

## MKU: Helicopter Armouring for Safety & Efficiency



With changing combat scenarios, helicopters have continually evolved from their basic transportation role in military operations to much diversified counter-insurgency and disaster control tasks. Helicopters have become workhorses as they haul supplies and troops to and from combat zones. As the pilots fly their helicopters into the combat zones, they and their machines are prone to fire from enemy forces. The most vulnerable part of a helicopter are its underbelly, cockpit and engine, most susceptible to ground fire. Therefore, not only is it crucial to make the helicopters more ballistically tolerant, but, protect the pilots and aircrew with ballistic body armour solutions.

### Helicopter armouring

MKU offers wide range of protection solutions for fixed wing and rotary aircrafts. MKU's armour is extremely lightweight and durable guaranteeing mission accomplishment and safeguarding trained aircrew. MKU offers certified solutions following NATO AQAP quality procedures. These aircraft protection solutions comply with US Federal Aviation Regulations (FAR) and the European Aviation Safety Agency (EASA) regulations. MKU provide end-users with the highest level of protection while retaining full system functionalities of the helicopter. Its technical team cooperates with several leading material developers to ensure special ballistic protection capabilities for the offered armour solutions.

MKU ensures that both its armour materials and its attachments comply with MIL 810 G standards and work

closely with operators from the very start to deliver an effective and high quality solution as per the actual need. MKU is among the few companies in the world with extensive experience in armouring airborne systems, is certified according to AS 9100 C for design and development of armour solutions for airborne platforms. Keeping the multi role operations and survivability of utility and assault helicopters in mind, MKU designs helicopter armour kits using the proprietary 'Modular Schutz Technik' (MoST). Depending upon the mission requirements, armour kits from MKU can be easily and quickly deployed in, or removed from the aircraft either in part or in full without the requirement of any special tools.

'Modulare Schutz Technik' uses precision engineered composite armour panels along with patented aero-grade attachment systems. These kits are simply installed upon the existing structure of the helicopter without making any structural changes or tampering with the aerodynamics of the Helicopter.

### Areas for Armour Protection

**Pilot seat protection:** MKU provides aircrew with optimum protection without affecting the operational ability of the machine. Pilot seat protection solutions offer crew with excellent protection against trauma sustained from turbulence and other ballistic threats.

**Floor protection:** MKU's innovative internal aircraft floor equipped with ballistic protection capability is easy to install, lightweight and requires minimal maintenance. Anti-ballistic flooring solution

can be easily integrated into original hull without necessitating any structural changes in the platform.

**Side Protection:** During combat side protection and door protection is equally important as the hull of aircraft. MKU's 6th Generation Polyshield V6 armouring technology facilitates helicopters with lightweight and effective armour solutions which can be easily and quickly deployed.

MKU understands the threats that pilots encounter while flying in combat, and have developed the Heli-pilot vest which offers maximum ballistic protection to the pilots. Heli-pilot vests are designed such that they offer privilege of obstruction free movement while flying aircraft from combat zones.

MKU is an Indian defence company headquartered in Kanpur, has four production facilities of which 3 are in India and the fourth one in Sittensen, Germany. The company manufactures protection and surveillance range of equipment and solutions. MKU has spent the last three decades building up a broad product portfolio that includes ballistic vests, ballistic helmets and other personal protection products for military and security forces as well as Platform armouring solutions for land-air-sea platforms. It has recently set up one of the most modern facilities for the manufacture of Night Vision Devices and Day sights. Till date, MKU has provided protection to over 2 million soldiers across 2000 platforms, its products used by 23 forces in over 100 countries worldwide.

