



ISTEC

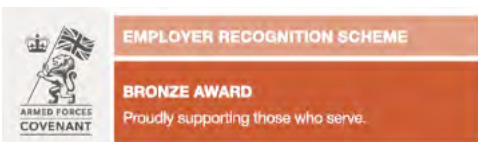
EXPERIENCE. INNOVATION.

NAVAL BROCHURE



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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.

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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Customer Support

The dynamic approach incorporated by ISTECS 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 ISTECS 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.

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

ISTECS use Supportability Engineering Management 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 is used to produce equipment and maintenance regimes, which reduce down time, erroneous inspections and ultimately support costs.

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

Training Needs Analysis is conducted to ensure the equipment can be used and maintained, on or off the battlefield, with minimum but effective training, and ISTECS can offer training courses and supporting publications for Users and Maintainers.



FEATURED ARTICLE

MARITIME BA

The maritime battlespace is one of the harshest environments in which ISTECS equipment operates. Manufactured from marine resilient material and finishes, the range of ISTECS 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. ISTECS also supply naval systems for integration on offshore drilling rigs.

ISTECS has exceptional strength in the engineering design and development of new innovative naval weapon systems with a large design team fully equipped with the latest 3D Solid Modelling and Finite Element Analysis (FEA) software. ISTECS adopt a proactive approach with an ardent desire to work as part of the customers team throughout the design process and beyond.

With many existing products in-service across the maritime domain, the engineering design team will 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 ISTECS design processes and procedures that ensure key 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.

The ISTECS 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 ISTECS look to continuously improve existing solutions or look to develop new concepts to the benefit of the user community.

Recent additions to the ISTECS range of naval solutions include a multi-panel ballistic shield system, which offers the user a level of protection, whilst operating the deck mounted weapon system. The shield systems normally consist of 3 or 5 ballistic panels and can integrate with the ISTECS Mk 15 Pedestal or other legacy Pedestals. The shield system is easy to install and modular by design, where additional panels can be added with ease. Varying levels of ballistic protection can be supplied by ISTECS from STANAG 4569 Level I to level IV.

ISTECS has over 30 different weapon systems in-service around the world with many being NATO codified and having seen active service. These include the following:

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FEATURED ARTICLE

BATTLESPACE

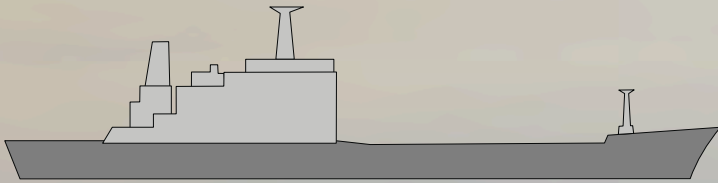
- Softmounts - for 5.56mm, 7.62mm, 12.7mm and 40mm AGL/GMG
- Pedestal Systems - either fixed height or height adjustable
- Universal Gun Mount – suitable for any Softmount
- Protected Weapon Stations – specific naval designs
- Ringmounts – specific naval designs
- Swing Arms (Single or Double Arms) – suitable for small calibre Softmounts
- Multi Panel Ballistic Shield Systems – 3 or 5 ballistic panels
- Frontal Ballistic Shields – normally fitted to an ISTECH Softmount/UGM/Ringmount

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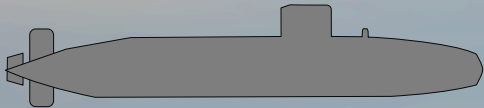
EXPERIENCE AND INNOVATION



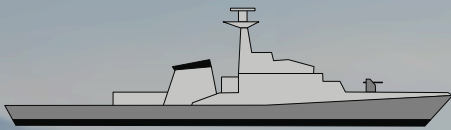
ISTEC's extensive and varied portfolio of in-service Naval Systems, including Softmounts, Protected Weapon Stations and Ballistic Shields, can be seen on an equally diverse range of Naval Vessels from small 5,000kg Offshore Raiding Crafts (ORCs) up to the UK's 65,000 tonne Queen Elizabeth Class Aircraft Carriers. Apart from recommending and supplying systems to suit the role of any vessel of any size and capability, ISTEC's team of experienced Engineers can also assist with integration, user training and ongoing support throughout the life of the platform.



SURVEY CLASSES



TRAFALGAR CLASS



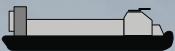
RIVER CLASSES



MCMV



LCU MK10



LCAC



LCVP MK5



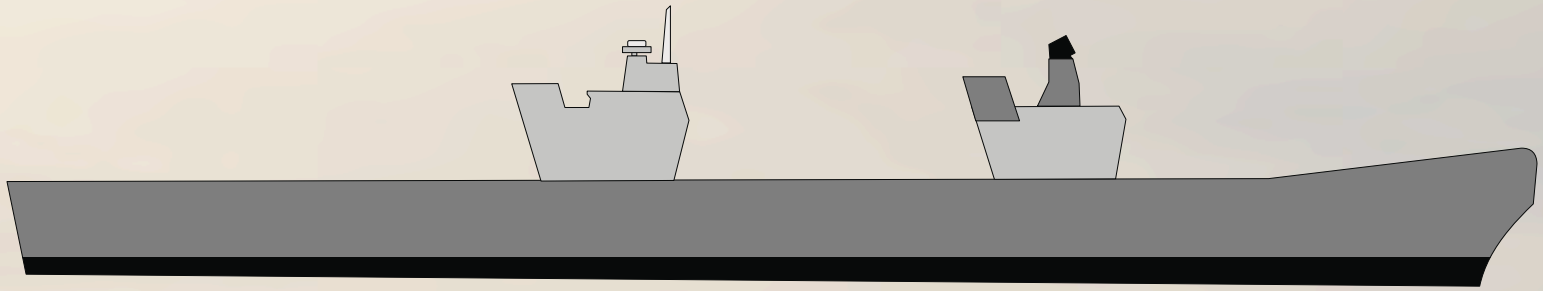
ORC



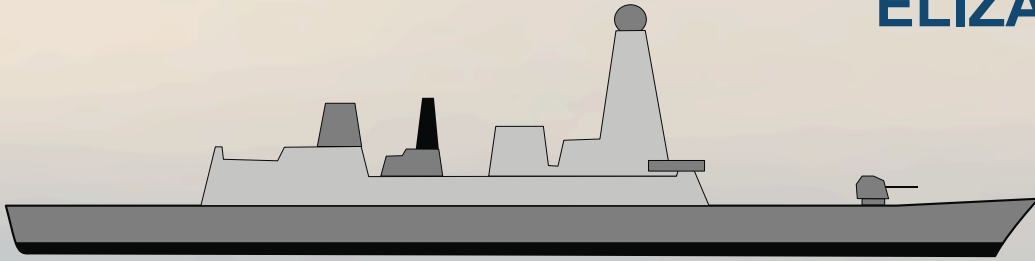
RPC



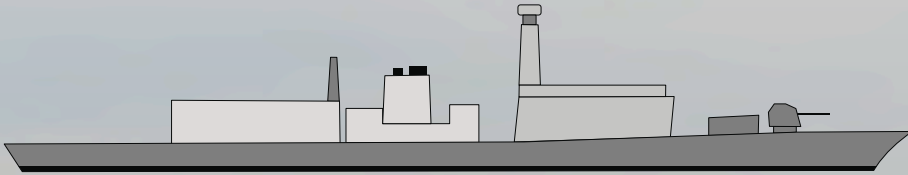
ATION ACROSS THE FLEET



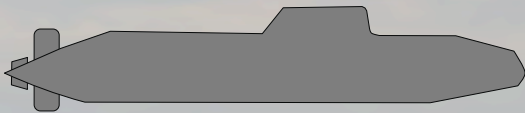
ELIZABETH CLASS



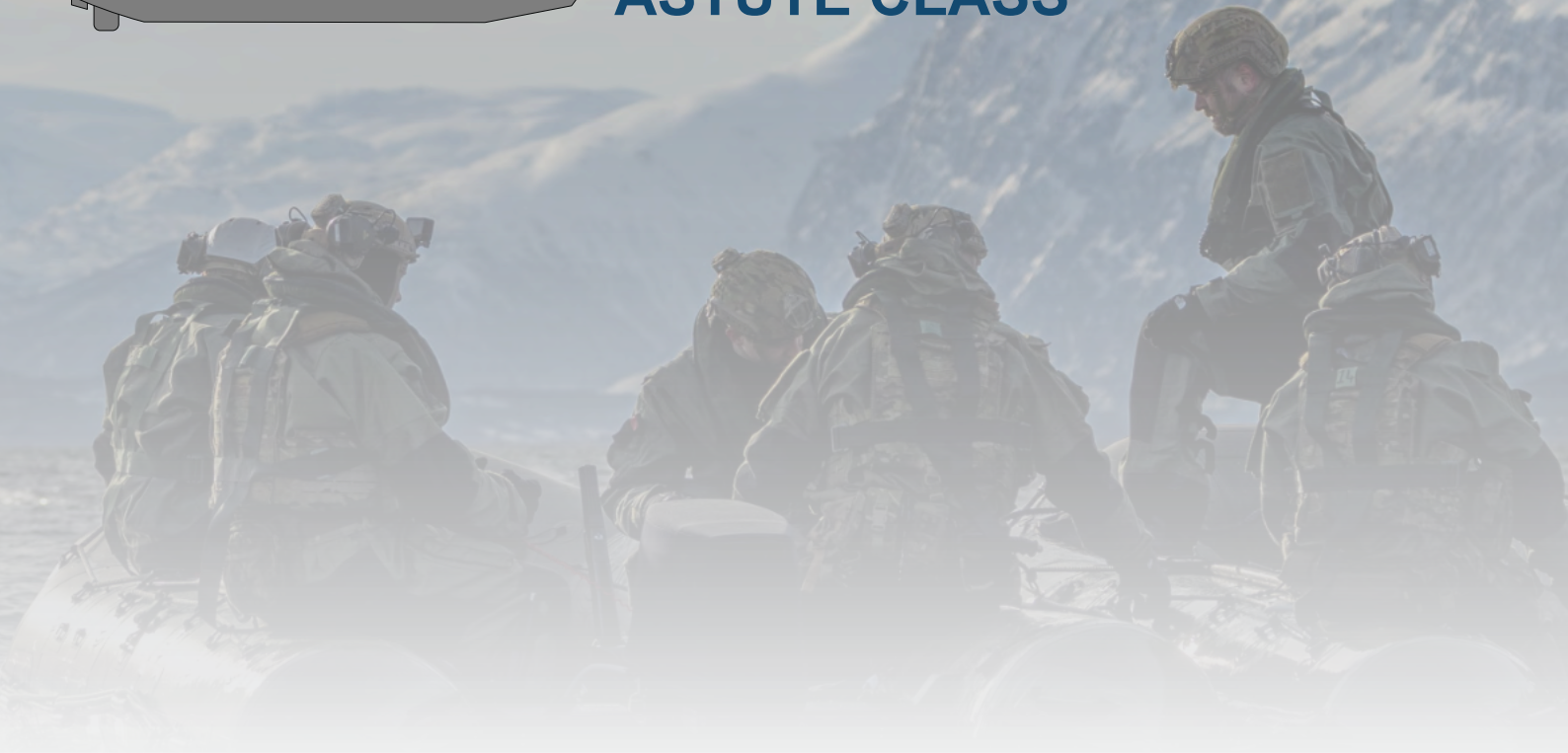
TYPE 45



TYPE 23



ASTUTE CLASS



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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 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 GMCs.



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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.



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Submarine Gun mounts



The ISTEK submarine mounts have been designed and manufactured to provide submarines with a close protection capability when surfaced.


Easily attachable and removable from the boats main tower, the mounts offers a stable firing platform from which to fire the attached GPMG.

The buffered softmount controls recoil and run out, whilst a link and case catcher helps reduce Foreign Object Debris (FOD) on the deck.

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HMG

Gun mounts

A person wearing white gloves is operating a Heavy Machine Gun (HMG) mounted on a boat. The gun is mounted on a black metal assembly. A green ammunition box with a warning symbol is visible behind the gun. The background shows the blue sea and sky.

The **L69 HMG** Weapon Mount Assembly is a mounting solution designed to fit the 12.7mm M2/Quick Change Barrel HMG. It has been designed for maritime use and is predominantly manufactured from stainless steel to resist salt-water corrosion. The HMG weapon mount assembly comprises of a buffered softmount which reduces the shock of recoil and runout during firing. The assembly mounts into the spigot receiver No1 or into the Mk16 Minigun receiver.

The assembly comes with a detachable shoulder-bar for ease of operation and a detachable link and case collector.

The buffered softmount can be detached from the cradle without tools. Arc stops can be cut to suit the individual vessel and firing position. The assembly spigot and adaptor can be changed at user level to accommodate the various mounting receivers; including the MK16 (for the Dillon M134 minigun) and the Spigot receiver No1.

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SAGM

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.

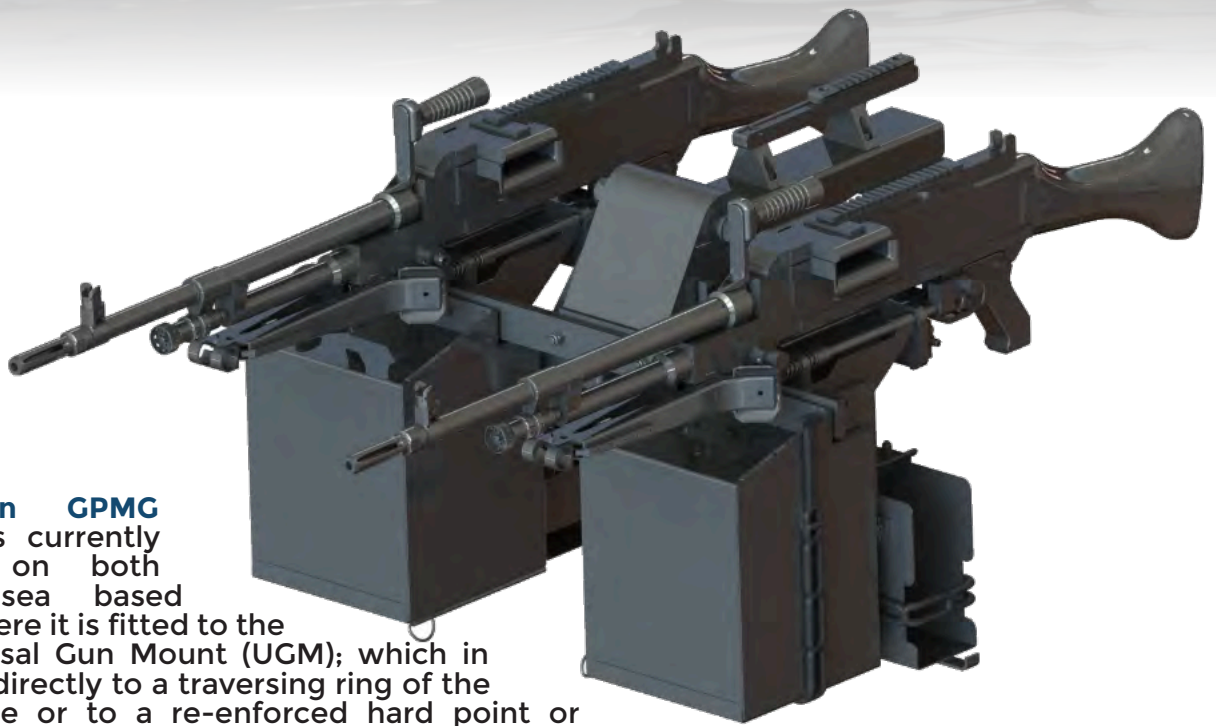
The Swing Arm Gun Mounts (SAGM) provide the operator with an extended stable platform to fire an MMG from.

Often fitted to pedestals, the SAGM offers an increased range of arcs, to the operator, than is provided from just a fixed pintle.



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TWIN Mount



The twin GPMG mount is currently utilised on both land and sea based platforms where it is fitted to the L20A4 Universal Gun Mount (UGM); which in turn is fitted directly to a traversing ring of the parent vehicle or to a re-enforced hard point or pedestal on the vessel.

The GPMG twin mount is designed to accept (x2) left hand fed L7A2 7.62mm General Purpose Machine Guns together with (x2) H84 boxes (200 rounds) of ammunition per gun.

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Contact us



info@istec.co.uk



+44 (0) 1992 517000



www.istecservices.com

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