

#### **Key Brands**



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.



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 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 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.

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 USA that specialises in high end rifle systems, but also produce the best small ledge hooks on the market.



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.





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### 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.

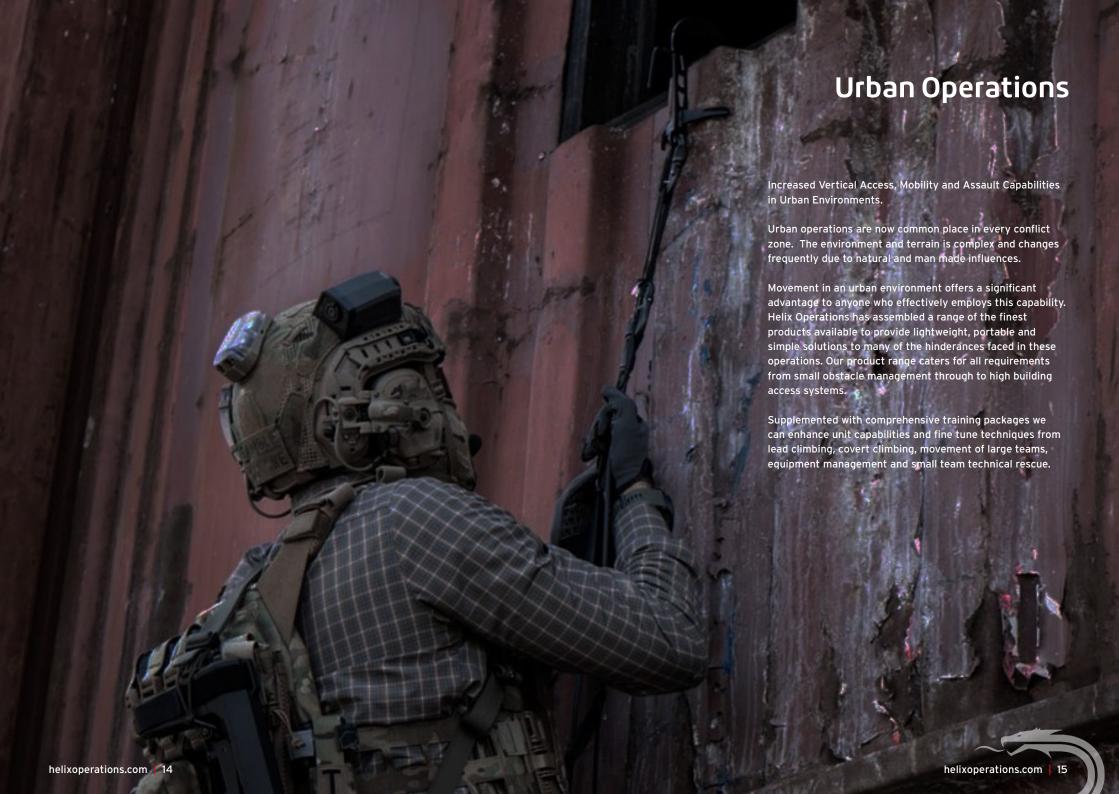
The buckles are a new design from DMM using a marine grade stainless steel with an offset slot to eliminate accidental opening. They are coated in an electrophoretic black polymer to give a secure system that is fast to use and can't be affected by corrosion of debris.

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.







# The Helix Combat Multi Harness (HCMH) II

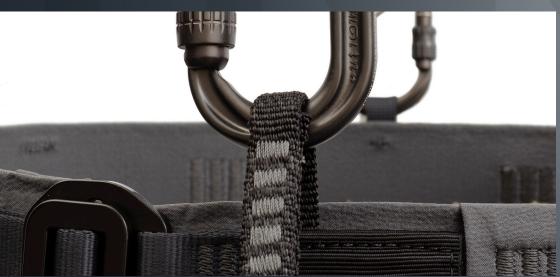
The Helix Combat Multi Harness (HCMH) II is a fully modular tactical harness system that has been developed over several years with significant end user input and trials. It can be either used as a standalone EN358 Riggers Belt, an EN 1277 Waist Harness or an EN 361 Full Body Harness.

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.





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#### **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.



Compatible with DMM Chest Harness and Bridge Sling.



Simple to use tie in point.

Stainless steel Slidelock buckles for durability.

Replaceable webbing keepers.



# 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.



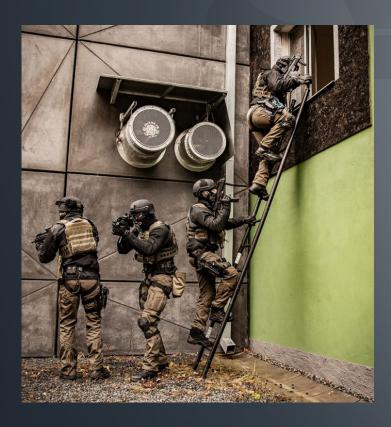
Extra rigging equipment included: An ANSI rated rescue hook and aramid sling that increase the options for creating safe anchor points. System contains a pre-rigged descent/lowering system. This uses 23m of 5.5mm heat resistant aramid rope with a rigging carabiner, a rope protector and an auto-locking, 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:

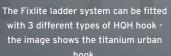
- Leaning ladder
- Hanging Hook ladder
- Bridge ladder
- Window breakers
- Emergency stretcher
- Assault platform ladder
- Train/bus entering ladder
- Smoke-jump ladder.





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 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 fiited 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.



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# HQH LADCARB® FIX-LITE Further Capabilites

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.



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### **HOH 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.



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### **HOH 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 multipurpose 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.



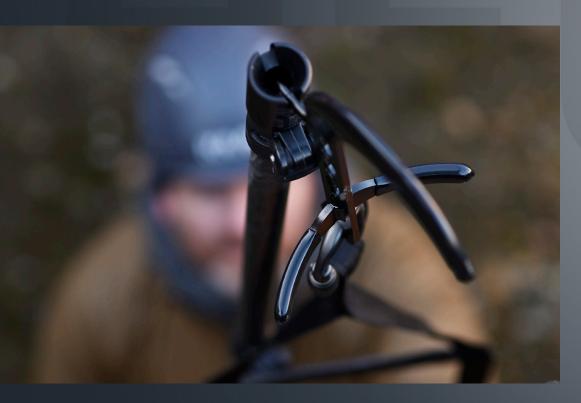
Constructed from 3K Carbon Fibre with section locks that can be tightened by hand.

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 a 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.



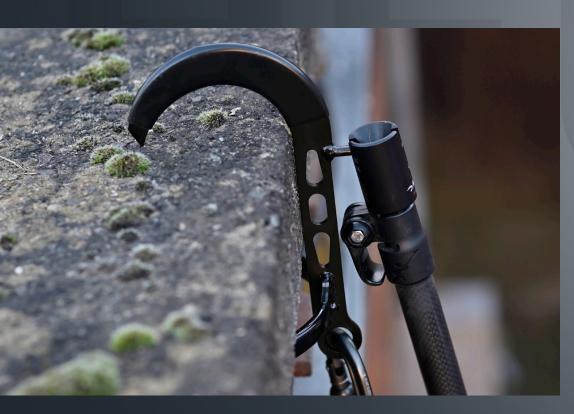


#### Helix Urban Hook

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.



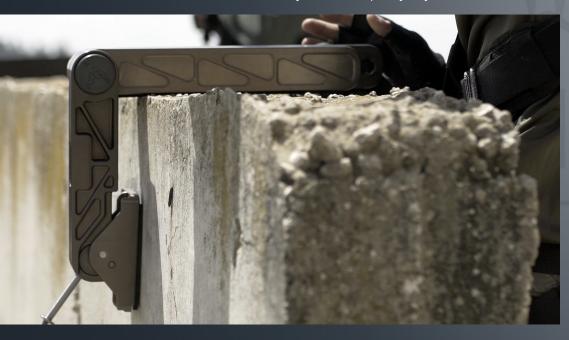


### Highnovate Roof Access Fast Anchor

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.





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### 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 electrohydraulic 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.





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## 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 optionT 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.





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## 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.





#### 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.



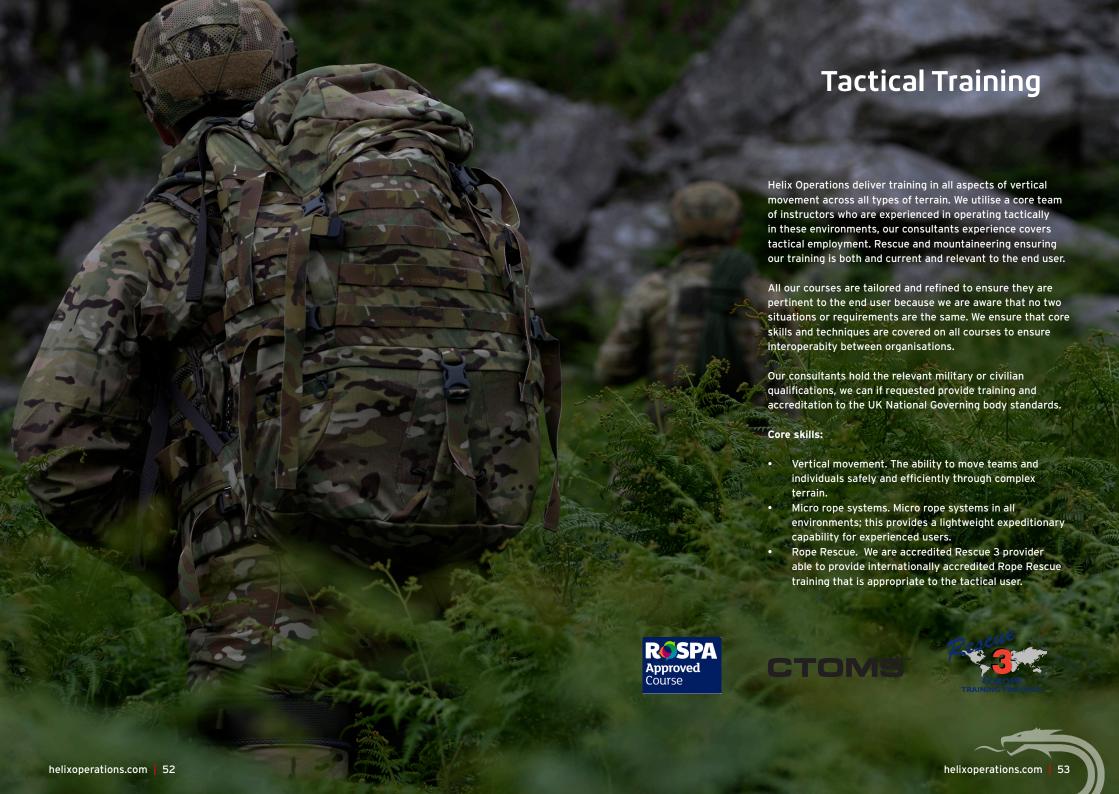
EBP1 Breaching Kit.

The cutter's non-conducting coating offers protection when cutting electrics 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

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Keep updated with Helix operations across platforms such as 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 tactial and rescue field as well as new courses.

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



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