



HELIX

CTOMS TRACE™ Systems Overview



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



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

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



ATLAS DEVICES

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.

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 Kits



Basic Capability Kit - Grey Kit

Usually carrying an egress-from-height kit is too much weight and volume restrictive, putting the user in a potentially dangerous situation if an immediate evacuation is required. Not anymore. Save weight and space while increasing safety and capability thanks CTOMS basic capability GREY Kit. This is an incredibly small kit, containing the basics, which allows a hands free edge transition, auto-braking when the device is released from grip and maintains a 10:1 factor of safety with a 1 person load. The kit can be used for both tactical lowering and abseiling.

Stock Code - CT79012-DMM-CK



CTOMS Quickie™
Descender, Black (x1)



CTOMS Quickie™ Ascender
with integrated Pulley,
Black (x1)



Sling, DMM Dyneema, 8mm
x 180cm (x2)



Carabiner, DMM Phantom
Screwgate, Matt Grey (x2)



Carabiner, DMM Chimera
Wiregate, Matt Grey (x1)



Rope of choice (1+)



CTOMS TRACE™ Systems Kits



Basic Operator Kit - Grey Kit Pro

The CTOMS Basic Operator Grey Kit Pro allows the operator to rappel, lower, rope ascend and conduct a 3:1 haul, all in an extremely compact and lightweight kit. It is an ideal kit to negotiate complex terrain when establishing installations and fixed lines, and allows the operator to self belay on a fixed rope on sloping ground.

Stock Code - CT79013-DMM-CK



CTOMS Quickie™
Descender, Black (1x)



CTOMS Quickie™ Ascender
with integrated Pulley,
Black (1)x



Rope Protection,
RopePro2™ (x1)



Carabiner, DMM Phantom
Screwgate, Matt Grey (x3)



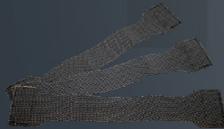
Carabiner, DMM Chimera
Wiregate, Matt Grey (x1)



Rope of choice (1+)



EdgePro™, Coyote Brown
(x1)



EdgePro™, Replacement
Skin 3 Pack (x1)



Flat Rope Bag, MULTICAM®
(x1)



Sling, DMM Dyneema, 8mm
x 60cm (x2)



Sling, DMM Dyneema, 8mm
x 120cm (x1)



Sling, DMM Dyneema, 8mm
x 180cm (x2)



CTOMS TRACE™ Systems Kits



Minimalist Rescue Kit - Orange Kit

The ORANGE Kit is a minimalist kit with enough capability to facilitate rescue or hasty installations. This is ideal for Assault Climbers, Pararescue, Medics, and other specialists that want to carry a capability for hasty rescue or troop movement facilitation in an extremely small and lightweight package.



CTOMS Quickie™
Descender, Black (x1)



CTOMS Quickie™ Ascender
with integrated Pulley,
Black (x2)



Prodigy™ PMP (Prusik
Minding Pulley) Black (x1)



Sling, DMM Dyneema, 8mm
x 120cm (x1)



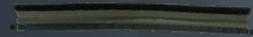
Sling, DMM Dyneema, 8mm
x 180cm (x2)



Carabiner, DMM Phantom
Screwgate, Matt Grey (x3)



Quick Link, Kong, 1430
lbs (x1)



Rope Protection,
RopePro2™ (x1)



EdgePro™, Coyote Brown
(x1)



Carabiner, DMM Phantom
HMS Screwgate Matt Grey
(x1)



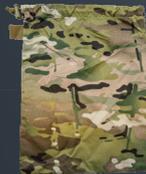
Carabiner, DMM Chimera
Wiregate, Matt Grey (x1)



Rope Bag, TRACE™,
MULTICAM® (x1)



EdgePro™, Replacement
Skin 3 Pack (x1)



Flat Rope Bag, MULTICAM®
(x1)



Sling, DMM Dyneema, 8mm
x 60cm (x1)



Harness POKETHOIST™,
Coyote (x1)



Rope of choice (1+)

CTOMS TRACE™ Systems Kits



Special Operations Capable (SOC) Kit

Rescuing casualties from a roof, upper floors, ships, or confined spaces has now become significantly simplified. The RED Kit increases your mission capability without a significant increase in weight burden. Where the ORANGE Kit is intended for hasty vertical movement, the RED Kit is intended for deliberate vertical movement.

This is the flagship kit of TRACE Systems providing the ability to perform advanced application use in high angle and confined space rescues, rappels, ascending, lowers, hauls, climbing, bridging, and more. This tiny kit is unmatched in capability and safety in its weight class.

This kit is ideal for the Assault Climbers, Pararescue, SOF Medics, and other specialists responsible for deliberate vertical movement of personnel and casualties. The intent of this kit is that if two Operators, each with one RED Kit are working together, they can construct every installation and capability, except for a reeve on a highline, which would need to be supplemented.



CTOMS Quickie™
Descender, Black (x2)



CTOMS Quickie™ Ascender
with integrated Pulley,
Black (x3)



Prodigy™ PMP (Prusik
Minding Pulley) Black (x1)



Double Prodigy™ PMP
(Prusik Minding Pulley)
Black (x1)



Rigging Plate, DMM XS BAT,
Matt Grey (x1)



Quick Link, Kong, 1430 lbs
(x2)



Sling, DMM Dyneema, 8mm
x 60cm, Black (x1)



Sling, DMM Dyneema, 8mm
x 120cm, Black (x1)



Sling, DMM Dyneema, 8mm
x 180cm, Black (x2)

CTOMS TRACE™ Systems Kits



Special Operations Capable (SOC) Kit



Sling, DMM Dyneema, 8mm x 240cm, Black (x1)



Carabiner, DMM Phantom Screwgate, Matt Grey (x4)



Carabiner, DMM Phantom HMS Screwgate Matt Grey (x1)



Harness POCKETHOIST™, Coyote (x1)



Rope of choice (1+)



Carabiner, DMM Chimera Wiregate, Matt Grey (x1)



Carabiner, DMM Belay Master, Matt Grey (x1)



EdgePro™, Coyote Brown (x1)



EdgePro™, Replacement Skin 3 Pack (x1)



Rope Protection, RopePro2™ (x1)



Rope Bag, TRACE™, MULTICAM® (x1)



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 Purple - Starter TRACE Kit

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



CTOMS Orange Kit - Minimalist Rescue Kit

The CTOMS Orange Kit is a minimalist rescue kit designed for Assault Climbers, Pararescue, Medics, and other specialists. It is a compact kit with enough capability to facilitate rescues or troop movement. Extremely small and lightweight package that can easily be carried on the man.





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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