

MKU strives to offer solutions to difficult problems of country's internal and external security

A leading protection solutions Indian enterprise MKU, set up 27 years ago, has been making rapid strides in offering solutions to country's internal and external defence and security related problems, by drawing richly from global experience and technologies.

From night-vision devices to armour solution for personnel and platforms like air, sea and land-borne vehicles, MKU has made a name for itself by striving for excellence in quality and focussing on requirements of customers.

A fully Indian company, with a hundred per cent owned company in Germany, MKU has been exporting to 100 odd countries but has been contributing to national confidence in effectively meeting the challenges.

Offering wide range of products based on latest technology, MKU has been able to carve a special niche for itself by satisfying the customer in a manner that ensures customer retention and repeat orders.

One of its products, Instavest, is the most advanced ballistic over-vest in the world as it offers excellent lightweight protection and features various design improvements which enhance user comfort and safety.

It also features the revolutionary 4P Quick Release System which can divest the over-vest off the user's body within a split second. Its innovative design makes it the simplest quick release ballistic over-vest which can be recouped and reassembled within 30 seconds.

MKU's night vision devices are one of the most sought after products as most of the infiltrations from across the border of anti-militancy as well as anti-terroristic operations have to be conducted at the dark hours of the day. Keeping different requirements of different military and para-military forces, MKU offers, among others the Jaguar-7, Jaguar-14 and Nighteye.

Jaguar-7 from MKU is a combat-proven hand held single tube Night Vision Goggle / Binocular. Jaguar-7 allows Interchangeability of Image Intensification Tubes, facilitating the use of latest technology IITubes of various makes and types. For optimal performance, SNR of 20 and resolution of 57 lp/mm for optimal performance is available, as it is rugged and waterproof. Jaguar-7 is a MIL-SPEC compliant device, capable of effectively operating under harshest environment.

The device has a built-in IR illuminator for no-light operations and an automatic bright light cut off sensor for protection from sudden burst of bright light. Low-battery indicator is located within the field-of-view thereby preventing detection by the enemy.

As battery life is critical for all operations, the battery compartment can accept two types

of batteries - AA & BA5567. Two standard AA batteries Or a single BA5567 battery provides 30 hours of uninterrupted operation.

Jaguar-7 can be head/helmet Mounted easily with the help of quick release mechanism located on the top. Both mounts allow adjustments to attain a comfortable viewing position.

The interpupillary distance (space between left and right eye) of the device can be adjusted to suit specific users for the best view. Adjustment of diopter setting is provided for bespectacled users.

At the same time, Jaguar-14 is an ultra lightweight multi-purpose monocular weighing 260gms, ideal for special operations. It too allows IITubes of various makes and types. MKU recommends SNR of 20 and resolution of 57 lp/mm for optimal performance.



The Jaguar-14 is also MIL-SPEC compliant device and

Multipurpose, the pocket size scope allows its usage as a handheld scope for night vision applications. Jaguar-14 can be used as a single eye goggle by attaching it to Head / Helmet Mounted easily with the help of quick release mechanism located on the top.

It can also be mounted in conjunction to holographic sights on weapons to provide night vision to the firer. Camera adaptor is optionally available for capturing of images/videos for surveillance or evidence gathering.

Third option, Nighteye is a rugged metal bodied weapon sight which is ideal for night missions that demand accurate aiming. It is designed with rugged housing that ensures durability and dependable bore sight retention during the entire mission, even at extreme temperatures. Nighteye is a fully MIL Spec complaint device.

The Nighteye offers superiority over adversaries with its target acquisition capabilities. Bore-sighting the weaponsight is easy with the help of reticule adjustment in both azimuth and elevation direction.

Depending on the distance, range estimation scale combined with the well graduated reticule facilitates the user in achieving accuracy during parabolic firing.

Nighteye comes with a standard picatinny weapon mount adaptor. It can be mounted onto any small arm weapon with picatinny rail.

After prolonged and sustained research and development, the MKU has developed a helmet- G-Factor. It uses advanced technology materials to deliver a unique helmet with excellent protection and ergonomics for added comfort. Nominated and used in various future soldier programs, it offers excellent shock resistance, water resistance, corrosion resistance and UV resistance.

MKU's other area of speciality is upgrading of vehicles, as different armour solutions, based on the requirement, specifications and structural drawings of the client, can be provided. These can be delivered as: panels, kits, add-on-armour or spall liners.

The ever-evolving nature of vehicle design is, perhaps, the biggest challenge to the manufacturers of ballistic protection. Steep and curvy contours necessitate the need for adaptive material that traces every inch of the automobile surface without compromising on protection levels.

Flexar from MKU is an innovative material that not only provides reliable ballistic protection but is also highly adaptive to the contours of the vehicle, making retrofitting a much easier task. Flexar is corrosion and chemical resistant, water repellent and can perform in high temperature zones.

It is suitable as a 'Fragmentation Blanket' for floors and backs of the vehicle seats. It also acts as an excellent backing material to ceramic armour panels. For flat applications, such as vehicle floors, quilted layers of aramid fabric are preferable to Flexa.

Similar and other solutions are available for operations in air and sea. In 2014 itself, the MKU has completed supplying to Rajasthan police HQ bullet proof jacket and had won an export award for MSMEs category in October last year. Also, Instavest was patented in the US in 2013.

"MKU has one of the largest capacity and infrastructure in the world; it can produce 2 lakh jackets annually. Known for timely deliveries, the MKU has an R & D Centre which has been developing technologies in-house and has been patenting them. Till date, there has been no complaint of non-performance for a life-saving equipment," an MKU spokesman said, adding that the company believes in executing the order to customer satisfaction. ■

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