components are available as separate items as shown above. It is suited for use with any STRATOS® winch rope.

Total weight: 0.75 kg (twitch hook, loop, and chain guide)

Diameter: 100 mm

Width: 60 mm

Technical data

Features	Rope Ø	Tensile force	Weight
	mm	kN	kg/m
STRATOS® Easyglide for 7 & 8 mm chain	8 - 17	70	0.75
STRATOS® Easyglide for 10 mm chain	8 - 17	70	0.85



LOG SLIDE

Log Slide, the ideal steel rope twitch hook for all STRATOS® winch ropes. This twitch hook has a large entrance radius for the synthetic fiber rope used and thus prolongs the life of your rope. It can be used for both chains (with Connex connector and chain lug) and steel wire ropes (in combination with Connex connector).

Weight: 1.0 kg



GO 10

The GO 10 (Pewag) Twitch Hook is suited for winching operations with choker ropes (made of synthetic material or steel). The GO 10 Twitch Hook is used for winch ropes having diameters up to 17 mm.

Weight: 0.73 kg

Opening width for winch rope: up to 17 mm



Twitch Hooks

In winching operations, the twitch hooks are used where steel rope chokers with nipples are available. Twitch Hooks can be used for winch ropes of diameters 18 mm and above.

Weight: 0.9 kg

Opening width for winch rope: 18 mm and above





STRATOS® Choker

For the rugged use demanded of a choker rope, TEUFELBERGER has come up with a light-weight and durable solution. The proven design of the STRATOS® Winch Pro rope, combined with high-strength stitchings and a special connection nipple, makes up the STRATOS® Choker rope. This rope is specifically designed for great user friendliness and high abrasion resistance. The nipple can be used together with the GO 10 and twitch hooks. For on-the-ground pulling jobs on winches with capacities of up to 6 tons traction force.

Rope diameter: 17 mm

Total weight: 1.8 / 1.9 / 2.0 kg

Max. traction force: 60 kN



TEUFELBERGER Chain Lug

TEUFELBERGER's Chain Lug was designed specifically for use with TEUFELBERGER's Easyglide and Log Slide products (in combination with Connex-connector). The Chain Lug is suited for use with choker chains 7 & 8 mm.

Weight: 0.4 kg

For chains 7 & 8 mm



GBG-V Chain Lug

The GBG-V (Pewag) Chain Lug is used in combination with TEUFELBERGER's end bond. The combination of these two elements ensures that in winching operations the line of pull on the winch rope will be as straight as possible. This helps counteract any problems of the winch rope being forced off due to great deflection angles of the twitch hooks.

Weight: 0.33 kg / 0.77 kg

For chains: 7 & 8 mm / 10 mm



CONNEX Connector

The Connex Connector is used to establish the connection between Log Slide and your choker rope.

Weight: 0.33 kg

Max. traction force: 80 kN

STRATOS® Component combinations

STRATOS® Winch Pro with choker chains:

STRATOS® Winch Pro with VGE Winch Pro end bond, two STRATOS® Easyglide twitch hooks and one GBG-V Chain Lug.

Straight-line pull = lowest possible deflection of winch rope in the area of the twitch hooks.



Recommendation:

- The use of the connection of the VGE Winch Pro ensures a relatively straight pull in the system that significantly prolongs its service life.
- Fasten the heaviest tree to the mounting point of the VGE Winch Pro. To enhance safety within the system, connect (at least) one other tree to the STRATOS® Easyglide rope glider.



STRATOS® Winch Pro with Choker Chains:

STRATOS® Winch Pro with one STRATOS® Easyglide twitch hook and STRATOS® VGE Winch Pro end bond.



STRATOS® Winch Light with Choker Chains:

STRATOS® Winch Light with two STRATOS® Easyglide rope gliders and STRATOS® rope puck.



STRATOS® Winch Light with Choker Chains:

STRATOS® Winch Light with two Log Slide rope gliders and one STRATOS® splice end bond.



STRATOS® Winch Light with Choker Chains:

STRATOS® Winch Light with two Log Slide rope gliders and one STRATOS® rope puck.

Distributor of STRATOS® in Austria,
Germany, Switzerland and Italy:

TEUFELBERGER Seil Ges.m.b.H.

Böhmerwaldstraße 20, 4600 Wels, Austria

T +43 7242-615-0

F +43 7242-60501

E wirerope@teufelberger.com

Distributor of STRATOS® for all
other countries:

TEUFELBERGER Fiber Rope GmbH.

Vogelweiderstraße 50, 4600 Wels, Austria

T +43 7242-413-0

F +43 7242-413-169

E fiberrope@teufelberger.com

www.teufelberger.com

