A Complete Tactical Advantage

Helix Tactical provides a complete capability for vertical access in mountain, maritime and urban environments.

We are based in the mountains of North Wales and have a heritage of over 30 years in supplying tactical climbing solutions to end users. Over that time, we have worked with and become a main supplier of tactical climbing equipment to the UK MOD and have provided equipment and systems to many other NATO friendly forces.

The capability offered by our close relationship with DMM has been extended by partnering with manufacturers such as Henriksen REBS, CTOMS, Hignovate and Cadex to offer complete solutions for working at height in a tactical environment.

ICAGE: U1AG3
Company Number: 10316654
DUNS: 221986629
Technical Knowledge

Helix Tactical provides access solutions worldwide for security, defence, and rescue operations.

Helix Tactical provides access solutions worldwide for security, defence and rescue operations. We provide equipment, systems and training to enable operators to work with speed, ease, and safety when accessing objectives across a wide range of environments; mountain, urban or maritime.

Our core competencies are:

- Mountain Operations
- Urban Operations
- Maritime Operations
- Rescue and Casualty Evacuation

We have been closely involved with developing climbing systems for over 30 years and have used this experience to work with units to modify and develop climbing systems for the tactical environment.

We co-operate closely with teams to develop equipment and systems that minimise weight, silhouette and noise whilst working with their standard kit.

We can help teams to build bespoke systems that will allow them to climb, rig, ascend, descend and haul on vertical terrain whether that is establishing an access point on top of a sea cliff or allowing operators to set up an OP on high ground. The rescue capability we offer extends from micro rope systems that allow teams to lower or haul casualties with a bare minimum of kit to systems that allow full 3-dimensional rescues to be performed on steep terrain.

We work with brands that all have a history of innovation and a reputation for producing class leading products. Helix Tactical work in close co-operation with our clients and our partners to develop products and systems that meet our clients' operational requirements.
The mountain environment varies enormously and requires a broad skill set for teams to be able to move across a wide variety of terrain and obstacles.

The systems Helix Tactical offer allow a full spectrum of operations to be carried out no matter whether it is a small team moving quickly with lightweight systems or a whether it is moving a company in mass onto high ground.

DMM Helix can increase the capability of units to move over scrambling/ fifth class terrain, climb rock, ascend, descend, navigate, haul supplies and cross obstacles such as ravines or fast flowing water. And all with kit that will minimise the weight burden and pack size that needs to be lugged around.
Mountain Operations

Helix provides equipment systems and training to enable teams of all sizes to move over steep terrain in all seasons.

We have worked with units operating in the full range of conditions from hot, arid landscapes to the high alpine mountains.

35 years’ experience of manufacturing climbing equipment together with close ties to mountain rescue teams, mountain professionals and specialist mountain troops allows us to deliver a capability that is always at the leading edge.
Mountain Operations
Vertical Assault and Mountain Movement

Helix's heritage is based around climbing and moving in the mountains. The variety of capabilities needed by military teams to operate in this terrain are massive, but we will try to outline the key areas where we can help.

1. ACCESSING HIGH POINTS IN ROCKY TERRAIN
   A range of equipment and systems to allow small teams to access high ground for observation points / ISTAR operations

2. COVERT TEAM INSERTION
   The micro climbing systems give teams the ability to move through technical rocky terrain with minimal weight burden compared to standard climbing equipment

3. TACTICAL CLIMBING
   Full racks of climbing equipment in subdued colours to allow mountain leaders to establish access points through steep terrain and establish fixed lines for the main troop to follow

4. MOVING TEAMS ONTO HIGH GROUND
   Static ropes, ladders, hauling systems and ascending equipment to allow larger teams to move quickly up and across steep ground

5. CASUALTY EVACUATION
   Equipment and systems to facilitate all sizes of team evacuate injured personnel across steep and rough terrain. Comprehensive systems from micro pulley/haul/lower systems to larger company level packs that allow complex 3 dimensional manoeuvres

6. RESUPPLY / HAULING
   A comprehensive range from micro systems to allow efficient and fast resupply to larger systems to haul ATBs out of ditches

7. CROSSING OBSTACLES - RAVINES - FAST WATER
   Platoon and Company stores to allow teams to establish haul lines and Tyrolean’s across obstacles

8. ALPINE CLIMBING / MOVEMENT ON SNOW AND ICE
   Axes, crampons and winter protection to allow operators to manoeuvre safely in the mountains in winter conditions
Urban environments are inherently complex environments that can be difficult to manoeuvre in without the correct tools; walls, buildings, trenches, and rubble create potentially challenging obstacles. The capability we offer allows unprecedented ease of access and superior mobility in urban scenarios and gives units a far wider range of deployment capabilities.

Representative solutions to commonly encountered problems are shown below and can include a full range of training solutions that can be adapted to cover everything from basic techniques to looking at full mission profiles. Bespoke solutions, equipment systems and training are available on demand.
Urban Operations

The equipment gives operators the ability to fire a grapnel hook 35m vertically to establish a high anchor point, ascend with a motorised winch up to 100m/min, leap frog past choke points with lightweight carbon ladders and insert large teams into lower floors quickly whilst avoiding ground level entry points.

All systems are designed to be light, modular and tough so that they can be carried easily and then quickly built up into a custom configuration to overcome the specific problem being encountered.
Urban Operations
Vertical Access and Urban Movement

Our equipment and systems increase the options that teams have in how to complete a task - these capabilities include:

1. CROSSING WALLS AND OBSTACLES
   Walls can be crossed using a wide range of ladders - rigid modular ladders that are leant against the wall or rigid/flexible ladders that are placed by a pole and hung from a hook or hooks.
   If the drop off the other side is too high to jump or for a hand lower a flexible wire ladder can be dropped down the far side.

2. ACCESSING LOW LEVEL FLOOR/WINDOWS/VERANDAS
   The multiple solutions for low level access allow operators the ability to be very flexible in how to access a position; assault ladders, hanging ladders that can reach up to 12m, flexible ladders placed by poles and hook and climb systems with integrated pulley/haul systems. Plus the good, old climbing of external features such as drainpipes.

3. ACCESSING HIGH LEVEL WINDOWS AND ROOFTOPS
   Grapnel launchers can reach up to 35m vertically whilst the latest pole ladders can reach 15m with their flexible ladders attached and can be positioned by a single person.

4. CLIMBING LIFTS SHAFTS
   Special grabs and systems for climbing inside liftshafts.

5. EGRESS / DESCENT
   Micro and standard systems to allow operator to descend into position or make an emergency egress. The systems can be pre-rigged with both descender and rope protector for fast deployment and can be converted easily into ascent systems.

6. HAULING / LOWERING
   Both kit and personnel can be raised or lowered using manual or motorised systems. The systems vary from micro 4:1 kits that fit into a small pouch to motorised winches that can quickly raise 250kg over 300m.

7. CROSSING GAPS
   The ability to cross between building or get over blown out floors with ladder systems that can be used as a bridge or with hi-line and Tyrolean rope systems.

8. CASEVAC
   A full range of systems that allow casualties to be evacuated from high positions; from micro systems to allow fireteams to raise or lower personnel to full, twin line systems for assisted vertical or horizontal lowerers in confined spaces.

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HIGH LEVEL ACCESS

LOW LEVEL & WINDOW ACCESS

GAPS, EGRESS & RESUPPLY
## URBAN REACH HEIGHT CHART

<table>
<thead>
<tr>
<th>Height Metres</th>
<th>30+</th>
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<th>25</th>
<th>22.5</th>
<th>20</th>
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| Model & Reach | Atlas Tactical 4.5m | CML 4.5m Lining | Rolatube 7m | CML with Tensioner 7.2m | Rebs AI Tactical Ladder 8m | Atlas LTL 8.5m | CML Hanging 10m+ | Rebs Carbon Ladder 10m | Rebs Ultralite Carbon Ladder 12m | Rebs Carbon Telescopic Pole 15m | Rebs Wind Up Pole 15m | Rebs Giraffe Pole 15m | Rebs Compact Launcher 35m | Rebs Launcher 50m+ | Atlas Powered Ascender 200+ | Atlas Powered Ascender 400+ |
|---------------|-------------------|-----------------|-------------|----------------------|-------------------------|-----------------|-----------------|------------------|--------------------------|-----------------------|----------------------|---------------------|-------------------|-----------------|---------------------|
| MBL           | 180kg             | 1000kg          | 1000kg      | 1000kg               | 160kg                  | 1000kg          | 1000kg          | 1000kg           | 1000kg                   | 1000kg                 | 1000kg               | 1000kg              | 1000kg            | 1000kg          | 1000kg              |
| Weight        | 9.5kg             | 7.5kg           | 2.6kg        | 12kg                 | 9kg                    | 20.4kg          | 15kg            | 5kg              | 5kg                      | 5kg                   | 5kg                  | 12.5kg             | 12.9kg            | 4.4kg           | 7kg              |
| Additional Function 1 | Bridge | Bridge | Bridge | Bridge | Bridge | Bridge | Bridge | Bridge | Bridge | Bridge | Bridge | Bridge | Bridge | Bridge | Bridge | Bridge |
| Additional Function 2 | Stretcher | Stretcher | Stretcher | Stretcher | Stretcher | Stretcher | Stretcher | Stretcher | Stretcher | Stretcher | Stretcher | Stretcher | Stretcher | Stretcher | Stretcher | Stretcher |

For more information, visit HELIXTACTICAL.COM.
The access systems and equipment we provide supports VBSS and dive operations with the tools needed to board all types of ships and marine structures. Once on board the same kit allows operators to climb and manoeuvre to inspect containers and to access confined spaces.

The systems allow ships to be boarded in different ways - telescopic poles, ladders and launchers allow the initial anchors to be placed before ascent is made using manual or motorised systems. Metal hulled vessels can be boarded using the REBS magnetic climbing system.

The poles and launcher have been designed to be used by divers as well as those using RHIBs.
**Maritime Interdiction**

Launchers, poles and ladders to enable operators to access all sizes of ship and marine structure whether approaching by RHIB or swimming. The latest products increase that capability further; the Giraffe pneumatic pole gives massive reach that extends faster and is as easier to control than any other system, the Ultralight Pole system increases reach and handling whilst the R3 harness is a totally modular system which can be worn above and below armour, incorporate a chest ascender and be used when swimming.
MARITIME REACH HEIGHT CHART

<table>
<thead>
<tr>
<th>Meters</th>
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<tr>
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- REBS Rigid Pool Ladder
- Aluminum Tactical Ladder
- Pneumatic Launcher
- REBS Windup Pole
- Carbon Fiber Telescopic Pole
- Gira Pneumatic Telescopic Pole
- Magnetic Climbing System
- Carbon Multi-Ladder
- Gira Pneumatic telescopic pole
- Compact Launcher
- Powered Ascender (APA)
- Powered Ascender (APA-3)

World's biggest container ship
Ocean tanker
Coastal tanker
Surface/splash

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The most technically complex of the capabilities that we provide. The systems have been developed with a wide cross section of users from PJ's to mountain rescue teams and have been designed to offer solutions in most environments whether working in a confined space, operating in an urban environment with minimal kit or conducting a large-scale evacuation in the mountains.

Our systems allow users to lower, haul and manoeuvre casualties in a broad range of situation whether using a heavy-duty system with a quadpod and titanium stretcher or a micro system built from 6mm Technora and a nappy harness that packs into a pouch and weighs less than 2kg.
Rescue

We have tried hard to build our rescue equipment and training into packages that are easy to deploy, simple to use and help minimise the possibility of human error - pre-rigging components together, making components easy to identify and building redundancy into systems helps reduce the risk of potentially large shock loads.

We can offer equipment and training solutions for a broad range of situations from simple lowers and casualty pick-offs to complex 3 dimensional evacuations through confined spaces.
The design of harnesses for tactical users is evolving very fast - harnesses are now available that allow integration with both Battle Belts and Molle attachments whilst also working with plate carriers to provide high levels of stability whilst still allowing access to kit and pouches.

The range of harness we supply is laid out below, but we realise that specific units have specific requirements that are often not served by off the shelf solutions. DMM International are pretty unique in that with both a technical sewing facility in Llanberis alongside our comprehensive engineering plant we have the ability to work with partners to design and produce bespoke product in small numbers.
DMM R1
Full Body Harness

DMM R2 Modular Harness System
R2 waist harness
Add in C2 chest harness with chest ascender

DMM R3 Modular Harness System
R3 Waist Harness
R3 Riggers Belt
R3 Legs
R3 Waist Harness
C3 Chest Harness
C3 Chest Harness with Chest Ascender
TACTICAL HARNESS OVERVIEW

CTOMS Harnesses
- M2 harness System
- T2 Chest Harness
- Pocket Nappy
- Harness Accessories

Crib Gogh VMOSS Harnesses
- VMOSS Harness

Climbing Harnesses
- Renegade
- Super Couloir
- Alpine
- Alpine Chest Bandolier
- Chest Harness
- Connector Slings

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DMM R1 FULL BODY HARNESS

The DMM R1 is a modular, full body harness that sits under the plate carrier whilst allowing connections via the belay loop, sternum attachment point and dorsal attachment point.

The waist harness can be used by itself and when done so it is certified to EN 813, 358 and 12277; when the chest harness is attached it becomes an EN361 rated full body harness.

The waist and chest harness are constructed from a low profile webbing that fits comfortably under body armour whilst incorporating a red wear indicator that allows the user to easily see if the harness has been critically damaged. The thin wide tapes also help to spread the load when sitting in the harness to minimise discomfort.

All the webbing adjustment buckles have been designed so that they are useable both with and without armour.

The harness uses fast release buckles on both the waist and legs that allow the harness to be quickly undone fully. The two large fast-adjust buckles on the waist keep the harness symmetrical whilst also giving a wide size range.
DMM R2 MODULAR HARNESS SYSTEM

A modular harness system combining a comfortable, padded sit harness with a low-profile chest harness.

The sit harness is rated by itself to EN12277 and when combined with the chest harness is certified to EN361.

The sit harness is manufactured from a wide, thin laminate that spreads load well, but has a low profile that does not inhibit movement. The harness opens fully using fast release buckles on the waist and legs whilst waist size adjustment is made via the buckles on either side of the harness – this dual system allows the harness to be kept symmetrical whilst giving a large size range.

The waist belt incorporates 4 low gear loops that sit out of the way below other equipment.

The chest harness connects to the waist harness with a bridge sling that is length adjustable to ensure the correct fit and uses the same fast release buckle as the waist harness.

The chest harness has been designed so that it can be worn over or under plate carriers. It uses a durable mesh fabric body that has very low bulk, but keeps the straps in position so that it is simple to put on and does not ride up or pinch when loaded.

A bespoke chest ascender can also be integrated into the chest harness which sits flat above the plate carrier and magazines.

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<thead>
<tr>
<th>Size</th>
<th>Waist (cm)</th>
<th>Waist (in)</th>
<th>Leg (cm)</th>
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<th>Weight (g)</th>
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<td>L-XL</td>
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<td>60-80</td>
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DMM R3 Modular Harness System

- The R3 Riggers belt in Coyote on MultiCam clothing
- The R3 Riggers belt is 45mm wide and inserts into standard belt loops
- The R3 Riggers Belt with Leg Loops attached
DMM R3 Modular Harness System

The DMM R3 is a modular tactical harness system based around a EN358 PPE certified Riggers Belt with the option of adding both lightweight legs and a chest harness.

The belt by itself is rated to hold 15kN (1.5 static tonnes) for a minimum of 3 minutes and the combination of the belt and legs meets EN12277 Type C which is the normal standard for climbing sit harnesses. The combination of belt, legs and chest harness gives a harness that meets EN 358 and EN361.

The R3 Riggers belt uses a very slim 45mm design that fits through a trousers waist belt loops and can double as a duty belt. The belt uses a fast release buckle that can be undone or adjusted quickly.

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<td>XL</td>
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<tr>
<td>XXL</td>
<td>111 - 141</td>
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The belt is sized so that it can take molle attachments and is stiff enough to take heavier equipment such as pistol holsters.

The belt can be used with the buckle on the left or right depending on personal preference.

The outside surface of the belt uses a fine soft Velcro so that battle belts can be positioned on top of the belt and won't move around.

The belt includes a low-profile textile belay loop on the front of the belt - this allows the user to connect quickly into an anchor or system using a PPE rated belt - useful for an emergency egress. When not in use the belay loop can be tucked out of the way. The harness uses a “soft” textile belay loop as this avoids leverage or 3-way loading being placed on any metal item being connected to it - much safer than using a metal D hook.

Gear loops are available as an optional extra and these Velcro into position onto the harness in the position required by the user.

When full climbing functionality is required the R3 harness has both leg loops and a chest harness as modular options.

The leg loops are very light and compact using a synthetic mesh to minimize their bulk and minimise moisture retention - they are one size only, weigh just 260g and pack down into a pouch that is just 12 x 8 cm which is attached to the belt for immediate and fast access. The legs can be added to the belt whilst wearing it in less than 15 seconds.

The chest harness can be used when the operator needs a high attachment point for when carrying heavier loads or better stability. It has been designed so it can be worn under the plate carrier so that it does not restrict access to pouches or equipment mounted on the vest.

The chest harness is connected to the sit harness via a webbing bridge that can be adjusted via a fast adjust buckle to achieve the perfect length no matter what the operator’s torso length. When adjusted, the buckle can be covered with the incorporated neoprene sleeve to minimise accidental movement.

All the components use fast out buckles that allow the harness components to be removed very quickly if needed.

The harness system is available in Black, Coyote Brown and Khaki Green.
CTOMS M2 Harness System

The M2 harness is a fully modular tactical harness system which can be built up from a Riggers Belt into a full sit harness that incorporates an armoured battle belt.

The M2 uses a patented connection method for the legs that offers several advantages over more traditional attachment designs by eliminating reliance on a single quick release buckle, allowing a high attachment point and allowing easy donning even when on steep or slippery terrain.
CTOMS M2 Harness System
Modular Components

The starting point of the harness is the M2 belt which is 1 3/4” (42mm) wide so that it fits into 2” (50mm) trouser belt loops - using it as a duty belt eliminates the need to carry two belts and so reduces weight and bulk. The belt consists of high strength webbing with a Cobra buckle inside a padded chassis.

The belt is also compatible with the CTOMS X-Belt padding and armour system. This way it can be built up into an armoured battle belt that can be used for emergency rappels or as an armoured harness for climbing in a tactical environment.

It can be combined with the M2 legs which have a patented attachment system that ensures that the integrity of the harness is not compromised if that buckle is not closed properly or if it is accidentally opened in use. The design also speeds up putting on the harness, as well as allowing the user to keep their feet planted whilst putting on the leg loops which is ideal when operating on steep ground.

The new 2nd generation M2 is lighter and more comfortable than its predecessor plus it is the first to use narrow 25mm Cobra Buckles with release tabs that are flush with the frame to minimize the chances of them being opened accidently. The smaller buckle also helps to reduce weight which is a nice bonus. Comfort has been increased by adding lightweight padding to the leg straps to increase comfort and the support straps are now field replaceable.

The M2-Harness was designed, manufactured and tested to meet ASTM standards.

Adjustable Waist Size: From 28” to 50”

Weight: 750g / 26.50oz for the full harness - 175g / 6.5oz for the belt
CTOMS M2 Harness System

Available Colors
Black, Coyote Brown & Ranger Green
M-Harness™ Gear Loop Set

The Gear Loop Set was designed specifically for the M-Harness™ QRPS. However, being MOLLE compatible, it can be used on any MOLLE covered belt, pack or vest. The gear loops integrate with the MOLLE to provide a semi-rigid loop that carabiners and gear can be racked on.

It is MOLLE compatible in any orientation - horizontal or vertical.

Molle Drop Down Panels

2 & 4 Columns

The Drop MOLLE Panel allows you to carry magazines on your duty belt. With a rigid HDPE insert for stiffness and ample padding, the Panel sits at a convenient height as not to create discomfort from sitting too high above the waist. Pull the Dot belt attachment straps prevents unintentional release. Available in 2 or 4 channels.

MOLLE Drop Extension

Panel Armor Compatible

The MOLLE Drop Extension Panel - Armor Compatible was designed to provide a lower MOLLE attachment point on the X-Belt™ PS for items such as mag pouches or MOLLE holsters, without lowering it so much that it requires a drop leg panel. The MOLLE Drop Panel is semi-rigid, allowing some flex to accommodate the wearer’s movement, but rigid enough to support magazine or pistol draw. If mounting magazines pouches, the Drop Extension Panel lowers the top of a 30 round carbine mag to the level of the top of your belt.

CTOMS M2 Harness System

X-Belt™ PS, Gen II

(Armor Insert Compatible)

CTOMS HARNESS SYSTEMS

HELIXTACTICAL.COM
CTOMS T2 Chest Harness

The T2 chest harness connects into the M2 harness system and can also integrates into an operators plate carrier system.

Typically a chest harness goes either under the armour making the high attachment point exit from behind the plate that got into the face of the wearer or more commonly it goes over top of the plate carrier and all the attached pouches. The problem with this approach is that the pouches are less accessible and when the harness is loaded it could crush the contents - not ideal for first aid kits or for pressing the PTT switch on a radio.

Thus CTOMS designed the T2 harness to seamlessly integrate into a plate carrier. The webbing runs through the MOLLE in front of the armour, but behind any mounted pouches thus solving the two major problems.

The T2 is designed to be used in conjunction with the M2 harness and in this configuration creates tested Class 3 harness system.

The T2 uses the same convenient connection style as our patented M2 harness system. A nice touch is that it is very fast for the user to alter the effective front length of the harness so that it can either be shortened to hold the user in the most comfortable position when the harness is loaded or it can be released so that it is not restrictive when walking or running.
CTOMS PocketHoist™ Harness

The PocketHoist is an ultra-lightweight, diaper style rescue harness that is intended to be used with ambulatory casualties or uninjured persons without a harness requiring vertical suspension.

The PocketHoist™ Harness can be put on in seconds, packs as small as wallet into the integral pouch, and is extremely strong due to its single loop Dyneema® sling support straps.

FEATURES

- Lightweight (100 grams);
- Packs small and stows into it’s own internal pocket;
- One size fits all
- Available in 2 colours: Black, MultiCam®
Tactical Gear Sling

A purpose built lead climber's gear sling for tactical rock climbing operations with unique features not found in recreational market equipment

ITEM CONTENTS

- 1 x Sling, Tactical Climbing Gear, Multicam®
- 1 x Retention Strap, 3/4 inch, Multicam®
- 3 x Climber's Dump Pouch, 10 inch, Multicam®
- 1 x Climber's Dump Pouch, 14 inch, Multicam®
- 2 x Carabiner, Freegate XSRE, Matte Grey

Climber's Dump Pouches are removable, MOLLE compatible, has a top draw string, rear compression straps and are available in 8.5", 11" and 14" lengths.

FEATURES

- Color: MultiCam®
- PALS integration on the padding and gear sling provide mounting options for equipment like radios, pistols, chock pick sheath
- Primary carabiner sling attachment allows quick-connect to the anchor prior to doffing to prevent dropping the rack
- Secondary side release buckle attachment allows quick-connect directly to PALS on a plate carrier with the use of surface mount receivers (not included)
- Re-sizable sling, long enough to fit over armour and equipment
- 3 different sized, removable Climber's Dump Pouches to sound, snag and if using third party components, color signature to a minimum
- Additional Climber's Dump Pouches available as accessories
- Climber's Dump Pouches are removable, MOLLE compatible, has a top draw string, rear compression straps and are available in 8.5", 11" and 14" lengths.
Crib Gogh
VMOSS Harness

The VMOSS harness is designed to work with an operators plate carrier to provide a full body style harness with a high waist connection point that sits at rib cage level - this provides greater stability when descending ropes with armour on.

The harness connect into the plate carrier with 4 buckles - one each on the shoulder and waist straps - this helps minimise the weight and bulk of the system whilst also making it fast to connect and disconnect.

**FEATURES**

- The harness straps sit on the plate carrier and still allow the majority of the Molle slots to be used.
- The harness comes in Multicam Original, MultiCam Arid, Black Khaki and Coyote.
- One size fits all
Renegade Tactical

The Renegade is an all-rounder that works across the full range of climbing disciplines: from cragging and winter climbing to big alpine routes.

One of the key features is the free-floating waist belt - the belt floats inside the waist pad allowing the user to centralize the belay loop and gear loops regardless of how many clothes being worn or whether at the extremes of the sizing range, this means the user gets a good fit with the gear loops, padding and belay loop all in the correct place.

The belt and legs both use our slide-lock buckles that allow fast, secure adjustment and yet can still be fully undone for ease of use on steep or slippery terrain.

The waist belt is constructed from high quality closed cell foam combined with a synthetic spreader plate in the lumbar area. This gives excellent comfort and support, while the carefully sculpted shape allows freedom of movement.

The racking system is generous with seven gear loops and was designed to work with both summer and winter racks. The gear loops have been re-positioned and re-shaped so that your gear is less cluttered and hangs more evenly.

The Hypalon ice clipper attachment points have been modified so that you can use two of the clipper points without interfering with the standard gear loops. The harness can hold up to four ice clippers.

FEATURES

- It is available in Black, MultiCam Original and MultiCan Arid.
- Top of the range fully featured adjustable leg padded harness
- A floating waist pad that gives a perfect fit over an extended size range and allows the gear loops and belay loop to be positioned correctly
- Fully adjustable with Slide Lock buckles on both waist and legs to give a secure fit with lot of adjustment
- Tie-in points all reinforced with tough, abrasion resistant webbing
- Narrow belay loop for better compatibility with small belay carabiners

<table>
<thead>
<tr>
<th>Variant</th>
<th>Size</th>
<th>Waist (cm)</th>
<th>Waist (in)</th>
<th>Leg (cm)</th>
<th>Leg (in)</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renegade</td>
<td>Small</td>
<td>64-79</td>
<td>25-31</td>
<td>45-58</td>
<td>18-23</td>
<td>395g</td>
</tr>
<tr>
<td>Renegade</td>
<td>Medium</td>
<td>75-91</td>
<td>30-36</td>
<td>50-63</td>
<td>20-25</td>
<td>415g</td>
</tr>
<tr>
<td>Renegade</td>
<td>Large</td>
<td>87-104</td>
<td>34-41</td>
<td>55-70</td>
<td>22-28</td>
<td>450g</td>
</tr>
</tbody>
</table>
Super Couloir Tactical

Our classic nappy/diaper style harness the Super Couloir is designed for situations that demand a harness that is very light, can be put on very easily no matter how unstable your footing, has a very low profile and operates well in wet, icy as well as dry conditions.

Ice climbing, alpine climbing, mountaineering and ski touring; you could even use it for rock climbing but we'd probably recommend something a bit more padded for that.

It's light, easy to put on (even when wearing crampons, skis or snowshoes) and has plenty of racking for gear and screws. The 'diaper' pull through leg loops design allows you to put it on without undoing any cumbersome buckles (a task especially difficult with gloves on) or standing into the leg loops.

We've used 'supported' 44mm webbing on the waist belt - this is surprisingly comfortable when hanging in the harness belays, has a low profile so it will fit snugly under your rucksack or duty belt and has absorbs a minimal amount of water that can freeze, add weight or create a cold spot around your core.

FEATURES

- Full specification alpine harness
- Low weight and minimal pack size
- Twin hypalon ice screw racking strips
- Five gear loops
- 20mm belay loop rated at 25kN
- 44mm minimally padded waist for lightweight comfort

<table>
<thead>
<tr>
<th>Variant</th>
<th>Size</th>
<th>Waist (cm)</th>
<th>Waist (in)</th>
<th>Leg (cm)</th>
<th>Leg (in)</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Super Couloir S</td>
<td>68-90</td>
<td>27-35</td>
<td>50-55</td>
<td>20-22</td>
<td>340g</td>
<td></td>
</tr>
<tr>
<td>Super Couloir M</td>
<td>79-100</td>
<td>31-39</td>
<td>60-70</td>
<td>24-28</td>
<td>350g</td>
<td></td>
</tr>
<tr>
<td>Super Couloir L</td>
<td>90-114</td>
<td>35-45</td>
<td>65-75</td>
<td>26-30</td>
<td>385g</td>
<td></td>
</tr>
<tr>
<td>Super Couloir XL</td>
<td>100-130</td>
<td>39-51</td>
<td>70-80</td>
<td>28-31</td>
<td>395g</td>
<td></td>
</tr>
</tbody>
</table>

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Chest Harness Tactical

A simple, but effective chest harness that works well will all our sit harnesses especially when used in conjunction with a DMM Bridge acting as a connector. The 44mm webbing is tough and sits flat on the torso.

- One size fits all and quickly adjusted via the two ABS buckles.
- Available in Matt Black, Coyote and MultiCam.

<table>
<thead>
<tr>
<th>Variant</th>
<th>Size</th>
<th>Waist (cm)</th>
<th>Waist (in)</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chest Harness</td>
<td>one</td>
<td>75-115</td>
<td>30-45</td>
<td>310g</td>
</tr>
</tbody>
</table>

Black Alpine

A low profile webbing harness with a high attachment pint to help increase stability when fully loaded. The harness uses either standard or ABS buckles - ABS buckles allow fast, on the fly adjustment whilst the standard buckles allow the harness to be completely undone. Gear loops can be added as required.

- One size fits all and quickly adjusted via the three buckles.
- Available in Matt Black, Coyote and MultiCam.

<table>
<thead>
<tr>
<th>Variant</th>
<th>Size</th>
<th>Waist (cm)</th>
<th>Waist (in)</th>
<th>Leg (cm)</th>
<th>Leg (in)</th>
<th>Weight</th>
<th>Cat No</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALPINE-BLK XS</td>
<td>XS</td>
<td>40-90</td>
<td>16-35</td>
<td>30-70</td>
<td>12-26</td>
<td>400g</td>
<td>ALPINEBLK-XS</td>
</tr>
<tr>
<td>ALPINE-BLK R</td>
<td>R</td>
<td>40-125</td>
<td>16-49</td>
<td>40-70</td>
<td>16-28</td>
<td>405g</td>
<td>ALPINEBLK</td>
</tr>
<tr>
<td>ALPINE-BLK XL</td>
<td>XL</td>
<td>60-150</td>
<td>24-59</td>
<td>50-90</td>
<td>20-35</td>
<td>425g</td>
<td>ALPINEBLK-XL</td>
</tr>
<tr>
<td>ALPINE-BLK ABS XS</td>
<td>XS</td>
<td>40-90</td>
<td>16-35</td>
<td>30-70</td>
<td>12-26</td>
<td>400g</td>
<td>ALPINEBLKABS-XS</td>
</tr>
<tr>
<td>ALPINE-BLK ABS R</td>
<td>R</td>
<td>40-125</td>
<td>16-49</td>
<td>40-70</td>
<td>16-28</td>
<td>405g</td>
<td>ALPINEBLKABS</td>
</tr>
<tr>
<td>ALPINE-BLK ABS XL</td>
<td>XL</td>
<td>60-150</td>
<td>24-59</td>
<td>50-90</td>
<td>20-35</td>
<td>425g</td>
<td>ALPINEBLKABS-XL</td>
</tr>
</tbody>
</table>
Connector Slings - Bridge

To increase the ease, speed and security of using a sit harness plus chest harness combination, DMM have produced the Bridge. This is a specialist sling that connects both components, providing an obvious high tie-in point for easy attachment.

FEATURES

› A linkage sling for harness components
› 2 sizes available (Small and Large)
ROPES

There are 4 main types of rope in our range:

- Dynamic Climbing ropes
- Low Stretch / Static ropes
- Heat Resistant Ropes and Cords
- Prussic Cords - Tag Lines - Fixed Lines

The rope is the heart of the safety system and is used to perform a multitude of tasks - ascend, descend, haul - in a wide variety of roles and environments. The rope needs to have the correct qualities to make completing the task as easy and safe as possible - different objectives call for different qualities in a rope; crossing alpine terrain needs a lightweight dynamic rope that repels water, a long abseil needs a tough static rope, bail-out ropes need to be super compact and light whilst offering good resistance to heat and cutting. Our range offers all these options including the super lightweight TRACE climbing system rope.
Dynamic Rope Range
- Crux 9.1mm
- Zone 9.8mm
- Aeon 10.2mm
- Dynamo 11.0mm

Static Rope Range
- Descent 11.0mm
- WorkSafe Plus 11.0mm
- WorkSafe 11.0mm
- WorkLight Dyneema 8.0mm
- Worklight Nylon 9.0mm

Specialist Ropes and Cords
- HeatShield 11.0mm
- Inferno 10.5mm
- FireEscape 7.7mm
- TRACE 6.5mm
- EOD 2.5mm

Accessory Cord / Trail Lines
- 8mm Cord
- 6mm Cord
- 2.5mm Cord

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## Ropes Specification

<table>
<thead>
<tr>
<th>Dynamic Ropes</th>
<th>Crux 9.1</th>
<th>Zone 9.8</th>
<th>Aeon 10.2</th>
<th>Dynamo 11.0</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dry coated, light rope that is triple rated</td>
<td>Well balanced allrounder</td>
<td>Tough rope</td>
<td>Very tough rope</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Static Ropes</th>
<th>Descent 11.0mm</th>
<th>WorkSafe Plus 11.00</th>
<th>Worksafe 11.0mm</th>
<th>Worklight Dyneema 8.0mm</th>
<th>Worklight Nylon 9.0mm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coarse sheath for good control on fast descents</td>
<td>Tough rope for harsh conditions</td>
<td>Classic 11.0mm abseil and rigging rope</td>
<td>Superlight, but strong for when weight is key</td>
<td>Lightweight static rope for abseiling and rigging</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specialist Ropes and Cords</th>
<th>Heatshield 11.0mm</th>
<th>Inferno 10.5mm</th>
<th>Fire Escape 7.7mm</th>
<th>Trace 6.5mm</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Heat resistant abseil rope in classic 11mm diameter</td>
<td>Lightweight heat resistant abseil rope</td>
<td>Very light heat resistant egress rope that will work with standard belay devices</td>
<td>Heat resistant rope for CTOMS micro rope system</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Accessory Cords and Trail Lines</th>
<th>8mm Cord</th>
<th>6mm Cord</th>
<th>2.5mm Cord</th>
</tr>
</thead>
</table>
**DYNAMIC ROPES**

Dynamic climbing ropes have a twisted or braided nylon core covered with a braided nylon sheath. The braided core provides the body of the rope and in a fall acts as a fabric spring to absorb the energy of the fall significantly reducing the force being imparted to the climber. The sheath protects the sheath as well as helping to define how the rope feels, how it runs through equipment and how the rope resists wear.

Dynamic climbing ropes used in a tactical environment are virtually always classified as “single” ropes i.e. they are designed to be used by themselves in the system without being backed up with another rope.

11mm used to be the standard diameter for tactical duties, but today the same performance and durability can be obtained from ropes with a diameter of 9.8mm – this saves over 20% on the weight and volume that needs to be carried.
Crux 9.1mm

The Crux is certified for use in single, half and twin rope systems as well as being UIAA dry treated for maximum versatility. Used as a lightweight single rope it’s perfect for alpine and mountain use, while as a half or twin, it is tough enough for loose or sharp terrain. The Crux is the rope for when low weight, superb handling, and top-flight performance are required.

<table>
<thead>
<tr>
<th>Model</th>
<th>Diameter (mm)</th>
<th>g/m</th>
<th>Falls</th>
<th>Imp Force (kN)</th>
<th>% Sheath</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crux</td>
<td>9.1</td>
<td>54</td>
<td>5 (single), 20 (half), 22 (twin)</td>
<td>8.6 (single), 6.9 (half), 10.6 (twin)</td>
<td>33</td>
</tr>
</tbody>
</table>

Code

- RP222GR-50: Crux 9.1mm x 50m Dry - Olive
- RP222GR-60: Crux 9.1mm x 60m Dry - Olive
- RP222GR-70: Crux 9.1mm x 70m Dry - Olive
- RP222GR-80: Crux 9.1mm x 80m Dry - Olive

Zone 9.8mm

The new generation workhorse rope – modern construction techniques and fibre treatments allow users to work with smaller diameter ropes that still provide very good durability. The advantages of using a smaller diameter are many fold – less weight to carry around, less bulk, better compatibility with modern rope control devices, lower impact forces and better handling.

Thanks to the ThermoControl treatment, the Zone absorbs punishment and handles brilliantly whilst being light enough to let you move fast with no compromise. A superb, versatile single rope that is totally at home on the cliffs as well as urban environments.

<table>
<thead>
<tr>
<th>Model</th>
<th>Diameter (mm)</th>
<th>g/m</th>
<th>Falls</th>
<th>Imp Force (kN)</th>
<th>% Sheath</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone</td>
<td>9.8</td>
<td>63</td>
<td>6</td>
<td>8.7</td>
<td>39</td>
</tr>
</tbody>
</table>

Code

- RP101NV-50: Zone 9.8mm x 50m Dark Green
- RP101NV-60: Zone 9.8mm x 60m Dark Green
- RP101NV-70: Zone 9.8mm x 70m Dark Green
- RP101NV-80: Zone 9.8mm x 80m Dark Green
DYNAMIC ROPE RANGE

### Dynamo 11mm

With an 11mm diameter, the Dynamo is the most robust dynamic rope in the range. Ideally suited for intensive use in areas with abrasive rock or where there will be a lot of top-roping and lowering. Available in custom lengths up to 500m.

<table>
<thead>
<tr>
<th>Model</th>
<th>Diameter (mm)</th>
<th>Length</th>
<th>g/m</th>
<th>Falls</th>
<th>Imp Force (kN)</th>
<th>% Sheath</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dynamo 11</td>
<td>50</td>
<td>12</td>
<td>9.1</td>
<td>37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dynamo 11</td>
<td>60</td>
<td>12</td>
<td>9.1</td>
<td>37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dynamo 11</td>
<td>200</td>
<td>12</td>
<td>9.1</td>
<td>37</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RP222GR-50</td>
<td>Crux 9.1mm x 50m Dry - Olive</td>
</tr>
<tr>
<td>RP222GR-60</td>
<td>Crux 9.1mm x 60m Dry - Olive</td>
</tr>
<tr>
<td>RP222GR-70</td>
<td>Crux 9.1mm x 70m Dry - Olive</td>
</tr>
<tr>
<td>RP222GR-80</td>
<td>Crux 9.1mm x 80m Dry - Olive</td>
</tr>
</tbody>
</table>

### Aeon 10.2mm

A super tough single rope for heavy, repeated usage, training duties or very abrasive environments. The sheath uses a very tight, thick construction to maximise durability. The Aeon is relatively thick to maximise durability, but still works well with a wide variety of rope control devices.

<table>
<thead>
<tr>
<th>Model</th>
<th>Diameter (mm)</th>
<th>g/m</th>
<th>Falls</th>
<th>Imp Force (kN)</th>
<th>% Sheath</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aeon</td>
<td>10.2</td>
<td>68</td>
<td>8</td>
<td>8.9</td>
<td>36</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RP601M-50</td>
<td>Aeon 10.2mm x 50m Midnight</td>
</tr>
<tr>
<td>RP601M-60</td>
<td>Aeon 10.2mm x 60m Midnight</td>
</tr>
</tbody>
</table>

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Low Stretch Static Ropes

Low stretch ropes (also commonly referred to as static ropes) are used for the repeated ascent and descent of lines as well as setting up rescue and hauling systems. It is important for such ropes to have minimal elongation, good abrasion resistance and consistent performance under repeated use in a wide variety of conditions.

It is important to note that low stretch ropes do still stretch (3-4%) under load, but have far less stretch than dynamic ropes. It should also be noted that low stretch ropes shrink about 5% once wetted for the first time.

Static ropes - like dynamic ropes - have a kernmantle construction that consists of an inner, twisted core and an outer braided sheath.

There are two types of low stretch rope as defined by EN1891 - type A and Type B. The characteristics of both are very similar except for a couple of notable differences; sheath slippage, dynamic performance, static strength with and without termination.

<table>
<thead>
<tr>
<th>Standards Characteristics</th>
<th>EN 1891 Type A</th>
<th>EN 1891 Type B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Characteristics</td>
<td>Ropes intended for use as safety ropes for working at heights (in combination with the relevant equipment) and as rescue ropes. Diameter 8.5-16mm. Test weight dynamics test 100kg</td>
<td>Ropes of smaller diameter and lower strength than Type A. Test weight dynamic test 80kg. Usually used in combination with specially developed abseiling equipment according to EN341 (Descenders)</td>
</tr>
<tr>
<td>Diameter</td>
<td>8.5 to 16mm</td>
<td>8.5 to 16mm</td>
</tr>
<tr>
<td>Capacity for knotting</td>
<td>(k &lt; 1.2 \times D)</td>
<td>(k &lt; 1.2 \times D)</td>
</tr>
<tr>
<td>Sheath Slippage</td>
<td>(\leq 30 \text{ mm})</td>
<td>(\leq 15 \text{ mm})</td>
</tr>
<tr>
<td>Dynamic Performance</td>
<td>(M=100 \text{ Kg}) 2m rope, 0.60m fall (F &lt; 6\text{ kN})</td>
<td>(M=80 \text{ Kg}) 2m rope, 0.60m fall (F &lt; 6\text{ kN})</td>
</tr>
<tr>
<td>Static Strength without Termination</td>
<td>(\geq 22 \text{ kN})</td>
<td>(\geq 18\text{ kN})</td>
</tr>
<tr>
<td>Static Strength with Termination</td>
<td>(\geq 15\text{kN})</td>
<td>(\geq 12\text{kN})</td>
</tr>
<tr>
<td>Extension at 150Kg</td>
<td>(\leq 5%)</td>
<td>(\leq 5%)</td>
</tr>
</tbody>
</table>
DMM Descent 11mm

The DMM Descent is specifically manufactured for military applications and is manufactured using high tenacity polyester for both the core and the sheath. The construction uses a 16 plait sheath to create a deliberately course sheath that provides good control on fast abseils as well as great abrasion resistance.

The polyester construction means that it does not suffer from the same initial shrinkage issues as nylon static ropes, it stretches less under load, does not lose strength when wet and has better abrasion resistance than an equivalent nylon rope.

Available in 50m, 60m 100m and 200m lengths.

<table>
<thead>
<tr>
<th>Diameter (mm)</th>
<th>Mass Core (g/m):</th>
<th>11</th>
<th>45.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight (g/m):</td>
<td>Mass Cover (g/m):</td>
<td>95.4</td>
<td>50.2</td>
</tr>
<tr>
<td>Sheath Slippage (%):</td>
<td>Mass Rope (g/m):</td>
<td>1</td>
<td>95.4</td>
</tr>
<tr>
<td>50 - 150 kg Elongation (%):</td>
<td>Shrinkage (%):</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Minimum Static Strength ex. terminations (kN):</td>
<td>Average Static Strength with sewn eye (kN):</td>
<td>22</td>
<td>27</td>
</tr>
<tr>
<td>Average Static Strength ex. terminations (kN):</td>
<td>Average Static Strength with fig. 8 loop (kN):</td>
<td>30.8</td>
<td>19</td>
</tr>
<tr>
<td>Minimum Static Strength with terminations (kN):</td>
<td>Average Static Strength with spliced eye (kN):</td>
<td>15</td>
<td>22.6</td>
</tr>
<tr>
<td>Fall Factor 1 falls. Fig. 8 loop:</td>
<td>Peak Force (kN), Fig 8 loop:</td>
<td>4</td>
<td>7.4</td>
</tr>
<tr>
<td>Fall Factor 1 falls. Spliced eye:</td>
<td>Peak Force (kN). Spliced eye:</td>
<td>15</td>
<td>8.3</td>
</tr>
</tbody>
</table>
Worksafe

The Worksafe 11mm encapsulates a burley twisted core with a tightly woven 32-plait sheath to give a rope that has low weight and high breaking strength. The high-twist 32-strand mantle braid helps give the Worksafe high dirt resistance, better grip and high abrasion protection as well as allowing the rope hold its shape well. The Worksafe rope offers good handling, stability, and a high resistance to wear. It is ideal for a variety of applications ranging from rigging, abseiling and converting into cows tails.

The Worksafe comes as standard in black in 11mm, but is also available on demand in 10.0 and 10.5mm diameters. The 11mm is certified for use with the DSD Plus descender.

Worksafe Plus

The Worksafe Plus was designed to have a tighter weave and be more compact than the Worksafe, whilst still having the same superb knotability and excellent abrasion resistance. Worksafe Plus is the rope of choice for anyone who is a heavy user of their rope with devices and therefore want the extra durability and wear resistance that the upgraded construction provides.

- Worksafe Plus is certified to EN1891 Type A
- The Worksafe Plus comes as standard in black in 11mm, but is also available on demand in 9.0, 10.0 and 10.5mm diameters

<table>
<thead>
<tr>
<th>Diameter [mm]</th>
<th>Weight [g/m]</th>
<th>Shrinkage [%]</th>
<th>Elongation 50-150 kg [%]</th>
<th>Min. breaking strength free length [daN]</th>
<th>Min. breaking strength with figure 8 knot [daN]</th>
<th>Cover [%]</th>
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<td>3,200</td>
<td>1,800</td>
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</table>

Code
- RP901BK-50 Worksafe x 50m - Black
- RP901BK-100 Worksafe x 100m - Black
- RP901BK-200 Worksafe x 200m - Black
- RP901BK-700 Worksafe x 700m - Black

STATIC ROPE RANGE
Worklight 8.0mm Dyneema

20% less weight and 50% higher tensile strength than an equivalent nylon or HTP static rope.

This rope has a tightly braided 32 plait polyester sheath to provide good abrasion resistance and a SK78 Dyneema core for excellent strength with minimum weight. Dyneema has some very useful properties for tactical operations; it is very light, very strong and has a specific gravity of less than one so it floats. It is not the easiest fibre to work with because the fibres have such low friction, but DMM Helix has experience in sewing Dyneema rope for the tactical market both as part of systems and by itself.

<table>
<thead>
<tr>
<th>Product</th>
<th>Colour</th>
<th>Diameter</th>
<th>Length mm</th>
<th>Weight g/m</th>
<th>MLB Kn</th>
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<tbody>
<tr>
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<td>Dyneema Black</td>
<td>8mm</td>
<td>Custom lengths to 200m</td>
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</table>

Code

- RP911BK-50 Worksafe Plus 11mm 50m Black
- RP911BK-100 Worksafe Plus 11mm 100m Black
- RP911BK-200 Worksafe Plus 11mm 200m Black

Worklight 9.0mm Nylon

An EN1891 type B rope that is manufactured to ensure optimal abrasion resistance and durability in a lightweight Type B rope. The rope uses multiple nylon cores to give more extension under heavy shock loads.

This static rope is constructed with a high sheath to core ratio which provides improved abrasion protection and reduced sheath slippage. The rope is available in black in 25, 50, 100, 200, 500 and 1000 metre lengths with end terminations to suit the customers' requirements.

Model designation 9mm Static Rope EN 1891 Type B
Core material Polyamide
Cover material Polyamide
Mass of rope 53.4 grams
Core % 54.90%
Cover % 45.10%
Sheath slippage 0
Elongation 50kg - 150kg 3.25%
Static strength without terminations 26.7kN Static strength with figure if 8 15.4kN Static strength with sewn eyes 22.7kN Impact force 3.82kN
No. of drops to failure >5
HEAT RESISTANT - ARAMID ROPES

Nylon ropes melt at 220 - 250 degrees centigrade and thus have limited usefulness in situations where high temperatures or flames may be encountered.

Aramid fibres in contrast resist melting and only start to decompose at 400-500 centigrade.

Thus, certain tactical ropes use aramid fibres to provide usability in high temperature environments. Aramid fibres can be used to construct the sheath, the core or the complete rope depending on the properties required.

Aramid fibres are strong - roughly twice the strength of polyester fibres - and this allows aramid ropes to have relatively small diameters. They are also very resistant to being cut or abraded and have very minimal stretch. These properties mean the fibre is ideal for making small diameter evacuation/ bai-out ropes that can be carried with minimal impact on mobility.

However, aramid fibre is not perfect for making ropes - it loses strength more quickly than most other fibres when exposed to UV and the fibres lose a significant amount of their strength each time they are bent and to make matters worse they do not give visible signs of this damage. It is also expensive.

Thus, aramid ropes are great for specialist applications; abseiling that involves descending very fast with heavy loads or for emergency egress etc.
HEAT RESISTANT ROPES AND CORDS

11mm Heat Shield

The rope uses a 16 plait aramid sheath with a twisted core made from high tenacity polyester. The construction is based on the DMM Decent to give a slightly coarse sheath that gives great control when doing long, fast abseils with heavy loads.

The aramid sheath not only gives the rope great heat resistance, but also high resistance to cutting and abrasion. The polyester core helps minimize elongation and shrinkage.

A very highly specified abseil rope for demanding environments and applications.

Inferno 10.5mm Aramid Abseil Rope

The Inferno is the toughest rope in our range with high resistance to damage by heat or flame together with very good cut resistance.

It has an aramid core that gives the rope its core characteristics and has a nylon sheath to help protect the aramid core from UV degradation.

The increased resistance to cutting and abrasion means that it is well suited as an abseil or work positioning rope near sources of heat or the danger of contact with sharp edges. It is also ideal for being used for repeated fast abseiling procedures in rapid succession where heat build-up could cause damage to standard nylon or polyester abseil ropes. This rope is perfect for special intervention units, emergency response organizations and for use in rescue operations.

- The Inferno is certified to EN 1891 A
- Fully compliant to EN 1891 A

<table>
<thead>
<tr>
<th>Product</th>
<th>Colour</th>
<th>Diameter</th>
<th>Weight [kg/100m]</th>
<th>Av. Breakload (Kn)</th>
<th>Av. Breakload with fig 8 loop(Kn)</th>
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<tr>
<td>11mm Heat Shield</td>
<td>Black</td>
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<tr>
<td>Inferno 10.5mm Aramid Abseil Rope</td>
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<tr>
<td>Diameter (mm)</td>
<td>Weight (g/m)</td>
<td>Elongation 50-150 kg (%)</td>
<td>Min. breaking strength Fw length (daN)</td>
<td>Min. breaking strength With figure 8 knot (daN)</td>
<td>Cover (%)</td>
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<tr>
<td>10.5</td>
<td>74</td>
<td>2.5</td>
<td>3,200</td>
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<td>36</td>
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</table>
CTOMS 6mm TRACE Systems Rope
CTOMS 6mm TRACE Systems Rope

The TRACE™ Systems rope is 6.5 mm in diameter with a Technora® aramid sheath on a nylon core. The rope is an integral part of the TRACE ascent and descent system which is the world’s smallest, comprehensive capability micro rope system.

It is a system that allows users to lead climb, abseil and haul rescue loads on a 6mm rope that is fire resistant to 500C and has superb cut and abrasion resistance, but to do this the system needed specifically designed devices that work together to control the loads that can be placed on the system. It is for this reason that this rope is recommended to only be used with the CTOMS QA (Quickie Ascender) and QD (Quickie Descender).

The sheath has a black tracer running through one half and a tan tracer through the other half to more quickly identify mid-rope. This feature is functional through night vision devices.

The rope comes with high strength sewn terminations at each end to avoid the need to knot the rope.
Helix 7.5mm Aramid Escape Line

An aramid emergency escape line that uses aramid fibers for both the core and the sheath of the rope to provide a strong line with the very best heat and flame resistance as well as excellent resistance to abrasion and cutting. The rope was originally designed for firefighters so that they had a portable solution for escaping from tall buildings.

Aramid is the perfect fiber for an emergency or fire escape rope because it has a very high decomposition point (500°C / 900°F). The abrasion and cut resistance of the aramid fibers are also a key properties because in bailout situations sharp glass or rough edges on the building can threaten the integrity of the escape rope.

The rope packs tightly into a compact bag which can be worn on a belt and deployed instantly if necessary. The rope is available by itself or as part of a self-contained bail-out kit that includes a pre-rigged descent device.

- The rope is available in custom lengths as required up to 200m.
- The rope is certified to NFPA 1983:2012

<table>
<thead>
<tr>
<th>Diameter mm</th>
<th>Weight g/m</th>
<th>Min. breaking strength daN</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.5</td>
<td>45.8</td>
<td>2,780</td>
</tr>
</tbody>
</table>
Accessory cords

Our new line of tactical static accessory cords are both supple and robust. Available in 3 diameters as standard: 8mm, 6mm and 2mm.

All other diameters can be manufactured to bespoke colours and length on requested. In addition we can offer a termination service to create loops on the ends in our sewing department.

Exceptionally versatile with uses ranging from washing lines at Base Camp, haul lines across white water; safety lines on steep ground and for making prusik loops.

Top Tip: 5mm is the standard diameter for making a prussik. Get a 3m length and cut it in half to make 2 generously sized loops.

FEATURES

- Subdued colours
- 2mm, 6mm & 8mm diameters
- Available on 100m reels
ROPE PROTECTORS

Helix offers a comprehensive range of rope protectors; The range covers metal protectors as well as fabric models. It is a large range because rope protection is so important and having a wide choice of options when setting up your rope system is the best way to ensure that the system is both as safe and as efficient as possible.

The metal protectors in the range all have rotating support bars because reducing friction is important when hauling and our fabric protectors are chosen to provide class leading protection with heavy loads on sharp edges.
ROPE PROTECTORS RANGE OVERVIEW

METAL PROTECTORS

DMM Roller Hauler
Big heavy duty edge protection friction reducer for heavy fast hauls

Petzl Module Roller
Good, large area protection on sharp edges that is very efficient

Conterra Edgebot
Modular system that is light, compact and efficient

Conterra Clampbot
Modular system that is light, compact and efficient - plus articulation adds versatility

Lyon Edge Guard 30
Double rope system sharp edge protector

Lyon Edge Guard 10
Single rope system sharp edge protector

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ROPE PROTECTORS RANGE OVERVIEW

FABRIC PROTECTORS

DMM K Pro
Kevlar and canvas rope protection

DMM ProPad
Large area protection with canvas, coir and latex to provide excellent cut protection

CTOMS Rope Pro
SuperFabric heavy duty wraparound rope protection

CTOMS Edge Pro
SuperFabric rope protector with replaceable SuperFabric wear sheet

HELIXTACTICAL.COM
DMM Roller Hauler

A bespoke tactical product used at the top of cliffs to minimise friction and protect ropes when hauling personnel or equipment.

The Roller Hauler is anchored at the top of the crag via the numerous tie-off points with the spiked feet providing additional stability. The ropes run across the wide roller that is elevated to allow more clearance as the ropes make the edge transition.

The latest generation is lighter and has a guard in front of the roller to stop object (hands!) getting jammed inside.

Typically used by getting a team of lads running back from the edge whilst holding the rope - things come up fast - hence the nickname of “roller carnage”.

Petzl Module Roller

The Roll Module is an articulated protector that contains 4 modules with rollers that guide a moving rope and protect it from abrasion. The modules are connected by maillons so that they can be added or removed as required. This unit is very good at keeping the rope away from sharp 90 degree bend because the rollers stay relatively closer to each other than on a lot of standard caterpillar devices.

▷ The rollers are used both on the horizontal axes and run on bearings to further minimise friction.
▷ The product sold as a kit - 4 modules + 6 quick links + carry bag - and in this format weighs 1300g
Conterra Edgebot

The Conterra Edgebot™ has a unique feature set that allows it to work really well in a wide variety of applications.

This is a very compact edge roller that uses stainless steel axles running on bronze bearings to maximise efficiency when hauling. The flared and curved shape of the unit lets it work on a wide range of surfaces including railings, logs, rocks, guard rails, parapets, pretty much anywhere else where edge protection with running ropes is needed. The double rollers give good clearance on 90 degree edges compared to most other units.

Modules can be joined together or removed as required and the design allows the creation of long, adjustable rope tracks by simply linking units with cord. Other features include the curved and serrated underside that adds stability and the triangular central connection hole that allows a carabiner redirect.

Conterra Clampbot

Conterra took the innovative design of our Edgbot™ one step further by adding articulation. This edge protector uses the same rotating stainless steel rollers as the Edgebot, but with the advantage that it can conform to whatever it is attached to. Additional stability is created with 28 mini crampon points on the underside that firmly grip on metal, wood and concrete.

Clampbots can be linked together or connected to Edgebots and has the same capability of redirecting the rope with a carabiner. A very useful feature of the Clampbot™ is its ability to “grasp” thin railings when used with the Rail Roller attachment.

The Clampbot™ is built with eight Oilite bronze bearings over stainless steel axles, with hourglass shaped aircraft aluminum tires. Despite these features the Clampbot™ is still very light and compact - easily fitting into the palm of your hand.

Conterra rail roller attachment for Edgebot

Allows near instant Edgebot™ and Clampbot™ placement on railings, guard rails, or trees.

Built with ultra strong pass through buckle and frapping strap. Comes with four screw links.
Lyon Edge Guard Leg 10 and 30

A simple and cost effective edge protection system that comes in two sizes - 10cm and 30cm The 10cm version is intended for single rope systems and the 30cm for two rope systems.

- They are both made from stainless steel for durability and this unit will securely smooth off sharp 90 degree edges.
- The unit can be anchored with the attached adjustable 4mm cords
- A simple Velcro closure on the top of the unit stops ropes from jumping off the edge protector

Maillons

Stainless steel ovals that are rated for PPE use.

4 sizes: 5 7mm, 8mm, 9mm and 10mm and two types: standard opening and wide opening

<table>
<thead>
<tr>
<th>REFERENCE</th>
<th>Dia</th>
<th>Dim</th>
<th>H.T.</th>
<th>H.I.</th>
<th>A</th>
<th>O</th>
<th>E</th>
<th>T</th>
<th>g</th>
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<td>5/16&quot;</td>
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<td>20.5</td>
<td>36</td>
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<td>157</td>
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</table>
K-PRO rope protector

The K-Pro Rope Protectors use two layers of heavy-duty, waterproofed, natural fibre canvas with an additional cut-resistant Aramid layer in-between. This Aramid layer provides additional security with little increase in weight or bulk.

Available in 50 and 80 cm lengths, they both feature full-length continuous Velcro closures, large connection eyes at each end and 3mm anchor cord.

Reversible outer fabrics in different colours - olive and black - help operators clearly identify parallel rope systems with both working and backup lines. The colour contrast between the dark outer fabrics and the tan colour of the aramid fabric sandwiched between them helps users identify when the outer fabric has been damaged or worn through.

PROPAD+

The ProPad+ consists of a three-layer protection pad incorporating a heavy duty canvas wear sheet sandwiching a 15 mm thick inner pad of natural fibre laminated with a flexible, latex membrane. This combination of proofed canvas sandwiching a coir/latex mat gives a large area of extremely good protection over hazardous edges. This multi-layer pad increases the edge radius ensuring smooth rope movement.

The top canvas wear sheet can be removed and replaced in order to maximise the life of the product.

Eight attachment eyelets and the choice of using it orientated horizontally or vertically gives numerous installation options. The ProPad+ can be used open or closed depending on the application and stability of the loaded ropes. It can be used in conjunction with the K-Pro rope protectors for added security.

The colour contrasts between the layers highlight any wear holes in the double-thickness wear sheet.

DMM Canvas Rope Protector

The standard DMM canvas rope protectors are manufactured from a heavy duty canvas for a good level of protection and to minimise heat build up in running rope situations.

The protector has a clipping eye or accessory cord attachment, is edge bound for wear protection and uses extra wide velcro for secure closure.
CTOMS RopePro

The RopePro™ consists of 4 internal layers of SuperFabric® with an external layer of grippy material. The RopePro™ wraps around the rope and secures to itself with Velcro®. Anchor points at each end can be used to secure it to prevent accidental movement. In drop tests performed with TRACE™ Systems 6mm rope over sharp metal and rock edges, the RopePro™ consistently saved the rope from catastrophic failure where an unprotected rope would completely fail*. (Testing of the RopePro™ was conducted using a 100 kg mass over a sharp metal and rock edge in a fall factor of 0.3)

CTOMS EdgePro

The EdgePro™ is a light weight and compact edge protector for rope. Internal and replaceable wire allows the shape to be moulded to the edge. Toughtek® backing helps prevent the EdgePro™ from moving. Grommets at the four corners allow for daisy chaining together or securing to prevent it from falling. Padded buffers on the sides prevent the rope from slipping off. The SuperFabric® swatch on the rope track acts as a sacrificial layer. It provides an excellent minimal friction surface for the running rope while adding significant durability to prevent the rope from burning through.

FEATURES

- Light weight: (178 g or 6.28 oz.);
- SuperFabric® - swatch refills available: (Skins Set of 3);
- Toughtek® - backing helps prevent slippage;
- Grommets at the four corners for securing in place;
- Padded buffers on the sides to prevent rope from slipping;
- Color: Coyote Brown
- Size: (29 cm x 9 cm or 11.5” x 3.5”).
Rope Bags

Rope bags allow rope to be carried easily and fed out quickly without tangling. Plus they keep the rope clean and so help prolong its life.
Pitcher

A lightweight, packable rope bag that is versatile and allows the rope to be fed out quickly: pack it in a Bergen, carry it as backpack or use it as a rope bucket.

The tarp design allows the rope to be packed away very quickly whilst keeping it free from tangles. The Pitcher holds a generous 35 litres and will easily take 100m of 11mm rope plus rigging kit. It is available in black or tan.
Classic

A rectangular top opening rope bag that can be carried as a small rucksack, slung over the shoulder or stuffed inside a larger sack.

It is slightly smaller than the Pitcher in terms of capacity and will just about take 100m of 11mm - 50m goes in easily with plenty of room to take rigging kit as well. The main zip closure is backed up with two compression straps that keep everything as compact as possible.

It is available in black or tan.
Transit

Tough and strong, the DMM Transit rope buckets will take 30 and 45 litres each. The 30 litre bag will take 50m of 11mm rope and the 45 litre will easily take 100m of 11mm rope with plenty of room to spare for rigging equipment. They are made from heavy duty tarpaulin to let them cope with being dragged and hauled.

FEATURES

› Made from heavy duty Tarpaulin for strength and durability
› Draw cord closure
› Removable rucksack straps
› Daisy chain outside webbing for kit connection
› Vinyl front pocket for documents
› Interior pocket
› Interior tie off loops to tie rope ends
› Top compression straps for additional kit
› Transit 30 — Volume: 30L, Height: 40cm, Approx. Diameter: 30cm
› Transit 45 — Volume: 45L, Height: 40cm, Approx. Diameter: 40cm

Porter

The DMM Porter range of bags will take 45 and 70 litres, with a blow moulded back panel and substantial carry system. They are designed for carrying loads over greater distances than the Transit bags. The Porter also has a detachable lid and heavy duty top handles.

FEATURES

› Made from heavy duty Tarpaulin for strength and durability
› Removable lid
› Draw cord closure
› Interior pocket
› Interior tie off loops to tie rope ends
› Daisy chain outside webbing for kit connection
› Top compression straps for additional kit
› Removable rucksack straps
› Porter 45 — Volume: 45L, Height: 62cm, Approx. Diameter: 30cm
› Porter 70 — Volume: 70L, Height: 62cm, Approx. Diameter: 36cm
BELAY, ROPE CONTROL & DESCENT
The Helix range of abseil and belay devices allows climbers to control ropes effectively and confidently. The range cover standard tube devices, assisted braking models, devices for specialist systems and Fig 8s.

Our wide range of rope control devices means that no matter which rope or system you are using there will be a comparable device to use that will offer the user complete control no matter whether using thick low stretch abseil ropes, modern thin diameter dynamic ropes or super skinny 6mm systems.

All the devices when paired with a rope of the correct diameter will allow rope to be paid out smoothly, catch falls confidently and allow fast controlled descents or lowers.

The Bug is popular for heavy duty use on thicker ropes whilst the Pivot and Mantis are high performance devices that are optimised to give confidence inspiring control over modern ropes with diameters from 8.0 to 10.5mm. The Pivot has an innovative guide mode feature, while the Mantis tips the scales at just 45g.

We have two abseil devices which cover a range of needs and budgets from the classic Figure 8 to the heavy duty Anka with its improved safety and good heat dissipation.
**Tube Belay Devices**
The Bug is popular for heavy duty use on thicker ropes whilst the Pivot and Mantis are high performance devices that are optimised to give confidence inspiring control over modern ropes with diameters from 8.0 to 10.5mm. The Pivot has an innovative guide mode feature, while the Mantis tips the scales at just 45g.

- **Pivot**
- **Mantis**
- **Bug**

**Figure 8's**
Helix offer two DMM Figure 8 descenders - the classic Figure 8 and the heavy duty Anka with its improved safety and good heat dissipation.

- **Classic Fig 8**
- **Anka**

**Descenders**
Specialist descenders that allow controlled descent over long distances and automatic braking when released allowing fast access to weapons or other equipment.

- **DSD Plus**
- **ID s**
Multi-functional Devices
Devices that allow the user to belay or descend and which can be used for ascent when paired with additional equipment. Plus they give automatic braking when released allowing fast access to weapons or other equipment.

- GriGri

Back-Up Devices
DMM offer two back-up devices for safety when using a second line - the Catch is the sprung version of the Buddy and can be positioned on the rope whereas the Buddy trails behind the operator.

- Catch
- Buddy
DMM Pivot

The Pivot is a versatile belay device that can be used to belay in either guide mode or from the waist. Suitable for ropes from 7.3mm to 11mm. Optimised for 8mm to 10.5mm ropes.

The patent pending Pivot device takes its name from the pivoting guide mode connection point that when loaded minimises the leverage to release it again - this solves the main problem of belay devices in guide mode - if the climber being brought up falls off then releasing the device ranges from a complete pain to impossible.

Hot forging and CNC machining lets us put metal precisely where it's needed to create a guide plate that weighs just 72g. These manufacturing techniques also allow internal design that gives confidence inspiring performance across a wide range of ropes.

<table>
<thead>
<tr>
<th>Pivot</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matt Grey</td>
<td>A116MG</td>
</tr>
<tr>
<td>Matt Black</td>
<td>A116BLG</td>
</tr>
</tbody>
</table>
**Mantis**

The Mantis is a featherweight belay device that is suitable for all round climbing with single, half or twin ropes from 7.3mm to 11mm. It has been optimised for 8mm to 10.5mm ropes.

Hot forging has allowed us to create a high performance belay device that weighs just 45 grams, yet is robust enough for heavy use. The carefully sculpted rope grooves offer a greater grip on ropes, the rope slots allow easy loading and the rear of the device ensures adequate lift-off for snag-free paying out.

The device conforms to the new EN standard for belay devices - EN15151-2.

**Bug**

This is a great all-rounder for medium to thick ropes; a belay device that handles all duties really well even when used on wet ropes.

Used with ropes in the 8.5mm - 11mm range it handles beautifully. The Bug is slick enough to allow a quick release of rope, just when it’s needed, but still allows a firm lock down in the event of a fall.

It can be also be used as an effective abseil device, with superb control and remarkably good heat dissipation.

The device conforms to the new EN standard for belay devices - EN15151-2.
Fig 8

A classic figure of 8 abseil device with the emphasis on the device being light and compact. The classic Figure 8 offers a smooth descent and good lock-off. Extra friction can be generated on skinny ropes by feeding them into the smaller hole and clipping into the larger hole.

It weighs 116g and conforms to the new standard for belay devices - EN15151-2.

<table>
<thead>
<tr>
<th>Classic Figure of Eight Descender - Matt Grey</th>
<th>A1150MG</th>
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</thead>
<tbody>
<tr>
<td>Classic Figure of Eight Descender - Matt Black</td>
<td>A1150MBLK</td>
</tr>
</tbody>
</table>

Anka

A longtime favorite of military units around the world because of the advantages it offers over a standard figure of eight – idiot proof loading of the rope, greater ability to control speed and stop quickly after coming down fast and good heat dissipation.

The distinctive 90 degree twist and anchor' head minimizes the twisting effect on your ropes and the horns prevent accidental lock-off.

These features make it the best device for those who need to be inserted very quickly.

The Anka weighs 169g and conforms to EN15151-2.

<table>
<thead>
<tr>
<th>Anka Descender - Matt Grey</th>
<th>A1150MG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anka Descender - Matt Black</td>
<td>A1150MBLK</td>
</tr>
</tbody>
</table>

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DSD Plus

The original DSD has been redesigned to be stronger and more ergonomic and is now available as the DSD Plus. It now has a breaking load in excess of 25kN and an increased maximum working load of 200kg.

The device still incorporates the anti-panic feature that locks the device if the handle is pressed too hard as can happen if going too fast or in a swing. The DSD Plus uses clever rope geometry to create a sweet spot in the middle of the handles range of movement that allows a controlled descent but which has automatic locking at each end of the range, i.e: it will lock virtually handsfree when let go by the operator AND it will lock if the operator squeezes the device too hard.

- The device also has the advantage that it can be loaded onto a pre-rigged rope.
- Other improvements include a longer handle for more control, wear indicators on the inside of the device and virtually fool proof loading of the rope.
- Conforms to EN 341 (Personal protective equipment against falls from a height) with 11mm ropes.
- Conforms to EN 12841 (Personal fall protection equipment – Rope access systems) when used with ropes between 10mm and 12mm.
- Recommended for descending up to a maximum of 100m at a time.
Petzl ID S

This is basically a big Grigri designed for industrial access work with a strong set of safety features.

An excellent auto locking descender for working on ropes between 10mm and 11.5mm. The I’D S allows the user to move easily both horizontally and vertically whilst also being able to position themselves without tying off the device.

The Petzl I’D S includes an anti-panic function that stops the descent if the handle is pulled too far and an anti-error safety catch that reduces the risk of an accident if the device is rigged incorrectly.

The I’D S has a safety clip on the swinging side plate that reduces the risk of dropping the device when removed from the rope, such as when passing intermediate anchors.

› Plus the the I’D will will catch if you load it upside down
› The ID weighs 530g and can be used for descents up to 200 m. It can be used to lower up to 250kg.
› The ID can be used in a hauling system for progress capture in pulley systems and system tensioning systems.
› If you need to switch from lifting to lowering or ascending to descending then you can instantly make that change.
› The handle also features a horizontal movement button which allows for low angle and steep angle access without having to work the handle.
› Certification(s): EN 341 classe A, CE EN 12841 type C, ANSI Z359.4, NFPA 1983 Technical Use, EAC
GRIGRI+

A development of the GriGri 2 that adds an anti-panic handle and which can be used on single rope diameters from (8.5 to 11 mm).

GriGri + is optimized for 8.9 to 10.5 mm diameter ropes and is suited for intensive use.

There are 2 usage modes; one for top-rope belay and the other for lead belay. The top-rope belay mode and the anti-panic handle make for a more comfortable belay and makes use in difficult environments easier.

The Grigri can also be rigged as an ascending system using a handled ascender and this system can also quickly be converted into a descending system whilst on the rope. It can also be used to create self-locking haul lines.

It is rated to CE EN 15151, UIAA
The best of the main stream assisted braking belay devices can function as a belay device, a single rope descender, and can be built into an ascending system. The latest version has added assisted braking and is optimized for 9.4 to 10.3 mm ropes. It is both compact and lightweight and will work with ropes from 8.9 mm to 11 mm diameters. The Grigri allows a very smooth and fast descent with the assisted brake feature allowing emergency hands-free stops if necessary. The Grigri can also be rigged as an ascending system using a handled ascender and this system can also quickly be converted into a descending system whilst on the rope. It can also be used to create self-locking haul lines. It is rated to both CE EN 15151 and UIAA standards.
Catch

The Catch is a towable rope adjustment device conforming to EN 12841:2006 Type A. It is commonly used as a back-up and positioning device.

The device features non-aggressive stainless steel cams which are spring loaded allowing it to be positioned on the rope while the user is working.

The towable release mechanism (patent applications EP2641635, GB2500483) allows the user to tow the device while simultaneously descending whilst minimising the risk of the device not engaging when needed.

FEATURES

› Back-up device can be towed whilst descending
› Ergonomic grip release handle
› For use on approved 11mm ropes (EN 1891:1998) with maximum lanyard length (including connectors) of 800mm (single person)
› No shock absorber required for either 100kg (single person) or 200kg rescue loads
› Screw lockable for semi-permanent attachment to rope
› Large attachment eye for multiple connections
› Anodised side plates and non-aggressive stainless steel cams for corrosion resistance
› Easily cleaned and inspected
› Tether cord facility
› Will work with dynamic cowstails, and textile or wire-rope lanyards
ASCENT | ROPES

There are a multitude of systems for ascending ropes depending on the environment that you are operating in and the operational parameters; speed, noise and the equipment available. Other considerations are the need to descend as well as ascend and how quickly you want to disengage from the system.

The use of motorised ascenders has revolutionised the ability to move heavy loads of both men and equipment very quickly up a building or cliff face.

The classic systems use two handled ascenders or a handled ascender in conjunction with a chest ascender. There are a couple of useful variations to go along side these systems that add the ability to easily swap into descent mode.

When no equipment is available the good old Prusik knot will allow ropes to be ascended using just a couple of pieces of accessory cord.
ASCENT | ROPES OVERVIEW

Motorised Ascenders
- Atlas APA-5 Ascender

Manual Ascenders
- Handled Ascender - Anthron AS10 and AL15
- Chest Ascender - Croll and Turbo Chest
- Pantin
- Knee Ascender
- Prusik

Etriers, Daisy Chains & Footloops
- Fibrelight Ladders
- 5 step Etrier
- Tactical Daisy Chain - Nylon
- Tactical Daisy Chain - Dyneema
- Adjustable Footloop

Please also see CTOMS section for information on their micro ascender system

HELIXTACTICAL.COM
Atlas APA-5 Motorised Ascender

Achieving a tactical advantage, hauling kit, or rescuing casualties often requires the ascent of men and equipment over steep obstacles in mountainous, urban, and maritime environments. This is a highly technical and physically exhausting task that impacts mission effectiveness.

The APA-5 minimises the burden of vertical obstacles.

Atlas Devices’ APA-5 is a lightweight, submersible, battery powered rope ascender that can haul loads of up to 270kg/600lbs on ropes ranging from 6mm to 11mm.

The APA-5 is use high capacity batteries that are changeable mid-operation. The high capacity depth-rated battery can haul 250lbs/113kg for 1400ft/427m on a single charge. Atlas Devices’ APA-5 is a multi-mission ascender and hauler that handles rescue loads, minimizes fatigue and speeds up operations.

The unit is controlled by a variable speed power tool-like trigger control.

- Material Construction: Aluminum
- Weight Without STD Battery: 14.8 lbs / 6.7 kg
- Weight With STD Battery: 22.1 lbs / 10 kg
- Dimensions Without STD Battery: 10.7 x 5 x 10.5 in / 27.2 x 12.7 x 26.7 cm
  Dimensions With STD Battery: 10.7 x 5 x 14.5 in / 27.2 x 12.7 x 36.8 cm
  Typical Reach Height: 1400 ft / 427 m
- 6 MM TO 11 MM MULTI-DIAMETER ROPE INTERACTION Ascender
- Weight: 14.8 lbs / 6.7 kg
- Max direct lift capacity: 600 lbs
- Ascent/descent speed: Variable
- Intuitive power tool-like operation
Atlas APA-5 Accessories

APA-5 wireless remote control
Atlas Devices’ APA-5 Wireless Remote is an encrypted unique paired, depth-rated remote module with two customizable interface options. The interface mirrors the interface controls on APA-5 ascender including full proportional control across all speed regimes.
The Wireless Remote control expands the capability of the ascender especially in advanced scenarios, such as confined space operations, where it is necessary to have control of both the load and negotiating obstacles at the same time. The Wireless Remote also incorporates a rapid on-the-fly pairing capability to any APA-5 system that establishes a unique, encrypted link.

APA-5 wired remote control
Atlas Devices’ APA-5 Wired Remote is a unique link, maritime depth-rated cable connected remote module with two customizable interface options. The interface mirrors the interface controls on APA-5 ascender including full proportional control across all speed regimes. The remote control allows the user to operate the APA-5 remotely during advanced access operations.
The wired remote control expands the capability of the ascender especially in “hands off scenarios,” such as hoisting into a helicopter, where it is necessary to have control of both the ascender and the incoming load at the same time.

APA-5 high capacity battery
Atlas Devices’ APA-5 High Capacity Battery is an interchangeable 12.4lb/5.6kg depth-rated battery certified by US DoD that can haul 250lbs/113kg for 1400ft/427m on a single charge without a 2x increase in volume or weight over the standard battery. The battery is DoD certified for safe use/transport in all operational environments and aboard land, sea, and airborne systems.
The battery can be quickly changed during operation, under load, and even at maritime depth. This unique capability provides an advantage by extending the performance, reducing cube volume, and distributing the pack load.
Anthron Handled Ascender

The handled ascenders come either as left or right handed and are certified to EN 567 for sport use and EN 12841 type B for work at a height use. They are certified in EN567 to work with low stretch and dynamic ropes from 8 mm to 13 mm and against EN12841 are certified for type A low stretch ropes from 9 mm to 13 mm.

The anatomically shaped handles have a large, anti-slip hand grip that easily accommodates a thick glove and provides good insulation in cold temperatures.

There is a double connection point at the bottom of the ascender as well as a top connection point to allow more versatile use in rescue and hauling operations.

The cam has a safety lock that stops it from allowing the rope to become disengaged accidentally. The cam teeth themselves are non-directional to enable easier release from the rope if the ascender is pushed up too close to a knot or anchor.

The left and right hand units both work perfectly with the Chest Ascender for efficient rope climbing.

The ascenders weigh 216g each.
Chest Ascender

The chest ascender offers advantages when ascending in constricted spaces and when a high connection point is useful i.e. when carrying a heavy sack or wearing a plate carrier.

The connection holes are twisted through 90 degrees so that the unit lies flat against your chest to allow movement in tight places whilst the cam profile and body shape have been designed to let the rope slide through the device with minimal friction.

It is certified according to EN 567 for sport use and is tested to work with low stretch and dynamic ropes from 8 mm to 13 mm.

Camp Turbo Chest Ascender

A high efficiency chest ascender for ropes from 8 to 13 mm that features two rollers to create a smooth interface with the rope. This improves climbing efficiency by making upward movement much smoother. The body is shaped with thick plates to keep the rope from escaping the device during tight pendulums and traverses. The toothed cam is finished with a special anti-wear treatment and features drain holes to help prevent the build-up of mud, grit and ice. The main body also features drain holes along the rope path to allow debris and water to escape during use for better contact with the rope.

The opening mechanism is simple and secure with the ability to lock the device open for easier attachment and a removable pull cord that makes it easier to operate while wearing gloves. The proprietary rollers also allow the Turbo Chest to be rigged as a locking pulley for light hauling with a max load of 50 kg/110 lbs.

The device is certified to both EN 12841/B and EN 567.
Grigri

The Grigri is best known as a really good, single rope belay device with assisted braking, but the (pretty much) automatic lock off also work well in an ascending system in conjunction with a handled ascender with the very real advantage of being able to turn your ascending system into a descending system very quickly and easily - a scenario that is a real pain when using two normal ascenders.

It is set up like this: Place your ascender/jumar with a foot loop as your top device on the rope and connect a pulley (Revolver works well) into the bottom of the ascender. The rope goes through ascender to a Grigri that is connected to your harnesses belay loop and from there runs back up to the pulley rigged into the jumar and then back to the ground.

Jumar and foot loop lanyard lanyard length all need optimizing as normal, but once those two are set you have a ascendind system with a 3:1 advantage.

Plus if you need to descend you just sit on the Grigri, unhook the ascender and head down.
Pantin
A foot ascender designed to make rope ascents faster and less tiring. The Pantin in black is designed to fit onto the left foot and is used in conjunction with a knee ascender system a handled ascender or a chest ascender. The toothed cam has a self-cleaning slot that optimizes performance with dirty or wet ropes and the Pantin releases easily with a simple backwards movement of the foot.

Knee Ascender
The 4SRT Knee Ascender has evolved over the last couple of years and is a hybrid of different set ups used by SRT specialists. The 4SRT knee ascender offers a light weight and efficient way to climb single ropes. The knee ascender is a floating ascending device that is used along with a foot ascender (on the other foot) to allow you to climb using both legs in a stair-walking fashion (rope walker). It is the fastest, lightest, and most efficient method of ascending ropes.

The Deluxe Knee Ascender consists of the following components:
- DMM XSRE x2
- Camp TurboChest Ascender
- Elastic
- Dyneema Loop
- Floop
- Silverbull Harness Pouch
Prusiks

A variety of prusik loops that are pre sewn in both nylon and aramid cord.

- 30cm Aramid 6mm Black
- 90cm Aramid 6mm Black
- 40cm Nylon 8mm Black
- 55cm Nylon 8mm Black

We also supply 6mm and 8mm nylon accessory cord on 100m reels for DIY prusik loops.
CTOMS Tactical Etrier

The Tactical Etrier uses a 6 step, ladder style design in subdued and camouflage color options. The top attachment point is separated so that multiple etriers can be daisy chained together. The steps have HDPE inserts to keep the rungs open and stop the sides from compressing onto your feet and the top of the ladder has a grab loop to make the transition at the edge easier to manage.

Fibrelight Ladders

The Fibrelight Assault Ladders are advanced flexible sided ladders, where the load is born directly by the side members. The construction provides an incredibly strong yet lightweight solution to the climbing requirements for military and emergency services. The Assault Ladders are noiseless and as they contain no metal parts, they are non-conducting and present no radar signal. The latest generation can also be weight loaded in either direction.

The ladders are available in both single (200mm) and double rung (400mm) widths and in 5, 10, 15 & 20 meter lengths. The single ladder can be loaded to 275kgs whilst the double can take up to 400kgs. The double rung is faster, more stable and more comfortable to climb. Pairs of ladders can be linked together to form double lengths.
8 step Aider

The Metolius 8 Step Ladder Aider is a solid ladder style etrier with tough urethane-reinforced steps that make them stay open and not crush the sides of your feet. This aider is relatively light considering how comfortable it is and has a nice generous grab loop.

This aider offers a reinforced clip-in point, a full-strength grab loop, and sub-steps in the top two steps. It also has a dedicated clip-in point at the bottom for en chaining aiders without collapsing the bottom step.

- Weight: 11.5 oz. (326 g)
- Strength: End-to-end: 18 kN (4050 lbf), Grab loop: 22 kN (4950 lbf), Steps: 4.4 kN (1000 lbf)
- Overall length: 74" (1880 mm)
- Step spacing: 9" (229 mm)

5 step Aider

The Petzl 5-Step Aider features classic, staggered, triangular step construction. Biothane™ step stiffeners ensure that the steps always stay open. This aider offers a reinforced clip-in point, a full-strength grab loop, and sub-steps in the top two steps. It also has a dedicated clip-in point at the bottom for en chaining aiders without collapsing the bottom step. For body weight only.

- Weight: 10 oz. (284 g)
- Strength: End-to-end: 18 kN (4050 lbf), Grab loop: 22 kN (4950 lbf), Steps: 4.4 kN (1000 lbf)
- Overall length: 72" (1829 mm)
- Step spacing: 14" (356 mm)

Footloop

The Petzl Footape Adjustable Foot Sling helps allow efficient rope ascents. Simply attach the sling to your handled ascender, adjust the length with the secure Mini DoubleBack buckle, and start making upward progress.

Abrasion-resistant webbing underfoot is slightly rigid so it’s easy to step into Adjustable elastic strap keeps your foot in the loop regardless of the type of shoe you’re wearing

Daisy Chain

11mm Black Dyneema and 16mm black daisy chains in 1.4m / 4.5ft lengths
CARABINERS & CONNECTORS
LOCKING CARABINERS

Locking carabiners have a gate that can be secured in the closed position for use when it is critical that the carabiner remains closed i.e. rigging anchor points, hauling systems or abseiling.

DMM's large range of locking carabiners reflects the diversity of uses that locking carabiners have within climbing systems.

Locking carabiners are normally made from aluminium alloy or steel. Steel carabiners are stronger (approx. 45kN vs 24kN) than aluminium carabiners, but also significantly heavier (approx. 250g vs 85g). Aluminium carabiners are the mainstay of modern climbing systems as their strength rating of 23-32kN is suitable for virtually all loads involving personnel. Steel carabiners are used when there is significant risk of abrasion from running ropes of when hauling/moving heavy loads i.e. hauling a vehicle out of a ditch.
ALUMINIUM LOCKING CARABINER RANGE

**Belay**
Optimised for use with belay/abseil devices

- **Ceros**
  Fully featured belay carabiner

- **Rhino**
  Mid size belay carabiner

- **Belay Master**
  Super safe belay carabiner

- **Sentinal**
  Light weight belay biner

- **Aero HMS**
  Classic belay carabiner

**Rigging**
Strong, high volume carabiners for applications such as setting up belays

- **Klettersteig**
  Largest locking carabiner

- **30kN Boa**
  Large and versatile

- **Ultra D**
  Strong allrounder

- **Zodiac**
  Strong classic rigging biner

- **Ultra O**
  Ideal for pulley and hauling systems

**Personal locker**
General purpose biners that are carried when climbing and used on sling runners/multi-pitch belay stances

- **Shadow**
  Mid size and light

- **Aero Offset D**
  Classic small locker

- **Phantom**
  Very light
ALUMINIUM LOCKING CARABINER RANGE

Specialist Carabiners for friction reduction gear racking and lanyard systems

Revolver Rig
Heavy duty hauling carabiner

Revolver
The original friction reducer

Vault
Strong racking for carrying gear

Sidewinder
Eliminates torsion

Captive Eye
Maximum security and predictability

STEEL LOCKING CARABINER RANGE

I-Beam Steel Carabiners

Steel I-Beam Klettersteig
The largest of the steels

Steel I-Beam Boa
Large and takes multiple connections

Steel I-Beam Oval
All-round connector

Steel I-Beam Shadow
Light and strong

Classic Steel Carabiners

Steel Offset D
Mid size classic

Steel Equal D
Mid size classic
Surface finishes

**Aluminium Carabiners**

The standard finish for our aluminium carabiners is anodising to BS EN 7599:2010 AA10 Sealed. This helps stop corrosion occurring and allows the product to be coloured.

On the tactical ranges there are 3 main colours we use: **Dark Matt Grey, Matt Olive and Matt Black**

In addition we can use a ceramic coating that has the advantages of being exceedingly tough and giving very high corrosion management as well as providing IR signature management. It also allows custom colours such as matt white and sand to be used.

We can also dip carabiner backs in plastic to create a back with a reduced noise signature.

**Steel carabiners**

We have several finishes that we can use on tactical steel carabiners:

- **epoxy paint; normally used in conjunction with zinc passivation to give a silk black finish**
- **electrophoretic coating; superior toughness and very good corrosion resistance**
- **cobalt passivation; very good corrosion resistance and a very durable finish**
Ceros

The Ceros is DMM's new directional belay carabiner that has evolved from the Rhino biner. It has the same horn feature and round top bar with a consistent circular cross-section for smooth rope handling, but a spring clip on the spine side of the biner to minimise the risk of cross-loading.

Designed to open downwards the clip will default to safe if it hasn't been located correctly on the harness and can easily be operated one-handed. The Ceros will be available from Sept/Oct this year with a choice of Screwgate, Locksafe or Kwiklock gates, as well as a captive bar option.
Rhino

A medium sized belay and rigging carabiner that has been optimised for working with rope control devices such as Grigris or ascenders. The horn prevents assisted locking belay devices rotating off the top bar and on to the spine reducing the risk of cross loading. It also works well with selected DMM pulleys.

The Rhino works brilliantly with standard devices because the full cross section of the top bar ensures greater wear resistance, and smooth operation in guide mode usage.

The big burly top bar is contrasted by our signature I-Beam construction on the non-rope bearing surfaces resulting in a low total weight of 72g.

The Rhino comes as standard with screw gate and Quicklock locking mechanisms.

<table>
<thead>
<tr>
<th>Model</th>
<th>Strength (Gate Closed)</th>
<th>Strength (Gate Open)</th>
<th>Strength (Minor Axis)</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhino Screwgate</td>
<td>27 kN</td>
<td>7 kN</td>
<td>9 kN</td>
<td>20 mm</td>
<td>72 g</td>
</tr>
<tr>
<td>Rhino Quicklock</td>
<td>27 kN</td>
<td>7 kN</td>
<td>9 kN</td>
<td>19 mm</td>
<td>80 g</td>
</tr>
</tbody>
</table>

Belay Master 2

The Belay Master 2 is a very safe belay carabiner. The carabiner back is an evolution of the classic HMS design with a lot of hot forging to minimise its weight whilst providing very smooth rope control. The back also features a recess that secures a nylon clip – this clip ensures that the gate is closed and the barrel locked when belaying and prevents cross loading that can occur with standard carabiners.

The big burly top bar is contrasted by our signature I-Beam construction on the non-rope bearing surfaces resulting in a low total weight of 72g.

<table>
<thead>
<tr>
<th>Model</th>
<th>Strength (Gate Closed)</th>
<th>Strength (Gate Open)</th>
<th>Strength (Minor Axis)</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belay Master 2</td>
<td>25kN</td>
<td>8kN</td>
<td>10kN</td>
<td>20mm</td>
<td>93g</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>A872MG</td>
<td>Belay Master 2 - Matt Grey</td>
</tr>
<tr>
<td>A860-02</td>
<td>Belay Master Clip</td>
</tr>
</tbody>
</table>
The Sentinel is a compact, multi-functional carabiner whose versatility allows it to perform several roles; the offset HMS shape allows it to perform both belay and rigging tasks equally well with a design that can accommodate two clove hitches and a large internal volume for ease of use with thick ropes and slings. Plus it is compact and lightweight enough to be used as a personal carabiner for both extending runners and building belays. The distinctive shape also works to prevent cross-loading in belay and rigging scenarios.

The Sentinel comes as standard in Screwgate, Quicklock and Locksafe gate systems.

<table>
<thead>
<tr>
<th>Code</th>
<th>Variant Description</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>A262MG</td>
<td>Sentinel HMS Screwgate - Matt Grey</td>
<td>20mm</td>
<td>54g</td>
</tr>
<tr>
<td>A263MG</td>
<td>Sentinel HMS Quicklock - Matt Grey</td>
<td>19mm</td>
<td>60g</td>
</tr>
<tr>
<td>A267MG</td>
<td>Sentinel HMS Keylock Locksafe - Matt Grey</td>
<td>19mm</td>
<td>61g</td>
</tr>
<tr>
<td>A267BLK-NSN</td>
<td>Sentinel HMS Keylock Locksafe - Matt Black</td>
<td>19mm</td>
<td></td>
</tr>
</tbody>
</table>

Aero HMS

The Aero HMS uses our classic HMS design to give a belay carabiner that is simple, strong and durable. A wide diameter, solid bar construction gives smooth and predictable rope control, adds to the Aero’s longevity and helps dissipate heat on long abseils.

The Sentinel comes as standard with the Screwgate or Quicklock gate systems.

<table>
<thead>
<tr>
<th>Code</th>
<th>Variant Description</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>A362MG</td>
<td>Aero HMS Screwgate - Matt Grey</td>
<td>19mm</td>
<td>85g</td>
</tr>
<tr>
<td>A363MG</td>
<td>Aero HMS Quicklock - Matt Grey</td>
<td>19mm</td>
<td>89g</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Variant Description</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>A362MG</td>
<td>Aero HMS Screwgate - Matt Grey</td>
<td>19mm</td>
<td>85g</td>
</tr>
<tr>
<td>A363MG</td>
<td>Aero HMS Quicklock - Matt Grey</td>
<td>19mm</td>
<td>89g</td>
</tr>
</tbody>
</table>
The Klettersteig is the largest and strongest rigging alloy carabiner in our range. It has a massive internal volume and a very large (25mm) gate opening that makes clipping ropes and wide slings easy, while the long top bar means the biner can accommodate multiple attachments and knots. A 30kN major axis strength and very strong minor axis and gate open strengths make the Klettersteig a reliable component in a rescue or heavy duty rigging system.

As a key part of our rigging range the Klettersteig is also offered with the option of been built with an Anti-Vibrate gate.

<table>
<thead>
<tr>
<th>Variant</th>
<th>Strength (Gate Closed)</th>
<th>Strength (Gate Open)</th>
<th>Strength (Minor Axis)</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Klettersteig Screwgate</td>
<td>30kN</td>
<td>10kN</td>
<td>14kN</td>
<td>26mm</td>
<td>87g</td>
</tr>
<tr>
<td>Klettersteig Quicklock</td>
<td>30kN</td>
<td>10kN</td>
<td>14kN</td>
<td>26mm</td>
<td>90g</td>
</tr>
</tbody>
</table>

Code

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB42MG</td>
<td>Klettersteig Screwgate - Matt Grey</td>
</tr>
<tr>
<td>AB42AV-BLK</td>
<td>Klettersteig Screwgate - Matt Grey</td>
</tr>
<tr>
<td>AB43MG</td>
<td>Klettersteig Quicklock - Matt Grey</td>
</tr>
</tbody>
</table>
30kN Boa

The Big Boa is a large volume rigging carabiner perfect for using as the central connection point in an anchor system. It shares the ergonomics and high volume internal volume of the standard Boa carabiner, but is made from 14mm bar rather than 12mm bar for increased strength. A 30kN major axis means this version of the Big Boa can be used for rescue loads, whilst the 12kN minor axis strength gives extra safety margins if accidently cross loaded.

The 30kN Boa is available with our Anti-Vibe barrel system that provides extra security against the barrel working itself loose into the open position through vibration within vehicles or aircraft or through movement in the rope system.

The 30kN Boa comes as standard with Screwgate, Quicklock or Locksafe gate systems.

<table>
<thead>
<tr>
<th>Variant</th>
<th>Strength (Gate Closed)</th>
<th>Strength (Gate Open)</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>30kN Boa Screwgate</td>
<td>30kN</td>
<td>9kN</td>
<td>24mm</td>
<td>95g</td>
</tr>
<tr>
<td>30kN Boa Quicklock</td>
<td>30kN</td>
<td>9kN</td>
<td>23mm</td>
<td>104g</td>
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<tr>
<td>30kN Boa Locksafe</td>
<td>30kN</td>
<td>9kN</td>
<td>23mm</td>
<td>105g</td>
</tr>
</tbody>
</table>

Code
- A902MG 30kN Big Boa HMS Screwgate - Matt Grey
- A902AV BLK 30kN Big Boa HMS Anti-Vibe Screwgate - Matt Black
- A903MG 30kN Big Boa HMS Quicklock - Matt Grey
- A903BLK 30kN Big Boa HMS Quicklock - Matt Black
- A907MG 30kN Big Boa HMS Locksafe - Matt Grey
Ultra D

The Ultra D is a very strong and versatile high volume carabiner that is suited to heavy duty rigging and rescue work. The carabiner’s shape is a hybrid of the Ultra O and Zodiac shapes; the resulting longer top bar, wider gate opening and larger internal volume makes it very easy to use with gloves and when working with thick rope and slings. Plus the ability for it to accommodate knots at either end and hold pulleys symmetrically makes it very versatile in rigging systems.

The Zodiac comes as standard with Screwgate, Quicklock and Locksafe gate options. In addition we can build this carabiner with the ANSI barrel that offers a minimum strength of 16kN in all orientations.

<table>
<thead>
<tr>
<th>Variant</th>
<th>Strength (Gate Closed)</th>
<th>Strength (Gate Open)</th>
<th>Strength (Minor Axis)</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultra D Screwgate</td>
<td>30kN</td>
<td>9kN</td>
<td>12kN</td>
<td>23mm</td>
<td>80g</td>
</tr>
<tr>
<td>Ultra D Quicklock</td>
<td>30kN</td>
<td>9kN</td>
<td>12kN</td>
<td>22mm</td>
<td>82g</td>
</tr>
<tr>
<td>Ultra D Locksafe</td>
<td>30kN</td>
<td>9kN</td>
<td>12kN</td>
<td>22mm</td>
<td>83g</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Variant</th>
<th>Gate Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>A332MG</td>
<td>Ultra D Screwgate</td>
<td>- Matt Grey</td>
</tr>
<tr>
<td>A333MG</td>
<td>Ultra D Quicklock</td>
<td>- Matt Grey</td>
</tr>
<tr>
<td>A333ANSI</td>
<td>Ultra D Quicklock ANSI</td>
<td>- Matt Grey</td>
</tr>
<tr>
<td>A337</td>
<td>Ultra D Locksafe</td>
<td>- Matt Grey</td>
</tr>
<tr>
<td>A337ANSI</td>
<td>Ultra D Locksafe ANSI</td>
<td>- Matt Grey</td>
</tr>
</tbody>
</table>

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Zodiac

The Zodiac is our lightest and strongest rigging biner. It is built around the offset D shape with a very thick back bar that gives it a 32 kN major axis strength. The Zodiac is strong enough to work within rescue systems, while compact size and relatively light weight means you can use it in personal climbing systems where extra safety margins are required.

The Anti-Vibrate gate helps ensure that the barrel stays closed even when used in environments where there is a lot of movement.

The Zodiac comes as standard in Screwgate, Quicklock and Locksafe together with the Anti-Vibrate option on the screwgate.

<table>
<thead>
<tr>
<th>Variant</th>
<th>Strength (Gate Closed)</th>
<th>Strength (Gate Open)</th>
<th>Strength (Minor Axis)</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zodiac Screwgate</td>
<td>32kN</td>
<td>12kN</td>
<td>12kN</td>
<td>18mm</td>
<td>75g</td>
</tr>
<tr>
<td>Zodiac Quicklock</td>
<td>32kN</td>
<td>12kN</td>
<td>12kN</td>
<td>18mm</td>
<td>78g</td>
</tr>
<tr>
<td>Zodiac Locksafe</td>
<td>32kN</td>
<td>12kN</td>
<td>12kN</td>
<td>18mm</td>
<td>78g</td>
</tr>
</tbody>
</table>

Ultra O

The perfect locker for use with pulley systems, swivels or shackles. The Ultra O is a symmetrical locking carabiner that allows the equipment attached to it to sit centrally at both ends of the carabiner – this means that the Ultra O has very stable loading characteristics because attachments will naturally self-centre under load with minimal movement of the biner. This characteristic makes it ideal for use with assisted braking devices, pulleys, swivels and shackles. It is also desirable for rigging where it is imperative that anchors are not shock loaded.

The Ultra O makes a good belay carabiner for tube devices as well - ropes sit centrally, flow well and the carabiner tends to self-right in the belay loop and avoid cross loading.

<table>
<thead>
<tr>
<th>Variant</th>
<th>Strength (Gate Closed)</th>
<th>Strength (Gate Open)</th>
<th>Strength (Minor Axis)</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultra O Screwgate</td>
<td>25kN</td>
<td>7kN</td>
<td>12kN</td>
<td>22mm</td>
<td>65g</td>
</tr>
<tr>
<td>Ultra O Quicklock</td>
<td>25kN</td>
<td>7kN</td>
<td>12kN</td>
<td>22mm</td>
<td>72g</td>
</tr>
<tr>
<td>Ultra O Locksafe</td>
<td>25kN</td>
<td>7kN</td>
<td>12kN</td>
<td>22mm</td>
<td>73g</td>
</tr>
</tbody>
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Code

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A822MG</td>
<td>Zodiac 12mm Screwgate - Matt Grey</td>
</tr>
<tr>
<td>A822AV-BLK</td>
<td>Zodiac 12mm Anti-Vibe Screwgate - Black</td>
</tr>
<tr>
<td>A823MG</td>
<td>Zodiac 12mm Quicklock Matt Grey</td>
</tr>
<tr>
<td>A823BLK-NSN</td>
<td>Zodiac 12mm Quicklock Black</td>
</tr>
<tr>
<td>A827MG</td>
<td>Zodiac 12mm Locksafe Matt Grey</td>
</tr>
<tr>
<td>A827BLK-NSN</td>
<td>Zodiac 12mm Locksafe Black</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A322MG</td>
<td>Ultra O Keylock Screwgate - Matt Grey</td>
</tr>
<tr>
<td>A323MG</td>
<td>Ultra O Keylock Quicklock - Matt Grey</td>
</tr>
<tr>
<td>A327MG</td>
<td>Ultra O Keylock Locksafe - Matt Grey</td>
</tr>
<tr>
<td>A327BLK</td>
<td>Ultra O Keylock Locksafe - Matt Black</td>
</tr>
</tbody>
</table>
Shadow

The Shadow is a lightweight, mid-size multipurpose locker that is a favourite as a personal locking carabiner. I-beam construction allows the Shadow to be light enough for modern climbing without sacrificing dimensions that make it practical for use in winter with thick gloves. All the typical DMM features are present - a clean nose with a push-in strength that is five times the European standard, a squared off spine that helps the carabiner sit in your palm without twisting and beefed up contact areas that are kind to gear.

<table>
<thead>
<tr>
<th>Variant</th>
<th>Strength (Gate Closed)</th>
<th>Strength (Gate Open)</th>
<th>Strength (Minor Axis)</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shadow Screwgate</td>
<td>24kN</td>
<td>9kN</td>
<td>7kN</td>
<td>18mm</td>
<td>51g</td>
</tr>
</tbody>
</table>

A302MG  Shadow Keylock Screwgate Matt Grey
Phantom

The Phantom is our lightest locking carabiner. Despite its minimal weight we have ensured that it is still useable in all situations - with gloves, in the wet and in the cold. It is also strong across every axis and has a clean nose that prevents snagging. The locker to carry when every gram counts. Very light, very strong and very useable.

Variant Strength (Gate Closed) Strength (Gate Open) Strength (Minor Axis) Gate Opening Weight

Phantom 24kN 9kN 9kN 16mm 42g

Code A312MG Phantom Screwgate - Matt Grey
A312BLN Phantom Screwgate - Matt Black

Aero

The Aero is our classic mid-size Offset D - a hot forged, durable workhorse for personal use. The solid bar construction resists wear and tear and features well rounded rope radii that are kind to ropes and gear. Our entry level biner is strong across every axis, and features a clean nose to prevent snagging - even the gate is rated to six times the European standard.

Variant Strength (Gate Closed) Strength (Gate Open) Strength (Minor Axis) Gate Opening Weight

Aero Offset D 25kN 9kN 9kN 17mm 59g

Code A372MG Aero Screwgate - Matt Grey
Revolver Rig

The Revolver Rig is an evolution of our innovative Revolver carabiner and adds industrial strength and performance to give an incredibly versatile connector that can be used in any running rope system to increase efficiency.

The Revolver Rig comes into its own when flexibility and efficiency are paramount, and will excel in improvised rescues, compact mechanical advantage systems and reducing friction in rigging featuring running ropes.

It is available with both single and double sheaves that run on high efficiency bearings; this allows Revolver Rigs to be joined together to create simple, light and efficient pulley hauling systems with a 4 or 5:1 ratio.

The back uses our horned design to stop connected items rotating around the carabiner to create dangerous cross loads.

- Available in Screwgate, Kwiklock and Locksafe variants.
- Single body design with integrated pulley and attachment becket
- Full cross-section top bar for excellent wear resistance
- Spine design minimises the chances of connected devices moving into cross-loading orientations
- Clean, taperlock nose increases gate strength in side-loading scenarios
- Tapered shape that ensures ropes seat correctly and consistently on the sheave

<table>
<thead>
<tr>
<th>Variant</th>
<th>Strength (Gate Closed)</th>
<th>Strength (Gate Open)</th>
<th>Strength (Minor Axis)</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revolver Rig</td>
<td>25kN</td>
<td>9kN</td>
<td>7kN</td>
<td>20mm</td>
<td>187g</td>
</tr>
</tbody>
</table>
Revolver

The Revolver is a multifunctional locking carabiner that was designed to reduce friction in rope systems. This is achieved by integrating a pulley wheel into the carabiner body thus saving weight and bulk by reducing the need for additional devices. It is the perfect tool for creating lightweight, improvised hauling systems or minimising rope drag on long climbs with roofs or sharp changes in direction.

It has become a standard piece of equipment for EOD hook and line kits

<table>
<thead>
<tr>
<th>Variant</th>
<th>Strength (Gate Closed)</th>
<th>Strength (Gate Open)</th>
<th>Strength (Minor Axis)</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revolver Screwgate</td>
<td>24kN</td>
<td>8kN</td>
<td>8kN</td>
<td>16mm</td>
<td>64g</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A272MG</td>
<td>Revolver Screwgate - Matt Grey</td>
</tr>
<tr>
<td>A272BLK</td>
<td>Revolver Screwgate - Matt Black</td>
</tr>
</tbody>
</table>

Vault

Strength, security and ease of use are the hallmarks of the Vault. The two-part construction allows customised user installation in a variety of ways, from harnesses, to kit bags, to vehicles and many other possibilities.

Once secured in place with the Allen bolt, the Vault is readily accessible for all of your gear storage, organisation and transport needs. The locking option provides even greater security for your kit. The unique gate design allows you to select between Open and Manually Locked, providing adaptable handling for a range of situations.

- Safe, strong and secure
- Low profile nose minimises hook-ups
- User installable
- Low profile locking mechanism does not affect clipping

<table>
<thead>
<tr>
<th>Variant</th>
<th>Non PPE MBS</th>
<th>Gate Opening</th>
<th>Weight</th>
<th>Max Webbing Size</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vault Locking Gate</td>
<td>3kN</td>
<td>20mm</td>
<td>79g</td>
<td>45 x 3mm</td>
<td>A552MG</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A552MG</td>
<td>Vault Screwgate - Matt Grey</td>
</tr>
</tbody>
</table>
Sidewinder

The DMM Sidewinder is a directional connector with an integrated swivel built into one end - this ability to rotate makes it ideal for situations where there is a need to manage torsion, cable spin or when it is necessary to rotate the load relative to the anchor. The DMM Sidewinder is often used as a connector on cut resistant lanyards and guided fall arresters as it can be built into a captive system, allows rotation by the user and is quick, easy and secure when connected. It can also be also be clipped or tied to maximise versatility and minimise any side torque on anchors.

<table>
<thead>
<tr>
<th>Variant</th>
<th>Strength (Gate Closed)</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sidewinder SG</td>
<td>25kN</td>
<td>23mm</td>
<td>218g</td>
</tr>
</tbody>
</table>

Code

A98K21MG Sidewinder Screwgate Non. Indicator Matt Grey

Captive Eye

The DMM Captive offers maximum security and absolute predictability when connecting into a system. Ideally suited as a ‘fixed’ component part in a system or lanyard, a captive eye carabiner can help keep things optimally aligned, minimising the chance of cross loading. The smooth radius of the eye interfaces perfectly with textile and metal componentry and the oversized spine gives additional strength reserves in sub-optimal orientation. The Taperlock nose increases the gate push-in and side-push strength.

<table>
<thead>
<tr>
<th>Variant</th>
<th>Strength (Gate Closed)</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Captive Eye SG</td>
<td>30kN</td>
<td>24mm</td>
<td>98g</td>
</tr>
</tbody>
</table>

Code

A912MG Aluminium Captive Eye Captive Eye 4° Keylock Screwgate Matt Grey
Steel I-beam Boa

A large capacity carabiner with a huge feature set - a wide gate opening for easy clipping, a long top bar takes wide webbing or multiple knots, the offset HMS shape offers stable loading for both running ropes and static loads.

**Variant Strength**

<table>
<thead>
<tr>
<th>Variant</th>
<th>(Gate Closed)</th>
<th>(Gate Open)</th>
<th>(Minor Axis)</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel Boa Screwgate</td>
<td>45kN</td>
<td>12kN</td>
<td>9kN</td>
<td>24mm</td>
<td>266g</td>
</tr>
<tr>
<td>Steel Boa Quicklock</td>
<td>45kN</td>
<td>12kN</td>
<td>9kN</td>
<td>23mm</td>
<td>277g</td>
</tr>
</tbody>
</table>

**Code**

- C892BLK: I-Beam Steel Boa Screwgate - Black
- C893BLK: I-Beam Steel Boa Kwiklock - Black

Steel I-beam Klettersteig

The Klettersteig is a large capacity carabiner with a wide gate opening. The wide top bar will take webbing up to 50mm wide as well as multiple knots. The wide gate opening and good handling make it popular for rescue and evacuation.

**Variant Strength**

<table>
<thead>
<tr>
<th>Variant</th>
<th>(Gate Closed)</th>
<th>(Gate Open)</th>
<th>(Minor Axis)</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Klettersteig Screwgate</td>
<td>45kN</td>
<td>15kN</td>
<td>9kN</td>
<td>25mm</td>
<td>270g</td>
</tr>
<tr>
<td>Klettersteig Quicklock</td>
<td>45kN</td>
<td>15kN</td>
<td>9kN</td>
<td>25mm</td>
<td>281g</td>
</tr>
</tbody>
</table>

**Code**

- CB4K2BLK: I-Beam Steel Klett Screwgate - Black
- CB4K3BLK: I-Beam Steel Klett Kwiklock - Black

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Steel I-beam Shadow

A compact and relatively light steel offset D locking carabiner. Great for rescue and rigging situations where strength is important, but the gear needs to be transported. Also perfect for centre use in setting up top ropes.

<table>
<thead>
<tr>
<th>Variant</th>
<th>Strength (Gate Closed)</th>
<th>Strength (Gate Open)</th>
<th>Strength (Minor Axis)</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel Shadow Screwgate</td>
<td>45kN</td>
<td>12kN</td>
<td>9kN</td>
<td>19mm</td>
<td>180g</td>
</tr>
<tr>
<td>Steel Shadow Quicklock</td>
<td>45kN</td>
<td>15kN</td>
<td>9kN</td>
<td>18mm</td>
<td>185g</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>C302BLK</td>
<td>I-Beam Steel Shadow Screwgate - Black</td>
</tr>
<tr>
<td>C303BLK</td>
<td>I-Beam Steel Shadow Kwiklock - Black</td>
</tr>
</tbody>
</table>

Steel Ultra O

A high strength oval with superior abrasion resistance and strength properties compared with aluminium is ideal for intense use or high load rigging. The oval shape offers great stability when rigging rope or sling systems and reduces the chances of loads shifting accidentally - perfect for any situation where you need to keep the load in a straight line. It is also less prone to cross loading due to its shape.

<table>
<thead>
<tr>
<th>Variant</th>
<th>Strength (Gate Closed)</th>
<th>Strength (Gate Open)</th>
<th>Strength (Minor Axis)</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oval Screwgate</td>
<td>30kN</td>
<td>10kN</td>
<td>10kN</td>
<td>18mm</td>
<td>175g</td>
</tr>
<tr>
<td>Oval Quicklock</td>
<td>30kN</td>
<td>10kN</td>
<td>10kN</td>
<td>18mm</td>
<td>186g</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>C302BLK</td>
<td>I-Beam Steel Ultra O Screwgate - Black</td>
</tr>
<tr>
<td>C303BLK</td>
<td>I-Beam Steel Oval Kwiklock - Black</td>
</tr>
</tbody>
</table>
Steel 12mm Offset D

An offset D shaped connector takes the spinal loading strengths of a D shaped back but extends the basket on one side to maximize gate opening and overall size without compromising too much on ergonomics and weight. Cold forged from 12mm bar, the strengths achieved in testing exceed 45kN and it is first choice in applications requiring stronger connectors in the systems used.

<table>
<thead>
<tr>
<th>Variant</th>
<th>Strength (Gate Closed)</th>
<th>Strength (Gate Open)</th>
<th>Strength (Minor Axis)</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offset D Screwgate</td>
<td>45kN</td>
<td>15kN</td>
<td>9kN</td>
<td>18mm</td>
<td>235g</td>
</tr>
</tbody>
</table>

Steel Equal D

A workhorse carabiner and a long standing favourite because it is so versatile - the 10mm steel Equal D connector strikes a perfect balance between strength, weight and usability. The subtle D shaped back design helps maximise the carabiners strength by placing the load close and parallel to the spine of the carabiner making it ideal for applications requiring a rugged, compact, strong connector.

<table>
<thead>
<tr>
<th>Variant</th>
<th>Strength (Gate Closed)</th>
<th>Strength (Gate Open)</th>
<th>Strength (Minor Axis)</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equal D Screwgate</td>
<td>30kN</td>
<td>10kN</td>
<td>10kN</td>
<td>15mm</td>
<td>175g</td>
</tr>
</tbody>
</table>

C812BLK Steel 12mm Offset D Screwgate

C412BLK Steel Equal D Screwgate
Non-locking carabiners are used to connect equipment together; this can include components in a climbing system, an impromptu drag or attaching equipment to yourself.

In our range you'll find carabiners to suit any application: from superlight wire gates that help minimise the weight of your gear, to sturdy solid gate carabiners designed to withstand the rigours of heavy usage.

All our carabiners are hot forged from 7075-T6 aluminium because when heat treated correctly it is very strong for its weight, as well as having the ductility needed to repeatedly absorb loads safely.
A steep top bar on a biner drives any load towards the apex so that they’re loaded in their strongest orientation; along their major axis or back-bar. Similarly, a deep rope basket will also help ensure correct loading.

Biners featuring a greater rope bearing radius are kinder to ropes, reducing wear on them and giving softer impact forces.

Our carabiners are engineered so as to ensure a firm and even gate pressure, reducing the chance of their strength being compromised by an open gate. While the European rating for gate-open strength is 7kN, all our biners are at least 9kN and the Thor gives the security of 11kN.

At every stage of carabiner construction sample testing takes place. Following assembly every biner is laser etched with a unique serial number for complete traceability.

Dynatec and nylon are the two materials used for quickdraws. Weight for weight Dynatec is stronger than nylon so is popular with trad climbers as the tape can be thinner, so more flexible and lighter. It also absorbs less water than nylon so is a better choice for winter use. For sport climbing where it is common to work routes, wide nylon tape that is easy to grab hold of is often used. Quickdraws come in a variety of lengths as longer draws will reduce rope drag on meandering routes.
Super-light
Minimal weight and maximum performance when every gram counts

Chimera
Phantom

All-rounders
Multi-tasking biners that take sport, trad, winter and alpine in their stride

Alpha Trad
Thor
Spectre
NON-LOCKING CARABINERS

Sport
Robust, strong and carefully designed for quick clipping and great handling

Alpha Sport
Alpha Clip
Aero
Aero Bent

Specialist
inners for specific applications

Revolver
Oval Straight Gate
XSRE
Vault

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Chimera

The Chimera is our flagship lightweight clean nose carabiner, with dimensions that strike a precise balance between weight saving and usability. Our signature I-beam construction sheds grams while retaining impressive strength. Security comes from a fully clean nose that reduces snagging, and is backed by a 9kN gate open rating. The Chimera is ideal for trad and alpine adventures where a light rack adds to your chance of success.

### Variant Strength

<table>
<thead>
<tr>
<th>Variant</th>
<th>Gate Closed</th>
<th>Gate Open</th>
<th>Minor Axis</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chimera</td>
<td>23kN</td>
<td>9kN</td>
<td>7kN</td>
<td>22mm</td>
<td>30g</td>
</tr>
</tbody>
</table>

### Code

<table>
<thead>
<tr>
<th>Variant</th>
<th>Color</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>A39BMG</td>
<td>Matt Grey</td>
<td>A39BMG</td>
</tr>
<tr>
<td>A39B</td>
<td>Matt Black</td>
<td>A39B</td>
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<tr>
<td>A39BMG-12</td>
<td>Matt Grey-Matt Black</td>
<td>A39BMG-12</td>
</tr>
<tr>
<td>A39BMG-18</td>
<td>Matt Grey-Matt Black</td>
<td>A39BMG-18</td>
</tr>
</tbody>
</table>

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 Phantom

The Phantom is our lightest climbing carabiner. Weighing in at just 28g, all unnecessary extras have been stripped back to minimise with compromising strength or the ability to use it easily with cold or wet hands. We could have gone smaller and lighter, but that would have meant making it too weak or too small.

Despite its focussed nature, the Phantom has all the signature details that make DMM carabiners stand out from the crowd including I-Beam construction, beefed up rope radii, a minimised gate notch and a shape that encourages correct loading. The Phantom delivers minimal weight without sacrificing the essentials of a quality carabiner.

### Variant Strength

<table>
<thead>
<tr>
<th>Variant</th>
<th>Gate Closed</th>
<th>Gate Open</th>
<th>Minor Axis</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phantom</td>
<td>23kN</td>
<td>9kN</td>
<td>7kN</td>
<td>22mm</td>
<td>28g</td>
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</tbody>
</table>

### Code

<table>
<thead>
<tr>
<th>Variant</th>
<th>Color</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>A318BMG</td>
<td>Matt Grey</td>
<td>A318BMG</td>
</tr>
<tr>
<td>A318BLK</td>
<td>Matt Black</td>
<td>A318BLK</td>
</tr>
<tr>
<td>A318BMG-12</td>
<td>Matt Grey-Matt Black</td>
<td>A318BMG-12</td>
</tr>
<tr>
<td>A318BMG-18</td>
<td>Matt Grey-Matt Black</td>
<td>A318BMG-18</td>
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<tr>
<td>A318BMG-25</td>
<td>Matt Grey-Matt Black</td>
<td>A318BMG-25</td>
</tr>
</tbody>
</table>

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HELIXTACTICAL.COM
NON-LOCKING CARABINERS
Alpha Trad

The Alpha Trad is our most ergonomic carabiner. Its radical shape sits naturally in your hand for positive handling. Grooves on the spine provide extra grip, while deep rope baskets guide gear and ropes into the biner. The large gate opening works with these features to make the clipping intuitive, even if you’re pumped or wearing thick gloves. The Alpha delivers security through a clean nose that prevents snagging, and deep rope baskets that minimise the chance of accidental gate opening and encourage loading along the strongest axis. Superb ergonomics and security without a weight penalty mean the Alpha excels in any climbing environment.

<table>
<thead>
<tr>
<th>Variant</th>
<th>Strength (Gate Closed)</th>
<th>Strength (Gate Open)</th>
<th>Strength (Minor Axis)</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha Trad</td>
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<td>9kN</td>
<td>7kN</td>
<td>27mm</td>
<td>34g</td>
</tr>
</tbody>
</table>

Code
- A508MG Alpha Trad - Matt Grey
- A508BLK Alpha Trad - Matt Black
- A508MG-12 Alpha Trad QD Set 12cm - Matt Grey-Black
- A508MG-18 Alpha Trad QD Set 18cm - Matt Grey-Black
- A508MG-25 Alpha Trad QD Set 25cm - Matt Grey-Black

Thor

The Thor is our strongest non-locking carabiner, rated at 28kN major axis and 11kN gate open. This strength is achieved by moving extra metal into areas of the biner that experience significant forces when loading. The spine, top and bottom bar and rope bearing radii have all been beefed up to give the Thor its headline strength figures. This helps the Thor to resist the wear and tear inherent in operations whilst maintaining a high safety reserve. Despite the extra metal, I-beam technology keeps the weight down to a mere 36g. A good all-round carabiner that is easy to handle with a low weight and very high strength.

<table>
<thead>
<tr>
<th>Variant</th>
<th>Strength (Gate Closed)</th>
<th>Strength (Gate Open)</th>
<th>Strength (Minor Axis)</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thor</td>
<td>28 kN</td>
<td>11 kN</td>
<td>7 kN</td>
<td>27 mm</td>
<td>36 g</td>
</tr>
</tbody>
</table>

Code
- A388MG Thor - Matt Grey
- A388BLK Thor - Matt Black
- A388MG-12 Thor QD Set 12cm - Matt Grey-Matt Black
- A388MG-18 Thor QD Set 18cm - Matt Grey-Matt Black
- A388MG-25 Thor QD Set 25cm - Matt Grey-Matt Black
Spectre 2

The Spectre 2 is our most popular carabiner because it is a solid, dependable workhorse that is ideal for creating the backbone of a climbing rack. This is the entry point for our carabiner range, but has a feature set that is impressive: I-beam technology, 33g, 9kN gate open strength plus a geometry that drives loads into the spine to give a safe, reliable connector. Additional features include a shrouded nose for added security, minimal I-beaming around the generous rope radii to give smooth rope running and a carefully tensioned gate that closes firmly for security, but is easy to clip. The Spectre 2 is a versatile carabiner that performs well in any climbing environment.

<table>
<thead>
<tr>
<th>Variant</th>
<th>Strength (Gate Closed)</th>
<th>Strength (Gate Open)</th>
<th>Strength (Minor Axis)</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spectre 2</td>
<td>24kN</td>
<td>9kN</td>
<td>8kN</td>
<td>25mm</td>
<td>33g</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A35BMG</td>
<td>Spectre 2 - Matt Grey</td>
</tr>
<tr>
<td>A35BBLK</td>
<td>Spectre 2 - Matt Black</td>
</tr>
<tr>
<td>A35BGM-12</td>
<td>Spectre 2 QD Set 12cm - Matt Grey-Matt Black</td>
</tr>
<tr>
<td>A35BGM-18</td>
<td>Spectre 2 QD Set 18cm - Matt Grey-Matt Black</td>
</tr>
<tr>
<td>A35BGM-25</td>
<td>Spectre 2 QD Set 25cm - Matt Grey-Matt Black</td>
</tr>
</tbody>
</table>
Revolver

The Revolver combines the functionality of a pulley and a carabiner to create a versatile carabiner that excels in reducing friction. It is indispensable in preventing crippling rope drag on long pitches, and as part of an improvised rescue or hauling system.

It has recently found favour with the EOD community as a component in hook and line systems to minimise friction on long pulls through multiple redirects.

The Revolver’s integrated pulley wheel reduces the friction on the rope as it moves through the carabiner. When placed in the rope system at sudden or considerable changes of direction this can translate to dramatically decreased rope drag.

The Revolver also comes into its own as part of an improvised hauling or mechanical advantage set up. These systems can be very useful - moving a stuck second over the crux, hauling heavy kit, even rescuing your partner from a crevasse. Typically, a lot of your energy is lost due to friction between the rope and carabiners. The Revolver’s 11kN rate pulley wheel makes it highly efficient when placed in these systems, turning more of your energy into movement rather than friction. The Revolver’s dual nature also cuts down on the need for multiple devices - when not working as a pulley it can be used as a rope drag reducing carabiner.

One Revolver in your kit gives you great versatility, letting you reduce rope drag and make efficient mechanical advantage systems without the extra weight and bulk of a pulley.

<table>
<thead>
<tr>
<th>Variant</th>
<th>Strength (Gate Closed)</th>
<th>Strength (Gate Open)</th>
<th>Strength (Minor Axis)</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revolver</td>
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<td>9kN</td>
<td>7kN</td>
<td>24mm</td>
<td>51g</td>
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<tr>
<td>Code</td>
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<tr>
<td>A238MG</td>
<td>Revolver - Matt Grey</td>
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<tr>
<td>A238BLK</td>
<td>Revolver - Matt Black</td>
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<tr>
<td>A238SAND</td>
<td>Revolver - Matt Sand</td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

NON-LOCKING CARABINERS
NON-LOCKING CARABINERS

Alpha Pro

The Alpha Pro is our top end sport climbing biner. Decades of hardware manufacture and climbing experience have led us to deliver a carabiner that handles beautifully, is highly robust and minimises snagging or hanging up on bolts.

The Alpha back is our most ergonomic biner shape, sitting intuitively in the hand for easy manipulation. Grooves in the spine provide extra grip, giving positive handling when stretching to make that all important clip. The solid gate is easier to handle when pumped, giving you a better chance of clipping the bolt.

The Alpha Pro has more metal in areas of high wear than its Trad equivalent to better resist the rigours of modern sport climbing. Bolt on carabiner interaction is particularly harsh on the biner, but beefed up contact areas allow the Alpha Pro to take this in its stride.

The keylock nose of the Alpha creates a clean nose that minimises snagging, reducing the chance of the biner hanging on the bolt. The clean nose also makes stripping a steep route easier, something you'll be thankful for at the end of an arduous redpoint session.

Ergonomic, strong and secure, the Alpha Pro is the ideal biner for the bolt end of your sport draw.

Alpha Clip

The Alpha Clip introduces a curved gate to Alpha Pro’s ergonomic back to create the most easily clipped biner in our range. The gate works with your natural clipping motion and the Alpha’s deep rope basket to guide your rope into the biner back. Allied to the easy handling Alpha back, this increases your chance of making that vital clip first time, removing one more barrier to redpoint success.

<table>
<thead>
<tr>
<th>Variant</th>
<th>Strength (Gate Closed)</th>
<th>Strength (Gate Open)</th>
<th>Strength (Minor Axis)</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha Pro</td>
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<td>9kN</td>
<td>8kN</td>
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</tr>
<tr>
<td>Alpha Clip</td>
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<td>9kN</td>
<td>8kN</td>
<td>25mm</td>
<td>45g</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS21MG</td>
<td>Alpha Sport Straight (Pro) - Matt Grey</td>
</tr>
<tr>
<td>AS26BLK</td>
<td>Alpha Sport Bent (Clip) - Matt Black</td>
</tr>
<tr>
<td>AS26MG-12</td>
<td>Alpha Sport QD Set 12cm - Matt Grey-Matt Black</td>
</tr>
<tr>
<td>AS26MG-18</td>
<td>Alpha Sport QD Set 18cm - Matt Grey-Matt Black</td>
</tr>
<tr>
<td>AS26MG-25</td>
<td>Alpha Sport QD Set 25cm - Matt Grey-Matt Black</td>
</tr>
</tbody>
</table>
Aero Straight and Bent Gate

Our entry level solid gate carabiner is strong, tough and handles well. It has a clean nose that won’t snag on gear or when used as a racking biner gear won’t hang up on a notch, making getting that vital wire off your rack as smooth as possible. The Aero Straight and Clip are both equipped with the same ergonomically shaped gates as their more premium brethren to ensure the Aero is as easy to clip as it is to handle. Solid bar construction and increased rope bearing radii give softer impact forces in the event of a fall. Sound design fundamentals like a steep top bar and rope notches encourage correct orientation when the biner is loaded. The curved gate and generous gate opening make clipping as easy and positive as possible.

<table>
<thead>
<tr>
<th>Variant</th>
<th>Strength (Gate Closed)</th>
<th>Strength (Gate Open)</th>
<th>Strength (Minor Axis)</th>
<th>Gate Opening</th>
<th>Weight</th>
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<td>Aero Straight</td>
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<td>9kN</td>
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<td>20mm</td>
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</tr>
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<td>Aero Bent</td>
<td>24kN</td>
<td>9kN</td>
<td>8kN</td>
<td>26mm</td>
<td>47g</td>
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</table>

**Variant Strength**

<table>
<thead>
<tr>
<th>Gate Closed</th>
<th>Gate Open</th>
<th>Minor Axis</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>24kN</td>
<td>9kN</td>
<td>8kN</td>
<td>20mm</td>
<td>47g</td>
</tr>
<tr>
<td>24kN</td>
<td>9kN</td>
<td>8kN</td>
<td>26mm</td>
<td>47g</td>
</tr>
</tbody>
</table>

**Code**

- A221MG: Aero Straight Gate - Matt Grey
- A221BLK: Aero Straight Gate - Matt Black
- A226BLK: Aero Clip Bent Gate - Matt Black
- A226MG-12: Aero Q/D Set - 16mm x 12cm Nylon - Matt Grey-Matt Black
- A226MG-18: Aero Q/D Set - 16mm x 18cm Nylon - Matt Grey-Matt Black
- A226MG-25: Aero Q/D Set - 16mm x 25cm Nylon - Matt Grey-Matt Black
Oval Straight Gate

The Ultra O is a versatile carabiner that works particularly well as a racking biner and in rigging systems. Its symmetrical shape means wires or pegs don’t bunch up as can happen with asymmetric carabiners. This allows the Ultra O to comfortably hold more gear, while increasing your chance of getting the right piece first time.

The Ultra O also makes a great rigging biner. The round basket allows attachment points to self-centre and means the biner will not shift disconcertingly into position when loaded, as happens with D-shapes. The basket shape also works well with devices such as pulleys although load involving personnel should use the locking versions for extra safety.

XSRE

The XSRE carabiner is a fully featured miniature carabiner that is rated to 400kg. The XSRE features the same signature attention to detail present throughout our range - a clean nose, I-Beam construction and protective anodising. It has found many uses from holding heavy personal equipment - it was designed to hold chainsaws - to rigging hammocks to being the ultimate keyring.

The carabiner weighs just 8g and measures 57mm x 33mm.

<table>
<thead>
<tr>
<th>Variant</th>
<th>Strength (Gate Closed)</th>
<th>Strength (Gate Open)</th>
<th>Strength (Minor Axis)</th>
<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultra O</td>
<td>25kN</td>
<td>7kN</td>
<td>12kN</td>
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<td>61g</td>
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Code

A321MG Oval Plain Gate - Matt Grey

<table>
<thead>
<tr>
<th>Variant</th>
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<th>Gate Opening</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>XSRE</td>
<td>4kN</td>
<td>13mm</td>
<td>8g</td>
</tr>
</tbody>
</table>

Code

A531BLK XSRE Mini Carabiner - Matt Black
A531MG XSRE Mini Carabiner - Matt Grey
The Vault Wiregate

The Vault is a secure and durable tool holder that can be used on everything from harnesses and kit bags to vehicles. The two part aluminium alloy Vault is secured using a stainless steel bolt and is the ideal solution for gear storage, organisation and transportation.

The DMM Vault is similar to existing ice clippers but there are some significant departures. Firstly it is created out of aluminium with all the care that DMM put into their carabiners. Secondly it has a hinged fastening mechanism with optional spacers that is opened and closed with a small screw to attach it to your harness making it very secure and impossible to invert. This construction bring a number of benefits: the Vault does not get twisted or inverted - it is always where you expect to find it and gear is easily retrieved.

A lot of expensive gear often goes onto racking carabiners and it is easy to twist the gates past the nose on plastic ones opening up the possibility of lost gear.

- Strong, safe and secure
- One handed operation for ease of use
- Top ‘shelf’ allows in situ gear selection
- Low nose profile minimises hook-ups
- Wire gate and locking gate versions available
- Max webbing size: 45 x 3mm
- WLL 0.3kN - Not PPE
- User installable - flat bladed screwdriver required

<table>
<thead>
<tr>
<th>Variant</th>
<th>Non PPE MBS</th>
<th>Gate Opening</th>
<th>Weight</th>
<th>Max Webbing Size</th>
<th>Cat No</th>
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<tbody>
<tr>
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<td>7kN</td>
<td>63g</td>
<td>45 x 3mm</td>
<td>A558MG</td>
</tr>
</tbody>
</table>
Maillons

A maillon, maillon rapide or quick link is a metal link that allows equipment to be threaded together in a more permanent manner than with a carabiner. Maillons have a threaded sleeve which tightens over a thread, as opposed to a hinged gate like a carabiner, making them stronger, but more time consuming to attach and detach from the system. Maillons are available in a range of shapes, diameters and strengths and have the advantage of offering greater versatility over carabiners as their different shapes and lack of hinged gates allow them to be used in multi-directional load situations.[2] Maillons are used primarily in climbing and caving systems to construct semi-permanent anchor points and they can also be used for fastening harnesses with a dual attachment point.

Grommet and Prestin

The Grommet and Prest-in are polymer inserts designed to fit in devices and provide a flexible friction interface between the device and a connector. This minimises the any movement and so optimises the configuration. The Grommet fits perfectly in any of the 16mm attachment holes of the DMM Triple Attachment/Hitch Climber pulley.

Wallis

The Wallis is a polymer device that reduces the possibility of any cross loading scenarios between a webbing sling and a connector. Quick and simple to install yet invaluable in maintaining safer configurations.

Underpants

Two retainers for slings - one for 8mm dyneema and the other for 26mm Variwidth - to provide a flexible friction interface between the sling and the attached carabiner. This minimises the any movement and so optimises the configuration.

THE MOST COMMON SHAPES ARE:

- **Oval** - the most common shape used to load two items together
- **“D”** - This shape is often used to create a central connection point on a harness which all items of equipment are attached.
- **“Delta” maillon** - a variation of the D maillon, the delta maillon is triangular in shape, rather than semi-circular.
CLIMBING PROTECTION & ANCHORS
The ability to place secure anchors is a key skill to staying safe when operating at height; that ability needs both the correct tools and the knowledge to use them. DMM Helix can provide both these elements.

The range we offer allows anchors to be built on a wide variety of terrains – mountain, snow, sand, urban and marine.

The range covers tactical variants of climbing protection through to tactical specific hooks and ground anchors together with some hybrid items such as steep earth axes and wire rope grabs.
CLIMBING PROTECTION RANGE OVERVIEW

Nuts, Wires, Passive Protection
- Wallnuts: Classic Rock protection
- Alloy Offsets: Versatile shape, Compliments Wallnuts
- Torque Nuts: Large nuts with large range

Cams Active Protection
- Dragons: Class leading holding power
- Big Bros: Wide crack/gap protection

Pegs, Piton, Hammered Protection
- Blade Pegs: Thin pegs
- Lost Arrow Pegs: Medium pegs
- Angle Pegs: Medium/large pegs
- Zeeper/Z Pegs: Large pegs
- Peckers: Small hooks
- Terrier/Bulldog: Larger hammered hooks
CLIMBING PROTECTION RANGE OVERVIEW

Hooks
- Skyhooks / Fifi Hooks
  Aid climb anchors
- Assault Hooks
  Window sill and narrow ledge hooks
- Grappling Hooks
  Throwing hooks

Slings, Lanyards and Strops
- Dyneema Slings
  Lightweight and black
- Nylon Slings
  Durable anchor slings
- Rope Lanyards
  Terminated, flexible and tough
- Wire Strops
  Super tough anchors

Ground Anchors
- Talon
  Light earth anchor
- Steep Earth Axe
  Custom axe for cliff ascent
- Earth/Sand Anchor
  Drive-in anchor systems
- Snow / Ice Anchors
  Winter anchors
Wallnuts

Wallnuts are the core component of a trad climber’s rack. Simple to place, lightweight and versatile, they are effective in all rock types and conditions, from summer trad to mixed winter climbing.

Despite their simple appearance, Wallnuts are highly featured pieces of climbing hardware. This begins with the raw material used for each size - smaller sizes are made from a harder alloy to prevent shearing, while larger sizes are softer so they can ‘bite’ into placements. The larger sizes feature hollow construction to reduce weight.

Wallnuts can be placed in multiple orientations, allowing any single nut to cover a range of crack sizes. They are shaped with a curving taper that allows them to fit securely in a wide variety of constrictions and rock types. The design creates three points of contact between the nut and rock to give a stable placement that resists accidentally lifting out.

Wallnuts also feature scooped faces that reduce weight, allow them to sit better in cracks, improve security in shallow placements, and resist lifting out when a leader moves past them.

Our Wallnuts are mounted on wires that are stiff enough to allow overhead placements, while flexible enough to reduce the chance of lifting out.

The tactical Wallnuts can be specified in a colour coded option that used 4 subtly different shades to allow a faster and easier selection of the correct size from your harness, and also to correspond with similarly sized pieces across our range of protection.

Wallnuts are the basis on which to build a comprehensive climbing rack.

| Wallnut No.1 - Matt Grey | A161MG | 15g | 7kN |
| Wallnut No.2 - Matt Grey | A162MG | 26g | 9kN |
| Wallnut No.3 - Matt Grey | A163MG | 28g | 11kN |
| Wallnut No.4 - Matt Grey | A164MG | 30g | 12kN |
| Wallnut No.5 - Matt Grey | A165MG | 32g | 12kN |
| Wallnut No.6 - Matt Grey | A166MG | 39g | 12kN |
| Wallnut No.7 - Matt Grey | A167MG | 40g | 12kN |
| Wallnut No.8 - Matt Grey | A168MG | 45g | 12kN |
| Wallnut No.9 - Matt Grey | A169MG | 50g | 12kN |
| Wallnut No.10 - Matt Grey | A1620MG | 56g | 12kN |
| Wallnut No.11 - Matt Grey | A1621MG | 68g | 12kN |
| Wallnut Set 1-11 - Matt Grey | A161/21MG | 168g | - |
| Wallnut Set 1-6 - Matt Grey | A161/16MG | 214g | - |
| Wallnut Set 3-8 - Matt Grey | A1613/18MG | 257g | - |
| Wallnut Set 7-11 - Matt Grey | A1617/21MG | 425g | - |

| Wallnut No.1 - Matt Olive | A161MOD | 15g | 7kN |
| Wallnut No.2 - Matt Sand | A162SAND | 26g | 9kN |
| Wallnut No.3 - Matt Grey | A163MG | 28g | 11kN |
| Wallnut No.4 - Matt Black | A164BLK | 30g | 12kN |
| Wallnut No.5 - Matt Olive | A165MOD | 32g | 12kN |
| Wallnut No.6 - Matt Sand | A166SAND | 39g | 12kN |
| Wallnut No.7 - Matt Grey | A167MG | 40g | 12kN |
| Wallnut No.8 - Matt Black | A168BLK | 45g | 12kN |
| Wallnut No.9 - Matt Olive | A169MOD | 50g | 12kN |
| Wallnut No.10 - Matt Sand | A1620SAND | 56g | 12kN |
| Wallnut No.11 - Matt Grey | A1621MG | 68g | 12kN |
| Wallnut Set 1-11 - MOD | A161/21MOD | 168g | - |
| Wallnut Set 1-6 - MOD | A161/16MOD | 214g | - |
| Wallnut Set 3-8 - MOD | A1613/18MOD | 257g | - |
| Wallnut Set 7-11 - MOD | A1617/21MOD | 425g | - |
Anatomy of a Climbing Nut

- Larger nuts manufactured from extruded 6082 alloy to reduce weight whilst having good bite.
- Crimps are covered by 3 layers of material for extra durability.
- Wire diameter and construction is chosen to provide easy placing at full reach whilst still allowing enough bend to minimise the chances of rope movement.
- Wires are recessed into heads to increase durability.
- On extruded nuts the wire is protected by a raised edge on the top of the nut to improve durability.
- Smaller nuts are hot forged from 7075 alloy because the harder alloy reduces the chances of the smaller contact areas pulling through.
- Complex 3 dimensional shapes increase the placement options keeping the climber safer.
- Recesses in faces allow nuts to sit better in irregular cracks.
- Forged nuts have lightening holes drilled into them where possible.

Other Features

- Colour coding available to make size choice easier.
- All nuts can be placed in 3 orientations - facing left, facing right and face o with the narrow face inward.
- Good size overlap between sizes allow more placement options when low on gear or going light.
Alloy Offsets

Alloy Offsets feature a radical taper that makes them ideal for protecting flared cracks. Used in conjunction with Wallnuts they give the user a comprehensive protection package for use in the mountains.

Cracks vary enormously in shape and size, so a good variety of gear maximises your protection options - Offsets are shaped to slot into irregular and flared constrictions that other nuts struggle with. Their offset taper lets them protect cracks where curved nuts would not sit properly and used alongside curved nuts, you’ll find security in almost any crack.

DMM Offsets are all rated at a robust 12kN, and come mounted on wires that are set into a recess to protect them from wear and tear. Their faces feature scoops that allow the Offset to sit more securely in highly featured rock and act to prevent them lifting out. The larger sizes have holes that reduce weight without compromising strength.

The tactical Wallnuts can be specified in a colour coded option that used 4 subtly different shades to allow a faster and easier selection of the correct size from your harness, and also to correspond with similarly sized pieces across our range of protection.

Used in conjunction with Wallnuts and Torque nuts, Alloy Offsets offer a toolkit to protect most cracks you’ll encounter in summer or winter.

<table>
<thead>
<tr>
<th></th>
<th>Weight</th>
<th>Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alloy Offset 7 - Matt Grey</td>
<td>A1B17MG</td>
<td>27g</td>
</tr>
<tr>
<td>Alloy Offset 8 - Matt Grey</td>
<td>A1B18MG</td>
<td>30g</td>
</tr>
<tr>
<td>Alloy Offset 9 - Matt Grey</td>
<td>A1B19MG</td>
<td>37g</td>
</tr>
<tr>
<td>Alloy Offset 10 - Matt Grey</td>
<td>A1B20MG</td>
<td>45g</td>
</tr>
<tr>
<td>Alloy Offset 11 - Matt Grey</td>
<td>A1B21MG</td>
<td>56g</td>
</tr>
<tr>
<td>Alloy Offset Set 7-11 - Matt Grey</td>
<td>A1B17Z1MG</td>
<td>195g</td>
</tr>
<tr>
<td>Alloy Offset 7 - Matt Black</td>
<td>A1B17BLK</td>
<td>27g</td>
</tr>
<tr>
<td>Alloy Offset 8 - Matt Olive</td>
<td>A1B18MOD</td>
<td>30g</td>
</tr>
<tr>
<td>Alloy Offset 9 - Matt Sand</td>
<td>A1B19SAND</td>
<td>37g</td>
</tr>
<tr>
<td>Alloy Offset 10 - Matt Grey</td>
<td>A1B20MG</td>
<td>45g</td>
</tr>
<tr>
<td>Alloy Offset 11 - Matt Black</td>
<td>A1B21BLK</td>
<td>56g</td>
</tr>
<tr>
<td>Alloy Offset Set 7-11 - MOD</td>
<td>A1B17Z1MOD</td>
<td>195g</td>
</tr>
</tbody>
</table>
Torques

Torque nuts are lightweight protection for large or parallel sided cracks. Clever geometry allows them to provide secure placements in a variety of orientations, while their passive nature means that when properly placed, they work in any conditions including icy cracks where they can be hammered in to positions that would only offer insecure cam placements.

The original lightweight camming device, Torque nuts can be used to protect parallel sided cracks. Their geometry allows them to be used in multiple orientations, giving you a wide range of placement options without the weight penalty of carrying multiple pieces of protection. Further weight is saved through material choice, which has allowed us to make the sidewalls thinner while keeping a 14kN strength across the entire range.

Torque nuts work in any conditions, making them ideal protection in both wet and icy conditions. They come into their own protecting cracks that are iced up and so cannot be protected by cams. Our re-slinging service means your Torque nuts can last as long as your climbing career.

<table>
<thead>
<tr>
<th>Torque Nut 1 - Matt Grey</th>
<th>AT41MG</th>
<th>54g</th>
<th>14kN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Torque Nut 2 - Matt Grey</td>
<td>AT42MG</td>
<td>70g</td>
<td>14kN</td>
</tr>
<tr>
<td>Torque Nut 3 - Matt Grey</td>
<td>AT43MG</td>
<td>104g</td>
<td>14kN</td>
</tr>
<tr>
<td>Torque Nut 4 - Matt Grey</td>
<td>AT44MG</td>
<td>146g</td>
<td>14kN</td>
</tr>
<tr>
<td>Torque Nut Set 1-4 Matt Grey</td>
<td>AT41/44MG</td>
<td>334g</td>
<td>-</td>
</tr>
</tbody>
</table>
Nutbuster

The Nutbuster is an essential tool for retrieving gear placed by the leader.

In an ideal world leader placed protection would always be easy to clean for the second. In reality gear can be difficult to recover, and in these situations nut keys become invaluable.

Our Nutbuster takes this simple concept and refines it. A rubber handle gives you a firm grip, and lets you bash the Nutbuster to remove particularly stubborn pieces.

We’ve laser cut the Nutbuster from stainless steel for strength and corrosion resistance, and added holes to minimise weight.
Dragons

The Dragon 2 is our premium camming device. Combining over 30 years’ design and manufacturing experience with our vast wealth of climbing knowledge, we’ve created a state of the art cam that makes the most of every placement.

This second generation model came about because we wanted to improve the performance of cams in the two areas:

› Increase holding power in low friction rock types such as limestone and slate
› Better performance with less chance of failure in irregular placements, which cause the cam lobes to be loaded in multiple directions

The resulting research triggered an overhaul to our cam range which maximizes the climber’s chances of finding a safe placement, even when the odds are stacked against them.
The main changes were:

- New Cam Surfaces - Our newly-patented TripleGrip Dragon cam lobes are forged oversized, anodized and then the contact surfaces are CNC’d. This process creates a surface that contains more aggressive edges to maximize grip. This minimizes ‘walking’ and resists slipping as the load comes on to the cam, meaning increased security.

- Redesigned Cams - We have totally redesigned and fine-tuned the cams to increase surface area, torsional rigidity and resistance to bending. We've even made small weight savings.

- The new thumb press has deeper grooves for better handling and the Dyneema sling features a more compact joint system. Both of these features improve ergonomics without sacrificing strength.

The single stem, dual axle design gives our Dragons 360° flexibility and a substantial expansion range, increasing both performance in sub-optimal placements and your chance of getting the right piece first time.

The extendable sling cuts down on the quickdraws needed to extend placements, reducing weight on your harness.

<table>
<thead>
<tr>
<th>Size</th>
<th>Model</th>
<th>Weight</th>
<th>Strength</th>
<th>Passive Strength</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>A73500MG</td>
<td>75g</td>
<td>10kN</td>
<td>9kN</td>
<td>13-21mm</td>
</tr>
<tr>
<td>0</td>
<td>A7350MG</td>
<td>85g</td>
<td>14kN</td>
<td>12kN</td>
<td>16-25mm</td>
</tr>
<tr>
<td>1</td>
<td>A7351MG</td>
<td>103g</td>
<td>14kN</td>
<td>14kN</td>
<td>20-33mm</td>
</tr>
<tr>
<td>2</td>
<td>A7352MG</td>
<td>117g</td>
<td>14kN</td>
<td>14kN</td>
<td>24-41mm</td>
</tr>
<tr>
<td>3</td>
<td>A7353MG</td>
<td>128g</td>
<td>14kN</td>
<td>14kN</td>
<td>29-50mm</td>
</tr>
<tr>
<td>4</td>
<td>A7354MG</td>
<td>154g</td>
<td>14kN</td>
<td>14kN</td>
<td>38-64mm</td>
</tr>
<tr>
<td>5</td>
<td>A7355MG</td>
<td>208g</td>
<td>14kN</td>
<td>14kN</td>
<td>50-85mm</td>
</tr>
<tr>
<td>6</td>
<td>A7356MG</td>
<td>299g</td>
<td>14kN</td>
<td>14kN</td>
<td>68-114mm</td>
</tr>
</tbody>
</table>

|  |  |  | HELIXTACTICAL.COM |
Trango Big Bros

The Trango Big Bros use an expandable tube chock design to protect horrible scary, wide cracks - stick a Big Bro in the crack, push the button to extend it to the right size, and twist the sleeve to lock it in place. Breathe.

Since Big Bros resist pull in any direction, they're nearly impossible to accidentally dislodge as you climb.

They need more practice to place than cams, but once one learns the trick then they provide a method of protecting otherwise very bold, awkward climbs.

<table>
<thead>
<tr>
<th>#</th>
<th>Weight</th>
<th>Strength</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>154 g</td>
<td>12 kN</td>
<td>81-109 mm, 3.2-4.3 in</td>
</tr>
<tr>
<td>2</td>
<td>190 g</td>
<td>12 kN</td>
<td>101-145 mm, 4-5.7 in</td>
</tr>
<tr>
<td>3</td>
<td>235 g</td>
<td>12 kN</td>
<td>135-203 mm, 5.3-8 in</td>
</tr>
<tr>
<td>4</td>
<td>338 g</td>
<td>12 kN</td>
<td>191-305 mm, 7.5-12 in</td>
</tr>
</tbody>
</table>
Pegs (Pitons) are a semi-permanent type of anchor that are ideal for setting up lines for repeated ascent descent or hauling. They are basically metal nails of various shapes and sizes that are hammered into cracks or weaknesses in the rock.

The carabiner is then attached to a connection point in the eye of the piton.

Pegs/Pitons are available in soft or hardened steel, however all the pitons we supply use a hardened steel as this performs better on most rock types. We can supply soft pitons for softer rock such as fractured limestone if required.

Climbers carry a varied assortment of both different models and different lengths to cater for the wide variation in crack size and depth. If a piton is too short there will not be maximal surface area contact between it and the rock and so it will not be as secure as if a longer piton had been used. Alternatively, if a piton is too long it will not be possible to hammer the entire length into the rock and so the head will stick out and be subject to dangerous leverage forces in the event of a fall.

Thus having the correct assortment of pegs/piton in terms of model and length is important to safety. The better the variety the better the chance of protecting the crack and creating safe and secure anchors with maximum strength.

It is important to bear in mind that there is a certain skill needed in placing pitons as the placement and the carabiner in the eye should act to twist the peg in the placement when loaded – just relying on compression friction to hold he piton in place will give very inconsistent results.

There are 4 main types of peg to choose from:

**Knifeblade** - the thinnest and generally shortest of the main steam peg designs – ideal for very thin, shallow cracks where nuts would be too marginal. Normally just a few (3-5) millimeters thick and between 4 and 7cm long.

**Lost Arrow** - A classic solid, tapered shape that performs well in small-medium size cracks. Normally just 7-8 millimeters thick and between 6 and 9cm long.

**Angle** - Formed from thin steel plate that is bent into a “U” or “V” shape to create a peg that deforms to the shape of the crack as it is hammered in. Good for medium size cracks that are a bit less uniform or slightly deeper. Normally 10-20 millimeters thick and between 5 and 11cm long.

**Zeepers** - The largest pitons are a specifica type of angle called zeepers – they are made from steel plate that is formed into a “Z” shape. Pretty esoteric these days.
<table>
<thead>
<tr>
<th>Category</th>
<th>Code</th>
<th>Blade Thickness</th>
<th>Blade Length</th>
<th>Weight</th>
<th>Material</th>
<th>CE Certified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blade Pitons</td>
<td>RS170.40</td>
<td>3 mm.</td>
<td>43 mm.</td>
<td>53 gr.</td>
<td>Chromolly Hard Steel</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>RS170.50</td>
<td>3 mm.</td>
<td>53 mm.</td>
<td>55 gr.</td>
<td>Chromolly Hard Steel</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>RS171.50</td>
<td>5 mm.</td>
<td>55 mm.</td>
<td>82 gr.</td>
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<td>CE EN 569</td>
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<tr>
<td></td>
<td>RS171.75</td>
<td>5 mm.</td>
<td>75 mm.</td>
<td>95 gr.</td>
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<td>CE EN 570</td>
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<tr>
<td>Lost Arrow Pitons</td>
<td>RS160.60</td>
<td>8 mm.</td>
<td>65 mm.</td>
<td>80 gr.</td>
<td>Chromolly Hard Steel</td>
<td>CE EN 571</td>
</tr>
<tr>
<td></td>
<td>RS160.80</td>
<td>8 mm.</td>
<td>80 mm.</td>
<td>98 gr.</td>
<td>Chromolly Hard Steel</td>
<td>CE EN 572</td>
</tr>
<tr>
<td></td>
<td>RS162.75</td>
<td>7 mm.</td>
<td>75 mm.</td>
<td>95 gr.</td>
<td>Chromolly Hard Steel</td>
<td>CE EN 573</td>
</tr>
<tr>
<td></td>
<td>RS165.85</td>
<td>8 mm.</td>
<td>85 mm.</td>
<td>115 gr.</td>
<td>Chromolly Hard Steel</td>
<td>CE EN 574</td>
</tr>
<tr>
<td></td>
<td>RS165.55</td>
<td>8 mm.</td>
<td>55 mm.</td>
<td>80 gr.</td>
<td>Chromolly Hard Steel</td>
<td>CE EN 575</td>
</tr>
<tr>
<td>Angle Pitons</td>
<td>S180.11</td>
<td>21 mm.</td>
<td>105 mm.</td>
<td>102 gr.</td>
<td>Chromolly Hard Steel</td>
<td>CE EN 576</td>
</tr>
<tr>
<td></td>
<td>RS180.35</td>
<td>20 mm.</td>
<td>42 mm.</td>
<td>63 gr.</td>
<td>Chromolly Hard Steel</td>
<td>CE EN 577</td>
</tr>
<tr>
<td></td>
<td>RS180.70</td>
<td>16 mm.</td>
<td>73 mm.</td>
<td>63 gr.</td>
<td>Chromolly Hard Steel</td>
<td>CE EN 578</td>
</tr>
<tr>
<td></td>
<td>RS180.80</td>
<td>21 mm.</td>
<td>80 mm.</td>
<td>94 gr.</td>
<td>Chromolly Hard Steel</td>
<td>CE EN 579</td>
</tr>
<tr>
<td>Zeoper Pitons</td>
<td>RS190.50</td>
<td>10 mm.</td>
<td>50 mm.</td>
<td>64 gr.</td>
<td>Chromolly Hard Steel</td>
<td>CE EN 580</td>
</tr>
<tr>
<td></td>
<td>RS190.80</td>
<td>14 mm.</td>
<td>80 mm.</td>
<td>97 gr.</td>
<td>Chromolly Hard Steel</td>
<td>CE EN 581</td>
</tr>
<tr>
<td></td>
<td>RS191.50</td>
<td>15 mm.</td>
<td>50 mm.</td>
<td>94 gr.</td>
<td>Chromolly Hard Steel</td>
<td>CE EN 582</td>
</tr>
<tr>
<td></td>
<td>RS191.80</td>
<td>19 mm.</td>
<td>80 mm.</td>
<td>130 gr.</td>
<td>Chromolly Hard Steel</td>
<td>CE EN 583</td>
</tr>
</tbody>
</table>
Hammer

A classic hickory shaft piton hammer. The hickory shaft provides good feel when placing the pegs and absorbs vibrations well. The head has a flat face for accurate strikes with a narrow-lipped spike at the other end for seating small nuts and levering out placements. The head also has a hole for attaching a retraction leash for removing placements with a shock load and for racking the hammer close onto the harness. A spring leash is attached to the shaft to allow use at full arm length whilst still being securely attached to the harness.

SPECIFICATION

- Material: Hickory Shaft + Steel Head with retaining leash
- Length: 30cm
- Weight: 650g
Black Diamond Peckers

The Black Diamond Pecker climbing tools are ideal for clean aid when climbing buildings - their small size lets them be placed or hammered into mortar lines, window frame recesses and other thin lines of weakness. Peckers can be hand-set and cleaned quickly when quietness is required. When micro nailing, their double-tapered, thin, serrated blades hold solid – especially in softer rock. A new, swaged cable lifts out of the way when pounding the eyes during removal. The largest size also works well in the mixed medium, offering additional options on mixed lines when small cracks or frozen turf are nature's only offerings.
Bulldog / Terrier

Urban climbing protection is often about making the best of what’s available. In an ideal world, this would massive drain pipes, deep horizontal breaks and large railings, however this is not often reality and so inventive use of our Bulldog and Terrier have been crucial in offering protection in mortar/expansion lines between bricks. Our new, updated bulldog keeps its versatility, but it’s lighter, easier to place and easier to remove than its predecessor.

FEATURES

› Improved hammering area for speedy placements
› Positive removal fin
› Lightening holes trim weight and help extraction
› Extendable 11mm dyneema sling
› Rated to15kN
Skyhooks
The Black Diamond Skyhooks allow the climber to create temporary anchors on otherwise protection less territory.

Black Diamond Cliffhanger Skyhook
The Black Diamond Cliffhanger Skyhook is the smaller of the two Black Diamond Skyhooks and is made of high strength chromoly steel. It has a bipod base and chiseled point with flat tip that are designed to prevent rotation and enhance stability on tiny flakes and edges.
Weight: 42g
Length: 63.5mm

Black Diamond Grappling Skyhook
The Black Diamond Grappling Hook is larger than the Cliffhanger. The slightly oversized shape is better for hooking larger edges and flakes plus the long throw allows this hook to clear larger placements than the Cliffhanger. The wide bipod base is remarkably stable even on small edges.
Weight: 67 g (2.4 oz)
Length: 76.2 mm (3 in)
Cadex Short Assault Hooks

The Cadex Short Assault Climbing Hooks (SACH) provide the assaulter with extremely versatile tools for vertical methods of entry.

They come in two sizes - 4 inches/100cm and 7 inches/175cm.

The hooks are ideal for placing on window sills or small ledges where larger hooks do not have enough room to get a stable purchase. The hooks are connected to a ladder, rope or pulley system and then placed into position using a pole or rifle barrel. Once loaded the hook cams onto the placement forcing the aggressive carbide teeth to dig deep into the surface. A very effective tool for ascending relatively featureless structures.

**SHORT ASSAULT CLIMBING HOOK 4 INCH**

<table>
<thead>
<tr>
<th>DIMENSIONS</th>
<th>4.67&quot; x 2&quot; x1.98&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>11.87 cm x 5.08 cm x 5.02 cm</td>
</tr>
</tbody>
</table>

| WEIGHT: | 0.738 lbs |
|         | 355 GRAMS |

| MATERIAL | AERONAUTIC ALUMINIUM [FRAME]/CARBIDE [SPIKES] |
Cadex Extra Long - Afghan - Hook

The big aggressive sibling of the 4 inch and 7 inch hooks designed for use on compound walls.

A large folding hook designed to be used in scaling Afghan style compound walls.

The design gives numerous configurations which accommodate a variety of environments.

The hook can be extended to a maximum 14 inches with an arm extension that gives automatic deployment of extension by pulling a release cable.

The spine of the hook can be adjusted to two different angles depending on type of wall or window ledge encountered. Plus the tip section of the hook can be adjusted to 6 different angles.

The teeth on the hook are easily replaceable and can be changed out to change lengths depending operational requirements.

The hook folds flat and can fit in a 2.5 x 4 x 12 inch pouch
Yates Assault Hook

A aggressive hook designed to work with poles via a pigg attachment. The hook bites well into marginal placements creating a secure anchor for the attached ropes or ladders. The hook weighs only 125g and will hold between 500 to 900kgf depending on the quality of the placement.
Collapsible Grappling Hook

The Mil Grabber is a lightweight, collapsible, portable and reusable grappling hook. It is 217 mm tall, 103 mm wide, 92 mm thick and weighs 742 g.

The hook has three claws and is made from 7075-T651 aluminium alloy. A 19.4 mm thick 7075-T651 spider is pinned to the top of the shaft with a 6.3 mm. pin. The spider supports three 8 mm. thick 7075-T651 claws which freely pivot on 9.5 mm. pins. Each claw has two teeth on the end and four more on the underside.

The grabber has a spring-loaded locking mechanism with a stainless steel shackle to connect into the rope.

The grabber is rated for 1800 lbf or 8.0 kN loads. The shackle is rated at 3500 lbf or 15.5 kN

A grappling hook made with five tines of 4140 chrome-moly steel and incorporating an eyebolt.

The tines on are heat treated hard enough to be strong, but are left ductile enough to fail by opening up rather than breaking.

Finished with a black, baked on epoxy finish for long lasting protection.

SPECIFICATION
- Height: 304mm
- Diameter: 215mm
- Weight: 1.36kg
- Each tine will withstand loads of up to 909kg
- The center support is a 12.5mm forged eye bolt that tests in excess of 53.37kN

Grappling Hook

A grappling hook made with five tines of 4140 chrome-moly steel and incorporating an eyebolt.

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- Height: 304mm
- Diameter: 215mm
- Weight: 1.36kg
- Each tine will withstand loads of up to 909kg
- The center support is a 12.5mm forged eye bolt that tests in excess of 53.37kN
As part of the DMM group Helix has full access to DMM’s textile development and sewing manufacturing facilities. This allows us to sew all types of product including:

- Webbing: 8mm black Dyneema to 44mm Nylon/Polyester
- Static Rope: 3mm cord to 8mm Dyneema rope to 11mm Nylon/Polyester ropes.
- Dynamic Rope: Lanyards and terminations on all diameters of rope.

Helix can develop, test and certify bespoke items in addition to supplying a core range of sewn product.

The same applies to all our wire strops - they are all made in our factory and so we can manufacture custom product as required.
Black Dyneema Slings

DMM have access to both 8mm and 11mm black Dyneema webbing and we use this to construct black Dyneema slings. Black Dyneema is not commonly available because dyneema does not take dyes well, but this webbing uses fibers that are individually coated to produce a dark webbing with a durable colour. Dyneema climbing slings have pretty much replaced Nylons slings, due to them having a higher strength to weight ration, smaller pack size, less water absorption (important in winter) and has a higher resistance to cutting. Dyneema is not perfect though; it has a lower melting point than nylon and they tend to wear a bit quicker.

Nylon Slings

Where durability is crucial and weight is less of an issue Nylon comes into its own. The Nylon 16mm has the same strength as our Dyneema slings, but because there is physically more material they offer a greater safety margin should the sling be dragged over a sharp edge.

The 26mm nylon slings use the strongest tape in our range. It might not have some of the weight advantages of the skinnier Dyneema slings, but if you are looking for a sturdy, hard wearing sling, this is it. The Nylon 26mm is perfect for anybody who does a lot of rigging will appreciate its strength and durability.

<table>
<thead>
<tr>
<th>Model</th>
<th>Strength</th>
<th>Code</th>
<th>Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dyneema 8mm x 30cm</td>
<td>22kN</td>
<td>HP0830</td>
<td>Black</td>
</tr>
<tr>
<td>Dyneema 8mm x 60cm</td>
<td>22kN</td>
<td>HP0860</td>
<td>Black</td>
</tr>
<tr>
<td>Dyneema 8mm x 120cm</td>
<td>22kN</td>
<td>HP08120</td>
<td>Black</td>
</tr>
<tr>
<td>Dyneema 8mm x 240cm</td>
<td>22kN</td>
<td>HP08240</td>
<td>Black</td>
</tr>
<tr>
<td>Dyneema 8mm x 400cm</td>
<td>22kN</td>
<td>HP08400</td>
<td>Black</td>
</tr>
<tr>
<td>Dyneema 11mm x 30cm</td>
<td>22kN</td>
<td>HP1130</td>
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</tr>
<tr>
<td>Dyneema 11mm x 60cm</td>
<td>22kN</td>
<td>HP1160</td>
<td>Black</td>
</tr>
<tr>
<td>Dyneema 11mm x 120cm</td>
<td>22kN</td>
<td>HP11120</td>
<td>Black</td>
</tr>
<tr>
<td>Dyneema 11mm x 240cm</td>
<td>22kN</td>
<td>HP11240</td>
<td>Black</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Model</th>
<th>Strength</th>
<th>Code</th>
<th>Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nylon 16mm x 60cm</td>
<td>22kN</td>
<td>MA1660</td>
<td>Black/Olive</td>
</tr>
<tr>
<td>Nylon 16mm x 120cm</td>
<td>22kN</td>
<td>MA16120</td>
<td>Black/Olive</td>
</tr>
<tr>
<td>Nylon 16mm x 240cm</td>
<td>22kN</td>
<td>MA16240</td>
<td>Black/Olive</td>
</tr>
<tr>
<td>Nylon 26mm x 60cm RFID</td>
<td>30kN</td>
<td>MA2660</td>
<td>Black</td>
</tr>
<tr>
<td>Nylon 26mm x 120cm RFID</td>
<td>30kN</td>
<td>MA26120</td>
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</tr>
<tr>
<td>Nylon 26mm x 240cm RFID</td>
<td>30kN</td>
<td>MA26240</td>
<td>Black</td>
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</tbody>
</table>
Rope Lanyards

DMM rope lanyards with sewn terminations are durable, versatile, and ideal for height safety applications. They can be used for work restraint, work positioning, and fall arrest systems when combined with an appropriate device or energy absorber.

Sewn terminations are stronger than knots, which can dramatically reduce a rope’s breaking load. They are also less bulky, making it easier to pass the termination through anchors and constrictions. Unlike knots and splices, sewn terminations have a consistent, guaranteed minimum strain of 22kN.

All of our lanyards are sewn in our factory in Wales using advanced CNC technology and precision sewing patterns. This means our lanyards are made to the same exacting quality as all DMM products.

Wire Strops

The humble wire strop forms the backbone of most ‘short term’ temporary anchor systems. Made from swaged 6mm galvanised steel wire with thimbles to minimise potential of over-tight rope radius damage. PVC tubing protects the sling from its environment and in some cases, the environment from the sling (such as delicate paintwork).

Our final touch is to heat shrink in the swages, minimising the chance of cuts and abrasions from the terminated wire ends.

<table>
<thead>
<tr>
<th>Variant</th>
<th>Length</th>
<th>Strength</th>
<th>Weight</th>
<th>Conformance</th>
<th>Cat no</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wire Lanyard</td>
<td>35cm</td>
<td>24kN</td>
<td>219g</td>
<td>&quot;EN 795(b):2012 - EN 354:2010&quot;</td>
<td>SPWS0035</td>
</tr>
<tr>
<td>Wire Lanyard</td>
<td>50cm</td>
<td>24kN</td>
<td>239g</td>
<td>&quot;EN 795(b):2012 - EN 354:2010&quot;</td>
<td>SPWS0050</td>
</tr>
<tr>
<td>Wire Lanyard</td>
<td>100cm</td>
<td>24kN</td>
<td>392g</td>
<td>&quot;EN 795(b):2012 - EN 354:2010S&quot;</td>
<td>SPWS010</td>
</tr>
<tr>
<td>Wire Lanyard</td>
<td>150cm</td>
<td>24kN</td>
<td>525g</td>
<td>&quot;EN 795(b):2012 - EN 354:2010S&quot;</td>
<td>SPWS015</td>
</tr>
<tr>
<td>Wire Lanyard</td>
<td>200cm</td>
<td>24kN</td>
<td>659g</td>
<td>&quot;EN 795(b):2012 - EN 354:2010S&quot;</td>
<td>SPWS02</td>
</tr>
</tbody>
</table>
Talon

DMM’s steep earth anchor, the Talon, is the ideal solution for rigging in situations where the only anchor option is the earth itself.

It was developed with input from mountain rescue teams, Cockermouth Mountain Rescue Team (MRT) in particular, for back-roping stretchers on steep ground where the consequences of a failure are not catastrophic.

Although there is no strength rating for this product, mountain rescue teams achieved strength ratings greater than 5 kN from a single set during field trials. Multiple Talon anchors, when equalised, will increase the holding power.

Each of the Talon’s five legs are laser cut from sheet aluminium giving an excellent strength-to-weight ratio. The flat head of each leg provides an ideal surface for hammering with a ‘soft-headed’ hammer such as DMM’s new Claw steep earth axe while a 11 mm Dynatec sling attachment point is used for strength, flexibility and low-weight.

Servicing from DMM is available in the event that any individual legs become damaged or the Dynatec loop requires replacing. Available from stock in red but phone to discuss if you require production in other colours.

The serrated top edges create a standing platform with improved grip underfoot when it is weighted by an individual for added security. This is standard procedure for Cockermouth MRT when skidding a stretcher: working as a two-person team at the belay station, with the individual standing on the anchor relaying communications back from the stretcher party on required back-rope speeds to the rope controller.

Clearly, the holding power of the Talon anchor is dependent on the integrity of the substrate in which it is being used, as well as it being correctly installed and orientated in the first place. When the Talon is not in use, a retaining pin fastens it together, so it can conveniently be carried on a harness or stowed in a kit bag.
Steep Earth Axes

Based on the key components of the reliable DMM Fly axe, the Claw has been designed for specialist personnel operating on steep ground where an absence of handholds makes movement difficult. Two versions are available, an axe with a broad adze for excavation work, and a hammer. The hammer version has a soft replaceable Thor head which is sympathetic to our aluminium ground anchor, the Talon. The soft head is also significantly quieter when placing gear.

The pick on both versions has a T-Shaped cross section that increases surface area, reducing the risk of ‘pull through’ and increasing safety and stability, especially when the operator is heavily laden.
Duckbill Drive-in Anchors

The Duckbill Stealth are drive-in earth anchors that are particularly useful in situations where a substantial anchor needs to be placed in earth or soil. The anchor can be placed quickly and simply and only needs hand held equipment for installation. The chisel drive point on the head and streamline shape means that it penetrates hard or compact earth easily, but once locked into position with a pull provides good holding power even in soft soil.

The Stealth anchors are designed to cover a wide range of anchoring solutions for Quadpod hauls, CASEVAC and roller haulage.

<table>
<thead>
<tr>
<th>Approximate Anchor Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil Type</td>
</tr>
<tr>
<td>SPT/CPT</td>
</tr>
<tr>
<td>Shear angle</td>
</tr>
<tr>
<td>Anchor</td>
</tr>
<tr>
<td>S4</td>
</tr>
<tr>
<td>S6</td>
</tr>
<tr>
<td>S8</td>
</tr>
</tbody>
</table>

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Helical Anchors

Helical screw-in anchors are a quick, simple and reliable means of creating secure fixing points in the ground. Manufactured from galvanised steel, they consist of an anchor shaft with an angled disk at the lower end. The upper end of the shaft has a closed eye for connections to the system.

Installation is either by hand or by powered augering. The achievable holding capacity is dependent upon the ground conditions but with the correct anchor in the right conditions holding capacities of up to 50kNs are attainable. The anchors can be unscrewed for re-use at other locations.

Anchor Selection

The length and diameter of the shaft and the diameter and thickness of the anchor disk are dependent upon the anchor's purpose, the screw-in depth and the required holding capacity.

<table>
<thead>
<tr>
<th>Diameter of Anchor (mm)</th>
<th>Installation Depth (mm)</th>
<th>Heavy Soil/ Clay/Dried Out Ground</th>
<th>Gravel mixed with Sand/ Medium Heavy Ground</th>
<th>Coarse Grained, well settled Soil</th>
<th>Soft Clay/ Agglomerate soils</th>
<th>Fine grained/Low consistency Ground</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>400</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>100</td>
<td>800</td>
<td>9</td>
<td>8</td>
<td>6</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>150</td>
<td>1200</td>
<td>17</td>
<td>14</td>
<td>11</td>
<td>9</td>
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<td>200</td>
<td>1500</td>
<td>44</td>
<td>39</td>
<td>35</td>
<td>26</td>
<td>17</td>
</tr>
</tbody>
</table>
Deadman

Decent belays in classic snow gullies can be hard to find. Sometimes on a big open snow slope there will be no other possible options beyond burying your axes, and that won’t work very well unless the snow is hard.

The Deadman gives you an element of security in some of the most insecure places. Make sure you’ve got one clipped to the back of your harness the next time you head out winter climbing.

Top tip: It is imperative that the Deadman is placed correctly to ensure maximum holding power. A well-placed Deadman will dig itself deeper under load, whilst a poorly placed device will pull out very easily.

FEATURES

- Snow protection device
- Lightweight design
- Stainless steel striker plate
- 4mm galvanised wire
- Epoxy powder coated for durability

Petzl Laser Light Ice Screw

Great screws that are unbelievably light. They work exceptionally well, rack well and weigh next to nothing. They are available in 3 sizes: 13cm, 17cm and 22cm with stated weights of 91g, 100g and 110g.

The tube of the screw is aluminium and only the teeth are steel. The steel tip sits inside the aluminium tube, and sticks out, meaning the tips are sharp steel, and you can sharpen them like any normal screw.

The head has a very low profile and is easy to grab at any angle, meaning starting the screws off is a breeze and it also doesn't get impeded by featured ice. The head has a very neat fold-out winding handle that is colour-coded to ease size identification, and when it is folded out it is a good size and easy to use.

The tip is fantastic and bites in to the ice brilliantly, one of the best on test.
PULLEYS, HAULING, LOWERING & RIGGING
Pulleys, Hauling, Lowering and Rigging

DMM have developed a range of load management systems and devices which offer customers solutions when faced with difficult and complex hauling and lowering situations.

The range can handle a wide range of duties from using the heavy duty RPM system to haul a Quadbike out of a ditch to the CTOMS micro system that allows users to create 9:1 systems with a minimal weight burden.

The new Revolver Rig is a stand-out product that is a multifunctional carabiner with in-built pulley sheaves that can be easily incorporated into systems to minimize friction and can be built up into a compact 4:1 hauling system.
PULLEYS, HAULING, LOWERING AND RIGGING RANGE OVERVIEW

RPM Shackle System
Heavy duty and efficient hauling system

Revolver Rig System
Friction reducing carabiner and pulley system

Gyro Single Sheave and Double Sheave
Modular range with single and double sheaves with Prusik minding options

Triple Attach
Rapide Pulley
Very versatile swing cheek pulleys

Pinto Pulleys
Fixed side plate pulleys

CTOMS Prodigy Pulleys
Micro rope system with single and double sheave pulleys with Prusik minding options

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PULLEYS, HAULING, LOWERING AND RIGGING RANGE OVERVIEW

Swivels

- **Axis Swivel**
  - Strong and compact

- **Mini Swivel**
  - Our smallest swivel

- **Focus**
  - Swivels with a shackle incorporated

- **Nexus**
  - Swivels with shackles at either end

Rigging Plates/Rings

- **Bat Plates**
  - 4 sizes of textile friendly rigging plate

Accessories - Configuration Aids

- **Wallis**
- **Grommet**
- **Prestin**

Quodpod

Lyon Obalisk

Versatile rescue and confined space rigging

HELIXTACTICAL.COM
RPM Shackle System

The RPM System is a high strength, modular pulley and shackle system that gives a 4:1 mechanical advantage and increased efficiency when lifting, lowering, moving, or controlling a load.

It can be used to haul or lower supplies or men from either end of the rope system and is strong enough for heavy work such as pulling Quad bikes out of ditches.

The compact design makes it suitable for applications with restricted headroom, such as Urban Search and Rescue (USAR), silo/manhole rescue, and use with tripods.

A range of different cartridges fit the modular RPM bodies. A single sheave cartridge accepts a single rope of up to 16mm diameter, or two 11mm ropes. A double sheave cartridge accepts an 11mm rope reeved twice. The Rigging Plate cartridge allows additional components to be rigged above or below an RPM body.

The Twin body RPM allows complex rigging set ups such as backed up trolley systems with lifting and lowering capacity.

- Compact system – only 32cm from end to end when compressed
- Modular - cartridges can be exchanged to reconfigure the RPM system for a wide range of uses
- Dual control - Prusik can be installed at either end of system, for control by either operator being lowered, operator at top anchor, or both operators simultaneously
- RPM bodies feature swivel components for torsion resistance
- Bespoke eye-to-eye friction hitch cord is matched to side plates for effective Prusik minding function with minimum ‘sit back’ between lifts.
- Low stretch 10mm cord and sealed ball bearings in sheaves ensure efficient hauling
- Easy-to-use locking pins for simple connection/disconnection of friction hitch cord
- Available in 15m or 30m rope length versions, certified to the Machinery Directive 2006/42/EC Specification
- Rated to 50kN MBL and 10kN WLL
Revolver Rig Systems

The Revolver Rig brings industrial strength and performance to our innovative pulley wheel-connector combo to give an incredibly versatile connector that can be used in any running rope system to increase efficiency.

The Revolver Rig comes into its own when flexibility and efficiency are paramount, and will excel in improvised rescues, compact mechanical advantage systems and reducing friction in rigging featuring running ropes.

Integrating a highly efficient pulley wheel into a connector that resists cross loading creates a secure, adaptable device that increases options when improvising or creating complex rigging set ups, while reducing the number of devices the user needs to carry to construct such configurations.

THe Revolver Rig comes with either bushings or high efficiency roller bearings.

- Single body design with integrated pulley and attachment becket
- Full cross-section top bar for excellent wear resistance
- Spine design minimises the chances of connected devices moving into cross-loading orientations
- Clean, taperlock nose increases gate strength in side-loading scenarios
- Tapered shape that ensures ropes seat correctly and consistently on the sheave
- Strength - 25kN/ 9kN/ 7kN
- Sheave WLL - 5kN
- Dimensions - Length - 133mm/ Width - 80mm/ Depth - 30mm
- Sheave Diameter - 22mm
- Maximum Rope Diameter - 14mm
- Becket Clip-in Size - 8mm
- Weight - (with bearings) 189g / (with bushings) 187g
- EN12275:2013 B / EN362:2004 B and T
- EN12278:2007
- NFPA 1983 (12 ED) Type T pulleystandard
Gyro Single Sheave Pulley

The Gyro is a high strength, compact, durable, and textile friendly pulley. Developed in conjunction with our industry partners, it offers excellent performance in any rigging scenario.

The single sheave Gyro is available with either a rounded bottom edge or a straight (prusik minding) edge to allow use with a prusik knot load capture.

All feature sealed roller bearings and rope friendly fairleads to maximise efficiency.

The pulleys are certified to EN12278 and have a WLL of 10kN

- Sheave diameter = 38mm
- Compact design reduces system height
- Sealed roller bearings for high efficiency
- Rope friendly fairleads maintain pulley efficiency when used in sub-optimal orientation
- Big bore axles resist side plate leverage
Gyro Double Sheave Pulley

Compact, lightweight double pulley made by DMM with edged side parts to push prusik knots, with eye for pulley blocks and rounded, rope-friendly fairleads. The attachment loop is big enough for three carabiners.

Two double Gyros can be used together to create a very compact 4:1 or 5:1 pulley system with a 10kN WLL that weighs less than a kilo.

The pulley uses sealed roller bearings and rope friendly fairleads to maximise efficiency. Plus the design shares the loads on the axles with the sideplates to help maximise the weight to strength ratio.

The pulleys are certified to EN12278

› Sheave diameter = 38mm
› Compact design reduces system height
› Sealed roller bearings for high efficiency
› Prusik minding sheaves effectively tend prusiks
› Textile compatible becket for additional attachment options
› Dual sheaves allow increased mechanical advantage
› Rope friendly fairleads maintain pulley efficiency when used in sub-optimal orientation
› Big bore axles resist side plate leverage
Triple Attach Pulley

The DMM Hitch Climber Rapide Triple Attachment Pulley is an even more efficient version of our popular Hitch Climber Pulley. It combines a small three hole rigging plate with a pulley as before, but the pulley spins on a high efficiency roller bearing making it even smoother and therefore much more efficient in a full range of applications. It can obviously be used as a standard pulley, but the additional holes allow it to be guided or controlled without adding any complication into the system.

All the edges are rope and textile friendly allowing direct attachment that minimises bulk and maximises versatility.

A deep grooved, contact sealed roller bearing gives maximum efficiency and minimal maintenance requirement.

- Triple attachment points for specialist rigging applications
- Hot forged aluminium side plates provide strength and durability
- Heat treated stainless steel spindles for high strength and corrosion resistance
- High efficiency roller bearing for ultra smooth operation
- Anodised to BS EN 7599:2010 AA10 Sealed for corrosion protection

Pinto Rig Pulley

Hot forged aluminium side plates provide strength and durability, whilst the heat treated stainless steel spindles offer high strength and corrosion resistance. This pulley has textile friendly surfaces and pre-lubricated sintered bronze bearings for ultra smooth operation. It also has riveted and tamper-proof assembly.

Clip, hitch, splice or thread the anchor holes or the beckett to give numerous work and rescue configurations (textile attachments can help minimise any torsional build up in closed systems).

Spacers are available to support the anchor holes when textile connecting elements compress the side plates.

- Hot forged aluminium side plates provide strength and durability
- Heat treated stainless steel spindles for high strength and corrosion resistance
- High efficiency roller bearing for ultra smooth operation
- Load bearing beckett
- Anodised to BS EN 7599:2010 AA10 Sealed for corrosion protection
CTOMS Prodigy Pulley System

The CTOMS range of micro pulleys and pulley systems incorporates impressive strength and efficiency into a tiny package that makes setting up hauling systems very fast and very intuitive.

The system is based around the 3 Prodigy pulleys - a single sheave pulley plus prusik minding single and double sheave pulleys.

The single pulleys weigh less than 50g, have a strength of 24kN and use bearings that give 95% efficiency.

The pulleys are designed for the TRACE 6.5mm rope system, but will work well with larger diameter ropes up to 11mm.

When combined with the CTOMS QA and QD it can quickly be built into a modular 4:1 to 9:1 pulley system.

Features:

› Strength: (24 kN Rating) / (18 kN Tangential Rating);
› 95% Efficient: (Using 6 mm TRACE™ Systems rope and 100 kg load);
› No efficiency reduction after loading of 8.7 kN; ≥9 mm rope if you’re using it with other than TRACE™ Systems
› Pulley eye accepts up to 3 carabiners (DMM™ Phantom Screw Gate) for use on a high-line, etc;
› Lightweight: single sheave pulley is only 43 grams.
**Axis Swivels**

DMM Axis Swivels have been designed to be smooth, compact and incredibly strong. Made from hot forged, CNC machined bodies with large bearings and heat treated, stainless steel axles, They can be incorporated into rope systems that are connected to heavy loads and minimise any twisting being introduced to the system as the load moves. This helps keep the efficiency of the system as high as possible.

Features:
- Hot forged and CNC machined from heat treated, 7075 T6 Aluminium alloy
- Stainless Steel axles
- Colour anodised to BS EN 7599:2010 AA10
- Sealed for corrosion protection and identification
- Conforms to EN 354:2010
- Also certified to NFPA 1983 (2012 Ed)
- Class G Textile friendly attachment points with large radii
- Variant Strength

<table>
<thead>
<tr>
<th>Variant</th>
<th>Strength</th>
<th>WLL</th>
<th>Dimensions</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axis Swivel Large</td>
<td>50kN</td>
<td>10kN</td>
<td>96 x 60 x 39mm</td>
<td>184g</td>
</tr>
</tbody>
</table>

**Mini Swivel**

DMM Mini Swivels are compact solutions to torsion management scenarios where maximising efficient use of limited space is crucial. They can be used as a swivel between two connectors, textile elements, or a combination of both. They work really well on personal lanyards and equipment lanyards to stop twisting. Engineered to achieve high strengths and outstanding functionality using CNC’d components. Internally a high quality bearing ensures smooth and reliable rotation.

Features:
- Textile-friendly
- User maintainable grease port for bearing longevity
- Double locking high tensile stainless steel axles for durability
- Roller thrust bearings for smooth efficiency

<table>
<thead>
<tr>
<th>Variant</th>
<th>Strength</th>
<th>WLL</th>
<th>Dimensions</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mini Swivel</td>
<td>26kN</td>
<td>3kN</td>
<td>65 x 31 x 21mm</td>
<td>17g</td>
</tr>
</tbody>
</table>

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**LOCKING CARABINERS | STEEL RIGGING | PULLEYS, HAULING, LOWERING AND RIGGING**

| HELIXTACTICAL.COM |
**Focus - Combined Swivel and Shackle**

The Focus is a directly connectable swivels that features both swivel and shackle attachments to give you increased connection options.

The Focus is available with small or large shackles. The small D-shaped shackle of the Focus S allows for accurate configuration of connectors, while the bow-shaped design of the large shackle on the Focus L eliminates cross loading issues and allows multiple attachment points, ideal for complex rigging setups.

- Textile-friendly CNC’d from aluminium
- User maintainable grease port for bearing longevity
- Double locking high tensile stainless steel axles for durability
- Roller thrust bearings for smooth efficiency
- Shackle uses 4mm and 2mm Allen keys to ensure secure locking

<table>
<thead>
<tr>
<th>Variant</th>
<th>Strength</th>
<th>WLL</th>
<th>Dimensions</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus S</td>
<td>26kN</td>
<td>3kN</td>
<td>76 x 36 x 21mm</td>
<td>63g</td>
</tr>
<tr>
<td>Focus L</td>
<td>26kN</td>
<td>3kN</td>
<td>82 x 48 x 21mm</td>
<td>70g</td>
</tr>
</tbody>
</table>

**Nexus - Combined Swivel and Double Shackle**

Nexus range is a modular, directly connectable swivel system that delivers maximum freedom of movement to and from the device. Shackles can be swapped out at either end to give you a huge range of connection options to cater to the requirements of almost any torsion management scenario. The shackles themselves are connected by a high performance swivel that allows efficient torsion management.

- Textile-friendly with hot forged aluminum shackles and CNC’d swivels
- User maintainable grease port for bearing longevity
- Double locking high tensile stainless steel axles for durability
- Roller thrust bearings for smooth efficiency
- Patent pending

<table>
<thead>
<tr>
<th>Variant</th>
<th>Strength</th>
<th>WLL</th>
<th>Dimensions</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nexus-1</td>
<td>26kN</td>
<td>3kN</td>
<td>102 x 48 x 27mm</td>
<td>99g</td>
</tr>
<tr>
<td>Nexus-2</td>
<td>26kN</td>
<td>3kN</td>
<td>97 x 36 x 27mm</td>
<td>92g</td>
</tr>
<tr>
<td>Nexus-3</td>
<td>26kN</td>
<td>3kN</td>
<td>108 x 48 x 27mm</td>
<td>108g</td>
</tr>
</tbody>
</table>
Batplates

Batplates are a series of 4 rigging plates that were developed with input from professionals in the rescue industry - these plates raise the bar in terms of design, performance and strength. Precision machining and heat treatment make them super strong, light and incredibly versatile. The ‘Bat’ shape minimises height loss in complex rigging scenarios and generous radii allow direct attachment of textiles and rope as well as connectors.

- Four sizes for all rigging configurations
- Textile friendly surfaces with large radii
- Centralised connection point for stable rescuer attachment
- CNC machined from high strength heat treated aluminium
- Anodised to BS EN 7599:2010 AA10
- Sealed for corrosion protection
- Conforms to NFPA 1983 (2012 Ed) Class G

<table>
<thead>
<tr>
<th>Variant</th>
<th>Strength</th>
<th>WLL</th>
<th>Dimensions</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>X Small Bat Plate</td>
<td>36kN</td>
<td>7kN</td>
<td>62 x 62 x 10mm</td>
<td>37g</td>
</tr>
<tr>
<td>Small Bat Plate</td>
<td>60kN</td>
<td>12kN</td>
<td>129 x 95 x 10mm</td>
<td>159g</td>
</tr>
</tbody>
</table>

HELIXTACTICAL.COM
Lyon Quadpod

The Obelisk Quadpod has been designed for CASEVAC, hauling and lowering operations on steep, rough and remote terrain. It is constructed from stainless steel and aluminium to give a combination of strength and lightweight. The Obelisk uses an adjustable length crosshead bar so that loads of different sizes can be maneuvered through the legs making smooth edge transitions easier. Multi-position main anchor point with option for a second anchor point to be fitted if required.

Features:

› Tool-less locking of leg sections using captive ‘Push pins’.
› ‘Swivel and lock’ feet giving a rapid change between load-spreading surface and stainless steel spike.
› Dedicated guying points for additional security.
› Max height under swivel anchor point: 2200 mm.
› Max width with long cross-head: 400 mm
› Weight including all accessories: 22 kg
› EN 795:2012 type B, CEN/TS 16415:2013 type B
ROPE LAUNCHERS
ROPE LAUNCHERS

The REBS® Launchers enables users to access high-up entry points by launching a grapnel hook on to a permanent fixture and then ascending ropes or ladders fixed from that point.

The Launcher is perfect for entering buildings, bridges, ships, platforms or getting up cliffs as well as crossing ravines or rivers.
Standard Launcher

The Standard REBS Pneumatic Launcher is the most powerful launcher on the market. It’s a multi-shot, diveable pneumatic line launcher that gives the operator a 100m / 300ft tactical access capability. The system can be transported subsurface for dive operations or attached rigidly to a deck mount for boat deployment.

Powered by a 4,500 psi pneumatic cylinder, the launcher accurately delivers a titanium/stainless steel grapnel on target over railings or through windows to establish an anchor point. The unique spring loaded grapnel arms provide superior route finding, grip, and strength.

The REBS® Launcher is powered with pressurized air, which facilitates low noise operation and enables easy reloading from ordinary diving bottles. The latest launchers have a new noise reducing piston mechanism that reduces both recoil and sound levels to 19-22 dB, providing both tactical and HSE benefits.

The grapnel hooks in high strength aluminum alloy and titanium reach distances of 50 meters vertically and have a horizontal distance of 100 meters. A climbing ladder can be launched as high as 25 meters. The power of the launcher can be preset on the fly by adjusting the pressure using the pressure gauge. The Launcher can be used several times at various heights for each tank refill and the number of shots between refills depends on the pressure used for each shot.

Specifications

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum height w/ Grapnel hook</td>
<td>50 m / 164 ft</td>
</tr>
<tr>
<td>Maximum height w/ Rope ladder</td>
<td>25 m / 82 ft</td>
</tr>
<tr>
<td>Maximum length w/ Grapnel hook</td>
<td>100 m / 328.1 ft</td>
</tr>
</tbody>
</table>

For ease of transportation and increased comfort at very high pressures we provide a REBS Launcher stand platform which can be bolted to any flat surface and we also provide custom interfaces for any boat or vehicle.
REBS® LAUNCHER SYSTEM OVERVIEW - MOST COMMON PARTS

- REBS® Launcher (Basic Unit) BE002442
- 1L Composite Bottle w/ Valve V.2 BE003711
- Rope / Ladder Container BE003674
- Launcher Grapnel w/ Titanium Arms BE002513
- 50m Dyneema Rope Black BE002507
- Toolkit for Launcher / Grapnel BE002537
- Fill Line Valve V.2 BE004009
- External Air Bottle Use System V.2 BE003752
- Transportation Box BE002480
- 25 m Rope Ladder w/ Alu. Steps BE002477
- Launcher Mount Kit BE000113
- Launcher Piston kit BE000038
Compact Launcher

The Compact Launcher is a smaller version of the larger REBS® Launcher, and has been developed for more versatile use than the big brother. Whereas the REBS® Launcher is designed to be the ultimate boarding tool with unmatched performance, the Compact Launcher is designed to be a light weight, compact in size line thrower for many different applications.

Based on end user experience from the bigger REBS® launcher and customer requests, the Compact Launcher with collapsible stock was designed. The system is very effective to use in many scenarios including diving, boat-based and land-based climbing operations.

The Compact launcher is powered by pressured air and the 0.35 L bottle can be easily be re-filled from a normal 300 bar diving bottle. Lower pressure diving systems can also be used to charge the tank. Users can set the firing pressure on the fly depending on the height needed. A Compact rope container can be mounted on the barrel and fits 35m of 8 mm rope, or 16 ft of rope ladder. Multiple shots can be fired from a single bottle charge.

As per its larger brother the Compact Launcher is salt water resistant, is designed for use in seawater environments and can be used during diving.
COMPACT LAUNCHER SPECIFICATIONS

- Weight: 9.7 lbs / 4.4 kg
- Deployed Dimensions: 30.7 in / 78 cm
- Maximum Height w/ Grapnel hook: 35 m / 114.8 ft.
- Maximum height w/ Rope ladder: 16 m / 52.5 ft.
- Deployed Dimensions: 30.7 in / 78 cm
REBS® COMPACT LAUNCHER SYSTEM OVERVIEW - MOST COMMON PARTS

- REBS® Compact Launcher (Basic Unit) BE003749
- 0.35 L Aluminum Bottle w/ Valve BE004204
- Rope / Ladder Container Compact Launcher BE004262
- Compact Launcher Grapnel BE007838
- 30 m Dyneema Rope Black BE004343
- Maintenance Kit Compact Launcher BE00487
- Fill Line Valve Compact Launcher BE004263
- 16 m Rope Ladder w/ Alu. Steps BE002458
- Storage and Transportation Box BE004342
TACTICAL LADDERS
Tactical assault ladders are a critical bit of kit for operating quickly to gain height, move over obstacles or reach an entry point.

We offer a diverse suite of ladders optimized for urban, maritime, and rugged terrain use in a tactical environment.

We offer both rigid and flexible ladder systems that are light, portable, tough and easily deployable in the field.
TACTICAL LADDERS - RANGE OVERVIEW

Rigid Ladders

Double Stile

CML Ladder

Atlas Ladder

Specifications

<table>
<thead>
<tr>
<th></th>
<th>MBL (Hook Suspended)</th>
<th>Section weight</th>
<th>Section Length</th>
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<tbody>
<tr>
<td></td>
<td>1000 kg / 2204 lbs</td>
<td>1,85 kg / 3.7 lbs</td>
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<table>
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Test UPL Carbon Ladder Tactical Ladder Units

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<th>UPL</th>
<th>Carbon Ladder</th>
<th>Tactical Ladder</th>
<th>Units</th>
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<td>kg</td>
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<tr>
<td>Flex</td>
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<td>10</td>
<td>10</td>
<td>mm @ ~ 125 Kg</td>
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<td>Crushing</td>
<td>490</td>
<td>350</td>
<td>600+</td>
<td>Kg @ R=3mm / d=15mm</td>
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<tr>
<td>Bending</td>
<td>147</td>
<td>146.5</td>
<td>120</td>
<td>mm @ 20 Kg (incl. Joint)</td>
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<tr>
<td>Weight</td>
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<td>2418</td>
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<td>g</td>
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<td>Effective Length</td>
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<td>1700</td>
<td>1553</td>
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<td>Weight / m</td>
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<td>1,487</td>
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<td>Stackability</td>
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<td>No</td>
<td>No</td>
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<td>Salt water resistance</td>
<td>Yes</td>
<td>Yes</td>
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<td></td>
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<tr>
<td>Diving suitability</td>
<td>Yes</td>
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<td>11</td>
<td>11</td>
<td>10</td>
<td>8.5</td>
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</table>

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TACTICAL LADDERS RANGE OVERVIEW

WIRE LADDERS & ACCESSORIES

REBS Wire ladder
- Highest strength to weight ratio of any wire ladder

Lyon Wire ladder
- Wire ladder available in custom configurations

Fibrelight Assault Ladder V2
- Strong, light, noiseless and can be joined together

Rebs Rope Ladder
- The recommended ladder for the REBS launchers

Baudet ks-10
- Wire Cutters

Wire Reel
REBS CARBON MULTI LADDER (CML)

The REBS® Carbon Multi Ladder is a rigid, modular and multi-functional ladder system with a dual rail design. The system uses modular 90cm sections that can be locked together to create a ladder, stretcher or bridge.

The Carbon Multi Ladder can be used in multiple configurations such as being hung from an attachment point via a hook or hooks, leant against a wall, bridging a gap between buildings/containers or as a rigid stretcher with handles and a harness that holds the casualty securely.

It is manufactured from carbon fibre for a combination of excellent rigidity combined with light weight. The design was derived from the same advanced carbon fibre moulding techniques that are used to manufacture modern bike frames and optimizes carbon fibre’s properties to create a very strong monocoque frame where each 90cm section is moulded in one piece to minimize joins and weak spots. The ladder rungs are wide enough to easily get two boots onto a rung and all of the surfaces have a tough, high friction coating to make use as secure as possible.

The MBL is 1000kg when suspended by hooks and each 90cm section weighs 1.7kg.
A lightweight, rigid stretcher can be created by connecting two sections together and adding the 4 optional stretcher handles. The handles connect and disconnect quickly to allow both easy carrying and then the ability to fit the stretcher into tight spaces or a helicopter.
The frames versatility is maximized with the ability for it to be connected to a wide variety of accessories that includes hooks, feet, A-frames, stand-offs and litter handles. This allows the ladder to be optimised for a wide variety of environments and conditions. The CML accessories have full compatibility with the range of REBS Tactical Hooks that are also used on the REBS Tactical Ladder (far right).

The ladder segments and its components are rapidly and easily assembled with stainless steel quick release pins.

The handles provide good grip whilst also keeping the stretcher off the ground. An optional harness also allows the casualty to be restrained in vertical ops.

The CML is also designed to work with the REBS wire ladders to allow extra length to be added and adding a flexible component that won't dislodge the top placement if the ground is unstable or not flat.

The Carbon Multi Ladder system packs into a low-volume package which is easily carried in a rucksack or with the custom CML rucksack.

The REBS® Carbon Multi Ladder is a versatile choice for urban and other tactical access applications and can be built into custom packages.

EMERGENCY EVACUATIONS

The stretcher handles keeps the stretcher off the ground and protect the hands of the operators carrying it. The hand protectors double as runners which makes possible single handed emergency evacuations by pulling the stretcher as a sled. The stretcher bed has an integrated lifting harness which enables vertical lifts of patient in stretcher, e.g. for helicopter evacuation.

The Carbon Multi Ladder system packs into a low-volume package which is easily carried in a rucksack or with the custom CML rucksack.

The REBS® Carbon Multi Ladder is a versatile choice for urban and other tactical access applications and can be built into custom packages.

Specifications

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MBL (Hook Suspended)</td>
<td>1000 kg / 2204 lbs</td>
</tr>
<tr>
<td>Section weight</td>
<td>1.7 kg / 3.7 lbs</td>
</tr>
<tr>
<td>Section Length</td>
<td>0.9 m / 3.0 ft</td>
</tr>
<tr>
<td>Deployed Dimensions</td>
<td>35.4 x 17.7 x 5.5 in / 90 x 45 x 14 cm</td>
</tr>
</tbody>
</table>
TACTICAL LADDERS - REBS CARBON MULTI LADDER

CML COMPONENTS

- CML Complete Section w/ 2x Quick Release
  BE007564

- CML Top Adapter w/ Pigg
  BE007630

- Rubber Top
  BE007565

- Rubber Foot
  BE007566

- Wall Standoff
  BE007599

- CML Backpack
  BE007687

- CML Angle Connector Kit
  BE007569

- Left Side
  BE007691

- Right Side
  BE007692

- Bridge line kit
  BE007786

- CML Top Adapter w/ Pigg, Step Fork & Rope Clamp
  BE007567

- Quick Release Pin
  BE007689

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TACTICAL LADDERS - REBS CARBON MULTI LADDER

CML COMPONENTS

- CML TA Step Fork BE007596
- CML TA Wire Clamp BE007597
- CML Stretcher Handle Kit BE007570
- Female Left BE007586
- Female Right BE007587
- Male Left BE007592
- Male Right BE007590
- Tactical Hook 7" / 10" BE004512 / BE005746
- Tactical Dual Hook BE004514
- Tactical Ladder Flexi Element BE004636
- Wide Wire Ladder 1,5 m BE002491

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Atlas Tactical Ladder (ATL)

The Atlas Tactical Ladder (ATL) is a high strength aluminum collapsible bridging, ladder, litter system that is ideal for jump, maritime, and urban tactical access mission requirements. The ATL can be joined to reach heights of 5-6m.

The ladder was designed in conjunction with USSOCOM. The ATL system features a sophisticated design optimized for an exceptionally high strength-to-weight ratio that offers durability, versatility, and incredibly light weight without sacrificing strength or height.

The innovative, patented locking joint design enables not just the ability to rapidly deploy and stow the ATL, but also the ability to separate the assembly into smaller sections to optimize load carry and length. This means that the ATL system's weight can be distributed among several people and rapidly reassembled on-site. It can also be configured for shorter lengths or deployed as several ladders, making it a single solution for many different missions.

The ATL is rated for loads up to 160kg/350 lbs and the 9m/28 foot full-length ladder weighs less than 20kg/45 lbs.

A key feature of the ATL is that when collapsed the system fits entirely within the torso's profile enabling unimpeded freedom of movement even when prone: ideal for urban and confined operations. The space within frame also provides storage and protection for additional equipment.

- Weight: <10 lbs / <4.5 kg
- Length: 7 ft (80 in) /2.1m (213 cm) rung to rung
- Stowed dimensions: 16 x 19 x 9 in / 41 x 48 x 23 cm
- Load capacity: 400 lbs / 181 kg (all configurations)
- Deployment time: <5 seconds
- Secondary positive joint locks can automatically engage on deployment
- Joints manually lockable for noise control
- Stow time: <10 seconds
- Tool free joining of up to 2 full ATL segments to yield 15 ft / 4.6 m ladder
- Compliant with relevant portions of NFPA 1931015, ANSI-ASCA14.2-2007
Atlas Tactical Ladder (ATL)
The Ultralight Pole Ladder (UPL) is REBS® latest single stile ladder. It is lighter, easier to stack and carry, and stronger. A lightweight rigid section ladder that is excellent for both urban and marine boarding and entering.

The UPL is delivered in 1.7 m sections. Depending on the hook used, the system can reach up to 11 m (36 ft) The total length is achieved by connecting (top to bottom): hook, top adapter, five sections of 1.7 m each, an optional single step and a 1.5 m wire ladder. Each section is molded using the latest in carbon fiber molding technology. A coat of durable non-slip paint has been applied to the steps. This layer is easy to repaint when necessary, increasing the lifespan of the ladders.

The quick connectors make it safe, fast and easy to assemble the sections together. The modular design makes it easy to assemble the required amount of sections to make up the right length for the task at hand.
REBS® ULTRALIGHT POLE LADDER

The ladder has rubber tipped standoffs that provide good space for hands and feet which increase climbing comfort and efficiency.

By attaching a flexible wire ladder at the bottom of the ladder sections, an additional 1.5 m of reach is gained. In addition to increasing the total length, the wire ladder also keeps the lowest step closer to the ground.

In marine environments the wire ladder will provide additional reach as well as increased operational safety. The RIB / boarding craft will not be able to knock the ladder off its hold when it is riding on the waves.

- Carbon fiber layup for
- High strength and flex
- Black paint & clear top coat

Specifications

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical system MBL*</td>
<td>1200 kg / 2645 lbs</td>
</tr>
<tr>
<td>Typical reach</td>
<td>11 m / 33 ft</td>
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<tr>
<td>Section weight</td>
<td>1.5 kg / 3.3 lbs</td>
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<tr>
<td>Section length</td>
<td>1.7 m / 5.6 ft</td>
</tr>
</tbody>
</table>

*Depends on load chain setup and usage
TACTICAL LADDERS - ULTRALIGHT POLE LADDER (UPL) SYSTEM OVERVIEW

WIRE LADDERS & ACCESSORIES

1,5 m Wire Ladder
BE002460

Ultralight Pole Ladder Section
BE008007

Tactical Hook 7” / 10”
Strong, light, noiseless and can be joined together

Tactical Hook Dual
The recommended ladder for the REBS launchers

UPL Packages

<table>
<thead>
<tr>
<th>Part Name</th>
<th>Part no.</th>
<th>7” Hook</th>
<th>10” Hook</th>
<th>Dual Hook</th>
</tr>
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<tr>
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<td>-</td>
</tr>
<tr>
<td>Tactical Hook 10”</td>
<td>BE005746</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Tactical Hook Dual</td>
<td>BE004514</td>
<td>-</td>
<td>-</td>
<td>1</td>
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<td>UPL Single step</td>
<td>BE000034</td>
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<td>1</td>
</tr>
<tr>
<td>UPL Top Adapter</td>
<td>BE008148</td>
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<td>1</td>
<td>1</td>
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<tr>
<td>1,5 m Wire Ladder</td>
<td>BE002460</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

HELIXTACTICAL.COM
REBS® Carbon Ladder

The REBS® Carbon Ladder is a light weight, rigid section ladder designed in conjunction with the Norwegian forces for both urban and marine operations.

It was developed to be a strong, tough and light system that can be used in marine operations by both divers and by operators from the deck of a boat or rib. On land, it offers an effective solution for entering buildings through balconies, flat roofs or windows. The system uses sections that are 1.7m or 0.7m long to build up a ladder with a reach of 11m.

The ladder’s construction is based around carbon fiber tubing filled with a closed cell foam core. This foam acts as a flotation aid and gives the sections neutral buoyancy. The sections have reinforced gussets around each step for added strength. Kevlar is then used to provide a final protective layer to the ladder. The whole unit is then covered in the very durable Purapaint, a two-part highly elastic membrane that is ideal for wet conditions. The final production process is covering the steps with an anti-slip material, which gives good grip for both hands and feet.

The Carbon Ladder comes in 1.7 m sections or 0.7 m half sections and depending on the hook being used the system can reach up to 11 m (36 ft.) On the top and bottom of each section there is a titanium quick connector that makes the sections fast and easy to assemble with a quick release ball pin. The ladder has rolling standoffs that provides good space for hands and feet which increase climbing comfort and efficiency.

The modular design makes it easy to assemble the required amount of sections to make up the right length for the task at hand and by attaching a flexible wire ladder at the bottom of the ladder sections an additional 1.5m of reach is gained.

In marine operations the wire ladder also helps stop the rib / boarding vessel from knocking the ladder off its anchor point when it is close to the ship being boarded.

Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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<tbody>
<tr>
<td>MBL</td>
<td>1000 kg / 2204 lbs</td>
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<tr>
<td>Typical Reach</td>
<td>10 m / 39 ft</td>
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<td>Section weight</td>
<td>2.4 kg / 5.3 lbs</td>
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<td>Section Length</td>
<td>1.7 m / 5.6 ft</td>
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**TACTICAL LADDERS - CARBON LADDER**

**CARBON LADDER SYSTEM OVERVIEW**

- **Carbon Ladder Element**
  - 1.7 m BE001679

- **Carbon Ladder Half Section**
  - (+ optional single step)
  - BE002551 (+ BE001680)

- **Dual / Single Titanium Grapnel Hook**
  - Any hook with hulk interface

- **9.5" Single Carbon Fiber Hook**
  - BE002436

- **UPL Top Adapter**

- **Tactical Hook Dual**
  - The recommended ladder for the REBS launchers

[HELIXTACTICAL.COM]
REBS® Tactical Ladder

The REBS® Tactical ladder is a rigid section, modular aluminum ladder that is light, strong and versatile. It consists of multiple segments that are fast and easy to connect together with a quick release pin.

The REBS® Tactical Ladder is a lightweight rigid section ladder that is well suited for both urban and marine boarding and entering. The ladder was designed primarily as a hook and climb ladder and can reach up to 8m with 4 sections and a 1.5m wire ladder attached to the bottom.

The modular design can connect to a range of hooks, vary in length, and include flexible joints and accessories to ensure compliance and reduce the risk of failure.

The Tactical Ladder is very robust and is made from forged and anodized aluminum. The rungs are fastened with dual rivets.

The ladder element, the flexi element, the hooks and all surrounding gear are connected quickly and easily using the fast release pins.

Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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<td>Section Length</td>
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**TACTICAL LADDERS - REBS TACTICAL LADDER**

**SYSTEM OVERVIEW**

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<thead>
<tr>
<th>Tactical Ladder Packages</th>
<th>Part no.</th>
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<tbody>
<tr>
<td>Tactical Ladder Section 1.6 m</td>
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<td>Tactical Hook 7”</td>
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<td>Tactical Hook 10”</td>
<td>BE005746</td>
</tr>
<tr>
<td>Tactical Hook Dual</td>
<td>BE004514</td>
</tr>
<tr>
<td>Tactical Ladder Single Step</td>
<td>BE004515</td>
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<tr>
<td>Tactical Ladder Flexi Element</td>
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<td>Tactical Ladder Wall Support</td>
<td>BE006527</td>
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<td>Tactical Ladder Base Stabilizer</td>
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**Tactical Ladder Packages**

<table>
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<tr>
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<th>7” Hook</th>
<th>10” Hook</th>
<th>Dual Hook</th>
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<td>Tactical Hook 10”</td>
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<td>Tactical Hook Dual</td>
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<tr>
<td>Tactical Ladder Single Step</td>
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<tr>
<td>Tactical Ladder Flexi element w/ QR-Pin</td>
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<td>Soft Bag</td>
<td>BE003342</td>
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<td>1</td>
<td>1</td>
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</table>
REBS® WIRE LADDERS

The new design of the wire ladders has the highest strength to weight ratio of any wire ladder in the world. The wire ladders have been developed with input from professional users and have high-end features for superior performance in tenuous situations.

All ladders are delivered ready to use. The rungs are diamond knurled and provide a durable high friction grip surface. Wire ladders are often used in combination with telescopic poles. The ladders are strong and rugged, but also compact in size, exceptionally light weight, and pack compactly and easily.

Our wire ladders are delivered completely prepared for immediate use. Every ladder is fitted with thimbles, proper connectors and checked and approved before they are put in stock for fast delivery. Wire ladders are kept in stock in the standard lengths: 1.5 m, 5 m, 10 m, 15 m and 20 m (5, 16.5, 23, 33, 49 and 65.5 ft), but custom lengths can be delivered upon request.

The ladder has a market-leading minimum breaking load (MBL) of 1,200 kg. The wire ladder is made with the highest quality components and materials. The Ø3 mm (1/8 in) wire rope and thimble are made from 316 stainless steel and the rungs are black anodized 6082 T6 aluminum.

The rungs are fastened to the wire rope with a innovative and very strong mechanical bond. The bond has been tested to 470 kg on a single side without breaking. All wire ladders are delivered in a black nylon bag as standard.

We also supply a fifi / safety hook that fits onto the wire ladder rungs. step with diamond knurled surface wire rope end with thimble.

Available Lengths

<table>
<thead>
<tr>
<th>Length</th>
<th>Part no.</th>
<th>Weight</th>
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</thead>
<tbody>
<tr>
<td>1.5 m / 4.9 ft</td>
<td>BE002460</td>
<td>0.33 kg / 0.73 lbs</td>
</tr>
<tr>
<td>5 m / 16.4 ft</td>
<td>BE002420</td>
<td>0.92 kg / 2 lbs</td>
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<tr>
<td>7 m / 23 ft</td>
<td>BE002538</td>
<td>1.20 kg / 2.6 lbs</td>
</tr>
<tr>
<td>10 m / 32.8 ft</td>
<td>BE002461</td>
<td>1.75 kg / 3.8 lbs</td>
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<tr>
<td>15 m / 49.2 ft</td>
<td>BE002462</td>
<td>2.43 kg / 5.35 lbs</td>
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<tr>
<td>20 m/ 65.6 ft</td>
<td>BE002463</td>
<td>3.26 kg / 7.2 lbs</td>
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</table>

Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Available lengths</td>
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<td>Wire strength</td>
<td>1200 kg / 2645 lbs eye-eye</td>
</tr>
<tr>
<td>Step MBL</td>
<td>200 kg / 441 lbs (24 mm / 1&quot; center load)</td>
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<tr>
<td>Step width</td>
<td>137 mm / 5.4</td>
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HELIXTACTICAL.COM
FIFI HOOK

The REBS FIFI hook (BE002459) is a small security hook made for use with wire ladders. The wide arch on our fifi hook will spread out the weight of the operator across a bigger portion of the step. This greatly reduces the chance of breaking the steps, compared to an ordinary fifi hook.

The fifi hook connects to your harness and is preferably used with retrieval lines near the chest area so it can be located quickly and hung onto a ladder step. The fifi hook supports the load of the operator and is useful for resting or situations where two free hands are needed. When used with retrieval lines, the user can simply resume climbing and the retrieval lines will pull the hook off the step and return it to its position near the users chest.

The fifi hook is precision machined from a single piece of high performance aluminium alloy. It has a MBL of 500 kg but the limiting factor will be the step MBL which is 270 kg when the fifi hook is placed on the center of the step.
REBS WIDE WIRE LADDER

The wide wire ladder is a good alternative when you want more room for your hands and feet. It is strong, light and easy to climb. The wide wire ladder is also optimized for use with the CML and Pool Ladder.

The wide wire ladder was made to enable a more comfortable climbing movement. Each step has provides a large and flat anti slip surface. The ladder is easy to connect to any rigid ladder and light and easy to carry around.

The steps are made of high quality aluminium alloy. The steps are made with an integrated anti slip profile. The wire is made from 316L stainless steel.
REBS LADDER REEL

The Ladder Reel is used to efficiently operate wire ladders up to 15 m (50 ft) long. Its functional, strong, lightweight design makes it not only perfect for fast operation of wire ladders, but also very useful for transporting and storing them. It features a carabiner hook for securing the ladder to the reel and a snap hook for holding the ladder in place when it is rolled on. A collapsible handle on each side enables fast and precise handling.

The ladder is simply connected to the centre of the empty Ladder Reel with a carabiner and the ladder is then rolled onto the reel. A snap hook is used to secure the ladder in the wound position to ensure it cannot unwind.

Collapsible handles unfold from each side of the reel that then twist and lock into position for winding/unwinding.

The Ladder reel is constructed from rubber castings built onto a sprung steel insert. This ensures high performance, and flexibility with high strength, and the rubber sheath prevents damage and abrasion to surrounding equipment.

- Capacity 15 m / 49 ft
- Weight 3 kg / 6.6 lbs
- Dimensions Ø310 x 175 mm / Ø12.2 x 6.9 in
- Dimensions Ø310 x 175 mm / Ø12.2 x 6.9 in
- Dimensions Ø310 x 175 mm / Ø12.2 x 6.9 in
Lyon Wire Ladders

Lyon manufacture a wide range of bespoke wire ladders with a choice of widths, lengths, rungs, sides and terminations.

The choices are:

- **Width:** Compact Lightweight (150mm wide), Compact Standard (150mm wide) or Wide (270mm wide)
- **Lengths:** 5 or 10m as standard with bespoke lengths up to 20m
- **Sides:** Galvanised or Stainless Steel
- **Rungs:** Plain aluminium alloy, black anodised aluminium with a high grip or GRP.
- **Rung Spacing:** 25cm or 30cm

The following accessories are also available:

- **Ladder Spreader** - If a ladder will be fixed to a single point, a Ladder Spreader should be used. Ladder Spreaders are available in 4 different types to match ladder connection types.
- **Ladder Belay** - Can be used to achieve a suitable anchor when wrapped around fixed structures. Available in swaged eyelet ends or with c-links for Speleo Ladders.
- **Storage & Rapid Deployment Pouch** - Allows ladders to be stored at the point of use ready for immediate deployment.
- **Stand Off’s** - Suitable for GRP fluted rung ladders only, this item keeps ladders away from a wall allowing easier climbing. A pair of stand offs is applied to every third rung of the ladder for vertical hangs. More maybe required if the ladder rests on an inclined/curved surface.
Fibrelight Assault Ladders

The Fibrelight Assault Ladders are advanced flexible sided ladders, where the load is born directly with the side members. The construction provides an incredibly strong yet lightweight solution to the climbing requirements for military and emergency services.

The Assault Ladders are noiseless and as they contain no metal parts. The Assault Ladders are non-conducting and present no radar signal. For operator ease they can also be weight loaded in either direction.

The ladders have been well received by Special Forces worldwide and have seen service with many military and law enforcement units.

The Fibrelight Assault Ladders are available in both single (200mm) and double rung (400mm) widths. They are available in 5, 10, 15 & 20 metre lengths.

The ladders have been tested and the single can be loaded to 275kgs whilst the double can take up to 400kgs. The double rung is faster, more stable and more comfortable to climb. Pairs of ladders can be linked together to form double lengths.

NSN CODES:
- Single Rung (10m) 4210-99-836-872
- Double Rung (10m) 4210-99-583-0972

REBS Rope Ladders

A rope ladder with aluminum steps. Super compact in size and low weight. Can be used inside the Launchers container or with our other poles. It is developed with input from professional users and has high end features for maximum performance.

The rope ladder is used where a ladder with the least size and weight is required. It is supplied with our launchers as a standard part of the launcher packages.

The Launcher is able to fire a hook with rope ladder 25 meters (82 ft) vertically, and the Compact Launcher is able to achieve a 16 m (53 ft) vertical placement. The rope ladder features high tensile fiber vertical lines with aluminum steps, and is extremely compact in size and low in weight. It was designed with input from professional users to optimize its performance and specifications.

- 6.5M ROPELADDER WALUSTEP
- 16M ROPELADDER WALUSTEP
- 25M ROPELADDER WALUSTEP
POLES AND HOOKS
The range of REBS poles includes 4 main types:

- **Pneumatic Telescopic Poles**: 10-15 meter self-extending and retracting poles that can be operated by one operator and run on compressed air.
- **Wind-Up Telescopic Poles**: A 15m telescopic pole that can be extended with a manual winder.
- **Telescopic Poles**: Lightweight, diveable poles for VBSS / Urban hook and climb operations.
- **Rolatube**: A unique composite roll out tube that becomes a rigid pole for placing hooks while remaining easily packable.
Pneumatic Telescopic Pole

The REBS Giraffe Tracer Pneumatic Telescopic Pole is the most popular hook and climb VBSS boarding system. The 10/15m carbon fibre Tracer has superior controllability and vacuum pressure disengagement feature and integrates easily with RHIBs and other similar surface vessels.

The REBS Giraffe Tracer Pneumatic Telescopic Pole is a very popular hook and climb VBSS boarding system. This is because the 10/15m carbon fibre Giraffe provides excellent command and controllability to the user for a complete pole and hook set that has a very long reach. A key feature is the control the system gives over hook engagement and vacuum pressure disengagement that ensures good, fast placements that are ready for climbing.

Operated with a simple up and down push buttons, the user has complete control of the system and can fully deploy the hook in 6-10 sec and retract the system in 11-14 sec. The lightweight system can be deployed by one man.

The system can be used with two different sizes of base plate depending on the operational requirements.

The Giraffe system includes all the elements needed to work alongside the pole and hook; wire ladders and ladder reels in various lengths, release mechanisms, air bottles, hoses and pressure regulators.

In the interests of simplicity, the Giraffe system is also available in complete packages ready to be deployed.
REBS Wind-Up Pole

The REBS Windup Pole is a lightweight 15 m telescopic pole that is extended with a hand crank for speed and ease of deployment that is used for placing a hook with an attached ladder or rope onto a ledge or railing.

It is a compact, strong pole for operations on both land and at sea with all of the telescoping tubes being made from high strength hybrid carbon fibre composite.

The main difference compared to the manual telescopic poles is the windup control which means that the pole needs less handling and is under certain conditions much easier to extend.

The Windup Pole will withstand immersion in sea water plus all belts and moving parts are contained inside the pole for a reliable system with few pinch points. The top adapter of the pole is compatible with the full range of REBS grapnel hooks. The windup pole is extended while in vertical position for easy operation.

<table>
<thead>
<tr>
<th>Model</th>
<th>Reach (extended)</th>
<th>Retracted length</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>15m Windup Pole</td>
<td>15 m / 49 ft</td>
<td>4,1 m / 13.45 ft</td>
<td>12,5 kg / 27.5 lbs</td>
</tr>
</tbody>
</table>
REBS TELESCOPIC POLE

The Telescopic Pole is a versatile and robust tool for many different purposes. Available in many different versions and lengths, with different adapters to suit any type of operation. Custom made adapters are available on request.

The manual telescopic pole consists of multiple carbon fiber segments telescoping into each other. At the end of each segment is a quick-action clamp with a lever that securely locks the internal segment in place. Pivot the lever to open position, and the internal segment is free to move. Adjust the pole segment to a set length and push the lever back down into the locked position. Repeat for all the segments to extend the pole to the desired length.

The height of the collapsed pole determines which situations it is most suitable. The poles up to 6m are easy to manage by a single operator on dry land or a boat, and are great tools for boat-to-boat boarding. The longer poles are made for diving and are easy to use and extend from within water, or to reach the top of a building on land.

The manual telescopic poles are made from carbon fiber, polyamide, and anodized aluminum which provide excellent salt water resistance. Telescopic systems should be cleaned with fresh water after operation at sea to ensure proper functionality over their lifetime.

<table>
<thead>
<tr>
<th>Model</th>
<th>Reach (extended)</th>
<th>Retracted length</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>15m Windup Pole</td>
<td>15 m / 49 ft</td>
<td>4.1 m / 13.45 ft</td>
<td>12.5 kg / 27.5 lbs</td>
</tr>
</tbody>
</table>
REBS TELESCOPIC POLE

These are our standard poles. Custom lengths and section combinations are available on request.

### Telescopic poles

<table>
<thead>
<tr>
<th>Part no.</th>
<th>Collapsed length</th>
<th>Full length</th>
<th>Weight</th>
<th>Sections</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE002404</td>
<td>0.75 m / 2.5 ft</td>
<td>2.8 m / 9.2 ft</td>
<td>0.85 kg / 1.9 lbs</td>
<td>6</td>
</tr>
<tr>
<td>BE002473</td>
<td>1.16 m / 3.8 ft</td>
<td>6.8 m / 22.3 ft</td>
<td>2.35 kg / 5.2 lbs</td>
<td>9</td>
</tr>
<tr>
<td>BE004834</td>
<td>1.85 m / 6.1 ft</td>
<td>8 m / 26.25 ft</td>
<td>3.5 kg / 7.7 lbs</td>
<td>5</td>
</tr>
<tr>
<td>BE002464</td>
<td>1.8 m / 5.9 ft</td>
<td>9 m / 29.5 ft</td>
<td>4.2 kg / 9.3 lbs</td>
<td>6</td>
</tr>
<tr>
<td>BE002465</td>
<td>3.5 m / 11.5 ft</td>
<td>10 m / 32.8 ft</td>
<td>3.1 kg / 6.8 lbs</td>
<td>3</td>
</tr>
<tr>
<td>BE004835</td>
<td>2.7 m / 8.86 ft</td>
<td>12 m / 39.37 ft</td>
<td>4.9 kg / 10.8 lbs</td>
<td>5</td>
</tr>
<tr>
<td>BE002466</td>
<td>3.3 m / 10.83 ft</td>
<td>15 m / 49.21 ft</td>
<td>5.9 kg / 13 lbs</td>
<td>5</td>
</tr>
</tbody>
</table>

#### 2,8 m Telescopic Pole Package BE004300

<table>
<thead>
<tr>
<th>Part name</th>
<th>Part no.</th>
<th>Pcs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5” Single Titanium Hook with Pigg Release</td>
<td>BE002526</td>
<td>1</td>
</tr>
<tr>
<td>2.8 m Telescopic pole</td>
<td>BE002404</td>
<td>1</td>
</tr>
<tr>
<td>2.8 m Telescopic pole Bag</td>
<td>BE294813</td>
<td>1</td>
</tr>
<tr>
<td>6 m Rope Ladder</td>
<td>BE004206</td>
<td>1</td>
</tr>
</tbody>
</table>

#### 9 m Telescopic Pole Package BE002180

<table>
<thead>
<tr>
<th>Part name</th>
<th>Part no.</th>
<th>Pcs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7” Single Titanium Hook with Pigg Release</td>
<td>BE004682</td>
<td>1</td>
</tr>
<tr>
<td>9 m Telescopic Carbon Pole</td>
<td>BE002464</td>
<td>1</td>
</tr>
<tr>
<td>Telescopic pole bag medium</td>
<td>BE003340</td>
<td>1</td>
</tr>
<tr>
<td>10 m Wire Ladder</td>
<td>BE002461</td>
<td>1</td>
</tr>
</tbody>
</table>
Rolatube

The REBS Rolatube is a unique composite roll out tube that becomes a rigid pole for placing hooks when climbing while remaining easily packable. The Rolatube is very easily deployed both in an urban environment and sub-surface in dive operations.

The unique composite construction incorporates a memory that enables extremely compact roll-up storage and instant semi-rigid deployment. Available in 9.8ft/3m and 16.4ft/5m lengths, the pole's hook interface enables access to first or second story windows with a REBS Wire Ladder.

The top end of the Rolatube uses a custom made top adapter that can be supplied with either 2,5” or 5” Titanium Hook attached. The Rolatube hook adapter releases from the Rolatube pole after the hook is placed. The adapter also allows the hook to be repositioned and removed by using the Rolatube pole. Combining the Rolatube pole with the top adapter and the 5 or 7 m (16.5 or 23 ft) wire ladder results in a very portable climbing system with great versatility, low weight, and excellent reach. The Rolatube packages allow users to reach entering points exceeding 7 m in height.

The packages are extremely compact when stored and easily fit into a backpack. The Rolatube can be used in many situations and for different purposes besides boarding. It is suitable as a stop mast, a signal mast, for surveillance, or any other uses where a portable, compact and collapsible pole is needed.

<table>
<thead>
<tr>
<th>Model</th>
<th>Length</th>
<th>Weight</th>
<th>Deployed Dimensions</th>
<th>Stowed Dimensions</th>
<th>Reach Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROLATUBE 3M - 2&quot; POLE/TUBE</td>
<td>3m</td>
<td>2.6 lbs / 1.2 kg</td>
<td>9.8 ft x 5.8 in x 6 in / 3 m x 15 cm x 15.2 cm</td>
<td>5.8 in x 5.8 in x 6.0 in / 14.6 cm x 14.6 cm x 15.2 cm</td>
<td>16 ft / 5 m</td>
</tr>
<tr>
<td>ROLATUBE 5M - 3&quot; POLE/TUBE</td>
<td>5m</td>
<td>5.8 lbs / 2.6 kg</td>
<td>14.2 ft x 6.8 in x 8.3 in / 5 m x 17.1 cm x 21 cm</td>
<td>6.8 in x 6.8 in x 8.3 in / 17.1 cm x 21.0 cm</td>
<td>23 ft / 7 m</td>
</tr>
</tbody>
</table>
ROLATUBE HOOKS
- 2.5” SINGLE ROLATUBE SMALL ADAPTER
- 5” SINGLE ROLATUBE SMALL ADAPTER
- 2.5” SINGLE ROLATUBE LARGE ADAPTER
- 5” SINGLE ROLATUBE LARGE ADAPTER

ROLATUBE 5 M PACKAGE
- Rolatube 5 m 2.5” Tube - Black x 1
- 7 m Wire ladder x 1
- Rolatube top adapter Large Ø58 w/ 5” titan hook x1
- Bag for Wire ladder Large x 1

ROLATUBE 3 M PACKAGE
- Rolatube 3 m 2” Tube - Black x 1
- 5 m Wire ladder x 1
- Rolatube top adapter Small w/ 2.5” titan hook x 1
HOOKS

DMM offer a range of hooks together with their associated poles, ladders and adapters for a comprehensive range of tools to reach, place an anchor and climb to an entry point in a building.
There are 4 main types of hook:

**Single Hooks**
for arc loading over rails or tip loading on edges. These are available in Titanium, Aluminum, steel and Carbon.

- **Carbon Single Hook**
  - Very light and strong

- **Titanium Single Hooks**
  - Wide range of light strong hooks

- **Aluminium Tactical Hook**
  - Forged hollow aluminium hooks with glass breakers

- **Yates Hook**
  - Light aggressive hook for most pole systems

**Double Hooks**
for arc loading over rails or tip loading on edges. These are available in Titanium, and Aluminum.

- **Double Titanium Hook**
  - Very light double hook

- **Double Aluminium Hook**

**Ledge Hooks**
Designed for small ledges or window sills

- **Cadex Hook**
  - Aggressive ledge hook

**Compound Wall**
Hooks for use on adobe walls and buildings

- **Rebs Max Grip Hook**

- **Cadex Afghan Hook**
Carbon Single Hook

The REBS single Carbon Fibre 24cm/9.5in grapnel hook is the most popular hook for boarding and urban operations. It has a very lightweight construction and uses a titanium tip for arc/tip loading to 1000kg/2200lbs. It is compatible with Carbon Ladder, Windup Pole, and Telescopic poles.

The hook was developed in collaboration with NDRE (Norwegian Defense Research Establishment), H. Henriksen AS and the Norwegian Forces. All the hooks are tested and certified by NDRE using two load cycles to 1000kg/2200lb MBL for a tip load configuration.

The hooks can house dual interface adapters to increase placement options. They are quick connected using quick release pins for safe, rapid deployment option transitions.

- 19cm/7.5 inch: Weight: 1.4 kg / 3.0 lbs
- 19cm/7.5 inch: Deployed Dimensions 22.5 in x 14.0 in x 3.0 in / 57.2 cm x 35.6 cm x 7.6 cm
Titanium Single Hooks

The REBS Titanium tactical single hooks are lightweight, high strength grapnel hooks designed for use with the Carbon Ladder, Telescopic Poles, and Windup poles. The titanium hooks can be arc or tip loaded.

There are 3 sizes available - 6.5cm/2.5 inch, 13cm/5 inch and 19cm/7.5 inch

The grapnel hooks are made of aerospace grade 6Al-4V (Grade 5) titanium and are assembled with precision craftsmanship to ensure excellent strength and durability. All hooks are tested during pre-production stages and certified to have a minimum 2200lb/1000kg breaking load.

At loads near the MBL, a small amount of permanent deformation of the hook may be expected, but strength remains intact.

- 6.5cm/2.5 inch: Weight: 0.4 lbs / 0.2 kg
- 6.5cm/2.5 inch: Deployed Dimensions 1.0 x 7.6 x 1.3 in / 19.3 x 19.3 x 3.2 cm
- 13cm/5 inch: Weight: 1.5 lbs / 0.7 kg
- 13cm/5 inch: Deployed Dimensions 9.5 x 12.0 x 1.0 in / 24.1 x 30.5 x 2.5 cm
- 19cm/7.5 inch: Weight: 1.9 lbs / 0.9 kg
- 19cm/7.5 inch: Deployed Dimensions 8.0 in x 14.0 in x 3.0 in / 20.3 cm x 35.6 cm x 7.6 cm
- All sizes feature the same, following features:
  - Material Construction: Titanium, Aluminum
  - MBL (TIP): 1,000 kg / 2,205 lbs
TACTICAL HOOKS

9,5" SINGLE TITAN GRAPNEL HOOK

DIM.: ISO-2768-1-m
THREADS: 6g/6H
SURFACE: Ra 3,2
EDGE 0,2 x 45°

APPROX. MASS: N/ABASE ITEM:
PART NUMBER: BE002437
DESCRIPTION:

This document is proprietary information of H. Henriksen Mek. Verksted AS and shall not be copied without our written permission, and the contents thereof must not be imparted to a third party nor be used for any unauthorized purpose.
Aluminum Tactical Single Hook

The REBS Tactical Hook is a lightweight, forged aluminum hook designed for use with the Tactical Ladder or the Carbon Multi Ladder systems. The hook comes in two sizes 18cm/7 inch and 25cm/10 inch.

The hook is rated for tip loads up to 1,000kg / 2,200 lbs on its twin carbon spikes. The spikes are ideal for both hard and soft surfaces. The hooks use a quick connect pin for a rapid modular connection to the ladder system. The hook also includes a rated eyelet for safety and other connections.

- 18cm/7 inch: Weight: 2.0 lbs / 0.9 kg
- 18cm/7 inch: Deployed Dimensions 14.2 x 11.6 x 1.6 in / 36.0 x 29.4 x 4 cm
- 25cm/10 inch: Weight: 1.3kg / 2.9lbs
- 25cm/10 inch: Deployed Dimensions 20.0 x 14.7 x 1.5 in / 50.8 x 37.4 x 3.9 cm
Yates Ladder Hook with Kevlar Sling

An aggressive hook designed to work with poles via a pigg attachment. The hook bites well into marginal placements creating a secure anchor for the attached ropes or ladders. The hook weighs only 125g and will hold between 500 to 900kgf depending on the quality of the placement.

- Hook to work with poles using a Pigg attachment and with two stabilising feet
- Hook hardness and orientation optimised to provide maximum grip on metal, stone and plastic surfaces.
- Brown
Titanium Double Hooks

Dual hooks can provide increased stability compared to single hooks, but the potential disadvantage of the dual hooks is that the movement from the user climbing a ladder attached to the hook may cause the hook to “walk” or move if it is suspended on the hook tips.

The REBS Titanium tactical hooks are lightweight, high strength grapnel hooks designed for use with the Carbon Ladder, Telescopic Poles, and Windup poles. The titanium hooks can be arc or tip loaded.

There are 3 sizes available - 6.5cm/2.5 inch, 13cm/5 inch and 19cm/7.5 inch.

The grapnel hooks are made of aerospace grade 6Al-4V (Grade 5) titanium and are assembled with precision craftsmanship to ensure excellent strength and durability. All hooks are tested during pre-production stages and certified to have a minimum 2200lb/1,000kg breaking load.

At loads near the MBL, a small amount of permanent deformation of the hook may be expected, but strength remains intact.

- 10cm/4 inch: Weight: 2.4 lbs / 1.1 kg
- 10cm/4 inch: Deployed Dimensions 13.8 x 7.2 x 3.3 in / 35.0 x 18.2 x 8.3 cm
- 15cm/6 inch: Weight: 3.9 lbs / 1.8 kg
- 15cm/6 inch: Deployed Dimensions 14.5 x 8.9 x 4 in / 36.8 x 22.7 x 10.3 cm
- 20cm/8 inch: Weight: 5.3 lbs / 2.4 kg
- 20cm/8 inch: Deployed Dimensions 20 x 13 x 12 in / 51 x 33 x 30.5 cm

All sizes feature the same, following features:
- Material Construction: Titanium, Aluminum
- MBL (TIP): 1,000 kg / 2,205 lbs

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Aluminum Tactical Double Hook

The REBS Tactical Double Hook is a lightweight, forged aluminum hook designed for use with the Tactical Ladder or the Carbon Multi Ladder systems.

The hook comes in one size - 18cm/7 inch

The hook is rated for tip loads up to 1,000kg / 2,200 lbs on its twin carbon spikes. The spikes are ideal for both hard and soft surfaces. The hooks use a quick connect pin for a rapid modular connection to the ladder system. The hook also includes a rated eyelet for safety and other connections.

› 18cm/7 inch: Weight: 4.0 lbs / 1.8 kg
› 18cm/7 inch: Deployed Dimensions 14.3 x 12.4 x 7.2 in / 36.3 x 31.5 x 18.4 cm
Cadex 4 inch Hook

The Cadex Short Assault Climbing Hooks (SACH) provide the assaulter with extremely versatile tools for vertical methods of entry. The hooks are ideal for placing on window sills where larger hooks do not have enough room to get purchase. The hooks are connected to a ladder, rope or pulley system and then placed by pole. Once loaded the hook cams onto the placement forcing the aggressive carbide teeth to dig deep. A very effective tool for ascending relatively featureless structures.

- MBS > 550kg
- Carbide Spikes for maximum purchase
- Folds up for compact and safe transport
- Black

Cadex 7 inch Hook

- MBS > 550kg
- Carbide Spikes for maximum purchase
- Folds up for compact and safe transport
- Black

Cadex Afghan Hook

The big aggressive sibling of the 4 inch and 7 inch hooks designed for use on compound walls.

- MBS > 450kg
- Aluminium Frame with carbide teeth
- Folds up for compact and safe transport
- Black
MaxGrip Hook

The lightweight, collapsible REBS MaxGrip Hook is designed for use on urban adobe-style surfaces such as those found in the Middle East and Afghanistan.

The hook is compatible with the REBS Tactical Ladder, REBS Manual Telescope poles, REBS Windup Telescope poles, and the REBS Giraffe Tracer Pneumatic pole together with the Carbon Multi Ladder. The MaxGrip can use either the quick release PIGG or Tactical Ladder interfaces.

The hook is manufactured from tough Grade 5 titanium with a spiked hook that distributes load over an array of teeth that provide maximum grip on softer surfaces such as adobe. The hook weighs ~3.3 lbs and uses an Atlas quick connect pin for a rapid modular connection to the ladder system. The MaxGrip can also be configured with the PIGG release adapter for telescopic pole use.

- Weight: 3.3 lbs / 1.5 kg
- Deployed Dimensions: 20 in x 3 in x 11 in / 60 cm x 7.6 cm x 28 cm
- Stowed Dimensions: 20 in x 3 in x 3 in / 60 cm x 7.6 cm x 7.6 cm
- Material Construction: Titanium, Aluminum
- MBL (TIP): 1,000 kg / 2,205 lbs
CTOMS Trace is a micro rope system that allows operators to descend, ascend, haul and lead climb.

It is very compact and light, but more than that it is exceedingly versatile. It allows an operator to change a lower into a 3:1 haul then increase the mechanical advantage all the way up to 9:1 before changing the system back to a lower - all with the system fully loaded, with minimal equipment and all this can be done in seconds.

The same versatility allows hauls to be turned into lowers or a descent into an ascent. The system can be rigged for two person loads and is re-usable.

This is achieved by using 4 core components that have been designed to work together and which are unique to the TRACE system.

These components are:

- Trace Rope
- QD (Quickie Descender)
- QA (Quickie Ascender)
- Prodigy Pulleys
The TRACE system components were designed to work together to provide maximum versatility to the operator whilst keeping weight and pack size to a minimum, but another key factor was to keep the forces that could develop within the system to a minimum.

This is very important as micro systems using thin aramid rope have far less opportunity to minimize forces through dynamic elongation of the rope. Force reduction within the TRACE system is achieved by designing the components to allow the rope to slip when the load goes above a safe limit.

Thus, a fall that generates more than 4kN will cause the device to slip, and when the friction of the slippage is reduced to around 4kN, it will bring the climber to a stop. The percentage of slippage in the TRACE system is actually similar to percentage of stretch seen in a standard dynamic rope system.

The CTOMS TRACE system has four main, unique components as mentioned before, but there is actually a fifth element that is very important and that is training. TRACE pushes the boundaries of what is achievable with micro rope systems and it is important that all users understand how the system should be used. Thus all users must complete an on-line training course.

CTOMS have done a lot of testing of their system. This has included introducing alternative components into the system - this has always resulted in higher forces being introduced into the system that often resulted in damage to the rope. Thus, CTOMS strongly recommend only using CTOMS TRACE components - TRACE rope/QD/QA - within the TRACE system - this isn’t a way of getting users to just buy CTOMS kit - it is genuine attempt to keep users safe. It is for this reason that QDs and QAs can only be bought as part of a TRACE system kit.

The central components of the TRACE system are the rope and QD (Quickie Descender). The QD can be pre-rigged on the rope as an egress system that can be deployed very quickly. These two components allow a user to descend or lower.

CTOMS TRACE SYSTEM - OVERVIEW

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The TRACE rope and QD

Adding a QA (Quickie Ascender) adds the ability for a user to create a 3:1 hauling system or create an ascending system.

Adding a pulley and or more QAs allows users to create high mechanical advantage systems as well as two person lowers.

CTOMS have done a lot of testing of both their system. This has included introducing alternative components into the system - this has always resulted in higher forces being introduced into the system that often resulted in damage to the rope. Thus CTOMS strongly recommend only using CTOMS TRACE components - TRACE rope/QD/QA - within the TRACE system - this isn’t a way of getting users to just buy CTOMS kit - it is genuine attempt to keep users safe.
CTOMS 6.5mm TRACE Rope

The TRACE™ Systems rope is 6.5 mm in diameter with a Technora® aramid sheath on a nylon core. This exact construction was the result of an awful lot of testing to get the best balance of cut resistance, slippage in the QD, elongation and heat resistance.

The rope allows users to lead climb, abseil and haul rescue loads on a 6mm rope that is fire resistant to 500C and has superb cut and abrasion resistance.

The sheath has a black tracer running through one half and a tan tracer through the other half to more quickly identify mid-rope. This feature is functional through night vision devices.

The rope comes with high strength sewn terminations at each end to avoid the need to knot the rope.

- 16m (Single pattern sheath);
- 30m (Dual Pattern Sheath);
- 46m (Dual Pattern Sheath);
- 60m (Dual pattern Sheath);
- 76m (Dual Pattern Sheath).
CTOMS Quickie Descender (QD)

The QD is an auto-locking rope controller that can be used for descending, lowering or locking off the TRACE 6.5mm aramid rope.

The QD is also designed to be a force limiter and will slip under a dynamic load that exceeds 4kN.

It is a core component in all TRACE systems and is used as part of the ascent, lower, haul and lead climbing capabilities that TRACE offers.

It should be stressed that this was specifically designed for use with the TRACE™ Systems rope and can only be bought as part of a system.

The QD weighs 95g.
CTOMS Quickie Ascender (QA)

The CTOMS Quickie Ascender™ is a rope grab with an integrated pulley that is used for ascending and hauling in the TRACE system.

The QA™ has been designed to work with the CTOMS 6mm Technora rope and is unique in that it incorporates force reduction into the system through slippage at a specific force window.

It can be added onto a loaded, tensioned rope in seconds to create a hauling or ascent system. Adding one Quickie Ascender creates a 3:1 system, adding a second creates a 6:1 and then adding a micro pulley gives the user a 9:1 system.

The Quickie Ascender weighs just 100g (3oz) and locks closed onto the rope so that the rope cannot be forced out of the cam under load.

The QA can be used in the following ways:

- Rope ascension
- Haul and tension systems
- Self-belay
- A rope grab
- Force absorber/reducer
CTOMS Prodigy Pulley System

The CTOMS range of micro pulleys and pulley systems incorporates impressive strength and efficiency into a tiny package that makes setting up hauling systems very fast and very intuitive.

The system is based around the 3 Prodigy pulleys - a single sheave pulley plus prusik minding single and double sheave pulleys.

The single pulleys weigh less than 50g, have a strength of 24kN and use bearings that give 95% efficiency.

The pulleys are designed for the TRACE 6.5mm rope system, but will work well with larger diameter ropes up to 11mm.

When combined with the CTOMS QA and QD it can quickly be built into a modular 4:1 to 9:1 pulley system.

Features:

- Strength: (24 kN Rating) / (18 kN Tangential Rating);
- 95% Efficient: (Using 6 mm TRACE™ Systems rope and 100 kg load);
- No efficiency reduction after loading of 8.7 kN; ±9 mm rope if you’re using it with other than TRACE™ Systems
- Pulley eye accepts up to 3 carabiners (DMM™ Phantom Screw Gate) for use on a high-line, etc;
- Lightweight: single sheave pulley is only 43 grams.
CTOMS Descent and Egress kits

Parachute Tree Landing Escape Kits

There are two Parachute Tree Landing Kits – one with 46m of 6mm Technora Aramid rope and the other with 76m.

This is a basic TRACE™ Systems kit that is intended specifically for rappelling to the ground should a parachutist experience a tree landing. The kit comes standard with a TRACE™ Systems Rope descender and a couple of carabiners – it can all be pre-rigged so that you just loop one end of the terminated rope around the trunk with one of the carabiners whilst using the other to attach the descender to your harness – then just squeeze he descender to bail out of the tree. The Quickie Descender™ descend control device provides an auto-brake when hands are removed from the device for added safety during descent.

Emergency Egress Kit

The most popular of the CTOMS kits

Usually carrying an egress-from-height kit is too much weight and volume restrictive, putting you in a potentially dangerous situation if you need to get off a roof, or out of a building fast, but the CTOMS Emergency Egress kit changes that with an incredibly small package that allows a hands free edge transition, auto-braking when the device is released from grip and maintains a 10:1 factor of safety with a 1 person load. The kit can be used to both lower and rappel.

The kit packs down into a package a MTP or Multicam pouch that fit onto your molle contains a 16m length of heat and cut resistant aramid rope, a pre-rigged auto-stop descender and a terminated bail-out carabiner for connecting to an anchor point.

The kit weighs 890g and fits in a pouch measuring 19cm x 12cm x 7cm.

It is important to stress that all the components have been designed to work with one another as a system; comprehensive development has been carried out to ensure that force reduction is built into the system and the ability to shock load the system is normally minimised to 2.5kN and will not exceed 6kN.
The Quickie Ascender is only available as part of a CTOMS Trace system kit – the CTOMS kits are designed to be mission specific and are as follows:

**Squad Self Rescue Kit**

The Squad Self Rescue kit is a simple self-rescue kit for military squad / section use. The intent of the kit is to provide the element the capability to conduct self-rescue in circumstances such as a fall into a well, or evacuation from an elevated position. The rescue kit has a minimal weight and volume burden, significantly reduces the time of rescue, and reducing the requirement for advanced rescue assets to be deployed forward. Online training access is provided with the kit and supplemented with easy to follow pictorial instructions.

**Rope Assaulter**

An ideal kit for the individual assaulter, the Rope Assaulter provides the user the ability to rappel, lower, rope ascend and conduct a 3:1 haul, all in an extremely compact and lightweight kit. The kit comes packed in a gear loop system that will rapidly connect/disconnect to the main belt of a harness or belt Ideal for individual issue as a basic capability kit.
Assault Climbers Kits

Gone are the days of the rainbow rack, introducing the TRACE™ Systems GREEN Kit. You aren't sport climbing, so why should you have to use sport climbing equipment? This is a purpose built kit for tactical rock climbing operations with unique features not found in recreational market equipment. The intent of the Assault Climbers kits is to offer a comprehensive tactical lead climber’s rack that can be custom configured depending on the mission specific requirements.

Special Operations Capable

Rescuing casualties from a roof, upper floors, ships or confined spaces has now become significantly simplified. The RED Kit increases your mission capability without a significant increase in weight burden. The RED Kit is an evolution of the TAN Kit with some minor adjustments in components and carriage configuration. This is the flagship kit of TRACE™ Systems providing the ability to perform advanced application use in high angle and confined space rescues, rappels, ascending, lowers, hauls, climbing and more. This tiny kit is unmatched in capability and safety in its weight class. Ideal for the team medic or rescue specialist.
ABOUT US
About Us

Helix Tactical evolved from DMM International and DMM Engineering and are part of the same group.

We have been manufacturing height safety equipment for over 35 years in our factory in Llanberis in the UK. We have a comprehensive capability to design, prototype, manufacture test and certify personal protective equipment.

We have one of the largest forging plants and most comprehensive CNC plants in the UK and complement this with a sewing department that works with high strength textile webbings and ropes.

Helix Tactical complements these products with ranges from Henriksen and CTOMS.

In addition Helix Tactical offers training and servicing on all the products and capabilities we offer. This includes topics such as PPE inspection and CTOMS TRACE training.
ABOUT US

Manufacturing Capability

- More than 35 years of manufacturing class leading vertical access equipment
- Turnkey manufacturing solution. Full control of all the manufacturing processes ensures the safest and highest quality in all products. DMM perform all operations on site from the testing of raw material to the final assembly and inspection of our equipment and systems.
- Significant investment in a state of the art manufacturing facility delivering complete solutions. Our hot forging plant and cutting edge CNC facility are complimented by a large sewing that delivers complete vertical access solutions facility that allows us to build product into PPE systems.
- The factory’s capability includes design, prototyping and testing as well as forging, heat treatment, CNC machining and sewing
- Significant investment in the latest machinery and technology including RFID enabled product.
- Modern, self-contained facility that covers 40,000m and employs 200 people.
Technical Knowledge and Quality

- First Welsh company to be awarded International ISO 9001 quality certification
- DMM International are an active member and standards setter in the two leading international committees that set and implement technical and safety standards for climbing equipment. DMM sit on the CEN Technical Committee (sets the standards for the European Union) and UIAA Technical Committee (sets International + USA standards)
- We manufacture equipment to the full range of international standards:
  - ANSI: (American National Standards Institute)
  - The governing body for standards and safety in the United States of America
  - CSA: The Canadian Standards Authority, whose certification is recognized internationally
  - IRATA: (International Rope Access Trade Association) The main global trade association in the work at height sector
  - CEN: (Comité Européen de Normalisation) The organisation that defines standards within the European Union
  - UIAA: (Union Internationale des Associations d’Alpinisme) The leading international standards organisation in mountaineering
Supply and Support

In addition having our own production plant offers customers the following additional advantages:

- Minimal supply chain
- Flexibility to produce small batches of bespoke product
- Fast response to custom orders
- On-site training on using all of our products

We have over 20 years of experience in working with various NATO forces helping them to improve tactical capability when operating at height; reducing the weight burden and pack size of equipment that needs to be carried, making kit that is as versatile as possible to minimise redundancy, using cutting edge materials to reduce objective dangers from heat or sharp edges, making systems that deploy quickly and work efficiently under difficult conditions.

Above all we work hard to establish strong relationships that are built on trust.