BISTEC



SE12025 STAND N5-2102025



EXPERIENCE. INNOVATION.

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EMPLOYER RECOGNITION SCHEME

SILVER AWARD

Proudly supporting those who serve.

Background

STEC 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, customerfocused 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.



STEC continues its 100% record of exhibiting at DSEI with an impressive array of products and capabilities on display at this year's event between 9th - 12th September, at the ExCel Exhibition Centre located in London's Docklands. At this premier event, ISTEC is proud once again to continue its unwavering support for both the UK Armed Forces and UK Defence Community across Land, Sea and Air domains.

The products on display showcase ISTEC's suitability to participate with platform OEM's on programmes such as the up and coming UK Light Mobility Programme by offering in-service, qualified systems already proven and currently in production. This is also the case with Naval and Air programmes where ISTEC offer in-service solutions to meet demanding requirements.

As the primary supplier in the UK of high quality, precision engineered, crew served weapon systems to the UK's Armed Forces, ISTEC continue to identify, develop and secure targeted global partnerships and alliances that strengthen ISTEC's market position and fill capability gaps critical to achieving market expansion. Part of this expansion into adjacent, new and emerging markets is the result of carefully selected product development and strategic diversification.

A selection of ISTEC products will be on view on many of the prime OEM stands around DSEI and of course on the ISTEC stand, **N5-210**.



Capability

STEC 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.

New Collaborations

team implement a strategy for growth and begin an exciting phase in pursuit of carefully selected expansion opportunities.

These expansion opportunities have already included notable partnering agreements to assist in achieving a diversified product range and a market presence in new regions.

As the strategy for growth continues, the initial two collaborations are now in full swing with Supacat Asia Pacific and Gus Periscopes UK.

Supacat Asia Pacific

In June, Supacat Asia Pacific welcomed ISTEC to Supacat Asia Pacific Global Partners which is a partnership that leverages the strengths of the global supply chain and enables more comprehensive solutions to be offered to better serve regional customers.

This strategic alliance brings together Supacat Asia Pacific's proven expertise in high-mobility defence platforms and ISTEC Services' specialised technical capabilities with weapon mounting solutions for military use across land, sea and air platforms, thus creating a powerful combination to enhance capability for military, law enforcement and security organisations throughout the region.

Gus Periscopes UK

In July, Gus Periscopes UK and ISTEC signed a partnering agreement to begin collaborating on design solutions to enhance vehicle situational awareness such as combined armoured hatch and periscope solutions.

ISTEC will also now add the proven product range of Gus Periscopes UK to their own portfolio of in-

service systems.

This product range includes glass and acrylic Unity Vision Periscopes (UVP) such as the widely used M17 and M27 UVP's, electronic hybrid periscopes and driver's night vision systems which combine conventional unity vision design with innovative digital technology.

Both collaborations show ISTECs commitment and desire to work with reputable, reliable and trusted partners that benefits all, with the aim to offer outstanding solutions to its customer base both in the UK and around the world.

ISTEC continues to carefully assess suitable partners for joint ventures and strategic alliances as well as its continuing strategical development of key technologies and diversification into adjacent markets across land, sea and air domains.

LIGHT MOBILITY PROGRAMME

s well documented in Defence Journals in recent times, the UK Ministry of Defence announced its plans to replace the battle proven, but ageing, fleet of Land Rovers and Pinzgauer light mobility vehicles. As part of these plans, earlier this year, UK MoD issued the Request For Interest (RFI) to industry to participate in the development of a new Light Mobility Vehicle (LMV) as part of the wider Light Mobility Programme (LMP).

The aim of the LMP is to seek replacements for varied vehicle types currently used across the armed forces and to modernise vehicle capabilities. UK MoD have stated that the next generation must offer cost efficiency, improved reliability and improved operational capabilities.

Based on the main aims, Off the Shelf (OTS) solutions look to be favoured to keep the selection and acquisition process short and life cycle costs low. UK content is also high on the priority list.

As part of LMP, vehicles such as Mastiff, Ridgeback and Wolfhound will all be replaced, with many having been gifted to Ukraine.

Historically, the vehicle types that fall under the LMP category, including LMV, have invariably been equipped with ISTEC crew served weapon systems. Although weapon fits and ballistic protection levels may vary, there is considerable commonality across all the ISTEC weapons systems.

Applicable in-service ISTEC equipment include:

- · Universal Gun Mount Capable of accepting all ISTEC's range of Pintle Mounts
- Pintle Mounts for 5.56mm LMG, 7.62mm GPMG, 12.7mm M2HB MG or 40mm GMG
- · Swing Arms Lightweight, Single or Double Swing Arms
- · Ringmounts Suitable for varying weapon fits
- Protected Weapon Systems (PWS) Varying levels of protection with either steel or composite shields and varying weapon fits
- 66mm Smoke Grenade Dischargers Including electrical harnessing and qualified Fire Control Unit (FCU).

ISTEC is well placed to support LMV and indeed the wider LMP range of platforms with in-service, cost efficient and capable weapon mount solutions with proven in-service reliability.

ISTEC weapon mount solutions are all designed, manufactured, and supported from within the UK and are therefore well positioned to give 100% UK content and support to major UK vehicle programmes.

Whilst ISTEC continually look to diversify and add innovative solutions to the product range, ISTEC stand (N5-210) at this year's DSEI showcases a range of products ideally suited to support new UK vehicle programmes for years to come.

IHM-71B Designed for Blackhawk

ver recent years, ISTEC has continuously looked to diversify its product range into adjacent markets. One hugely successful diversification has been embarking on the design and supply of crew served aerospace weapon systems for helicopters.

ISTEC now have a range of fully qualified and certified aerospace mounts which form the basis for any new aerospace crew served lethality capability. ISTEC's helicopter systems are now in-service on multiple platforms around the globe, including, notably, the USAF MH-139 Grey Wolf, a development by Boeing in partnership with Leonardo.

Due to the success of the air systems product range, this year ISTEC began a private venture programme to establish an alternative weapon mount solution for the venerable Sikorsky UH-60 Black Hawk. The Black Hawk first entered service with the US Army in 1979 and over the years has evolved into multiple variants for different military branches and roles. Over 30 nations now operate Black Hawk helicopters.

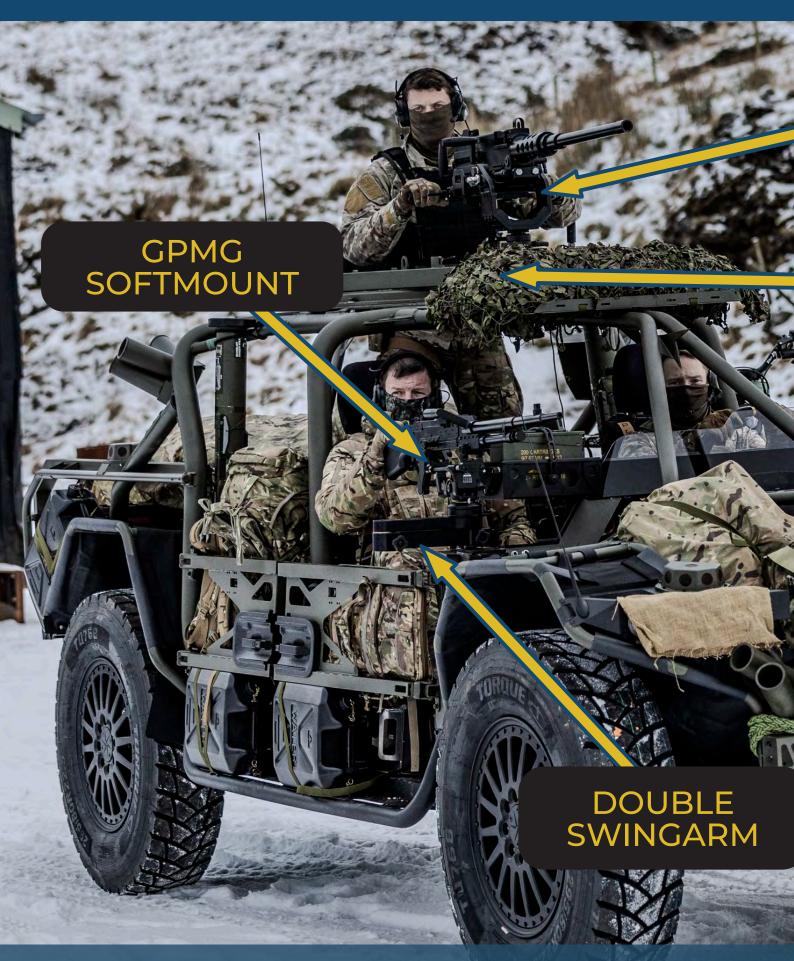
The new ISTEC IHM-71B weapon system is an ideal addition to Users looking to update or re-role their Black Hawk platforms under a Maintenance Repair and Overhaul (MRO) programme, or indeed for new programmes.

The system has significant read across from current in-service ISTEC crew served aerospace weapon systems, therefore offering proven performance and reliability.

The ISTEC solution is a simple to use and cost-effective option.

This internally funded design and development programme continues to highlight ISTEC's ongoing commitment to support both platform OEM's and Users around the world with the latest capable solutions which are fully supported throughout the lifetime of the platform.

Through a combination of field-proven systems and certified aerospace solutions, ISTEC delivers a trusted foundation for next-generation platform integration. As operational requirements continue to evolve, ISTEC remains committed to advancing capability and ensuring mission readiness across the global aerospace domain.



EXPERIENCE. INNOVATION.



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he 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 pintle.

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 square real estate on the vehicle to mount.



and manufactured various HMG mounts over many years, for applications across Land, Sea and Air domains. The latest is the ISTEC 12.7mm Softmount (20203) 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.

The mount can also be adapted to support organic fires, with the fitting of a 70mm rocket system.

The ISTEC 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.





s with the ISTEC HMG range of weapon mounts, ISTEC have designed numerous MMG softmounts over the years for applications across Land, Sea and Air domains. The ISTEC range covers most variants of 7.62mm and 5.56mm weapons.

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

ISTEC have in-service Softmounts designed to interface with the ISTEC 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 ISTEC MMG Softmounts includes the Twin GPMG Mount which is in service on both Land and Naval platforms.

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

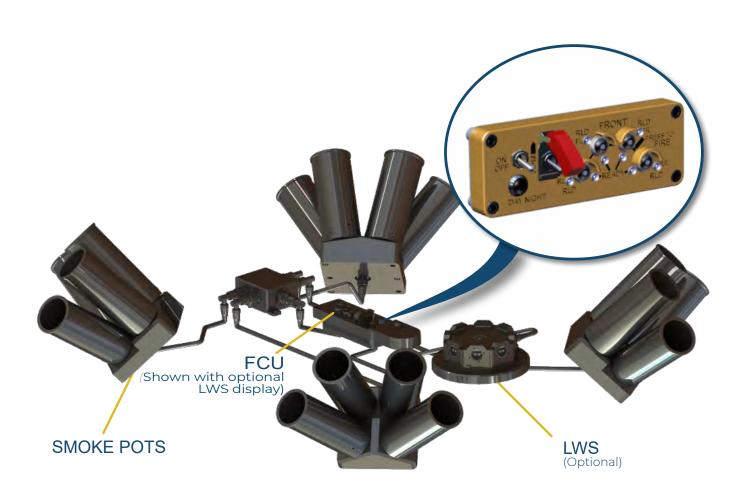
STEC have designed, developed, manufactured and supplied 66mm and 76mm Smoke Grenade Discharger Systems, with the 66mm System now being fully qualified and in service in the UK.

The 66mm system consists of banks of smoke dischargers, junction box, Fire Control Unit (FCU) and all interconnecting harnesses.

The banks of dischargers can be configured to suit customer requirements, e.g., two banks of two tubes; four banks of three tubes; four banks of four tubes.

The FCU is common across both 66mm and 76mm systems and is fully sealed and EMC protected. The FCU has a series of green LED's which denote when each discharger tube is armed and a series of yellow LED's that indicate when the discharger tubes require reloading.

As detailed in the Product Development section of this brochure, ISTEC has also recently completed the design and development phase of a low-cost Laser Warning System designed to be mounted with the ISTEC Grenade Discharger Systems or supplied as a standalone system.







he maritime battlespace is one of the harshest environments in which ISTEC equipment operates. Manufactured from marine resilient material and finishes, the range of ISTEC naval equipment can be seen across the entire maritime domain on submarines, capital, littoral and merchant ships, as well as in-shore and river crafts. ISTEC also supply naval systems for integration on offshore drilling rigs.

The ISTEC range of naval products is extensive, with modern solutions being added on a regular basis. New product design may be as a result of a specific customer requirement, or as part of an internally funded programme where ISTEC look to continuously improve existing solutions or look to develop new concepts to

the benefit of the user community.





