



DSEI 2023
STAND H2-702



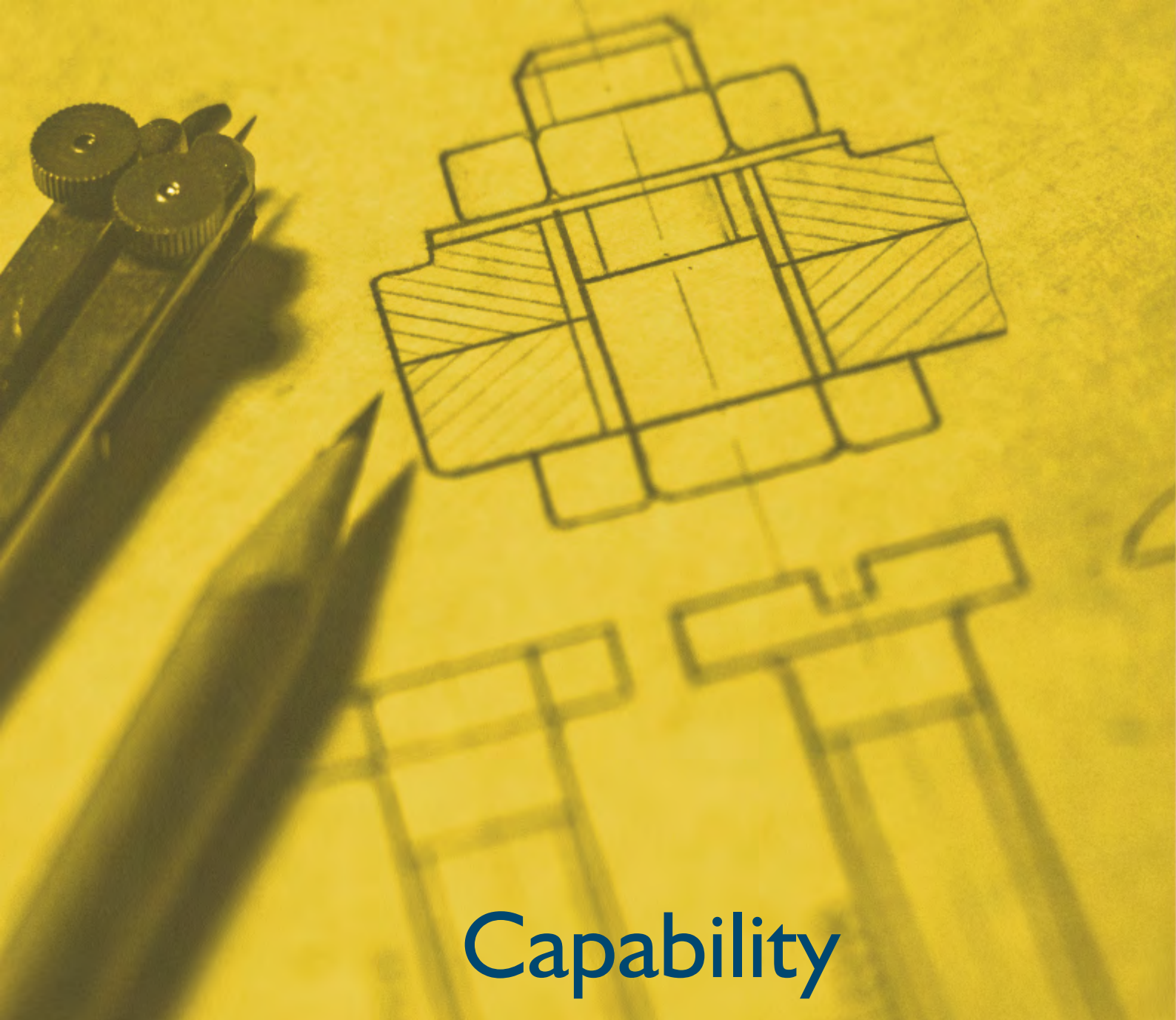
EXPERIENCE.INNOVATION.

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Capability

ISTEC has exceptional strength in the engineering design and development of new innovative systems, with a large team fully equipped with the latest 3D solid modelling and Finite Element Analysis (FEA) software. ISTEC adopt a very proactive approach with a strong desire to work as part of the customer's team throughout the design process and beyond.

With many existing products in-service, across Land, Sea and Air domains, the engineering team look to either adapt 'off the shelf' in-service solutions, or establish bespoke solutions to ensure full compliance with customer requirements.

All design work is undertaken in full compliance to the ISTEC design processes and procedures that ensure critical areas are addressed during the design phase, such as: compliance with user requirements; ease of operation and maintenance; ensuring a modular design and obsolescence management.

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Background

ISTEC Services Limited (ISTEC) is the United Kingdom's principal supplier of high quality, precision engineered small-arm and medium calibre gun mounts, weapon stations and ancillaries.

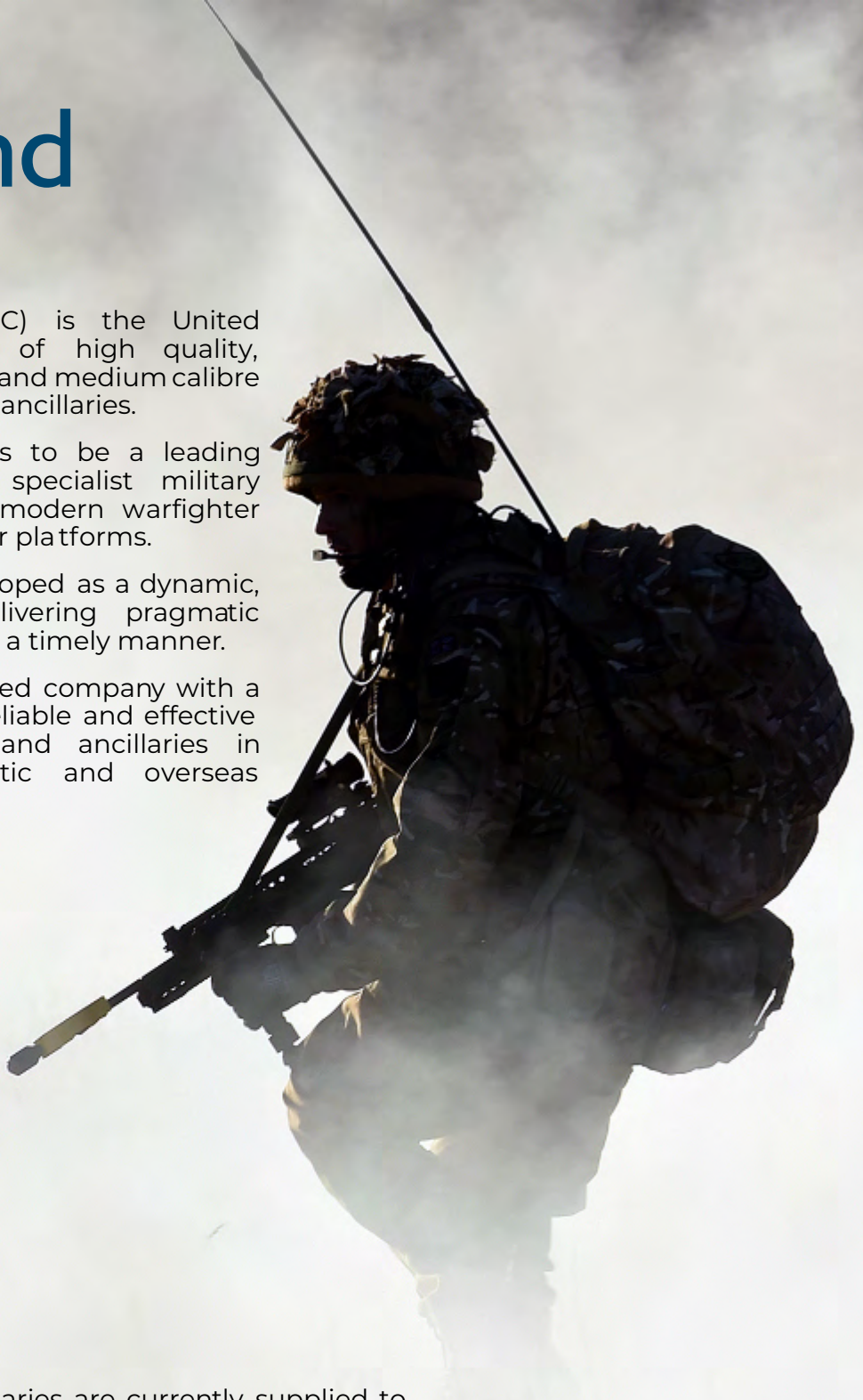
Formed in 1989, ISTEC continues to be a leading designer and manufacturer of specialist military equipment which supports the modern warfighter worldwide, across Land, Sea and Air platforms.

During that time, ISTEC has developed as a dynamic, customer-focused company; delivering pragmatic advice and high quality products in a timely manner.

ISTEC is an ISO 9001:2015 accredited company with a reputation for providing robust, reliable and effective weapon mounting equipment and ancillaries in support of continuing, domestic and overseas requirements.

ISTEC's mounts and weapon ancillaries are currently supplied to the world's leading defence integrators and operated by users worldwide, as well as the UK.

ISTEC specialise in fully integrating a customer's inventory of crew-served weapons, either retrospectively onto vehicle platforms or by design at the concept stage.



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Editorial

ISTEC will once again be exhibiting at this year's Defence Security Equipment International (DSEI) exhibition held for the 12th time, at the ExCel Exhibition Centre, located in London's Docklands, between 12th – 15th September.

ISTEC prides itself on having exhibited at every DSEI since its origins in Aldershot under the banner of the British Army and Royal Navy Exhibition.

The London DSEI exhibition is arguably the world's premier defence exhibition and continued attendance as exhibitors, underlines ISTEC's ongoing commitment to supporting the both the UK Armed Forces and UK Defence Community, across Land, Sea and Air domains.

ISTEC is the United Kingdom's principal supplier of high quality, precision engineered small-arm and medium calibre gun mounts and weapon ancillaries. ISTEC have supported UK MOD for over three decades. Continued success in supplying innovative and reliable weapon systems to the UK's Armed Forces has developed into a well-established export market with ISTEC supplying systems to OEM's and users in over 40 countries.

As global interest grows in the ISTEC range of Land, Sea and Air products, so too does the portfolio. ISTEC continue to invest in new products with diversification the key to future growth. A small selection of these products will be on view at DSEI on the ISTEC Stand Ref: H2-702



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Customer Support

The dynamic approach incorporated by ISTECH starts with strong customer liaison to fully understand a customer's requirements. Our customer support team is ex-military and has a strong understanding of requirements and capabilities.

Links forged between ISTECH and the customer at this early stage is strengthened throughout the programme; through delivery. Customers have direct access to a dedicated representative to help support their requirement.

ISTECH technicians deploy globally, into diverse locations; in order to assist its customer base with varied tasks ranging from equipment installation, embodying modifications, to providing advice and training.

It is ISTECH policy that Integrated Logistic Support (ILS) is applied to all product development and supply. ISTECH use a disciplined approach that influences the product design and develops a sustainable support solution, to reduce Cost Of Ownership (COO) and maintenance burden, whilst optimising supportability.

ISTECH use various Supportability Engineering Management (SEM) tools to produce a product that not only delivers the required capability, but can also be supported and maintained at various levels.

Reliability Centred Maintenance (RCM) is used to produce equipment and maintenance regimes, which reduce down time, erroneous inspections and ultimately support costs.

Ease of Maintenance Assessments (EMA) are employed to establish the most efficient engineering support regime.

Training Needs Analysis (TNA) is conducted to ensure the equipment can be used and maintained, on or off the battlefield, with minimum but effective training, and ISTECH can offer training courses and supporting publications for users and maintainers.



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Lifting 'A' Frame

A recent addition to the ISTECH product portfolio, launching at this year's DSEI exhibition, is a lifting 'A' frame, which has been specifically designed to offer an increased angle of elevation for specific installations, whilst maintaining a stable and rigid firing platform.

The simple to use system ensures that any weapon fit will now achieve an angle of elevation of 60deg, ideal for engaging targets in an urban environment.

The modular design allows the system to be mounted to existing ISTECH ringmounts or PWS' and can be readily adapted for interfacing with other third-party installations.

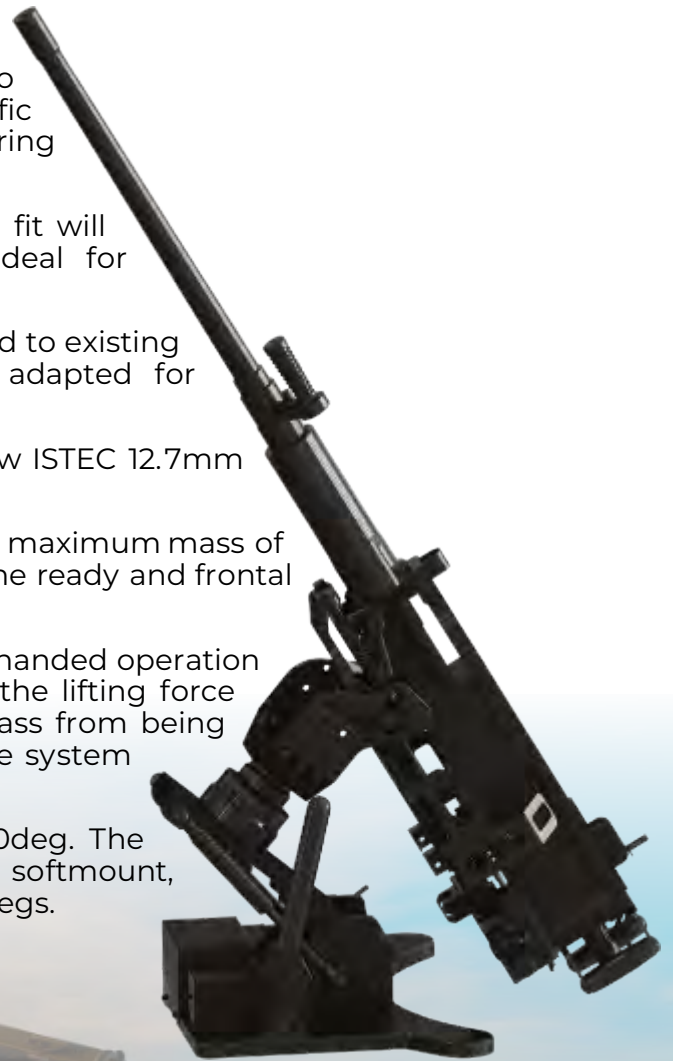
Installed on the lifting 'A' frame on display is the new ISTECH 12.7mm softmount.

The lifting 'A' frame has been designed to elevate a maximum mass of 150kgs (12.7mm M2, softmount plus 100 rounds at the ready and frontal ballistic shield if required).

Elevation and depression of the 'A' frame is a single-handed operation via an assisted ratchet handle. Dual gas struts aid the lifting force with a gearing system preventing the elevating mass from being back-driven. The gas struts act as an aid, whilst the system can still be elevated without the struts.

The system is stowed at 0deg and elevates to 40deg. The additional 20deg elevation is achieved by the softmount, thereby obtaining the total weapon elevation of 60deg.

The mass of the lifting 'A' frame is only 25.5kgs.



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Ringmounts

ISTEC have designed and delivered several thousand ringmount systems over many years in various configurations and for various platforms for both land and naval applications.

The ISTEC ringmounts are a weapon mounting system designed to offer maximum capability with the minimum of user input.

The in-service system on display includes ballistic hatch, user sling seat, weapon mounting 'A' frame, traverse handle, locking brake and softmount which will accept varying weapon fits

Further developments of the ringmount have included the addition of all round ballistic protection up to STANAG 4569 Level IV, resulting in the ISTEC family of Protected Weapon Stations (PWS) which are also in-service in the UK and on overseas platforms.

The system is based upon a ring/adaptor plate fixed to the platform roof or support cage. Mounted to this fixed ring/plate is a bearing assembly which can offer the operator continuous 360 degrees of uninterrupted traverse in either direction.

The bearing assembly provides the mounting platform for a selection of options, usually based upon a baseplate. A variety of weapon mounting options are available that will accept light to medium weapons such as 5.56mm LMG, 7.62mm MMGs, plus 12.7mm HMG and 40mm GMGs.

Dependant on the platform and the role, the ISTEC ringmounts/PWS' can be supplied with differing interface diameters, lightweight options and a range of stowage features for spare barrels, personal weapons, spare ammunition boxes and other user required ancillaries.



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Helicopter mounts

The **ISTEC air domain** portfolio continues to expand each year as ISTEC's reputation for innovative designs, manufactured to the highest quality, is recognised by OEM's and users. Once again 2023 will see several new systems designed specifically for customer programmes, around the world.

The ISTEC helicopter mount on display this year at DSEI is the fully qualified 12.7mm M3D Softmount.

ISTEC systems can be found on numerous airframes with differing weapon fits, including 7.62mm GPMG/Mag58/M240, MG3, M60 and PKM plus 12.7mm M3D.

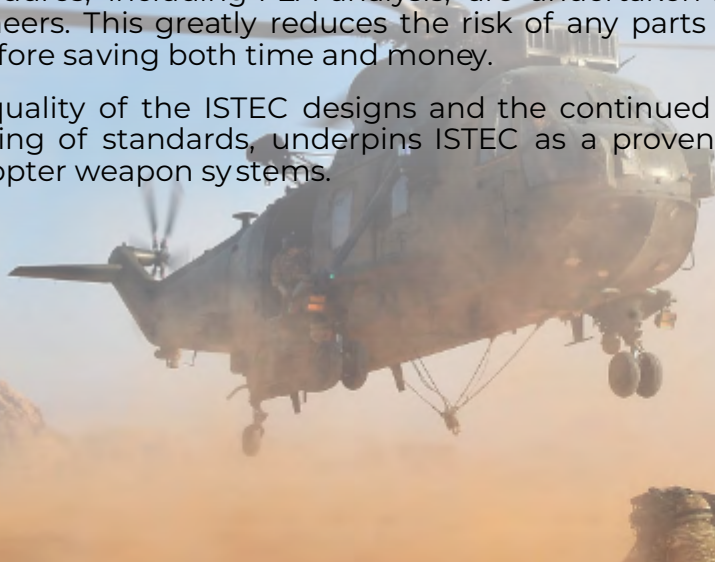


All ISTEC air products are subjected to a strict level of qualification and airworthiness and in some cases 'Type Certification', prior to gaining full acceptance for service.

The level of certification and specific accelerated life testing required for an aerospace mount, can often vary from platform to platform; nevertheless, the comprehensive aerospace quality procedures and the vigorous testing regimes, have ensured that ISTEC have successfully qualified mounts on numerous airframes for a variety of global helicopter users.

The acceptance accelerated life testing simulates approximately 20 years of service including environmental as well as mechanical testing (shock and vibration). But before the system is subjected to any testing (in fact prior to any part being manufactured) strict design processes and procedures, including FEA analysis, are undertaken by the ISTEC team of experienced design engineers. This greatly reduces the risk of any parts of the qualification unit failing under test, therefore saving both time and money.

The quality of the ISTEC designs and the continued exemplary performance against the most exacting of standards, underpins ISTEC as a proven key and reliable partner for crew served helicopter weapon systems.



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Naval mounts

ISTEC's early diversification into naval products and continued investment, has resulted in large contracts for ISTEC naval systems, for delivery in 2023 and beyond. The naval product range has now over 30 different systems in-service in the UK and worldwide. The majority of products are NATO codified and have seen active service.

The in-service range includes:

- Softmounts (5.56mm, 7.62mm, 12.7mm and 40mm AGL/GMG)
- Swingarms (single and double for small calibre softmounts)
- Pedestals (fixed height and adjustable height)
- Universal Gun Mount (UGM) (to accept any softmount)
- Protected Weapon Stations (PWS)
- Ringmounts
- Multi-panel ballistic shield systems (with 3 or 5 panels)

ISTEC designed and developed products continue to perform reliably in the harshest environment of the maritime battlespace.

Modern and innovative solutions are being added regularly as a result of either specific customer requirements or internally funded programmes. ISTEC look to continuously improve existing solutions and develop new concepts to benefit the user community.



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66mm smoke system

The **ISTEC 66mm** grenade discharger system as exhibited on the ISTEC stand at DSEI is the latest configuration specifically designed for installation onto the future UK MLRS platform (shown fitted to the vehicle on the MoD stand at DSEI).

The ISTEC 66mm system is already in-service in the UK and has achieved full ordnance board approval. Operation of the system is via the ISTEC designed Fire Control Unit (FCU) which facilitates the grenade discharger selection, firing and circuit testing as well as enabling the user to see which discharger tubes need replenishing. The FCU is fully EMC tested and qualified

As with all ISTEC systems, the 66mm grenade discharger system can be adapted to suit the specific platform requirements. This includes differing numbers of dischargers, angles between discharger banks and any subsequent configuration changes to the FCU.

Each grenade discharger (singular or banks thereof) is manufactured from aluminium and have the firing pin mounted in the base of the tube allowing firing of current in-service grenades. Each tube has the appropriate protective finish and is fitted with a rubber cap.

Depending on the system configuration and grenade type, the deployment range is nominally between 20-90m.



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Double swingarm

The swingarm shown on the ISTECH stand at DSEI is the latest, in-service, version of the ISTECH double swingarm that can be seen most recently on the future UK MLRS vehicle (shown fitted to the vehicle on the MoD stand at DSEI).

ISTECH have designed and delivered many variants of the swingarm (single and double) for Land, Sea and Air applications once again underpinning the level of performance and reliability of ISTECH weapon mounting solutions. Lightweight 'bespoke' single or double swingarms can also be designed and delivered.

The ISTECH designs include arc stops which are configured for each platform whether that be Land, Sea or Air. Spent case and clip collection bags/boxes can also be added if required.

The ISTECH family of swingarms offer an increased range of arcs to the operator than normally provided from just a fixed pintle. This increased capability is further enhanced by the double swingarm.

Each arm is fitted with the appropriate spigot receiver (normally with either the G3 cone or NATO tapered cone) which is able to mount the correct softmount for LMG or MMG options.

The swingarm solution offers a capability multiplier for a relatively small cost and minimal footprint. The swingarm needs less than 150mm square real estate on the vehicle to mount.

Current users of the ISTECH swingarms include the British Army, Royal Marines, Royal Navy, US Marines and Coastguard to name just a few.



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Tripod

Based on the renowned L4A1 UK Sustained Fire Kit Lightweight tripod can accommodate the L7A2 and other medium calibre machine guns (see

The ISTEK Lightweight Tripod can be seen mounted and the Sig Sauer MG 338 Machine Gun on DSEI, stand ref: H2-588.

Designed for ease of operation, the fine mechanism is built into the tripod head – T&E Mechanism, a common requirement

The Medium Machine Gun (MMG) giving stability to the attached quick to mount, dismount and

For storage and transportation, the mounting tripod to be fitted into a webbing holdall. The design incorporates its own recoil buffer unit, permits all round traverse and has a quick release mechanism allowing free traverse, elevation and depression.

The tripod can be mounted in either a low or high position, with the legs fully adjustable, allowing the mounting to be used in any terrain.



(SFK), this extremely robust, GPMG / M240 / FN MAG58 examples below).

configured with an ISTEK the Edgar Brothers stand at

it does not traverse and elevation for most tripods. need a separate

tripod is a lightweight platform, giving stability to the attached weapon. It is portable, simple to operate, quick to mount, dismount and easy to handle and pack.

legs and cradle fold into a straight line to allow the mounting tripod to be fitted into a webbing holdall. The design incorporates its own recoil buffer unit, permits all round traverse and has a quick release mechanism allowing free traverse, elevation and depression.

BRIEF TECHNICAL SPECIFICATION

Mass	9.5kg
Weapon Fit	5.56mm Minimi, MG4 7.62mm GPMG, Mag58 M240, MG5, PKM 338 Sig Sauer
Traverse	6400mils (w/o arc stop)
Recoil Buffering	Yes
Runout Buffering	Yes
Fine Traverse	200mils (cradle locked)
Fine Elevation	600mils (cradle locked)
Control Click	2.2mils
Control Lock	One handed

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Vehicle

Sub-systems

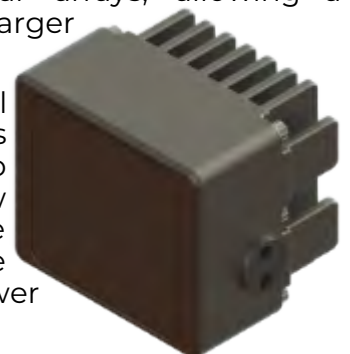


ISTEC's continued growth and investment into new systems for AFV's has led to the following additions to the portfolio: of 76mm and 66mm smoke grenade discharger systems and more recently the standalone Laser Warning System (LWS) and the IR lighting system designed for a specific overseas customer. The ISTEC designed 66mm smoke grenade discharger system has been adopted on UK vehicles and includes varying quantities of dischargers, the Fire Control Unit (FCU) and all interconnecting harnesses, plus accessories such as cleaning brushes and circuit testers.



ISTEC has designed and developed a low cost LWS, ideally suited as an upgrade to legacy platforms. The system is designed as either standalone or mounted directly to the ISTEC FCU and used in conjunction with the 66mm or 76mm smoke grenade dischargers, as part of a defensive aide suit. The original ISTEC design consisted of one circular array of detectors but has now been enhanced by the latest configuration of semi-circular arrays, allowing a number of units to be installed on larger vehicles.

The compact IR Illuminator unit can be configured to suit varying tactical requirements, with 850 or 940nm IR emitters and a variety of optics ranging from a 9° FOV 'spot' to a >100° FOV 'flood' using custom lenses. Two banks of two emitters, controlled by individual isolated enable lines, allow for mixed configurations and the inclusion of more traditional visible spectrum LEDs. The simple interface allows for mounting to any vehicle and the inbuilt filtering means the unit can operate off a variety of power supplies, while remaining EMC compliant.



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OVER 30 YEARS

1995



The ISTEK Mk1 UGM undergoes trials on the WMIK Land Rover. It was designed to offer a stable firing platform for the 20mm GIAT cannon and 12.7mm HMG.

2003



ISTEK delivers Protected Weapon Stations for the UK MoD's Urgent Operational Requirements for the Iraq conflict. UORs included; MAN SV, HT and CES trucks, Husky, Foxhound and Oshkosh HET.

1989



ISTEK services Limited opens for business at its original location in Stanstead Abbots, Hertfordshire.

2002



ISTEK delivers weapon mounts for the UK MoD's Urgent Operational Requirements for the Iraq conflict, including fitting out the Offshore Raiding Craft (ORC)s.

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S OF SUPPORT

2010



STEC continues to deliver gun mounts for the Royal Navy, from small patrol vessels, capital ships and submarines.

2015



STEC delivers its first aerospace approved weapon mount for the UK MoD's Puma 2 helicopter. A pintle mounted GPMG door mount.

2005



STEC continues to deliver weapon mounts for the UK MoD's Urgent Operational Requirements for the Iraq conflict, including fitting out the Jackal 2.

2012



STEC sees its medium and heavy weapon mounts expand over the Royal Naval fleet, from MCM mine sweepers, Type 45s, Patrol class boats, and the new aircraft carriers.

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SEA

A detailed photograph of a submarine's conning tower and deck. Several crew members in white uniforms are visible on the deck, some looking through binoculars. The submarine is dark grey and has various antennas and sensors mounted on its mast. It is moving through the ocean, creating a wake. The sky is clear and blue.

EXPERIENCE. INNOVATION.

Weapon Stations

The **ISTEC maritime** ring mounts are a weapon mounting system designed to offer maximum capability with the minimum of user input.

The ISTEC ring mounts allow a single operator to maintain up to 360-degree capability with the weapon always directly to their front, without the need to stretch or strain on extreme arcs.

The system is based upon a metal ring fixed to the platform. Mounted to this fixed ring is a forged traversing ring, which can offer the operator continuous 360 degrees of uninterrupted traverse in either direction unless physical arc stops are required.

The traversing ring provides the mounting platform for a selection of options, usually based upon a baseplate. These include armour panels to defeat threat levels from STANAG 4569 Level 1 up to Level 4, hatches, spare barrel holders, personal weapon holders, spare ammunition box holders and other operator required ancillaries. The traversing ring or baseplate is also supplied with a weapon mounting interface.

The ISTEC rings are available in a variety of sizes, but are usually restricted to the two most common sizes:

The GVA compliant 1080mm ring and the smaller UK MOD approved 980mm ring (this ring offers the best compromise between size, weight, functionality, and cost).

The weapon interface can be selected for just a single weapon type, such as a 7.62mm MMG, or it can be fitted with the ISTEC Universal Gun Mount, which can take a selection of weapon options from 5.56mm LMG, 7.62mm MMGs, 12.7mm HMG and 40mm GMGs.



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Shields



ISTEC have designed various ballistic shield systems, specifically for naval applications, to offer the gunner a certain level of protection whilst operating a weapon mount.

The ISTEC naval shields, both 3 and 5 panel systems are the latest naval protection system to be designed and manufactured for a specific user requirement by the ISTEC design and development team.

The current designed system offers protection to STANAG 4569 Level I using composite panels. Other levels of protection are also available up to level 4.

The naval shield system can be fitted to the ISTEC Mk 15 pedestal or other integrated ship's pedestals.

The shield system is designed to be easily deployed and can be adjusted to provide varying angles of protection around the pedestal and the user.



MG Gun mounts

The maritime battlespace is one of the harshest environments in which ISTECS equipment operates. Manufactured from marine suitable material and finishes, the range of ISTECS maritime equipment is in use, worldwide, on submarines, capital ships, assault craft, patrol craft, merchant navy craft, oil rigs and hovercraft.

ISTECS weapon mounts provide a stable platform to support operators crew served weapon.

ISTECS's main focus of weapon mount capability is buffered softmounts, into which the weapon would be fitted. Recoil and runout mechanisms within the softmounts, buffer the weapon during firing, reducing the max peak recoil forces by up to 40%, whilst still maintaining the full functionality of the weapon.



Softmounts interface with the parent platform via a spigot. ISTECS offer a range of spigots, including the G3 tapered spigot, the NATO 4796 tapered spigot, the US standard parallel spigot and minigun gun spigot.

In general the receiver for the softmounts mounts directly onto the platform, a swing arm, or ring mount system and provides crucial safety arc stops needed on maritime platforms.

The ISTECS Universal Gun Mount (UGM) is the largest of the softmount receivers supplied worldwide to the military: offering outstanding capability to the operator. The UGM can be fitted with a front shield and also fitted to folding bulwark mechanisms to bring the weapon system 'in board' when required.

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LAND

The background image shows a military vehicle, possibly a Land Rover, in a desert environment. In the foreground, there is a detailed view of a weapon station, which is a metal ring mounted on a platform, with a weapon (likely a machine gun) mounted on it. The weapon station is shown in a cutaway view, revealing its internal components and the weapon itself.

PROTECTED Weapon Stations

The **ISTEC ring** mounts/PWS product range are weapon mounting systems designed to offer maximum capability with the minimum of user input.

The ISTEC ring mounts allow a single operator to maintain 360-degree capability with the weapon always directly to their front, without the need to stretch or strain on extreme arcs.

The system is based upon a metal ring fixed to the platform roof or support cage. Mounted to this fixed ring is a forged traversing ring, which can offer the operator continuous 360 degrees of uninterrupted traverse in either direction.

The traversing ring provides the mounting platform for a selection of options, usually based upon a base-plate. These include armour panels to defeat threat levels from STANAG 4569 Level 1 up to Level 4, hatches, spare barrel holders, personal weapon holders, spare ammunition box holders, and other operator required ancillaries. The traversing ring or base-plate is also supplied with a weapon mounting interface.

The ISTEC rings are available in a variety of sizes, but normally are restricted to the two most common sizes:

The GVA compliant 1080mm ring and the smaller UK MOD approved 980mm ring (this ring offers the best compromise between size, weight, functionality, and cost).

The weapon interface can be selected for just a single weapon type, such as a 7.62mm MMG, or it can be fitted with the ISTEC Universal Gun Mount, which can take a selection of weapon options from 5.56mm LMG, 7.62mm MMGs, 12.7mm HMG and 40mm GMGs.

As well as designing, manufacturing and supplying complete weapon systems such as the various in-service PWS' and ringmounts, ISTEC also design sub-systems for military platforms. These include bespoke armoured solutions, steel or composite, such as ingress/egress hatches and shields (either forward facing or designed to give 360deg protection to the User). Many of the sub-systems used on ISTEC weapon stations can also be supplied as standalone sub-systems to third parties (either proven off the shelf designs or adapted accordingly), such as stowage solutions for ammunition, personal weapons and spare barrels; and innovative weapon mounting platforms such as folding 'A' frame assemblies and assisted mechanical handling systems using hydraulics or geared solutions, to offer the weapon system improved elevation and depression angles. ISTEC can also design and supply mounting configurations such as the G3 Cone and NATO Spigots, or other pintle and socket designs.

Whatever the system or sub-system requirement for a weapon platform, ISTEC can provide the solution.

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HMG

Gun mounts



STEC have designed and manufactured various HMG mounts over many years, for applications across land, sea and air domains. The latest is the ISTECH 12.7mm softmount which is a compact, modular buffered mount designed to hold the 12.7mm M2HB MG.

The weapon is held securely in the mount via the M2's standard front and rear mounting points and is controlled by the twin handles at the rear of the mount. The handles give the user total control of the mount in azimuth and elevation, plus there is an alternate firing lever attached to the handle on the right side allowing the operator to fire the weapon without removing their hands from the handles. The mount also has an applied safety catch, preventing inadvertent operation of the weapon.

The mount also includes azimuth and elevation locks and stops which can limit movement of the mount in these directions.

The modular design allows for an optional spent case and collection system to be clipped into position if required, as well as a ready round tray.

The mount has been designed using materials and finishes that allows it to be used in either land or naval applications.

The interface for the mount is via the standard G3 cone, but this can be readily replaced with other mounting systems such as NATO 4796 pintles if required.

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Universal Gun Mount




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The widely adopted ISTE Universal Gun Mount (UGM) is currently utilised on both land and sea-based platforms, where it is attached directly to a traversing ring of the parent vehicle, or to a re-enforced hard point on the side of a vessel.

The UGM is capable of accepting the following range of weapons together with their dedicated softmounts (either ISTE softmounts, or alternative solutions):

- Light Machine Guns (e.g. Minimi/M249)
- Machine gun (e.g. L7A2 GPMG/FN MAG 58 /M240, M60, MG3, PKM)
- Twin L7A2 GPMG Mount
- 12.7mm HMG (e.g. M2HB, L110A2 QCB, M3D)
- 40mm Grenade Machine Gun (e.g. H&K GMG, MK19)



In addition to these weapons, the UGM can be readily fitted with an adaptor to allow mounting of anti-armour weapons and 20mm cannon.

The UGM is designed to provide a solid, backlash-free, firing platform when clamped; fine adjustment being made by means of a fine control Traverse and Elevation mechanism (T&E). This provides exceptional single shot accuracy, coupled with the ability to rapidly engage, or track targets.

The UGM is modular, permitting the attachment of a variety of fitting kits and ancillaries; from frontal armour to folding interface equipment.

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ARM Gun mounts



The **ISTEC arm** mounts provide the operator with an extended stable platform to fire an LMG/MMG from.

Often fitted to commanders or sentry positions, the swing arms offer an increased range of arcs, to the operator, than is provided from just a fixed platform.

Each arm is fitted with the appropriate spigot receiver, which is able to mount the correct softmount, normally either the G3 or NATO tapered cone.

For extra arc capability, double swing arms are available.

Lightweight 'bespoke' single/double swing arms can also be designed and supplied.

The swing arm solution offers a capability multiplier for a relatively small cost and minimal footprint. The swing arm needs less than 150mm x 150mm real-estate on the vehicle to mount.

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MMG

Gun mounts

As with the ISTECH HMG range of weapon mounts, ISTECH have designed numerous MMG softmounts over the years for applications across land, sea and air domains.

The ISTECH range covers most variants of 7.62mm and 5.56mm weapons.

The ISTECH range of MMG mounts includes compact, capable and easy to use softmounts, designed to interface with existing pintle sockets or ISTECH designed and supplied interfaces, such as the G3 Cone or NATO Spigot to name but two.

ISTECH have in-service softmounts designed to interface with the ISTECH Universal Gun Mount (UGM) with built in T&E mechanism and mounts that include an array of additional (and optional) features to enhance capability, such as:

- Ready round stowage (200-400 rounds)
- Spent case and clip collection systems
- Traverse and elevation locking clamps
- Adjustable traverse and elevation stops
- Mounting points for frontal ballistic shield (steel or composite material)


Other unique designs of ISTECH MMG softmounts includes the Twin GPMG mount which is in service on both land and naval platforms.

The existing range of ISTECH MMG softmounts will meet almost all user requirements. However, with the vast engineering knowledge and experience in weapon system design within the ISTECH team, overcoming problems, advising on solutions, and meeting stringent user requirements is the ISTECH speciality.

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AIR

M3D Gun mounts



The ISTECA aerospace weapon mounts provide a stable platform to support operators crew served weapon.

All ISTECA 12.7mm helicopter mounts are designed and built bespoke for each platform type and conform and qualify to all aviation standards. The ISTECA 12.7mm helicopter softmounts are specifically designed to exacting standards and will accept the 12.7mm M3D MG.

The modular design of the mount assembly enables it to be deployed and modified to suit varying roles. The mount system incorporates a proven ISTECA 12.7mm softmount mechanisms.

The softmount can be detached quickly and without tools, and mounted on any other G3 cone mount, such as the UGM: providing capability for the helicopter operating in both land and maritime environments.

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MMG Gun mounts

Each **ISTEC 7.62mm** helicopter mount is designed and built bespoke for each platform type and conforms and is qualified to all aviation standards. The ISTEC 7.62mm helicopter softmounts are specifically designed for use as crew door swing arms on a variety of helicopters and allow fitting of the 7.62mm M60, Mag58 GPMG and 7.62mm PKM.

ISTEC 7.62mm helicopter mounts are fully qualified 'air worthy', in service mounts.

The modular design of the mount assembly enables it to be deployed and modified to suit varying roles. The mount system incorporates the proven ISTEC GPMG softmount mechanisms.

The softmount can be detached quickly and without tools, and mounted on any other G3 cone mount, such as the UGM: providing capability for the helicopter operating in both land and maritime environments.

The travel locks are set for the individual helicopter and position, preventing customer desired arcs being exceeded. Ammo box holders are standard.

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SIGHTS

RANGE DRUMS HMG & GMG



The **L8A1 .50in** range drum has ballistic optimisation for the current range of in-service .50in. ammunition.

The range drum is graduated from 500m to 2200m in 100m increments. It features a Gaseous Tritium Light Source (GTLS) for illumination of the range scale under conditions of low light level.

The range drum is fitted with a quick release clamp that allows fitting to a Mil Std 1913 Picatinny rail.

The rail for attachments of the optical sight and other electro/optical ancillaries is the Mil Std 1913 Picatinny type.

It features a rotary locking device fitted to the range adjusting drum, which, when applied, prevents inadvertent rotation.

There is a high degree of commonality between the various models and with a full range of sub-assemblies and component parts available if required to carry out a repair.

The **40mm L9A1** range drum is optimised for the various natures of 40mm munitions currently available. The sight mounting rail is tilted slightly to the right from the horizontal, to compensate for drift caused by the spin of the projectile. The range scale is graduated from 0 to 2000 m and is fitted with a GTLS on the range and zero lines to aid setting the range under low light levels.

The range drum is fitted with a quick release female dovetail mounting bracket, commonly referred to as a rail grabber; which allows rapid fitting and adjustment to the Picatinny pattern mounting rail on the bridge of the GMG softmount.

The range drum is fitted with a top mounted sight rail, with two side mounted rails for auxiliary equipment such as lasers and range finding equipment. All three rails conform to Mil Std 1913.

The range adjusting drum can be locked in any elevation, providing exact range targeting and preventing inadvertent movement once the range is selected.



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SIGHT Mounts

The L12A1 flip ver sight bracket, with its double Picatinny pattern rails, is designed as a direct replacement for the existing IR sight mounting bracket secured to the LH rear side of the GPMG body.

The design of the sight bracket positions the optical axis of the sight directly above the bore, as well as a secondary equipment such as a laser. When loading / unloading or carrying out weapon IA drills the sight can be tilted to the left, allowing the top cover to be opened. The Picatinny pattern mounting rail allows fitting of any optical sight or night vision sights equipment with a Mil Std 1913 interface.



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