



FALLSTOP® SAFETY WIND TURBINES

FALLSTOP® SAFETY
Safety and rescue on wind turbines



FALLSTOP® SAFETY WIND TURBINES

On wind turbines at ever greater heights...

Working on wind turbines requires made-to-measure rope equipment for professionals in these special work situations:

- Safe ascent of guided type ladders with rail or rope systems
- Safe walking within the machine room
- Variable securing options on free edges
- Safe descent and return to the rotor hub
- Simple and safe descender rescue in an emergency (evacuation)
- Fast rescue of comrades after a fall in a harness
- Offshore: protection against drowning and hypothermia in water

BORNACK has supplied equipment to the wind energy sector for more than 20 years. Based on its years of experience and close cooperation with leading turbine manufacturers, BORNACK now has a range of high-quality equipment parts, the most important of which are presented here in this user catalogue.

Please feel free to contact us; our experts will be happy to answer any questions.
+49 (0) 7062 / 269 00-0

FS 2-3 MARITIME life jacket

The right life jacket for your harness and CONTRA overall. Thanks to the D-ring for the rescue line, there is no risk of confusion common with other life jackets.



FS 2-3 MARITIM

Personal protective equipment

CONTRA 140AS survival suit

The newly developed survival suit CONTRA (registered for patent) was specially designed to meet the requirements of offshore construction sites, be it on wind turbines, on ships, or on structures on the coast, at sea or in inland waters; everywhere where there is a risk of falling, hypothermia or drowning.

A prerequisite is the compatibility of various PPE (suitability for use at the same time). In contrast to other comparable products, the full body harness is worn below the overall in the CONTRA system! This means that no uncontrolled air pockets are formed when the wearer is swimming which could significantly impair the function of the life jackets and destabilize the user in the water! The CONTRA has a permanently integrated D-ring on the chest that can be connected quickly to the full body harness ENERGY CONTRA by means of a single CLICK connection. This guarantees perfect fall protection.

If necessary, the CONTRA overall can be put on and taken off very quickly without having to remove the full body harness! There is a rescue loop integrated into the CONTRA to allow safe and fast evacuation by helicopter winch in case of an emergency, even if no full body harness is worn.

The special design of the CONTRA overall, which is made of high-quality GORE material, allows it to be put on and taken off very easily.



CONTRA 140AS

ENERGY full body harness

The new full body harness ENERGY has been specially designed for climbing / securing / rescuing and has a completely innovative concept for the strap geometry with various setting options. This guarantees perfect load transfer in all situations.

Product features

- 3 D-rings on the back, on the hip and at chest height
- 2 side positioning loops right / left
- 1 D-ring as a sit harness
- Fast adjustment of the vertical leg loops to the settings 'Climbing / work in a crouched position' and 'Upright walking / standing'.
- Arrester loop ENERGY: integrated energy absorber and optimized displacement of the centre of gravity of the body
- High-quality airy hip and shoulder padding AIR COMFORT
- Maximum user weight 140 kg



ENERGY

TURTLE back protector

This back protector can be simply retrofitted to protect the full body harness from wear and tear when climbing through narrow shafts and towers.



TURTLE

VISION full body harness

The VISION is the first full body harness on the market that can be adjusted for different work situations, e.g. walking, climbing and working close to free edges. This means that it can be perfectly adapted to the human body and is therefore extremely comfortable whilst also ensuring absolute safety in various situations.

Special leg fittings allow an optimum short connection and perfect free suspension in the full body harness. The new central belt lock at chest height combines the fast connection with CLICK and an integrated D-ring. This makes it impossible to close the chest strap incorrectly and therefore prevents critical situations in the event of a fall.

Product features

- 1 rear D-ring
- 1 multifunction D-ring at hip height
- 1 front D-ring at chest height
- 2 side positioning loops right / left
- 2 material loops
- Fast adjustment of the vertical leg loops to the settings 'Climbing / work in a crouched position' and 'Upright walking / standing'
- Ergonomic padding on the shoulders and leg loops
- High-quality airy hip and shoulder padding AIR COMFORT
- Maximum user weight 140 kg



VISION

PHEOS ALPINE helmet

As one of the few helmets on the market, the PHEOS ALPINE helmet has both approvals:

- EN 397 Industrial helmet
- EN 12492 Climbing helmet

This makes it ideal for working at heights.

A high-quality textile carrier system inside the helmet offers excellent comfort and good aeration.

Maximum safety due to the snug fit, even in a fall, thanks to the proven 4-point chin strap system that comes from the sport helmet field.



PHEOS ALPINE without and with visor

PHEOS ELEKTRO helmet

This helmet satisfies the requirements for working in electrical environments: no openings in the shell of the helmet. In combination with the accessories for eye and ear protection, it guarantees fully shielded protection of the head. Not approved in accordance with EN 12492.

For more accessories, e.g. visor and ear muffs, please visit www.bornack.de

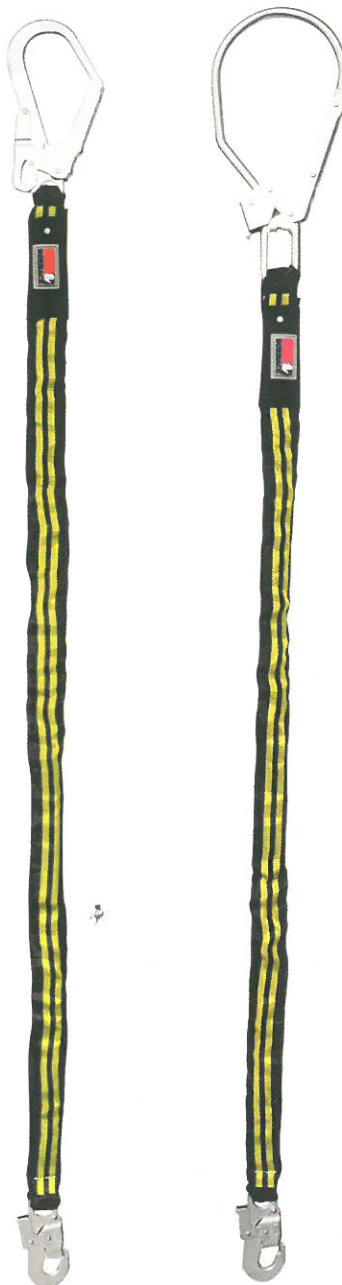
PYTHON**Energy absorber line**

Use for safety when working in exposed situations (e.g. securing when window cleaning, climbing from vertical fall-arrest-system equipment on rooftops etc.). Ideally suited for use in rough operating conditions with large mechanical loads.

The energy absorber line PYTHON P02 stands out thanks to its innovative arresting method. The shock force is no longer absorbed via the very heavily influenced rope friction or the ripping of a strap/seam. In the PYTHON P02 (system), the shock is absorbed by converting the energy across the entire length of the shock absorber line! This means it is possible to make this product very compact and handy. It has been possible to reduce the brake path by approx. 33 % leading to a shorter arresting path; also the rope protection can be used even at lower working heights. Normal fall 100 kg, fall factor 2.

Product features

- Lengths: 1,0 m, 1,5 m, 2,0 m
- Weight: approx. 900 g - 1130 g
- Karabiner of choice: FS51, FS90, FS92



PYTHON

ELASTIC Y tape energy absorber

Compact, handy, lightweight are words used to describe the new tape energy absorber ELASTIC Y, while also offering maximum safety!

The latest insights from industrial applications and mountaineering sports have been used in the design. The fact that the flexible lanyard contracts significantly reduces the risk of becoming caught when ascending.

The tape energy absorber is packed into a bag and can be removed and inspected by an expert for the regular inspections. Tested and approved to EN 355 / EN 354 in an endurance test comprising more than 30,000 cycles in various conditions.

Product features

- Length: 1.0 m – 1.8 m
- Models: 1 line or 2 lines 1
- Equipped with a swivel karabiner TL+ and a safety hook FS90 (other lengths available on request)



ELASTIC Y

SETP lanyard

SETP anchor equipment is extremely sturdy and with a special protection technology to protect against all potentially damaging influences. This makes SETPs suitable for heavy-duty use (temporary securing during lead climbing, deflection point or anchor point); they can also be used on sharp-edged steel profiles or pipes in chemical plants.



SETP sling

PROTEC S tape slings

The PROTEC S tape slings allow a safe anchor point to be created quickly and simply, even around larger parts.

A must-have in every equipment kit. Suitable for use with rope equipment (harness systems) and also for anchoring the abseiling-rescue device.



The PROTEC S tape sling is available in various lengths and colours.

**LORY HOLD lanyard**

This small handy unit can be operated with one hand and is always a great safety device to have in an emergency when ascending or descending via protected ladders or working next to the climbing route.

Can be simply unlocked with the thumb. It cannot be unlocked when under tension.

- Rope length 1.5 m
- Tested and approved in accordance with EN 358

LORY HOLD

ZIP BAG transport bag

A transport sack made of extremely durable Cordura with inside and outside pockets and zips. Handle and padded rucksack shoulder straps. Packing volume approx. 40 litres



ZIP BAG

ALU BOX transport box

Sturdy transport box made of lightweight aluminium in three sizes for up to 100.0 m, up to 150.0 m and up to 250.0 m of rope.



ALU BOX

TEXTIL I tool bag

Permanently open. Velcro flap that can be affixed to allow frequent access.



TEXTIL I

Ascent / descent and horizontal movement

LORY CLIMB securing system

Used to ensure safe lead climbing thanks to comrade securing to a mast or in areas where there is a risk of falling, and also to ensure the safety of following climbers.

The person climbing is connected to the safety rope. During climbing, securing points are positioned using sharp edge-tested slings. A 2nd trained person secures the climber and releases the rope in a controlled manner. This is facilitated by the special spring-controlled basic setting of the LORY CLIMB. If the climber falls, the LORY CLIMB arrests the person's fall. The securing person can lower the person who has fallen in a safe manner without any additional equipment! The equipment may only be used by trained personnel in compliance with an individual rescue plan.



LORY CLIMB

BK EVU

FALLSTOP BK EVU securing device

The versatile securing device FALLSTOP® BK stands out thanks to its simplicity. When ascending and descending the device slides at the same time. On roofs, the rope length adjustment feature manually positions the device. When taut, the rope brake clamps. In the event of a fall, the device arrests the person safely and limits the fall impact force to less than 6.0 kN. An additional energy absorber is not required. These models were specially adapted to the needs of energy providers. Equipped with a safety hook, the safety rope can be anchored to almost any structure.

Product features

Type: BK/EVU/PROFITEC16/FS90

- Securing device BK02 with connecting lanyard and FS51SG
- Kernmantel rope PROFITEC 16.0 mm with safety hook FS90 and locking ball

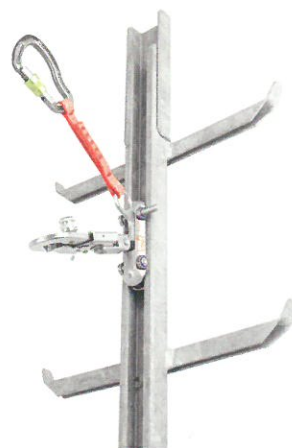
Type: BK/EVU/PROFI16/FS92

- Securing device BK02 with connecting lanyard and FS51SG
- Twisted rope PROFI 16.0 mm with safety hook FS92 and locking ball

RAILSTOP RS S05 fall arrester system

The fall arrester RS S05 sets new standards in terms of safety and ergonomics! 2 redundant safety catches immediately prevent falls caused when a person slides from the ladder, even under horizontal force.

2 separate attachment points on the full body harness at hip height and chest height maintain the ergonomically perfect climbing support via the pelvic padding of the harness. This reduces the risk of an accident caused by physical exertion. In the event of a fall, it prevents the upper body from tilting forward, which can have fatal consequences. After the fall, the body remains in a supported position.



RS S05

Product features

- Material: Aluminium body
- Separate safety catches for falls and tilting
- Optionally with safety hooks FS51 or karabiners with TWISTLOCK PLUS fastener and SWIVEL connection

LIMPET L2 ascent aid

All-In-One system LIMPET L2 makes climbing ladders faster, safer and easier. The LIMPET L2 ascent aid not only offers climbing support but also a redundant safety system.

It therefore makes an important contribution to reducing the risk of accidents and improving profitability.

Product features

- Stainless steel case
- Sturdy cladding made of polyamide
- Simple safety rope up to 130.0 m long
- Performance: max. 140.0 kg (climbing) / max. 280.0 kg (lowering)
- Dyneema® Band, breaking load 42 kN min.
- 220 - 240V AC, 16A, 50/60Hz
- Application temperature: IP56 & -40°C to +54°C
- Approved to: Z359, EN 354
- Remote control



LIMPET L2

Rescue

SOLID HUB rescue device

A very high-performance and versatile abseiling rescue device. Suitable for evacuations in case of fire, or rescuing casualties suspended in fall arresters, or persons suspended on the machine room or the hub.

Product features

- Redundant double brake
- Special brake pads and drums for high abseiling performance (250.0 kg useful load, max. 300.0 m abseiling height)
- Multiple abseiling in for swing rappelling possible
- Hand crank for lift function
- Approved in compliance with the latest standard EN 341:2011 Class A



SOLID HUB

SOLID S

SOLID S rescue device

The abseiling device SOLID S as an automatic centrifugal brake and is therefore ideally suited for abseiling over great heights. It does not need to be operated which is why it guarantees that an unconscious person can be lowered safely. The ideal rescue device for construction sites and stationary installation on tower platforms etc. Can be used for self-abseiling or as a shuttle service for several persons one after another. Thanks to the high useful load of 225 kg, persons can be rescued accompanied by a rescuer (two persons). In professional rescue operations, the rescuer can be lowered with the device and, using the jam cleat and rope deflector (eyebolt), block the rope when he reaches the casualty and stop the abseiling process.

FIX mobile anchor point

Can be used on any part of the rope.

Product features

- Useful load for swing rappelling: 250.0 kg (2 persons)
- Useful load as an anchor point: 1 person
- Weight: 185 g or 365 g (with karabiners)
- Type FIX 01: for rope diameter 9.0 - 11.0 mm
- Tested: based on EN 795 B as a mobile anchor point, based on EN 567 rope clamp + CNB/P/11.115



FIX

GRIP universal clamp

The GRIP can be used on almost all securing equipment, be it ropes, tape slings or tape energy absorbers.

Product features

- Material: Aluminium
- Clamp cam
- Colour: black
- Max. useful load: 2 persons
- Weight: 617 g



GRIP with kernmantel rope

Suitable securing element / lanyard

- Twisted ropes 16.0 mm
- Kernmantel ropes 9.0 - 16.0 mm
- Ripped tape energy absorber fabric
- Ripped or unstretched energy absorber fabric (e.g. PYTHON)



GRIP with PYTHON

CLIMATE PACKAGING

The CLIMATE PACKAGING by BORNACK can be used to protect emergency equipment, such as abseiling rescue systems or pool equipment, for longer periods:

- Against wind and weather
- or even unauthorised access



CLIMATE PACKAGING with moisture indicator

Working on the rotor blade

The LIMPET 5 series provides 3 passenger winches with different features depending on the application situation.

LIMPET L5

Climbing aid, arrester system, ascending /descending & positioning, rescue, evacuation, transporting materials, manual unwinding



LIMPET L5

LIMPET E5

Climbing aid, arrester system, ascending /descending & positioning, rescue, evacuation, transporting materials, manual unwinding



LIMPET E5

LIMPET M5

Climbing aid, arrester system, ascending /descending & positioning, rescue, evacuation, transporting materials, manual unwinding, suitable for use at sea (1,000 h saltwater test, 20 years offshore service life, GL-certified 2014)



LIMPET M5

Product features

- 90% climbing aid / arrester system
- Hoist up to 140.0 kg
- Remote control
- Control display on the device
- Max. rope length 130.0 m / 42 kN breaking load
- Ascent and descent speed can be set (Max. speed 1m/s)
- Solid casing (service life 25 years / Offshore 20 years)
- 'Blackbox-Recorder'
- Dimensions: 658,0 x 506,0 x 403,0 mm
- Weight: 63.0 kg
- Power connection: 220 - 240 V, AC, 13A, 50/60 Hz, simple phase
- Application temperature: -40°C - +54°C
- User weight: 40.0 – 140.0 kg
- Approval: CE certified



Spitzen Energy Solutions (India)
Pvt. Ltd.
52-53, Aditya Shagun Mall,
NDA-Pashan Road,
Bavdhan
Pune - 411 021
India
Contact: Mr. Ravi Nangre

T : +91-20-66539753
M : +91-8888806391