



| HELIX



Helix Operations are part of the Excalibur group which includes DMM International and DMM Engineering. We specifically look after the Defence, Government and Rescue markets and specialise in height safety and technical rescue in mountain and urban environments. Helix Operations are based in the mountains of North Wales and have a heritage of over 40 years supplying both recreational and tactical climbing solutions and specialist rescue capabilities to end users.

The capability offered by our close relationship with DMM has been extended by partnering with manufacturers such as Marlow, Harken, Cascade, CMC, Rock Exotica and Petzl to offer a complete solution for working at height and technical rescue in mountain and urban environment.

Company Number: 10316654
DUNS: 221986629

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

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

- Advice
- Equipment
- Training
- Servicing



Key Brands



DMM International 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.



Since 1962 Cascade Rescue have manufactured durable and reliable rescue gear. They have stayed committed to continuous product improvement and new initiatives, since it's success of the "Cascade Toboggan" of the 60's they now produce Cascade Rescue Stretchers and Litters supplied to 23 countries. Cascade Rescue is a Harken Industrial brand, based in the USA.



Priding themselves in remaining a stable family business, encouraging innovation to imagine the best solutions and insisting on industrial excellence Petzl has an impressive history of producing new tools for working at height since 1970 and have gone onto create many iconic products that are still the benchmark for performance today.



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.



Boasting a vast portfolio of rope product they includes a well-respected range of safety and rescue ropes such as the KM III series. Constructed from a polyamide core and a polyester cover which reduces rope rotation, bouncing and stretch, it is highlighted in our range.



LIBERVIT have over 25 years in design and manufacture of hydraulic tools and manual equipment for the industry, the special forces and the rescuers.



Harken Industrial has more than 50 years of manufacturing experience, originally a sailing hardware manufacturer they soon branched out into working at height and rescue equipment. Harken are introducing innovative product to the market (Clutch - Ninja) with both increased performance and functionality. Manufacturing in both Italy and the USA.



Kask specialise in developing, designing and manufacture of safety helmets. Since 2004 Kask has strived to produce helmets which strike a balance between technological excellence, functionality, safety, and attractive design. All Kask helmets are made 100% made in Italy, passed through the most rigorous safety and quality tests of the KASK's distinctive CSD Project - ComfortSafetyDesign.



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



Med Sled products are manufactured and assembled in the USA. Built using the toughest plastic which is UV resistant, the stretchers they offer reduce heavy lifting by using the 'drag and roll' method. Their integrated harness system allows a very light weight stretcher to be utilised in horizontal and vertical hoisting operations.












TEXORA is a world-class designer and manufacturer of technical webbings, textile lifting slings and safety products including fall protection harnesses, safety belts, shock absorbers and lanyards. Fully certified to ISO 9001:2008 and Inspec UK approved.



Since 1993, LED Lenser have been specialists in producing excellent LED Torches. Making quality German engineered products, they set themselves the highest standards in terms of innovation in materials, technology, workmanship, design and sustainability.

Comparing Stretcher Capabilities

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CONSTRUCTION		DIMENSIONS						WEIGHT	STRENGTH	WHEEL SYSTEMS COMPATIBILITY			ACCESSORIES				LIFT CAPABILITIES	CERTIFICATION
	Product Description	Material	Width at Chest	Width at Foot (tapered)	Length	Length Split	Depth	KG	Load Limit	Ferno Tirol Kit	Cascade Terra Tamer	Ferno Mule 2	Lifting Bridles	Flotation System	Carry System	Head Guard		
	Cascade Professional Series Two Piece Tapered Titanium Stretcher	Titanium	64.8cm	28cm	211cm	109cm	16cm	8.1kg	1112kg		✓	✓	✓	✓	✓	✓	Vertical and horizontal with optional lifting bridles	Tested to Mil Spec and ASTM F2821-10
	Titan Tapered Basket Stretcher	Titanium	60cm	30cm	212cm	-	18cm	6.3kg	1136kg		✓	✓	✓	✓		✓	Vertical and horizontal with optional lifting bridles	CE 93/42/EEC CLASS 1 (UK) for low risk medical devices
	Titan Tapered Split Basket Stretcher	Titanium	60cm	30cm	212cm	116cm	19cm	7.5kg	1136kg		✓	✓	✓	✓		✓		
	Titan Tirol Basket Stretcher	Titanium Alloy	60cm	30cm	212cm	116cm	21cm	21kg	225kg	✓		✓	✓		✓			
	Universal Stretcher UT2000	Aluminium tubing covered by a shield of strong plastic	44cm		200cm	104cm	12cm	8.2kg	160kg	Comes with own wheel system / Compatible with Cascade Terra Tamer			✓	✓	✓	✓	Vertical and horizontal with optional lifting bridles	CE 93/42/EEC CLASS 1 (UK) for low risk medical devices
	Medsled 36 inch VLR Rescue Sled Stretcher System	High Density Polyethylene	50-75cm in use		212cm in use	-	Moulds to shape	7.7kg with horizontal and vertical lifting straps	820kg				✓	✓	✓		Vertical and horizontal with included lifting bridles	CE 93/42/EEC for medical devices
	Medsled 36 inch VLR Rescue Sled Stretcher System with integrated harness	High Density Polyethylene	50-75cm in use		212cm in use	-	Moulds to shape						✓	✓	✓		Vertical and horizontal with included lifting bridles	

Cascade Professional Series Two Piece Tapered Titanium Stretcher

This Cascade Rescue Professional Series Titanium Litter represents the most state of the art in construction and materials available for basket stretchers and litters today.

Designed for the demanding professional, the litters are constructed with a 3/4 tubular frame of commercially pure titanium.

Each litter includes four Patented Articulating Lift Points for either horizontal or vertical lifts, four Quick Tab Patient Straps, integral Padded Patient Contour Support and a heavy duty high density polyethylene mesh liner.

The split stretcher features trademark Cascade Rescue FastLock System for rapid 10 second takedown/reassembly.

A bespoke flotation system, bespoke backpack, headguard, litter skin and various lifting bridles are available to increase versatility.



- Four QuickTAB Patient Restraint Straps
- Lighweight - probably the lightest wheeled stretcher when combined with the Terra Tamer wheel set.
- Integral Padded Patient Contour Support
- Optional Litter skin allows the base to be protected on drags across rough ground



Description	Construction	Width at chest	Width at Foot (tapered)	Length	Length Split	Depth	Weight	Load Rating
Cascade Professional Series Two Piece Tapered Titanium Stretcher	Titanium	64.8cm	28cm	211cm	109cm	16cm	8.61kg	11.12kN

Cascade Terra Tamer

The Cascade Terra Tamer is a litter trail wheel designed to transport the patient over harsh and demanding environments thanks to its 4.25" maxis tyres. It can withstand nearly all conditions and terrain such as mud, snow and sand and big obstacles.

As well as being extremely tough it is very light, weighing just 15.4 lbs./7kg. It can be easily broken down for convenient load sharing and transport.

The framework and fork system are constructed of Pure Titanium, making the Terra Tamer the lightest all-purpose patient transport on the market. It also features disc brakes, which is an additional safety feature for when back roping is not possible.

The attachment system works by simply slipping the custom designed hooks over the top railing of the litter and using the new compact stainless-steel ratches to cinch it down.

The Terra Tamer can be mounted on most standard rescue litters.



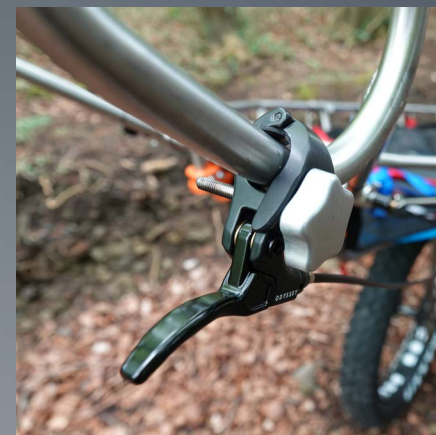
The Cascade Equalizer Adjustable Litter Handle System

The Cascade Equalizer Adjustable Litter Handle System easily and quickly attaches to CMC/ Traverse litters.

Years of R&D by Cascade Rescue has been put into designing this system which is lightweight and features a unique 24 position system allowing the operators to quickly change handle positions based upon operator height or varying terrain conditions.

For transport to the scene, or for high or low incline work, the handles of the Equalizer may be positioned so they "nest" against the side of the litter (31" wide when stowed) or removed entirely and stowed in a pack.

The handles can be bespoke made to retrofit any stretcher you may already own.



The only stretcher system with a breaking mechanism.



Cascade Accessories

Cascade Guardian Litter Shield

The Cascade Guardian Litter Shield deflects debris and rocks no matter the angle at which it strikes, giving a good level of protection for the patient.

It is made from precision molded, tinted polycarbonate plastic giving a toughness and the Top Rail Capture devices hold the shield in place meaning the shield will withstand harsh environments.

The shield will fasten securely to the top of the litter railing with the use of the flexible ratcheting mechanisms. It will also fit to just about any litter of the same width.



Cascade flotation system

A flotation system suitable for ocean, lake and swift-water rescue, designed to fit the Cascade Professional and Advanced series litters with a Daisy Chain and most other tube frame litters from other manufacturers. It is easily attached and removed.

The system maintains the litter position of a head-high horizontal position for ease of loading and is capable of floating the litter, patient and at least one rescuer.

Buoyancy: The system is designed to float a litter and patient in a slightly "head up" orientation. It will also partially float an attendant positioned to the side or end of the litter. Depending upon the distribution of the weight it will adequately float up to 400lbs (180kg).

Construction: The external cover of the system is 600 denier waterproof nylon pack cloth. Internal foam is 1.2 pound density closed cell polyethylene foam. It will not absorb water. The strap segments are 1" heavy duty polypropylene webbing with Velcro.



Cascade Accessories

Cascade Pro Litter Skin

The Cascade Pro Litter Skin for tapered litters offers a solution for when a rescue scenario demands that the litter be dragged across rough terrain.

It is ready to deploy quickly and easily by simply attaching the Pro Litter Skin to the litter. A new attachment system means that installation required no zip ties. Simply attach and go.

Constructed from a proprietary blend of super durable Hi-Density Poly with easy on/off attachment points. When fully deployed, it fits the width and length of a Cascade Rescue Professional Series tapered or rectangular litter up to the top of the secondary rail.



Tamer Transport Pack

The Tamer Transport Pack is designed to protect the Cascade Rescue Terra Tamer and accessories, and make it easy for rescuers to transport gear.

Two main internal compartments stow and protect the Terra Tamer Litter Wheel. Extra tools, parts, and gear can be organized in two smaller internal compartments.

It is also designed to carry a two piece-litter and two integrated side pockets will hold four Equalizer Adjustable Handles.



Ferno Titan Basket Stretchers

The Ferno Titan Series is specifically designed to perform in a technical rescue environment. The materials allow it to survive in almost all conditions, whilst the design itself allows for a user-friendly platform from which to work. Unique features include a 25.4mm top tube to make it easy to hold onto compared to smaller-tube frames. It also comes with four patented StratLoad attachment points that make it quick, easy and safer to clip your Litter Bridle into. These attachment points protect the carabiner from wall and rock faces. The High Density Polyethylene netting allows water and air to easily pass through the patient compartment, yet the small holes keep from snagging debris as easily. This netting material also will not rust.



Titan Regular



Titan Tapered



Titan Split
Regular

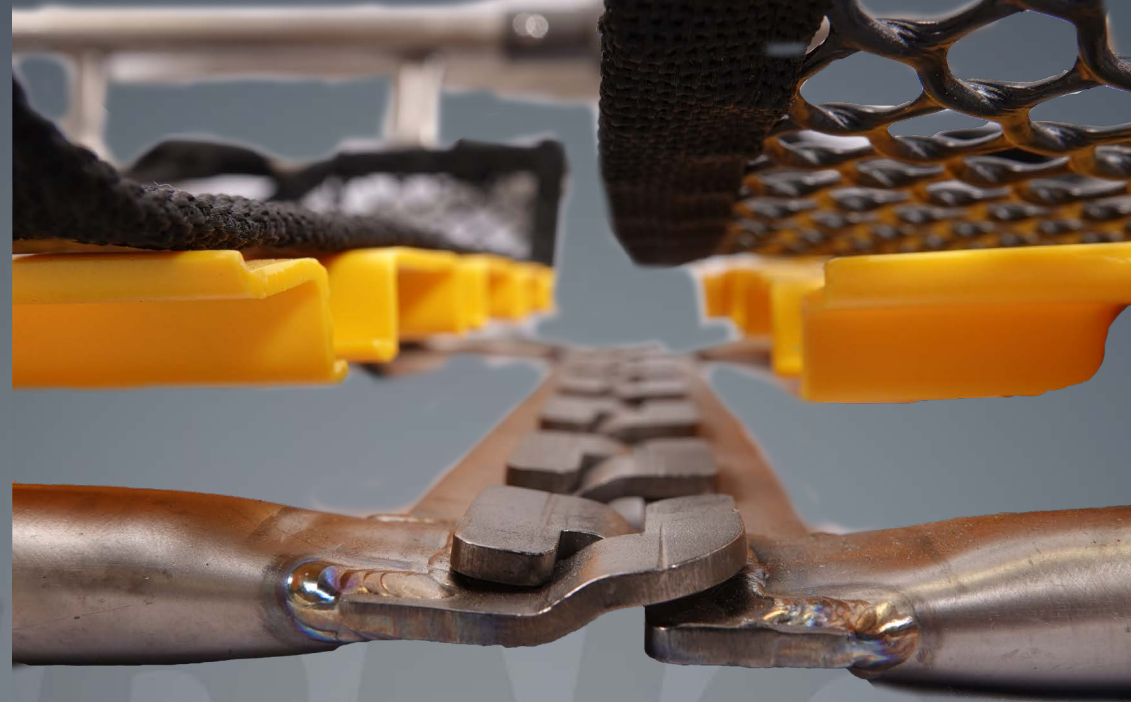


Titan Split
Tapered

Description	Construction	Width at Chest	Width at Foot (tapered)	Length	Length Split	Depth	Depth Split	Weight	Load Limit
Titan Tapered Basket Stretcher	Titanium	60cm	30cm	212cm	-	18cm	-	6.3kg	1136kg
Titan Tapered Split Basket Stretcher	Titanium	60cm	30cm	212cm	116cm	19cm	25cm	7.5kg	1136kg
Titan Regular Basket Stretcher	Titanium	60cm	-	212cm	-	18cm	-	6.3kg	1136kg
Titan Regular Split Basket Stretcher	Titanium	60cm	-	212cm	116cm	19cm	25cm	7.5kg	1136kg

Ferno Titan Split Basket Stretchers

The split apart stretcher option allows for a completely solid connection between the two parts of the stretcher, without the use of pins or tubes sliding into each other. A quick and easy visual check can be carried out to ensure connections are secure throughout an operation. This connection system allows for the stretcher to be assembled or un-assembled in about 15 seconds. Every Split Apart basket includes Collet Protectors which are meant to be used on each end when the stretcher isn't in use to protect threads from denting.



Ferno Titan Split Stretcher Transport Bag

The Traverse Basket Backpack is designed to house a split Titan basket and has plenty of volume for carrying other rescue essential gear.

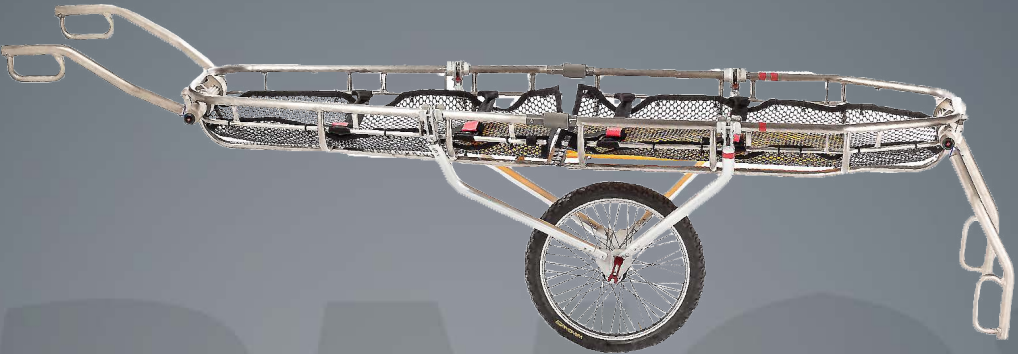
The backpack includes contoured backpack-style, padded shoulder straps, a variety of handles for handling an outer pocket for gear separation and a large three sided zip for uninterrupted access to the stretcher and contents.

Ferno Tirol Kit

The Tirol Kit from Ferno is a lightweight and versatile patient transportation system ideal for long haul retrieval and technical rescue with ergonomic operation on even the most difficult terrain. At an incredibly lightweight 10.8kg, the Tirol Kit can be backpacked or divided amongst rescuers and quickly set up and used by a single rescuer.

The Tirol Kit is designed to fit a purpose-built Titan Titanium split basket stretcher which has additional head and foot plates incorporated. The combination of these two lightweight products makes it possible to operate in the most hostile and inaccessible areas.

The Ferno Tirol kit is not available for retro-fit on existing Titan baskets.



Description	Weight	Code
Tirol Kit	10.8kg	LY11-0119TIROL-KIT
Light mule	4.7kg	-
Handles	4.5kg	-
SS Shoulder Supports	0.5kg	-

Fast installation and removal with the patient in the stretcher, even by a single rescuer.

12 position, adjustable carry handles to match the rescue team or terrain requirements.

Carry handles can become legs to provide an elevated, stationary position to treat the patient.

Ferno Tirol Kit Included Components



Light Mule

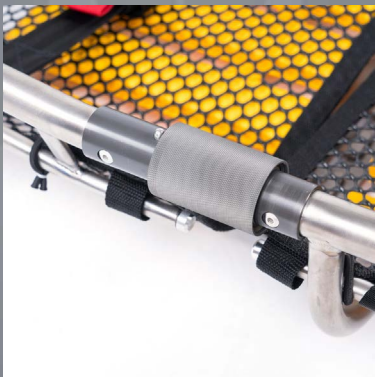
Single-wheel system composed of folding 'V' shaped wheel support and fast-clip locking, with a high load capacity wheel designed for mountain terrain.



Shoulder Supports. Easy to fit, adjustable and equipped with a high visibility system to allow more efficient distribution of the weight to be transported.



Wheel locking system



Titan Protection. special protective coating of the Titan-T basket stretcher to allow it to be dragged safely over all terrain types.

Ferno Tirol Kit Declaration of Conformity



FERNO S.R.L. n. RI BO/C.F./P.IVA 01693660977 capitale sociale € 53.712,00 Società Unipersonale

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Dichiarazione di Conformità

(Declaration of Conformity)

Il sottoscritto Enrico Carletti, Legale Rappresentante della società
(The undersigned Enrico Carletti, Legal Representative of the company)

Ferno S.r.l.
Via B. Zallone, 26
40066 Pieve di Cento (BO) - Italy

Dichiara che il prodotto
(declares that the product)

Denominazione (Product name):	Tirol Kit
Codice Prodotto (Product code):	21-0120-023
Classe del dispositivo (Device class):	I
Destinazione d'uso (Intended Use):	Dispositivo per il trasporto di pazienti in ambienti ostili
Prodotto da (Manufactured by):	Ferno S.r.l. Via B. Zallone, 26 40066 Pieve di Cento (BO) - Italy

è conforme ai requisiti delle seguenti direttive comunitarie:

(conforms to the requirements of the following European Council Directive)

93/42/CE concernente i Dispositivi Medici applicabile per il dispositivo sopraindicato in classe I
(93/42/CE on Medical Devices applicable for the above mentioned product of class I)

e inoltre dichiara che sono state applicate le seguenti norme armonizzate

(and that the following harmonized standard has been applied)

ISO 13485:2016 Medical devices — Quality management systems

Pieve di Cento, 29/09/2020

Enrico Carletti

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Società soggetta a direzione e coordinamento ai sensi dell'art. 2497bis del c.c.n.
di FERNOC INC - 70 Well Way - Wilmington, Ohio 45177 - USA

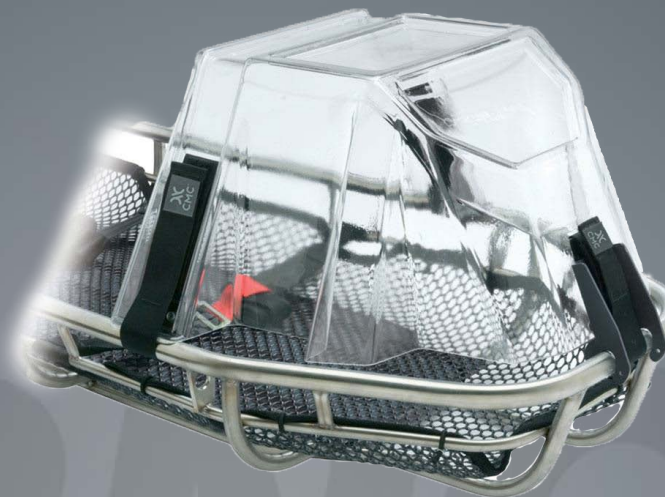
Ferno Accessories

Ferno Head Guard (CMC Litter Shield Plus) Bag

Designed to protect patients from further trauma during litter evacuations and carry-outs.

The shield not only provides protection from falling rocks and debris, but also protects against inclement weather and brush without compromising access to, and visibility of the patient's head. It also provides more room for a patient on a backboard or litter insert, and helps to reduce the "closed-in" feeling experienced by some patients. The reduced need for other head and face protective equipment also increased patient comfort.

The mounting bracket eliminates the need for a railing clamp on the litter and allows the shield to fit most litters.

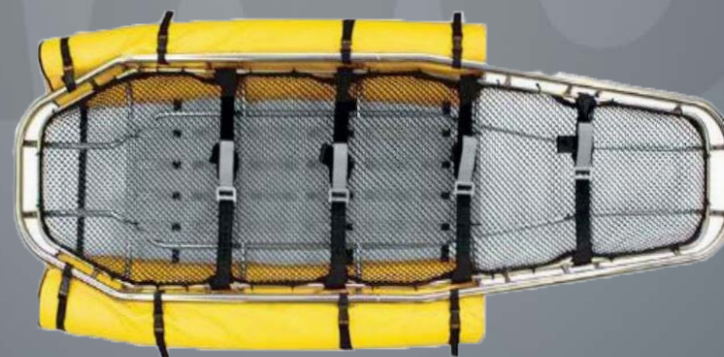


Ferno Titan Split Stretcher Floatation Collar

The Ferno Titan Split Stretcher Floatation Collar ensures that the patients head and airway is protected during aquatic rescue operations.

The lightweight collar is a flexible, two-piece design which allows for quick and easy installation on a wide variety of basket stretchers.

- Designed for use with Traverse Titan Series, Traverse Advantage and Spartan, Gazelle and FERNO Model 71
- Double floatation tubes provide 45 pounds of buoyancy
- Can be stored inside basket and is easy to deploy with a built in 5 strap/clip system



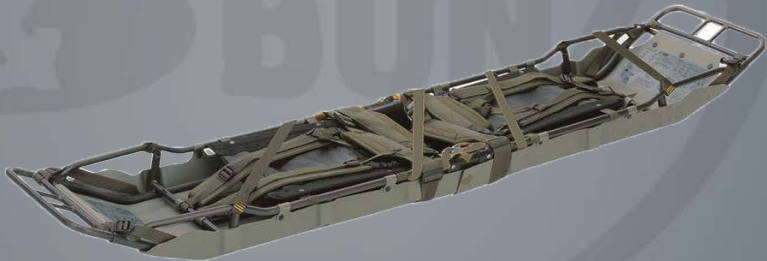
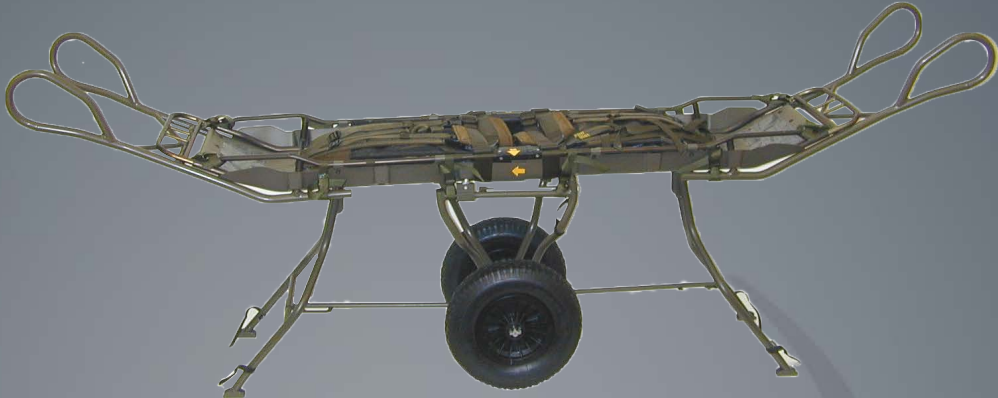
Kohlbrat & Bunz Universal Stretcher UT2000

The UT2000 from Kohlbrat & Bunz is a modular system 'Alpine Rescue' style stretcher designed for technical rope rescues and helicopter evacuations during military and tactical operations. It can be used for rescues in all types of environments including mountain, cave, canyon and sea.

It can be used to transport rescue and medical equipment through pathless, difficult terrain to the scene of the accident and then couples together to make a very capable rescue stretcher. The stretcher can be pulled on the ground in all directions and then lifted by a helicopter.

The stretcher is constructed from a welded tubular frame made from high quality aluminium tubing which is covered by a shield of strong plastic that protects the carrier of the stretcher. Wide, padded shoulder belts with a chest fixation provides optimum load distribution and high carrying comfort during transportation over tough terrain.

Comprised of two UT200 sections which can be used alongside wheels, flotation cylinders and an Ackja-sled module to offer a solution for water and winter rescue. Carrying belts can be detached for helicopter transport and four multi-functional load-bearing belts securely fixate the injured or load during steep face and helicopter rescue.



Description	Construction	Width	Length (with frame coupled as a stretcher)	Depth	Weight (as a stretcher)	Load Capacity
Universal Stretcher UT2000	aluminium tubing covered by a shield of strong plastic	44cm	200 cm	12cm	8kg	160 kg

Ferno Mule 2 Transport System

The Mule 2 Transport System from Ferno with an all terrain wheel, fast, simple securing system and eight position handles offers an all purpose transport solution for military and tactical operations. Greater leverage and easier carrying reduces fatigue and the chance of injury.

- Universal design, compatible with any type and style of rigid litter.
- Eight position adjustable handles.
- Single-wheel design is ideal for narrow trails, allows for agility, versatility and ease of movement in the roughest terrain including bogs, ruts, roots, rocks and snow.



Stretcher Support with Anti-Slip Surface

Main Frame

Vinyl-Coated Hooks. Hooks on securing straps have a one-inch diameter opening and can be attached to any style litter.

Fast ratchet securing system locks basket stretcher with 2 straps and 2 rubberized steel hooks/strap to cinch it down.

Large, lightweight ATV wheel offers greater tracking ability and shock absorption for smooth and comfortable patient transport.

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.



Deploys quickly and has minimal training burden.

Lifting straps are built into the body of the stretcher.

Suitable for remote and confined space environments.

A compact, lightweight and comprehensive rescue stretcher.

Med Sled® VLR

The stretchers are constructed from High Density Polyethylene (HDPE) which provides rigidity for patient stability and lifting. This is particularly useful when carrying out horizontal and high angle lifts. The stretcher bodies are very resistant to tearing, cutting and punctures.

The VLR stretcher has lifting straps built into the body that allow vertical or horizontal lifting to be carried out immediately after the patient is strapped in. A crucial advantage of the MED Sled is that the lifting system does not rely on the integrity of the HDPE body for safety because the straps run completely around, over and under the stretcher body to create a fully inter-connected webbing harness constructed out of mil-spec webbing that locks together with 18kN Cobra buckles. The lifting slings are rated to 4000kg.

There are two sizes available - 36 inch and 28 inch. The 28 inch VLR offers the same attributes as the 36 but on a smaller 28 inch platform. It is easier to carry, lighter but there is less side protection.

Accessories include:

- Tag Line Kit with V-Strap
- Weak Links Pack of 10
- Flotation System*
- Flotation Actuator Indicator Pins



Description	Construction	Width	Length	Depth	Weight (with hoist)	Sling Rating
Tactical Rescue Sled and Bag	High Density Polyethylene	91cm	254cm	-	7.7kg	4000kg

Med Sled® VLR Patient Restraint Harness System

The Patient Restraint Harness System is an optional add-on for the Med Sled VLR stretchers.

It provides extra stability to the casualty during vertical lifts and in high winds. It also allows casualties with severe lower limb trauma to be secured with placing pressure on the injury..

The harness is built into the body of the stretcher and can be deployed immediately by pulling back the cover and releasing the straps using the fast release Cobra buckles - these are then pulled up around the crutch before being re-attached at shoulder level.

This gives class leading stability that can be used very quickly.





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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 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.



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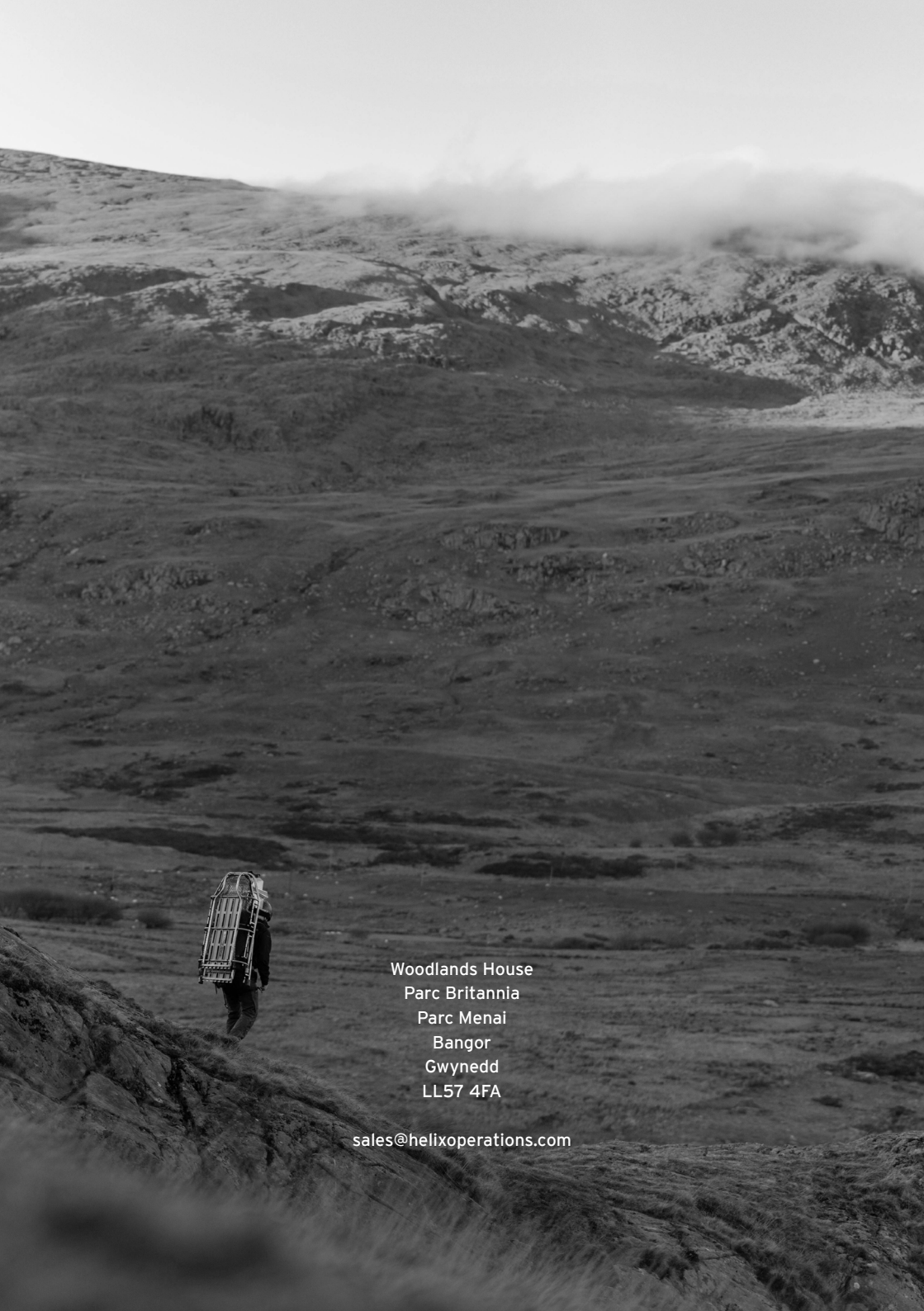
[helix-operations-limited](https://www.linkedin.com/company/helix-operations-limited)

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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