



HELIX

Helix Lightweight IED
System



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, systems and training 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.

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Mission Statement



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



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.



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.



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.



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 dismantled troops in urban environments with the ATV carbon bridge ladder demonstrating how tough carbon can be.



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.



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.



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



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.



Helix Lightweight IED System

The Helix Lightweight IED System is a complete game changer for the modern EOD operative. Just over a year ago, Helix were tasked by UK forces to minimise the size and weight of the old school and heavy kit in use for IED disposal. This led to the design of the lightest IED system available, coming in at just 890g for the entire system. The system has been military trialled and tested and is now in use in operations internationally.

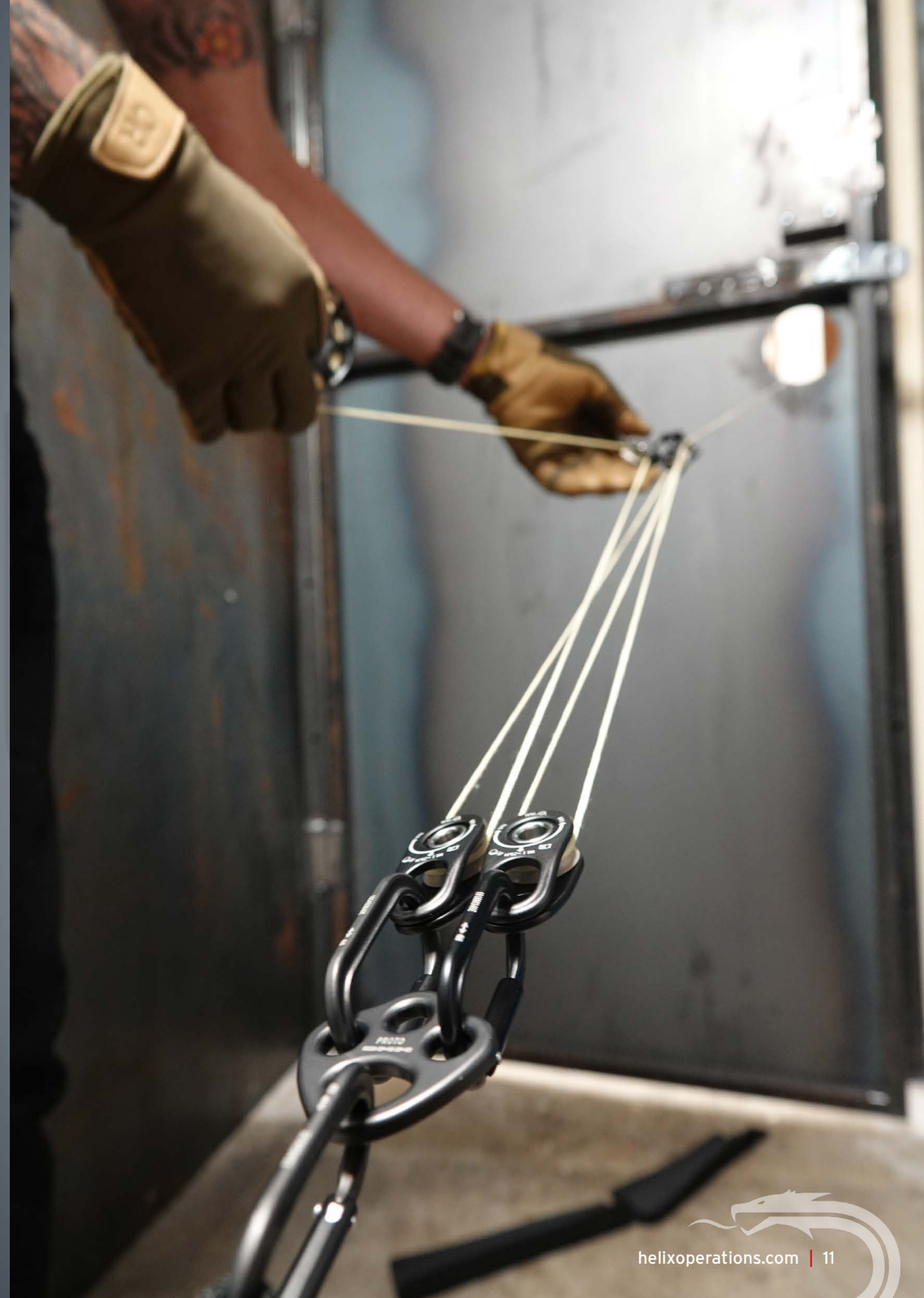
The system comprises of two 30m finger reels, loaded with 2mm aramid cord (rated to 2kN / 200kg) that can be easily joined together to allow for 60m of line capability. The aramid cord is also heat resistant up to 500 degrees.

Other key elements of the system (aside from the lightweight aramid reel) are the micro-pulleys and XSRE carabiners. These are so small and strong that you can set up a 5:1 mechanical advantage in the palm of your hand, which is simply incredible and more than capable of pulling at the maximum weight limit of the cord (which again is 200kg).

The pouch containing the kit is attached to the operative's belt using standard molle, with an internal sleeve holding the system elements. When removed from the outer pouch and laid flat - the sleeve provides a clean working space ready to organise your line, anchor and rigging points.

Includes:

- 2 x Aramid Finger Reels each with 30m of aramid 2mm cord and a XSRE captive bar)
- 4 x DMM Micro Pulleys
- 6 x XSRE Mini Carabiners - Matt Grey
- 2 x XSRE Lock Carabiners- Matt Grey
- 1 x DMM Accessory Micro Plate
- 1 x DMM Micro Walnut Set 00 - 0.75
- 2 x DMM Dyneema Slings 8mm x 120cm
- 1 x DMM Terrier Hook
- 1 x DMM Bulldog Hook
- 1 x Helix HAL Pouch



Helix Lightweight System Elements

Helix Aramid Finger Reel (2kN - 140 grams).

The Helix Aramid Finger Reel is a super lightweight alternative to the standard 6mm lines used in most IED kits. Helix reels are made from high grade aluminium, with 30m of 2mm aramid cord. The cord is rated at 2kN (200kg maximum load limit) and is fire/heat resistant up to 500 degrees. The reel is finished off with an XSRE Captive Bar carabiner (with screw gate) to provide a very strong and reliable initial connection to the IED (via lock-grips or hook). The XSRE is rated to 4kN (400kg), which gives the operator an extremely strong reel that literally fits in the palm of your hand.

Each pouch contains two 30m reels, which can be joined together using an XSRE (micro-carabiner), to give a 60m capability. Developed in conjunction with the needs of UK operatives, this has been trialled and tested, and is now in use in operations, internationally.



Helix Lightweight IED System

DMM Polo Micro Pulley and DMM XSRE (15kN - 25 grams)

Each kit comes with four micro-pulleys and XSRE open gate carabiners. The micro-pulleys are rated to 15kN (1500kg) so are extremely strong, compared to their size. By utilising the micro hub with the pulleys and accessory carabiners, the operator can easily set up a mechanical advantage of 2:1, 3:1 and 5:1 which enables the operator to easily move a large IED with minimal effort. Importantly, the mechanical advantage allows for smoother pulling of the IED, which is important. By using an Italian Hitch in place of a capture device / prussik, we can haul and reset the hauling system even in confined spaces / behind protective barriers.

By utilising mini-breakaway pulleys / re-direct plates, moving an IED from room to room (into a larger area) with these pulleys, becomes far less laborious for the end-user.



3:1 Mechanical Advantage

5:1 Mechanical Advantage



Helix Lightweight IED System

DMM Micro Wallnuts 00 – 0.75 (30kg – 2kN/6kN)

Originally derived from mountain climbing use, the Micro Wallnuts cross over into an urban EOD environment nicely. They can be used as anchor points in array of areas, such as cracks in walls, lampposts, and pavements curbs, and slid into door frames and rotated to form a solid anchor point for a carabiner, pulley or red-direct plate. If you slide the walnut itself up the wire, you can then wrap the wire around a table leg or chain fencing and connect to form a strong wire sling for a 2mm line connection point.

Micro Wallnuts

- 4.0 - 9.7mm
- 4.6 - 10.8mm
- 5.1 - 11.7mm
- 5.9 - 12.6mm



Helix Lightweight IED System

8mm Dynatec Sling (20g – 22kN)

Each kit contains two 120cm, 8mm Dynatec slings, which can be used for a very light, and compact sling connection point. They can be knotted and thread through doorways, or simply wrapped around posts, furniture (or other objects). Joined up, they can offer a maximum 240cm diameter to form a very strong and lightweight connection point for either a mechanical advantage system or a connector anchor.

Terrier and Bulldog (73g – 150g, 15kN).

This incredible hook duo offer an incredibly strong anchor point for hauling heavier IED's with mechanical advantage line systems. With vicious teeth along the front point, they can be hammered into tarmac, cracks in pavements or even soft walls /clay. The hooks are probably stronger than the walls you are hammering them into!





Connect With Us



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 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.



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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