



HELIX



Helix Operations provide a complete capability for vertical access and rescue in mountain, maritime and urban environments.

We are based in the mountains of North Wales and have a heritage of over 40 years 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 nations.

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

ICAGE: U1AG3  
Company Number: 10316654  
DUNS: 221986629  
NCAGE: U1AG3



To be the leading worldwide provider of comprehensive vertical access, rescue and mobility capabilities to the tactical operator in the mountain, urban and maritime environments.

To support vertical access operations for the tactical operator with a range of services including:

- Advice
- Equipment
- Training
- Servicing



# Key Brands

**REBS®**

REBS supply many critical components of any maritime or urban access system. Rapid Entry Boarding Systems - the best maritime boarding equipment that also works well for urban operations. They supply the best grapnel launchers and the lightest carbon ladder systems on the market.



**HQH SYSTEM**

Robust carbon ladder systems - these are the go to ladders if TLC is in short supply. The FIX-LITE being the new ladder of choice for dismounted troops in urban environments with the ATV carbon bridge ladder demonstrating how tough carbon can be.



The best motorised ascenders on the market with a real-life combination of versatility, ruggedness and battery life that is hard to beat.

**CTOMS™**

CTOMS was founded on the concept of evolving tactical medicine and expanded to encompass aspects of remote and improvised rescue. A key part of this evolution was the development of the TRACE™ system as micro rope system with a comprehensive capability that includes access, egress, hauling and high-lining. CTOMS are our longest standing partner and Helix are one of the very few authorised providers of training for the TRACE™ system.

**LIBERVIT**

LIBERVIT are an French company with over 25 years in design and manufacture of hydraulic tools and manual equipment for the industry, the special forces and the rescuers.



The DMM International group specialise in the manufacture of equipment and systems for operating safely at height. They have proudly manufactured all their hardware in the United Kingdom since 1981 and over that time they have established a reputation for innovation and quality.

**PROTECTION**

As part of the same group of companies Helix Operations rely heavily on DMM to design, prototype and manufacture much of the core product in our range.



An impressive micro rope system that is very intuitive to use, fast to deploy and incredibly robust. The system that came top in a recent egress system tender and impressed with its ability to meet the criteria of EN341 with a 160kg load.

Innovative rescue equipment designed and made in their factory in the USA. The range includes products that complement the DMM range of hardware - the Aztec pulley system, the Omni pulleys and the Arizona Vortex are all unique products that we are proud to offer.



Forward thinking equipment and systems designed by former operators to address gaps in current vertical assault capability. The QRAB is a class leading descender for medium diameter ropes that allows fast disengagement whilst the RAFA portable anchor gives security where normal anchors are not viable.



Precision engineering from the Canada that specialises in high end rifle systems, but also produce the best small ledge hooks on the market.

**Marlow**

Designed and manufactured in the United Kingdom with a reputation for outstanding quality and a long history of providing specialist rope solutions to military and rescue units. Marlow Ropes have a proven record as a key manufacturer of quality ropes for access, rescue and specialist products for use in helicopter operations.

# Manufacturing and Development

Helix Operations has the privilege of representing some of the best tactical access companies in the world, but we grew from a manufacturing background and so product development and manufacture are still an essential and fundamental part of our business.

We have invested heavily in the factory and now have a comprehensive manufacturing facility in North Wales with the ability to:

- Design, prototype, test and create tooling for safety critical metal and textile products.
- Forge, heat-treat and CNC both aluminium and steel product.
- Sew, laser cut and bond safety critical textile products.

All of which are run within a robust quality control system that allows complete traceability for every product.

We are part of a group that is the sole manufacturer of climbing hardware in the UK with a worldwide reputation for manufacturing premium quality product.

We work closely with end users to design product that enables operators to work with speed, ease, and safety when accessing objectives across a wide range of environments. This often involves forces and environmental factors in excess of those required for civilian certification and we can help customers test equipment and systems to help ensure that operational risk is minimised.



The Ghost carabiner was designed to create a quieter carabiner for covert situations - the Ghost uses a complex hot forged skeleton with an over-molded TPU outer layer. This creates a carabiner with a significantly reduced noise signature.

# Harness Manufacturing

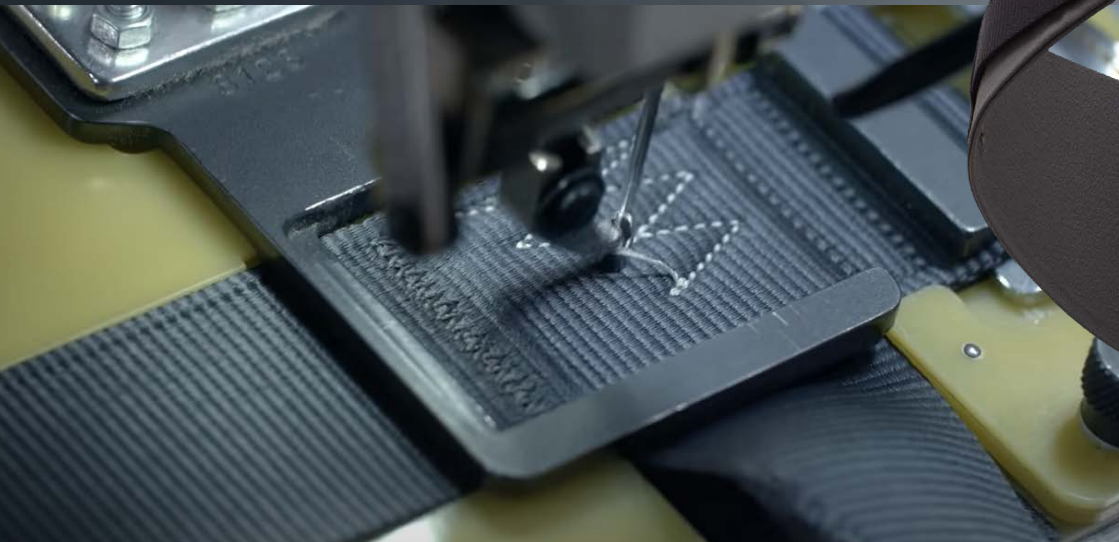
The HCMH II has been designed and is manufactured from start to finish in North Wales at the DMM factory in Llanberis. Once we had the design brief on how to improve the first generation model we realised that traditional tactical harness manufacturing processes would not give us the features we wanted.

Research led us to choose a totally new production process combining variable width, structural webbing with a laser cut, anatomically shaped bonded pad. This gave us very low-profile pads, but with material carefully positioned both to allow ease of movement when active, yet providing support when hanging.

The buckles are a new design from DMM using a marine grade stainless steel with an offset slot to eliminate accidental opening. They are coated in an electrophoretic black polymer to give a secure system that is fast to use and can't be affected by corrosion of debris.

All the bar tacks were developed from scratch to give maximum strength to the webbing infrastructure, and this has resulted in a harness that passed testing at 150kg rather than the standard 100kg.


Productisation of this harness has involved considerable investment in new machinery, but the end result is a class leading tactical harness system that has few, if any, competitors.





Urban

 | **HELIX**



# Urban Operations

Increased Vertical Access, Mobility and Assault Capabilities in Urban Environments.

Urban operations are now common place in every conflict zone. The environment and terrain is complex and changes frequently due to natural and man made influences.

Movement in an urban environment offers a significant advantage to anyone who effectively employs this capability. Helix Operations has assembled a range of the finest products available to provide lightweight, portable and simple solutions to many of the hinderances faced in these operations. Our product range caters for all requirements from small obstacle management through to high building access systems.

Supplemented with comprehensive training packages we can enhance unit capabilities and fine tune techniques from lead climbing, covert climbing, movement of large teams, equipment management and small team technical rescue.

# The Helix Combat Multi Harness (HCMH) II

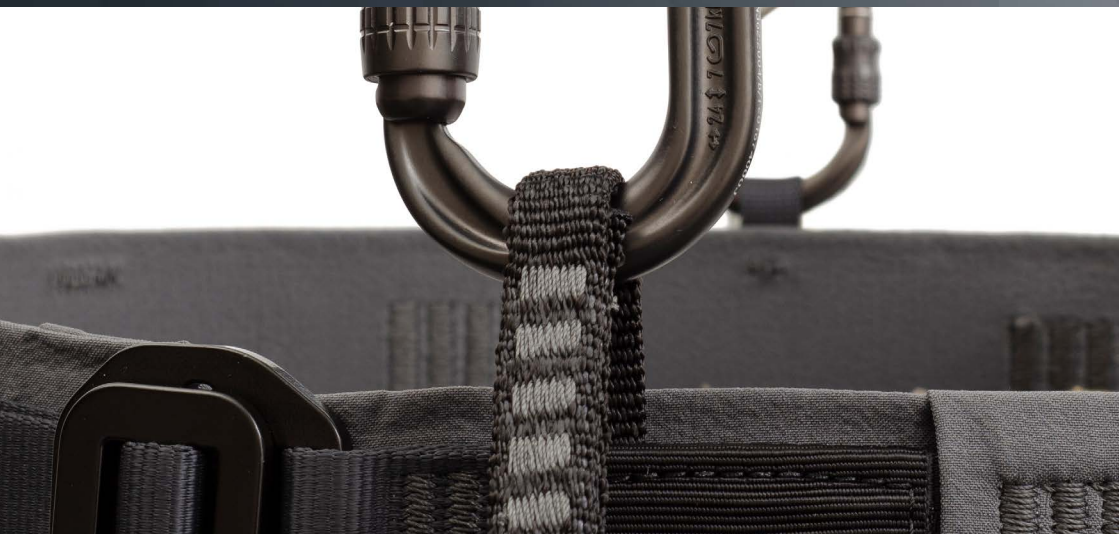
The Helix Combat Multi Harness (HCMH) II is a fully modular tactical harness system that has been developed over several years with significant end user input and trials. It can be either used as a standalone EN358 Riggers Belt, an EN 1277 Waist Harness or an EN 361 Full Body Harness.

The system has been specifically designed for military operational use and can be used in a wide range of missions and tasks - it has been fully evaluated across a wide range of environments including both maritime and desert.

The HCMH II fully integrates with other 'on the man' systems such as life jackets and plate carriers - it has been designed with an ultra-low profile using bonded vari-width webbing so that it can be run comfortably under a plate carrier. If a chest ascender is required, the innovative connection system occupies minimal area on the front of the carrier.

The system is extremely compact and yet because of the high tech materials & manufacturing processes used loads are spread more evenly creating a harness that is comfortable to hang in either as a waist or full body harness.

The HCMH II has been designed to function well over extended periods of use - the buckles are fast to use, secure and won't seize whilst the whole system holds minimal water and dries.



All items are interchangeable meaning when an item is damaged, it can be replaced, and the log card updated which is much more cost effective than replacing an entire system.

Fully integrates with in-service 'on the man' equipment.

Modular system provides a wide range of functionality, reduces training time and replacement cost.

Anatomically shaped legs and chest pads, low profile bonded fabrics and vari-width webbing help create a comfortable and functional harness system.

# DMM Center Slidelock Harness

The DMM Centre Slidelock harness is now available in black. Designed as a minimalist harness with a simple belay bridge it is an easy to use low profile option with a large size range making it suitable for training establishments as well as for seasoned rope operators. It can also be used with the DMM Chest Harness and Bridge Sling to give greater support and a high tie in point for increased stability when working with packs or body armour.

Used in conjunction with a sit harness, the chest harness gives greater support and a high tie in point when increased climber stability is required during military or tactical situations. Use with the Bridge sling for maximum ease of use.

The Bridge Sling increases the speed and security of connecting our chest and centre sit harnesses.



Simple to use tie in point.

Stainless steel Slidelock buckles for durability.

Replaceable webbing keepers.

Compatible with DMM Chest Harness and Bridge Sling.

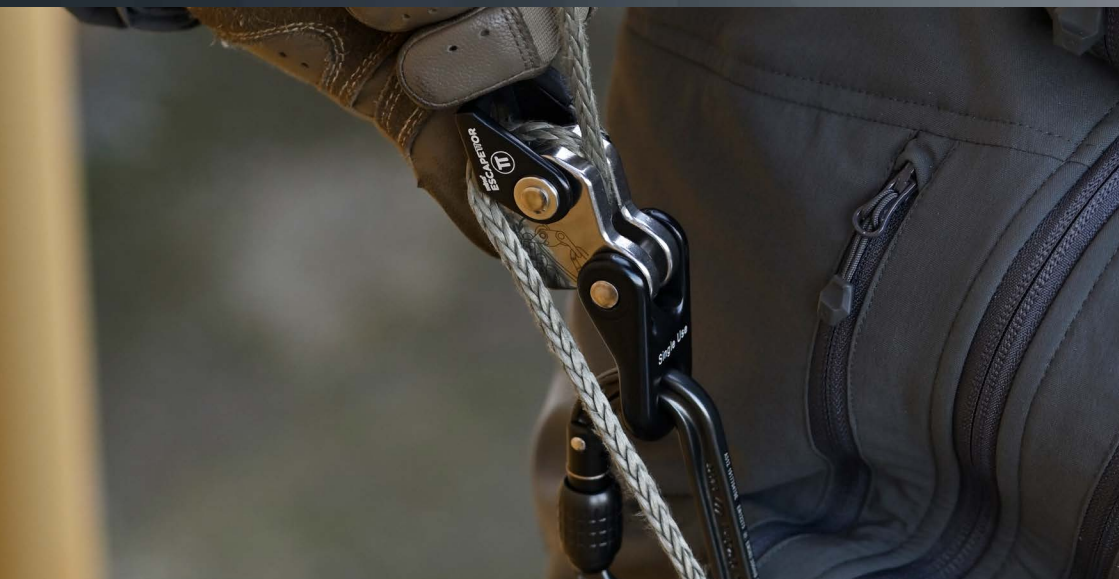
# Helix Personal Escape System (PES)

The Helix Personal Escape System is a modular, lightweight and low volume micro rope system that gives users the capability to quickly descend or egress from a position. The system can be used for both personal descent, and to lower a single operator or load. This system has been specifically designed for military, law enforcement and emergency personnel to perform an emergency escape across all environments and operational theatres. The system has been designed for fast deployment, intuitive to use and have minimal training burden.

The system contains the necessary equipment to do the following:

- Construct anchor points in a wide number of environments using a minimal amount of equipment.
- Protect the rope from damage.
- Descend or lower personnel up to 23m.
- Ascend the rope.

The system is certified to EN341:2011/2D European standard for descent systems and ANSI Z359.4-2013 American standard for fall protection and fall restraint and has also passed additional, harsher testing that simulated worse case scenarios with heavily laden operators.



Extra rigging equipment included: An ANSI rated rescue hook and aramid sling that increase the options for creating safe anchor points.

System contains a pre-rigged descent/lowering system. This uses 23m of 5.5mm heat resistant aramid rope with a rigging carabiner, a rope protector and an auto-locking, load limiting rope controller all attached and ready to deploy.

# HQH LADCARB® FIX-LITE

The HQH LADCARB® FIX-LITE is a fully modular and scaleable ladder system that can be used as a leaning or hanging ladder, bridge, stretcher and window breaker.

The ladder sections come in 2 different lengths; a 2 rung 70cm long section and a 3 rung 1.0m section. The standard base package consists of 4 x 1.0m sections and 2 x 0.7m sections - this allows ladders to be created in multiple lengths to match the height of the access point. Further fine tuning of the ladder can be achieved by using the 18cm long adapter that also allows use on steps, stairwells and uneven ground.

Shorter sections are an ideal solution for urban operations in confined space like ventilation ducts etc. In addition to this, these sections fit into a NATO approved parachuting container which can accommodate 3m long ladder with accessories and other gear.



Characteristics include high strength, low weight, increased impact resistance and precisely adjustable lengths.

The ladder packs down to a compact size for transportation and a 5m ladder can be deployed in under 2 minutes.

# HQH LADCARB® FIX-LITE Hook Ladder

LADCARB® FIX-LITE ladders are fully compatible with all dedicated LADCARB® accessories.

These accessories give the FIX-LITE ladder system the following capabilities:

- Leaning ladder
- Hanging Hook ladder
- Bridge ladder
- Window breakers
- Emergency stretcher
- Assault platform ladder
- Train/bus entering ladder
- Smoke-jump ladder.



The hook ladder can be used in different lengths up to 5.0m and with the extension wire or soft ladder up to 10m.

Ladder sections are secured by the universal spring-pin locks.



The Fixlite ladder system can be fitted with 3 different types of HQH hook - the image shows the titanium urban hook.

The Fixlite ladders can also be fitted with an adapter that allows the REBS® "Tactical" hooks to be used.



# HQH LADCARB® FIX-LITE Bridge Ladder and Window Breakers

The FIX-LITE ladder can be used to create a bridge for gaps up to 5m wide. This allows users to cross gaps, obstacles, ditches, shafts etc. The bridge can be used to allow end users up to 200kg to cross. Heavy loads can be slid along the smooth rails.

The FIX-LITE can also be fitted with aluminium drive-on plates so that it can be used as a loading/crossing ramp for motorcycles.



LADCARB® Window  
breaking head.

It is often difficult to break through windows covered by the advertising foil or anti-vandal film that is now widely used on buses.

The efficient method is to break the glass using a sharp-tip hammer and then smash it down with the heavy rubber window-breaking plate attached to the upper end of ladder. When the glass is pushed out the plate serves as an anti-slip wall support for the ladder.



# HQH LADCARB® FIX-LITE Further Capabilities

The custom-made aluminium adapters allow installation of a single or dual LADCARB® ladder to any model of vehicle-borne assault platform. One standard LADCARB® ladder set provides for 4.6/5.0m long single ladder or 2.3/2.5m long dual ladder.

Using two standard LADCARB® ladder sets, the dual ladder can reach up to 4.6/5.0m with substantially lower weight than offer standard assault platform ladders so that it can be easily lowered or lifted up by one operator.



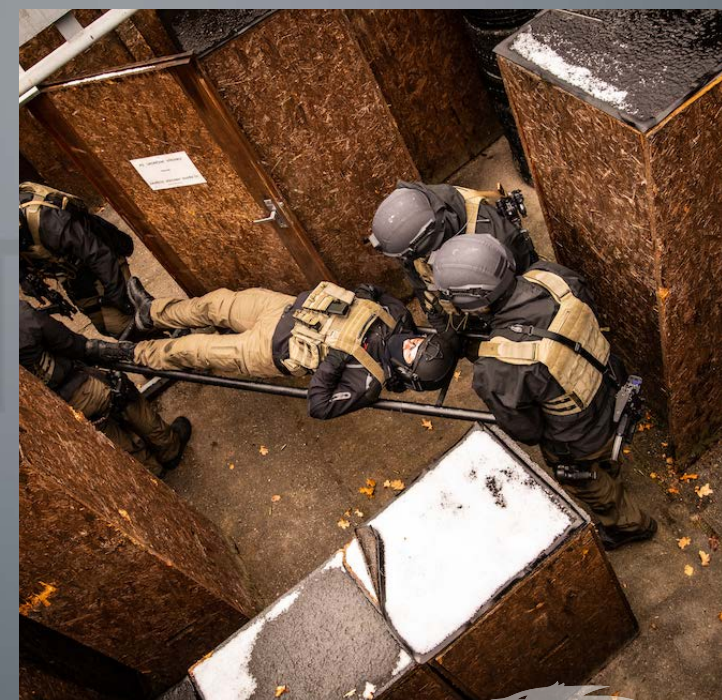
LADCARB®  
Raptor Anti-Slip  
Adapter.

The Raptor Anti-Slip adapters fit onto the end of a ladder to give a serrated tooth profile that grips on the edge of access points such as train doorways or window sills.



The Rescue Kit allows two sections of ladder to be converted into an improvised stretcher. The casualty restraining straps are quickly and easily attached and allow the transportation of injured persons for further medical treatment.

The system has been designed to allow lifting or descent on roped systems as well as for fast evacuation by helicopters.



# HQH LADCARB® LDC

The HQH LADCARB® LDC is a unique multi function, modular tactical assault ladder which builds on the robust, performance capability of the FIX-LITE ladder system by making the rungs removable. This allows the LDC ladder system to be more compact which makes transportation in a vehicle or on the man easier.

The rungs can be added to the sides very quickly and there is no compromise on strength compared to the FIX-LITE.

One single rung with the rough and durable anti-slip surface cover, withstands a load up to 500kg which allows the rescue of persons by carrying them over the shoulder.



Extremely strong structure.  
Can endure loads up to 200kg  
at horizontal position and will  
carry 3 persons while leaning  
against a wall. One single rung  
withstands a load up to 500kg  
allowing rescue of persons by  
carrying over the shoulder.

Performs at extreme  
conditions of +60c/-40c  
The ladders unbelievable  
versatility means that it can  
be used in extreme conditions  
without compromising the  
functionality.



# HQH LADCARB® LDC

The standard 4.6m long ladder set consists of four sections which can be quickly and easily dismantled to single parts. The dismantled ladder then fits into a dedicated bag for storage or transport.

The LDC is compatible with the HQH tactical hooks, window breaking tools, stand-off devices, evacuation kits and also with REBS tactical hooks.

Transforms to an emergency stretcher. The ladder can be used for not only ground transportation of patients, but for lifting by winch or fast evacuation under helicopter.



LADCARB® LDC is the only sectional ladder in the world with fully removable rungs. Rails (stiles) can be joined together into an extremely strong multi-purpose pole. The small size allows easy carrying and transportation which makes this ladder perfect for urban or covert operations.

By connecting 8 rails it is possible to build a mast 9.1m high.

It can be used for installation of antennas, cameras, radars etc.

# Helix Telescopic Carbon Pole

The Helix Telescopic Carbon Poles are designed for urban and tactical operations, where operators need to easily reach access points that are not otherwise accessible. Made from 3K carbon fibre, these poles are lightweight, extremely compact, quiet and smooth - all features which are essential when carrying out covert vertical access operations.

When used in conjunction with compatible hooks and flexible fabric or wire ladders these provide units with the ability to avoid ground floor entry points using a system that is easily carried and quick to deploy with minimal training burden.

The poles have a connection point at both the top and bottom which allows the pole to be carried from just the bottom cord or a sling can be attached to allow the pole to be carried over the shoulder. As standard the pole comes with a "Pigg" adapter that allows both Helix, REBS® and Yates hooks to be mounted. Additional adapters are available for Cadex Hooks and cameras.

The 4.5m pole system has been designed to allow access to first floor access points and the 8.5m system will reach second floor windows, balconies and terraces.



Compatible with REBS®, Yates and Helix hooks as well as others which use 4-5mm rods.

Constructed from 3K Carbon Fibre with section locks that can be tightened by hand.

Compact, lightweight pole systems to deploy ropes and ladders for urban and maritime access issues.

Optimised for urban use with multiple hook and camera adapters to increase versatility.

# Helix Telescopic Carbon Pole Adapters

The Helix Telescopic Carbon Poles are available with adapters that allow use with a variety of other accessories. As standard the poles come with an adapter that makes them compatible with a wide range of hooks including those from REBS®, Yates and DMM – in fact any tactical hook that has either a PIGG attachment or an attachment system using 4-5mm rods. The adapter features a unique (Patent Pending) conical internal bore which makes “fishing” to recover the hook much easier and faster.



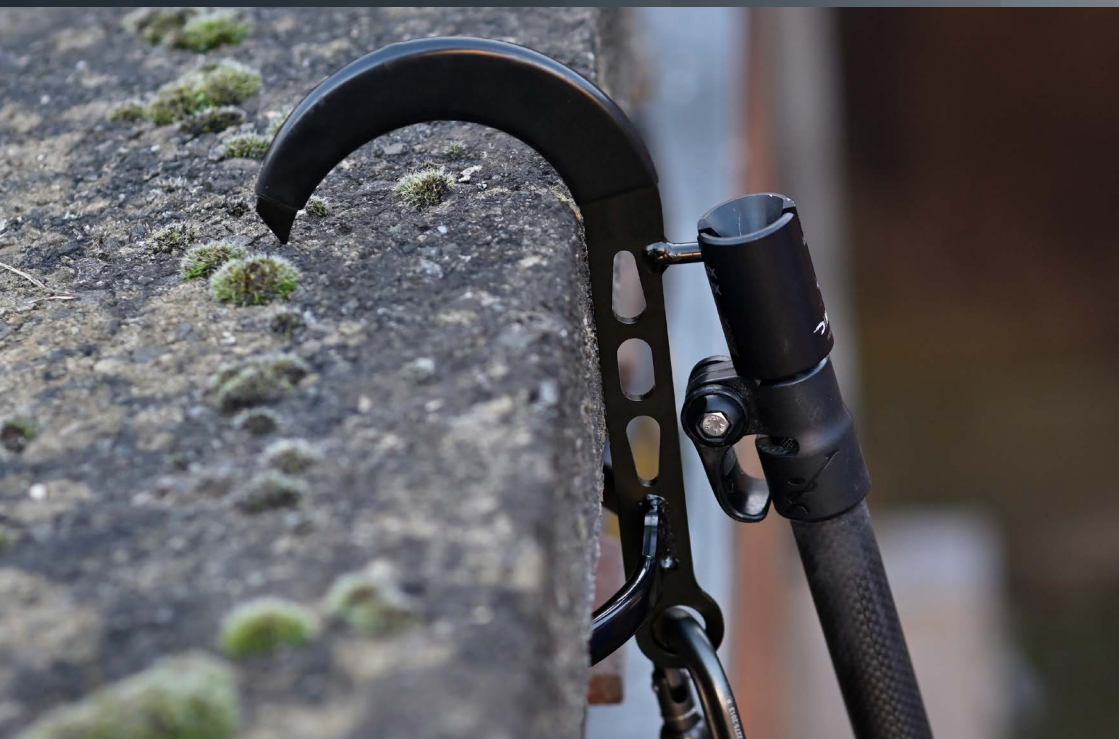
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# Helix Urban Hook

Initially designed as an urban hook for our hook and pole sets, the design brief was to create a strong hook with a subdued noise signature that bit well into surfaces and was stable when placed.

We started the process by specifying the same steel used on our ice axes. This helps the pick to remain sharp and the hook to bite well on a wide variety of surfaces. The point can be sharpened when it does eventually start to blunt.

The shape of the hook was carefully designed so that there would be three points of contact (tip and the edges of both wings) in various orientations - no matter whether the placement is on a vertical, sloping or overhung placement. The stability was further enhanced by adding rubber feet to the wings that helps reduce skidding/walking whilst also subduing noise.



The hook body is largely encased in a plastic coating that reduces noise when placing, especially when used on railings.

The placement spike fits into our range of telescopic poles as well as fitting into rifle barrels if a pole is not available. The spike is angled to allow easy release so that the placement isn't dislodged in the process.

The hook is heat treated to the same temperature as our ice axe blades, and when tested it was rated to 500kg when tip loaded and 1000kg when loaded on the apex.

The hook is available separately and also as part of our hook, pole and ladder sets that allow access to first and second story access points.

# Cadex Hook

Designed for use with telescopic poles these hooks provide anchor points when not much else is available - they are ideal on small, flat surfaces and come in two sizes: 4 inch and 7 inch.

Cleverly engineered the hook folds in half for transportation; this not only makes it really compact, but it protects the carbide teeth and stops them chewing up the inside of the rucksack.

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.

# Highnovate Roof Access Fast Anchor

The Highnovate RAFA© (Roof Access Fast Anchor) is a safe, robust and versatile anchor that provides a unique anchoring capability that can be deployed very quickly in the urban environment when natural anchors are in short supply. The anchor can attach to beams, doors, windows and roof edges and can fold down in a matter of seconds. It can also be placed as a hook and various other positions which are relevant for tactical situations and are not practical for regular rope access.

- Folded dimensions - 35 x 11 x 8cm / 13.7 X 4.3 X 3.1in
- Opening range - 10-45cm / 4-17.8in
- Weight - 2.8kg
- Minimum Breaking Load - 1300kg
- Maximum Working Load - 250kg
- Material - Aluminium 7075
- Standards - EN795, NFPA 1983 specifications

When compared to the Highnovate RAFA© L, the RAFA© is lighter by 1.7kg. The folded dimensions are the same but the RAFA© has a larger maximum opening range.



Can be used with a number of urban features such as beams, doors, windows and roof edges.

Lightweight and low volume for easy storage and transportation.

Available in black or dark grey.

# LIBERVIT Lightweight Door Opener Kit OPH55

LIBERVIT manufacture a comprehensive range of premium entry tools that are all made in France. They manufacture user specific ranges for both land and underwater use - the LIBERVIT Blackline is their tactical urban range.

The OPH55 system is part of the Blackline range and comprises of the GHP portable electro-hydraulic power unit and the compact OP55 door spreader.

The GHP hydroelectric power unit is designed as a backpack for easier transportation, giving freedom of movement to progress in harsh environments. The power unit is equipped with a lithium battery that can be changed manually in a couple of seconds.

The GHP hydroelectric power unit can power all LIBERVIT BLACKline range hydraulic tools. This system will quickly and silently open any standard door, whether opening inward or outward.



A 1.5 m hydraulic hose is integrated in the GHP, however in high-risk situations the GHP can be operated remotely ensuring safety for the operator. Both radio remote control can be used as a wireless remote or as a wired command control unit.

The OP55 hydraulic tool is one of the most compact door openers in the range weighing just over 5kg and giving 509kN of opening force over 140mm.



# LIBERVIT DOOR-RAIDER Light

The DOOR-RAIDER light opens heavy-armoured, inward-opening, multi-locks doors or outward-opening metal doors when equipped with the option T accessory. Silent, quick and easy to use, a heavy-armoured door can be opened in less than 20 seconds.

The opening of doors is done progressively, without impact and in optimal silence whichever mode chosen: remote controlled or by actioning the control switch on the tool. Rubber stoppers, placed at strategic points along the tool reduce the noise risk during transportation and whilst operating.

The GHP hydraulic power unit, part of the DOOR-RAIDER light breaching kit is powered by a 12V battery. This battery gives approximately 45 minutes of tool action which means that a great number of doors can be breached before battery recharging is necessary.



The DOOR-RAIDER light can be remotely controlled by any of the remotes which have a radio range of 30 m / 99 ft, and a wired 5m range.

# LIBERVIT DOOR-RAIDER Light Accessories

3 extension rams are included with the Door Raider light pack. These accessories are to be used for difficult access areas such as one or more steps in front of a door. The upper arm is equipped with a manually removable plate.

There are several different types of plates available on option to cope with different types of door.



The optionT is a DOOR-RAIDER light accessory. It opens some metal, outward-opening doors.

The optionT should be placed on the upper part of the upper arm of your already installed DOOR-RAIDER light and in place of the upper arm plate. The optionT creates a high artificial pressure point replacing the high point created by the door frame of inward-opening doors.

# LIBERVIT EBP1 - EBP2 Entry Kits

The EBP1 manual entry kit is a set of compact, manual entry tools that fit into a EBP-A custom backpack. The tools included are:

- The MR14 is a 14kg battering ram that can be used to break open most domestic doors. The handles are carefully positioned to give a balance point that allows the 100mm diameter strike surface to be used with precision and power. The front handle has a hand protection guard.
- The BS3 Sledgehammer is an all purpose entry tool that is manufactured from solid steel; it has a 625mm shaft and weighs 6kg.
- The handle's insulation meets the NF EN 60900 standard, to safely use on live objects up to 1000V for alternating currents and 1500V for direct currents.
- The CBT10 bolt cutters have a 10mm cutting capacity and so go through most padlocks and cope easily with fences, barbed wire, etc. The blades are replaceable if they get damaged.



EBP1 Breaching Kit.

The cutter's non-conducting coating offers protection when cutting electric cables or other live objects. The cutter's insulation meets the NF EN 60900 standard to safely cut through live object up to a 1000V for alternating currents and 1500V for direct currents.



The EBP2 Breaching Kit is similar to the EBP1, but has a longer sledgehammer to allow more force to be generated and a larger set of bolt cutters that will cut up to 12mm. The set consists of:

- EBP-A tactical backpack
- MR14 battering ram
- BS5 sledge hammer 3ft
- CBT12 tactical bolt cutter 12mm





# Mountain Operations

Helix Operations offer operators increased vertical access, mobility and assault capability in the mountains.

We provide systems and training to allow dismounted troops to operate effectively and with increased capability on high or steep ground in the mountain environment.

We provide solutions that enable enhanced movement, infiltration, intelligence gathering, load movement and force protection in highly complex terrain that is otherwise inaccessible. This capability increases the ability to control the dominant ground.

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

The systems we provide allow units to move over mountain terrain, climb rock, ascend, rappel, navigate, haul supplies and cross ravines or fast flowing water. All with kit that will integrate with operational equipment whilst minimising the weight burden and pack size that needs to be carried.

This ability to deliver a cutting-edge capability derives from a heritage of almost 40 years manufacturing climbing equipment in the mountains of Snowdonia together with close ties to mountain rescue teams, mountain professionals and specialist mountain troops.

# DMM Mountain Rack- Dragon Cams

The DMM Dragon Cams in Matt Grey are the ideal cam device for protecting technical terrain; high grip head units, extendable slings minimising the need for quickdraws, double axles for increased range and placement options plus they use proven 13.75 degree cam angle that optimises holding power with range.

The Dragon's striking TripleGrip cam lobes feature an increased contact area with a raw aluminium finish and additional bite points. These features work together to increase friction between the cam lobe and the rock it's placed in. This increased holding power reduces walking, particularly in slick or soft rock types and marginal placements.

Single stem, dual axle design gives Dragon cams 360° flexibility and a substantial expansion range, increasing performance in sub-optimal placements and helping you get the right piece first time. The Dragon cams hot-forged thumb press gives stable handling and reduces fumbling from gloved hands and pumped fingers. It allows the Dragon to have an extendable black 8mm dyneema sling with no strength penalty, reducing the number of quickdraws needed to extend placements and minimising rack weight.



DMM Dragon cams in Matt Grey come in 10 sizes covering a range from 14mm to 195mm.

# DMM Mountain Rack- Belay Equipment

Helix Operations offer several types of rope controller that are optimised for specific tasks - The DMM Pivot is our favourite belay device for mountain use because it is very versatile and works well with multiple rope systems.

The DMM 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 but optimised for 8mm to 10.5mm ropes. The device takes its name from the pivoting guide mode connection point which when loaded, minimises the leverage to release it again.

Hot forging and machining let 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.



The pivoting shackle moves the point of leverage when initiating lowering of your second. This vastly reduces the force needed to initiate and control lowering of one or two seconds, making guide mode more user friendly.

This device increases rope control when belaying, lowering a partner and abseiling. It is a fundamental part of a climbers rack.

The Belay Master is one of our favourite belay carabiners because of the extra layer of safety it provides - Closing the clip on the Belay Master 2 ensures the carabiner is safe for use. It can only be closed when the gate is screwed shut.

When closed, the clip keeps the carabiner in its strongest orientation, prevents devices and knots from moving onto the spine, eliminates possible cross loading due to rotation. This feature makes the Belay Master the perfect belay carabiner for those new to belaying.

Belay carabiners give smooth and confident belaying with tube and assisted breaking belay devices. They have full section top bars for consistent rope control and reduced rope wear. Their shape resists flipping into sub-optimal orientations when belaying, acting to ensure the carabiner loads along its strongest axis.



# DMM Mountain Rack

The DMM Revolver is a carabiner with an integrated pulley to help minimise friction. The Revolver's pulley wheel reduces friction on ropes moving through the carabiner. Placed where the pitch changes direction, it reduces rope drag and makes upward movement easier.

The Revolver can be used in an improvised hauling system to help your second over a crux, haul kit bags, or rescue your partner from a crevasse. Where normal carabiners in these systems cause energy to be lost as friction, the Revolver's pulley wheel makes hauling easier by converting more of your energy into movement.

A Revolver on your rack lets you reduce rope drag and make efficient mechanical advantage systems without the need for additional devices.



DMM manufactures the best and most comprehensive range of trad climbing protection which includes Wallnuts, Torque Nuts and Alloy Offsets. The Alloy Offsets are a favourites as they fit where a lot of other nuts won't. Alloy Offsets protect irregular and flared cracks that regular nuts cannot.

Every size of Alloy Offset has a robust 12kN strength rating. The wires they are mounted on are set into a recess to reduce wear, while larger sizes have holes that reduce weight. Use in conjunction with Wallnuts for comprehensive all season crack protection.



# DMM Mountain Rack

The ProPad+ is a heavy duty rope protector that is suited to the demands of the outdoor activity industry. Thick natural fibre matting protects ropes against sharp edges typically found at the top of crags, railway bridges, and other sites suitable for abseiling and top-roping. A replaceable wear pad increases the ProPad+'s longevity, and helps it withstand the heavy use of large group sessions.

The ProPad+ can be installed on-rope, or attached to the edge itself for increased predictability and protection.



The Alpha Trad Carabiner gives positive handling and easy clipping, with grooves on the spine to provide extra grip. Deep rope baskets help seat gear and ropes, and encourage loading along the Alpha's strongest axis.

A clean nose helps prevent snagging and accidental gate opening. Superb ergonomics and safe design mean the Alpha excels in any climbing environment.

Wire gate for maximum weight saving and minimising gate flutter.

Clean nose for snag-free clipping.



All-round carabiner for versatility.

The Alpha's shape fits naturally in the hand, and combines with its large gate opening to make the carabiner very easy to clip. Grooves on the back bar increase grip for confident handling.

I-Beam construction techniques allow carabiners to be lighter without compromising strength. This is achieved through hot forging, a process which allows metal to be made into complex shapes that improve functionality.



# DMM Winter Mountain

The DMM Spire Tech is a modern, versatile and lightweight winter tool. The bent shaft and machined grips make it suitable for technical or sustained terrain when walking, mountaineering or ski touring. The refined design and rivetted construction result in a robust axe that weighs in at only 323g.

In winter, there are times when the only thing to lodge an anchor in is the snow itself. The Deadman lets you make the most of this medium and improves on the classic ice axe belay by creating a larger surface area that increases resistance to the placement pulling through. Used in snow gullies and below cornice top outs, the Deadman creates protection out of nothing and provides security in the most insecure places.

The Bulldog and Terrier are anchors that can be used in many features thrown up in winter. Primarily a drive in anchor that finds strong placements in frozen turf and mud, it can also be placed into hooks in the ice created by your axe, and can even be hammered into cracks and seams like a peg.

A long flat plate on the back of the hooks creates a good area for hammering, making placements quick and easy. A long handle lets you create leverage to easily extract them from stubborn placements, and also houses an extendable sling that helps reduce rope drag on wandering winter pitches.



The Bulldog resembles an ice pick, allowing it to create protection options in any place you'd use your axe. Water ice, frozen turf and iced up cracks all become protection options when armed with a bulldog.

In tensile testing our Bulldogs rate to 15kN static load. Provided the material they are placed in is strong and the placement good, the Bulldog will provide you with lightweight security in a wide variety of situations.

# CTOMS TRACE™ Systems Overview

The weight and bulk of a traditional rope system often determines whether it is carried on a mission or not. Basic equipment needed for egress and escape packages is often left behind because of the volume they take up in a pack - space which is often seen as taking valuable room for other mission critical components.

Micro rope systems remove most of the bulk and weight of traditional rope systems without compromising the capability requirements of the end user.

CTOMS TRACE™ micro rope system 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. This can be done whilst the system is fully loaded, with minimal equipment in minimal time. 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 core components are, Prodigy Pulleys, TRACE™ Rope and QD (Quickie Descender).



The CTOMS Quickie Descender can be used for descending, lowering and locking off.



The Prodigy swing cheek micro pulley has a prusik minding edge that allows various MA systems to be created.



A custom 6.5mm aramid/nylon rope forms the basis of the CTOMS system - the rope was the result of much development to find the balance of performance, cut resistance and durability with the QA and QD devices.



The QA can be used for rope ascension, haul and tension systems, self-belay, rope grabbing and force absorption.

# CTOMS TRACE™ Systems Components

The CTOMS TRACE™ system allows users to lead climb, abseil, and haul rescue loads on a 6mm rope that is fire resistant up to 500c and has superb cut and abrasion resistance. The rope is 6.5mm in diameter, with a Technora aramid sheath and a nylon core. The sheath has a black tracer running through one half, and a tan tracer through the other. This allows quicker identification of the mid-rope, a feature which 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.

The CTOMS Prodigy PMP (Prusik Minding Pulley) is one of those subtle and often overlooked diamonds in the rough. There is impressive strength and efficiency in this tiny package and it truly does live up to its name. The weight of the Prodigy Pulley is usually only found in bushings, however the Prodigy contains a bearing and comes with the efficiency to match. That means less work for the user, both with carrying it and hauling loads.

The DMM XS Bat Plate raises the bar in design, performance and strength, Precision machining and heat treatment makes it strong, light and incredibly versatile.

The Bat shape minimises height loss in complex rigging scenarios and generous radii allow direct attachment of textiles as well as connectors. The oversized central hole allows for effortless centralising of connections and gives a perfect technician clipping point.

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 Phantom is our lightest locking carabiner at just 42 grams. Despite its minimal weight, we have ensured that it is still usable in all situations - with gloves, in the wet and the cold. It is also strong across every axis (24kN major axis and 9kN minor axis) and has a clean nose that prevents snagging. The locker to carry when every gram counts. Very light, very strong and very useable.

Dyneema has a high strength-to-weight ratio and is abrasion resistant, making it an ideal material for creating lightweight slings, that can withstand repeated use. It also absorbs less water than nylon.

# CTOMS TRACE™ Systems Kits



## CTOMS Red

Special Operations Capable Kit- Provides skilled end users with a full vertical access, egress and rescue capability.



## CTOMS Grey

Emergency Egress Kit- Allows a hands free edge transition with 10:1 factor of safety with a 1 person load.



## CTOMS Grey Pro

Rope Assaulter Kit - Allows the user to rappel, lower, rope ascend and conduct a 3:1 haul.



## CTOMS Green

Assault Climbers Kit - Purpose built kit for military and tactical rock climbing operations. It contains a full mountain rack including Dragon Cams, Wallnuts, Offsets, 8mm Dyneema Slings and lightweight Quickdraws.



## CTOMS Grey K9

Canine Access Kit - Aids the movement of working dogs during tactical and military operations.



## CTOMS Purple - Starter TRACE Kit

The most cost effective way to get into tactical TRACE™ systems.



## CTOMS Black

Squad Self Rescue Kit - Provides the capability to conduct self-rescue such as evacuation from an elevated position.



## CTOMS Emerald

Parachute Tree Escape.

Maritime



HELIX





# Maritime Operations

Maritime operations demand the highest level of skill and commitment from the operators involved, margins of safety are often reduced by the environment and the pace required to achieve the objective.

Therefore, the equipment provided for Maritime Operations must be of the highest quality across the board, robust, lightweight, intuitive in use and capable of functioning in the harshest of extremes. Helix Operations works with only the best manufacturers of high-end vertical assault solutions, supported by cutting edge research and development to provide products which will perform on demand every time.

Helix Operations provides a full range of ladders, telescopic poles, pneumatic poles, grapnel launchers and powered ascenders that can be used for both underwater and surface operations.

Training must also reflect the quality of our products and be suitable for the high tempo nature of maritime operations, training safely is extremely important. Helix Training can provide a range of training solutions to facilitate safe training provision as well as specialist courses for specific products in our range such as Grapnel Launchers and Powered Rope Ascenders.

# REBS® Compact Grapnel Launcher

The Compact Launcher enables users to access high-up entry points by launching a grapnel hook on to a permanent fixture and then ascending ropes fixed from that point. The Launcher is perfect for entering buildings, bridges, ships, platforms or cliffs as well as crossing ravines or rivers, both for military and rescue scenarios. It is a high performance pneumatic launcher that can be used for both dive and RHIB operations.

The system is powered by pressured air, the 0.35L 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 required. A compact rope container can be mounted on the barrel and fits 115ft of 8 mm rope or 53ft of rope ladder. Multiple shots can be fired from a single bottle charge. The Compact Grapnel with spring-loaded folding arms will hook into any object such as wire, fences, railings, and structural and natural features. It can be used to deploy a climbing rope, flexible ladder or a horizontal traverse line.

The Piston Kit upgrade reduces both recoil and sound levels, providing both tactical and HSE benefits. It is easy to maintain and has a long and robust service life with proper post operations care. The Compact launcher is available in several kit options. A custom made transportation and storage box makes the Compact Launcher highly transportable and user friendly.



Air pressure and reach can be adjusted on the fly to optimise performance.

Can be used with a variety of rope options from 7.5 to 11.0mm to allow use powered ascenders and optimise reach/security for a particular task.

35m max height with grappling hook.

Optional (highly recommended) piston kit reduces noise signature and recoil.

16m Max height with rope ladder.

Compact and lightweight (4.4kg).

# Atlas Powered Ascender APA-4

The APA-4 is the latest battery powered motorised ascender from Atlas Devices. It is rugged, battery operated and integrates into current SOPs using a broad spectrum of standard climbing equipment.

Whether operating at maritime depth, in a desert dust storm, or on the side of a remote cliff, the APA-4 brings new capability on a powerful, lightweight package to military and tactical operations. It is a multi-mission device that hauls heavy personnel loads, extends stamina, and reduces mission exposure.

Operating time is maximised with batteries that utilise the latest technology for both charging and discharge - a standard 3kg battery gives 210m / 700ft of ascent with a 115kg / 250kg load and the high capacity battery gives 420m / 1400ft of ascent on a single charge.



The batteries can be hot swapped both in and out of water. The batteries are non-volatile if punctured by ballistics. The batteries are compatible with the other motorised ascender in the Atlas range - the APA-5.

# Atlas Powered Ascender APA-4 and APA-5

The standard APA-4 lifts up to 160kg / 350lbs directly and an integrated 2:1 attachment allows users to build mechanical advantage systems quickly and easily to lift loads up to 700 lbs. In addition to this there is also a heavy duty version of the APA-4 available that will haul 250kg / 550lbs directly whilst the system can be overridden in an emergency with a manual brake release that allows descent with no battery. Ascent and descent speed is easy to control and allows speeds of up to 66m per minute.

The device handles ropes from 6-11mm in diameter without changing the drive system and is kind to ropes in applying power so that sheaths are not stripped. The unit works on a wide variety of ropes from 6mm skinny Aramid lines to standard low stretch 11mm nylon and polyester ropes.



Whether operating at maritime depth, in a desert dust storm, 100' AGL in a helicopter, or live bonding transmission lines, the APA-5 is a smaller unit offering a force multiplier that effortlessly reduces time and exposure during vertical operations. Lightweight and powerful, the APA-5 lifts up to 600 lbs directly, handles ropes from 6.5-11mm in diameter, operates at maritime depth, and has a hot-swappable battery.

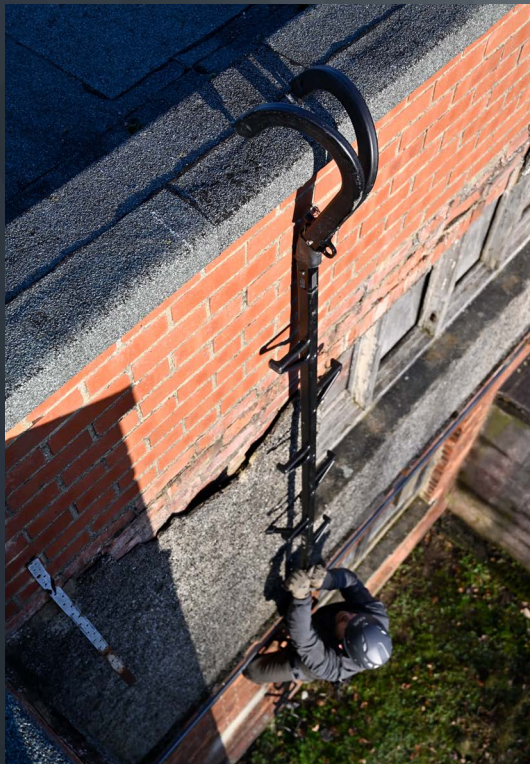
The APA-4 unit has been certified for operational use by the US DOD.

The Atlas APA-4 can be built up into bespoke packages with accessories such as a flotation jacket, wireless remote, hardcase, standard batteries and extended capacity batteries.

# REBS® Ultralight Pole Ladder (UPL)

The Ultralight Pole Ladder (UPL) is REBS®'s latest single stile ladder which is lighter, easier to stack, carry, and stronger. Each UPL section is 1.7m and is molded using the latest in carbon fibre technology. The system can reach up to 11m when the top adapter, five sections of 1.7m, an optional single step and 1.5m Wire Ladder are all connected. The quick connectors and modular design make the system safe, fast and easy to assemble.

By attaching the 1.5m Wire Ladder, an extra 1.5m of height can be gained whilst also keeping the lowest step closer to the ground. In marine environments, the Wire Ladder also provides increased operational safety as the boarding craft will not be able to knock the ladder off its hold when riding on the waves. Operational efficiency is increased with rubber tipped standoffs which provide good space for hands and feet, help keep the ladder stable and minimise noise in use.



Quick connectors and modular design.

Can be used for RHIB, Dive and Urban operations.

A lightweight rigid section ladder that can reach 11m whilst being operated by one person.

Fully compatible with REBS® Tactical range of hooks, Single Step and Top Adapter.



# REBS® Ultralight Pole Ladder Junior (UPL) and UPL Adapters

The REBS® UPL Junior is a half section of the Ultralight Pole Ladder that is optimised for urban use where the shorter length allows it to be packed / strapped to sack.

The UPL Junior uses exactly the same construction techniques as the standard UPL but is just 0.85m long.

The UPL Junior does not have the built in stand-offs in order for it to be packed as compactly as possible - instead it uses push in pins that act as stand-offs.

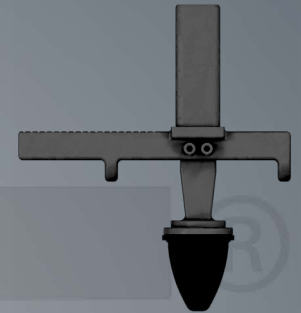
The UPL junior uses the same system components - hook adapter / bottom step / wire ladder - as the standard UPL.



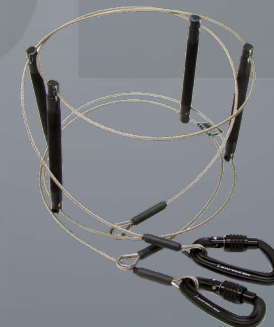
UPL Junior Section



Top Adapter



Single Step



REBS Wire Ladder 1,5m



REBS Hook Dual 6,8" Tactical

# Atlas ATL Tactical Ladder

The Atlas Tactical Ladder (ATL) is a high strength aluminum collapsible bridging, ladder, litter system ideal for jump, maritime, and urban lean-to and hook and climb tactical access mission requirements. The ATL can be joined to reach heights of 15-18ft.

The ATL (Atlas Tactical Ladder) system features a sophisticated design optimised for an exceptionally high strength-to-weight ratio. This allows for durability, versatility, and minimum weight (4.5kg) without sacrificing strength or height.

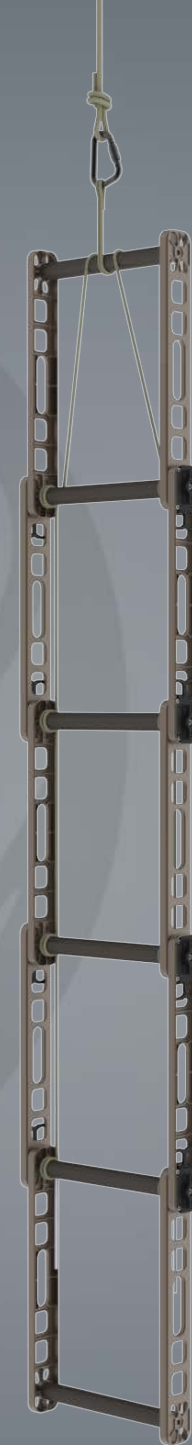
The ATL is the foundation of an ultralight Litter/Ladder/Bridge system designed for operators conducting austere special operations missions. Built on a core Atlas Devices ladder technology backbone, the ATL system combines the packable, height-conformable strength and tailor-ability of a ladder and bridge with the speed, efficiency, and security of a vertical/horizontal hoist-able patient litter. The integrated handle designs enable effective patient manipulation and longer duration carries which provide a multi-mission tool that is useful through all phases of operations.



Additional sections can be added to create a ladder up to 8.5m long.

The ATL is rated for loads between 180 and 360 kg depending on configuration. The 4.2m double section ladder weights less than 9.0kg. Additional sections can be added to create a ladder up to 8.5m long.

The 4.2m double section ladder weights less than 9.0kg.



# Atlas ATL Tactical Ladder

The Ladder easily collapses down and the space within the frame can provide storage and protection for additional equipment. When collapsed, the system fits entirely within the torso's profile thus enabling unimpeded freedom of movement.

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 optimise load carry and length. This means that the ATL systems 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 can be joined to reach heights of 5-6m.



The Atlas ATL Ladder joint locking system can be set to auto-locking mode for silent deployment. Compacting into a collapsed mode making it easy to handle.



# REBS® SkyPole

The REBS® SkyPole is a pneumatic pole system with a reach of 20m based upon the REBS® Giraffe Tracer pneumatic pole system.

The Giraffe has been considered as the stiffest and best solution for boarding ships with more than 160 systems sold worldwide. The SkyPole has been developed on this extensive experience to create a design which features state of the art carbon fibre tubes, offering the best possible stiffness and weight ratio.

The SkyPole is constructed using carbon fibre technology which has been taken from the automotive industry, meaning the tubes are extremely stiff therefore increasing the operational safety and effectiveness. A hook can be safely locked into place allowing for safe extension of the pole. When the pressure in the pole is reduced, the hook can be unlocked and will release easily. This means that the hook can be released whilst the pole is standing vertically. The locking system mechanism allows the pole to be used in both harsh and extreme conditions with no risk to the hook detaching.

Typically used from a RIB (Rigid Inflatable Boat), the pole is used to place a hook and ladder on larger ships but it can also be used for land based operations. Due to the SkyPoles robustness, heavier tools and large ladders can be used.

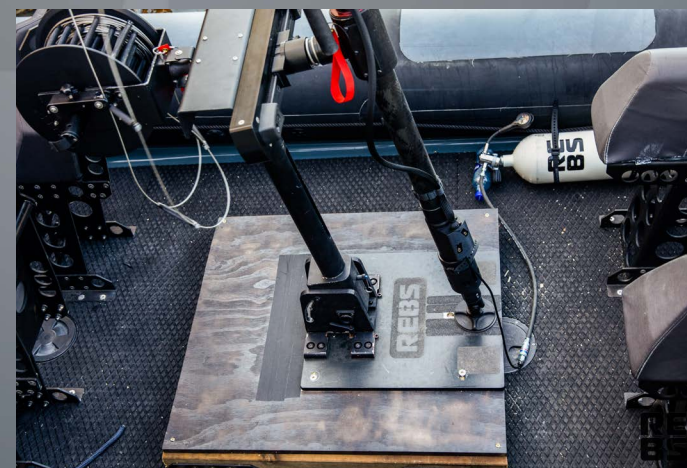


Excellent operational safety and effectiveness.

Safe and reliable hook connection.

Low centre of gravity and low weight.

High push and full force.







# Rope Rescue Capability

Established, proven and deliverable Rescue capability in Remote Environments.

Whether as part of a documented rescue plan when conducting another task, or as part of an established Mountain or Rope Rescue team. Rescue operations due to the fact they are dynamically evolving events in hazardous or deteriorating conditions against a compressed or collapsing timeline, are one of the most difficult tasks to train and deliver safely.

The ability to employ equipment that has been proven and compatibility tested with other components utilising proven techniques, provides the greatest degree of safety margin for the rescuers and increases the likelihood of a successful resolution for the casualty or casualties.

Helix Operations provide equipment capabilities built on the best components from across the vertical access and rescue industry and combine these with training packages to ensure they are employed appropriately and to their full potential.

# Med Sled® VLR

The Med Sled® Vertical Lift Rescue stretcher offers a compact, lightweight and comprehensive rescue capability for remote and confined space environments.

The Med Sled® VLR can be dragged, lifted horizontally or lifted vertically. It can be used on land or in water.

In addition, it has been tested by both the US Military and Canadian Search and Rescue and has passed all their air worthiness standards / requirements for both land and water rescues.

The Med Sled® VLR system deploys quickly, is intuitive to use and has a minimal training burden - these features all help to ensure that extraction is as fast as possible and make it perfect for use in less than ideal situations; poor visibility, cold gloved hands, confined spaces or hot zones.

A compact, lightweight and comprehensive rescue stretcher.

Lifting straps are built into the body of the stretcher.

Suitable for remote and confined space environments.

Deploys quickly and has minimal training burden.



# DMM Keanu

Compact trolley for highline rigging and rescue operations. If precision, speed and efficiency are important in your reeve, then the Keanu is your answer. By incorporating multiple sheaves within fixed side plates, not only have we ensured that you won't forget critical rigging components, we have created a trolley that makes it easier to lift and move loads with precision and speed.

Keanu is lighter and smaller than highline assemblies configured using multiple components. Series redundancy can be configured with the addition of pulleys and lines via quick release locking pins. Two Keanu trolleys can be bolted together to create parallel redundancy. All components are replaceable, so maintenance can be carried out by end users, making these trolleys ideal for rescue teams, arborists and theatre riggers.



# DMM Rigging Plates and Hubs

DMM Bat Plates raise the bar in design, performance and strength. Precision machining and heat treatment make them strong, light and incredibly versatile. The Bat shape minimises height loss in complex rigging scenarios and generous radii allow direct attachment of textiles as well as connectors. The oversized central hole allows for effortless centralising of connections and gives a perfect technician clipping point.

Complex 3D rigging focused onto a single anchor. The DMM rigging hub can be used to form a super strong centralised anchor point for use in treework, rope access and rescue. Radiused surfaces throughout allow direct rope or textile attachment - this includes running ropes, girth hitched slings, tied in prussiks, etc. Use of multiple 3D anchors often allow the hubs to be used as a lightweight alternative to a tripod for edge management or targeted lifting points e.g over a manhole or cave entrance. Certified to our in-house Linking Components standard.

Centralised connection point for stable rescuer attachment.

Four sizes for all rigging configurations.



Textile friendly surfaces with large radii.

Can be bolted together for '100% redundancy' in system.

# DMM Gyro PM

Developed in conjunction with our industry partners, the Gyro offers excellent performance in any rigging scenario.

The Gyro PM features prusik minding side plates that mean it can be used in efficient progress capture hauling systems.

The Gyro range features three models: single sheave; single sheave prusik minding; and dual sheave prusik minding with becket. All feature sealed roller bearings and rope friendly fairleads to maximise efficiency.

DMM iD is built into every Gyro pulley, so the range can be easily integrated into PPE safety management systems.

Manufactured in tactical colours it is suited to military and tactical climbing operations in both mountain and urban environments.



Prusik minding side plates allow progress capture when used in hauling systems.

Compact design reduces system height.

Roller bearings for increased efficiency.



Fairlead flares increase efficiency.

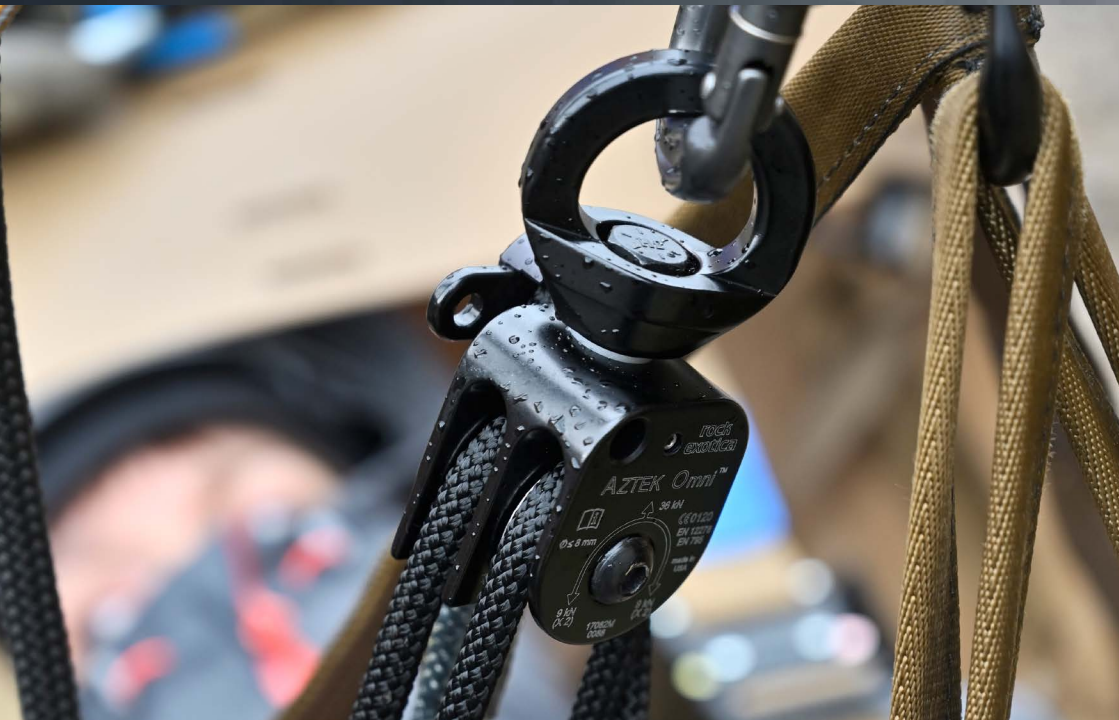
Compact design reduces system height.

Hot forged body reduces wear on ropes.

# Rock Exotica® AZTEC Pulley System

The AZTEC system is a Personal Mechanical Advantage kit which can be configured as a 5:1, or 4:1 with a re-direct by just rotating the system. The pulleys are machined from solid aluminium and they feature swivel connection points.

The system can be used as a pick off, adjustable directional, high directional guyline, high angle attendant tether, high angle litter scoop, load release hitch and much more.



The system uses a P41 AZTEC Double Pulley.

The AZTEC was designed for use with sewn Prusiks made by Sterling Rope and an 8mm main rope with a sewn end to attach to the side of the pulley. Note that the Prusik is a special "3 on 2". This is used because it cannot come off the rope like a traditional Prusik can.

P41 SET rigged with 8mm rope and 6mm Prusicord.



# Skylotec SPARK Tactical

The Skylotec SPARK Tactical is an auto locking descender based on the successful Sirius descender, but with features optimised for the tactical user.

It is certified for use on a wider range of rope diameter ropes (9.0mm to 11.0mm) and this allows the use on skinnier, lighter ropes. The descender is certified be used on both static and dynamic ropes.

The anti-panic function has been removed to allow fast descents to be made without having to worry about triggering the brake - control is simple pull back to go, pull back harder to go faster and slow down by letting the handle return. Hard stops are made by just letting go.

The auto-returning operating lever has a particularly small radius of motion so that you can work fast, accurately, more comfortably and safely.

The Skylotec SPARK Tactical retains the ability to descend with 250kg rescue loads and during rope insertion, the carabiner can stay connected to both the harness and the device.

Intuitive and simple, the Skylotec SPARK Tactical sits perfectly in the hand.

Developed for extended use under the toughest of conditions. That's why it is made of up to 100 % metal. It should not be forgotten that the Skylotec SPARK Tactical retains the outstanding handling of the Sirius thanks to compact design and intuitive route of the rope.



# Harken Industrial™

## CMC CLUTCH™

The CMC CLUTCH™ is a multi-purpose device for hauling, controlled lowering, smooth personal descent, easy ascending and reliable progress capture. It offers efficient operation and optimal control for the technical rope professional.

It serves as a personal descender with efficient ascending capability, as well as a traditional raise/lower system.

- Rope Size: 10.5-11mm / 7/16in
- Weight: 836g / 1.84lbs
- Dimensions: 208 x 112 x 47mm / 8.2 x 4.4 x 1.9in
- Max Loads: 272kg / 600lbs
- 3-Sigma MBS Pulley 40kN 8,992lbf / Becket 22kN / 4496lbf
- Certifications: NFPA 1983 (2017 ED) GENERAL USE; ANSI/ASSE Z359.4-2013; EN 12841: 2006/C; EN 341: 2011/2A; EN 15151-1: 2012/8



Features a faceted ratcheting sheave of stainless steel.

Combines the attributes of more expensive multipurpose devices with those of less sophisticated wearable personal descenders.

The double latched side-plate is independent of the devices attachment point.

Features a faceted ratcheting sheave of stainless steel.



# Rock Exotica Arizona Vortex

The Rock Exotica Arizona Vortex is an artificial high directional system and anchor point. It offers unlimited versatility and configuration options for rescues, lowers and hauling of equipment across all types of terrain, buildings and structures.

The Vortex can be rigged as a tripod, bi-pod and gin pole. This is possible because the Vortex's two-piece head set allows for it to be rigged as a standard tripod or in advanced applications as an easel A-Frame, A-Frame, sideways A-Frame and also as a gin pole. It has fully adjustable, telescoping legs that allow it to be rigged in the most challenging mountain or urban terrain.

Importantly for equipment designed to be used in remote locations in poor conditions, it is intuitive and fast to be set up. Transport options are maximised by the Vortex system breaking down into four separate bags. Winches are easy to attach if they are needed to ease and expedite raises and lowers.

The Arizona Vortex with other Rock Exotica products such as the Omni Block pulleys, AZTEC hauling system and Kootenay tyrolean pulley, meet virtually any requirement for a portable AHD system. All of these are available in subdued colours. A special production run in black offers a better suited option for tactical climbing and rescue operations.



A special production run in black offers a better suited option for tactical climbing and rescue operations.





Ropes  
 | **HELIX**

# Ropes

Ropes are an integral part of any access or egress system and tactical users demand a lot from their ropes systems. Static ropes are used for entry through broken windows, descent over sharp edges and exposure to high temperatures - all with heavier loads than normally used.

Dynamic ropes for operational tactical use in the mountains have similarly high requirements; skinny, light, tough, dry treated, triple rated and in subdued colours.

Helix Operations has worked to create a comprehensive range of low stretch and dynamic ropes that gives the end users greater safety and better performance.



# Marlow Fast Ropes and SPIES/ FRIES Ropes

Marlow Ropes designed and developed the original Fast Ropes in conjunction with the British Special Forces. These ropes are now in use by traditional regiments, special forces and SWAT teams in all four corners of the globe.

The unique construction of the Fast Rope from Marlow allows for comfortable control throughout the descent and makes it easier to slow down and brake. The suppleness of the eight braid spun nylon construction means that the rope is not hard on the hands and less force is required compared with other ropes. Oil and general spillages do not affect speed or control during descent as the Marlow Fast Rope will absorb liquids. Available in standard 40mm nominal diameter and thinner 32mm nominal diameter version.

As well as the standard Fast Rope series Marlow also produce ballasted fast ropes and a fast rope with a tighter braiding for fast descents.



Spliced Eye Termination



MultiFit Termination



Dynalite Termination



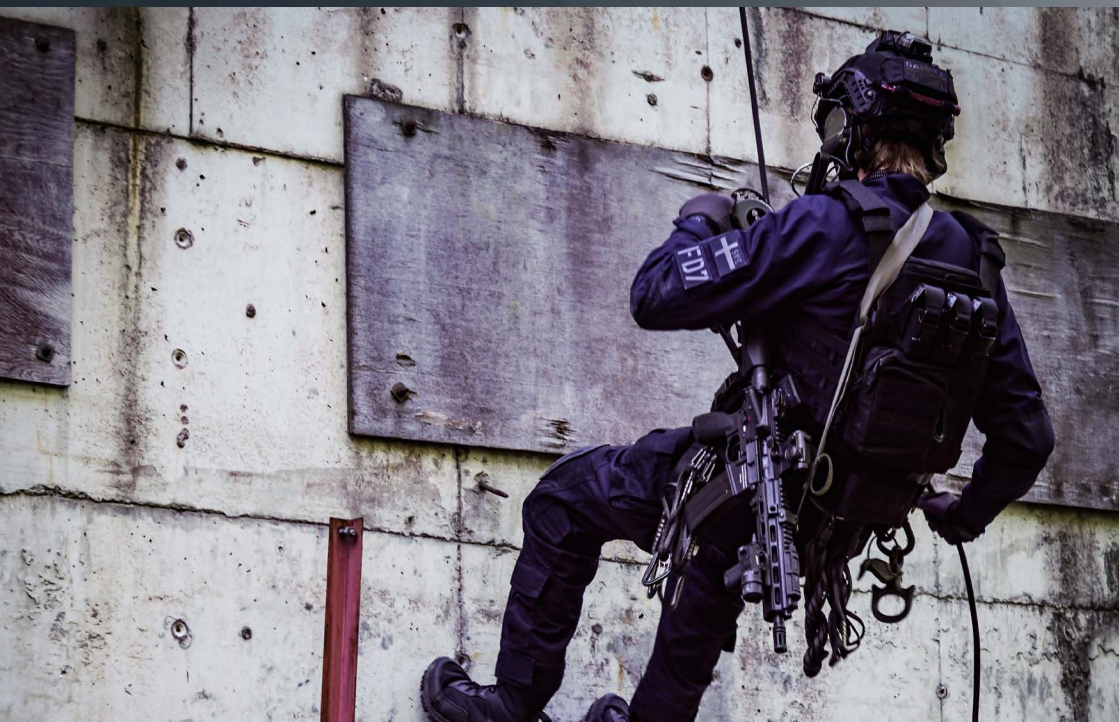
# Low Stretch Static Ropes

Low stretch "Static" ropes are an essential component for many vertical access tasks and Helix Operations has sourced a comprehensive range of ropes for the tactical end user.

These include:

- A range of ropes for motorised ascenders and grapnel launchers
- Aramid sheathed ropes for edge and heat protection
- Very low stretch polyester/specialist fibre ropes for rigging and rescue

In the range are heavy duty 12.5mm ropes all the way through to 9mm Type A ropes and 7.5mm / 8.0mm Technora/Dyneema ropes for specialist tasks.



# Dynamic Ropes

Helix Operations has worked with specialist rope manufacturers to put together a largely bespoke range of dynamic ropes designed for tactical operators.

The range includes:

- Skinny 8.9-9.1mm, triple rated dynamic ropes in subdued colours. These ropes are the ideal for the tactical operator as they can be used in a single or double rope system and are very compact and light. Plus they are normally dry treated so rain, snow and ice have limited effect on their performance.
- Work horse 9.4-10.2mm single ropes for general use where the ropes need to be able to take abuse, but still be light enough to carry.
- Heavy duty 10.5mm+ ropes for adventure training and repetitive use.



# Micro Ropes and Cords

Small diameter ropes and cords have always been important components within personal climbing and anchor systems whether it is personal prusiks or cordlette we have all relied on them for safety and back up.

With advances in modern materials utilising up to date construction techniques and technologically advanced fibres the strengths and properties of modern cords have become significantly improved allowing their use in high strength anchors and focal points for rescue systems.



# Rope Gloves

Helix Operations has a wide range of rope gloves to suit a variety of end uses and budgets.

Selecting the correct glove for a specific use can significantly alter the interaction between the operator and the rope systems they are employing, for example the incredible new Charon rope glove from W&R allows the use of fast ropes without the need for an extra over-glove to protect from friction, this allows the operator to transition from the fast rope to mission specific equipment without distraction.

In operations where friction is less of an issue the balance between protection and dexterity can be met by selecting gloves utilising high end modern materials such as aramid fibres and silicon layers to reduce the bulk of the glove whilst maintaining a high levels of grip and feel.



WR KinetiXx X-Rope Glove



# Tactical Training

Helix Operations deliver training in all aspects of vertical movement across all types of terrain. We utilise a core team of instructors who are experienced in operating tactically in these environments, our consultants experience covers tactical employment. Rescue and mountaineering ensuring our training is both current and relevant to the end user.

All our courses are tailored and refined to ensure they are pertinent to the end user because we are aware that no two situations or requirements are the same. We ensure that core skills and techniques are covered on all courses to ensure interoperability between organisations.

Our consultants hold the relevant military or civilian qualifications, we can if requested provide training and accreditation to the UK National Governing body standards.

## Core skills:

- Vertical movement. The ability to move teams and individuals safely and efficiently through complex terrain.
- Micro rope systems. Micro rope systems in all environments; this provides a lightweight expeditionary capability for experienced users.
- Rope Rescue. We are accredited Rescue 3 provider able to provide internationally accredited Rope Rescue training that is appropriate to the tactical user.







**CTOMS™**



Keep updated with Helix operations across platforms such as [helixoperations.com](https://helixoperations.com), Tactical and Rescue Instagram accounts as well as LinkedIn. We share exciting information regarding products we manufacture ourselves as well as key products from brands we work with.

Stay informed with key innovations across all product ranges in the tactical and rescue field as well as new courses.

Our website lists our entire range, including any certifications, technical specifications, and variations of products. You can also find information regarding courses and training, including our accreditation.

 [helixoperations.com](https://helixoperations.com) [@helixoperations](https://www.instagram.com/helixoperations) [helixoperations](https://www.facebook.com/helixoperations) [helix-operations-limited](https://www.linkedin.com/company/helix-operations-limited)

Helix Operations evolved out of DMM International when it became apparent that there was a need for a specialist company to support the government, tactical, and rescue markets.

DMM International has a global reputation as a leading manufacturer of superior height safety equipment and has supplied the UK and overseas military and government institutions with equipment since 1985. Growing demand for a broad range of complete, specialist systems where all components are selected and proven to work together led to Helix being founded on this broad wealth of expertise and experience. With a remit to bring together a portfolio of the best equipment, the resulting partnerships with companies such as REBS, CTOMS, and Atlas amongst others have allowed us to offer a complete capability for vertical access and rescue across Urban, Mountain, and Maritime environments.

Helix's mission is to provide the tactical end user with the very best equipment and systems for vertical access, egress, and rescue scenarios.

We understand that first class equipment is only one part of the equation, and that without a trained operator or enabler it is unlikely to be utilised to its true capacity. That is why Helix also offers training packages alongside systems and kit. Training can be delivered through a range of options; from standard courses for the operator, maintainer, or supervisor, through to bespoke courses covering specific scenarios. These training courses are either accredited by Helix or through external validation depending on the end user requirement and course syllabus.



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