

mkur[®]



Providing Protection to Armoured Vehicles

Militaries all over the world are in the process of upgrading their ageing land platforms due to continually evolving technologically advanced threats. Anti-tank mines and IEDs have become the weapon of choice in recent years, resulting in the urgent need of APC and other armoured vehicles with enhanced protection. APC and Infantry Combat Vehicles (ICVs) help in maintaining edge over the enemy's act of border trespassing by aggressively reacting to the act of insurgency and that too with fearless approach.

The role of the APC, as the crucial measure of ground combat power, has not changed over the years in relation to the threat posed by large armoured formations operating in vicinity of national borders. APCs were not developed to defeat the tanks as their ultimate goal is to defeat the small arms fire to provide protected mobility to our own infantry and thus penetrate enemy's defences in forward and depth areas.

Threats encountered by APCs

APCs come with some notable inherent limitations on the ever evolving battlefield and ammunition. The design and built of these vehicles remains vulnerable in several key areas. For example, its side armour is not effective against most anti-armour projectiles.

Because of increased velocity of war challenges and the pace of technology change, Army & land forces need to update & modernise their existing fleet of APCs with innovation & armour in such a way that it can counter future challenges. MKU offers ballistic protection solutions based on protection & performance requirements of the land systems including APCs, ICVs and tanks

Modernization is intended to provide the vehicle with additional capability to intervene in urban scenarios and remain prepared for future threats and deliver

best performance. Armour solutions by MKU result in increased survivability and improved mobility of existing tanks in arsenal of armies. In today's world APCs are highly advanced and exceptionally expensive to produce. MKU offers less expensive and high quality 'Add on Armour' which can be retro fitted to upgrade existing vehicles to meet evolving threats thus reducing cost of ownership to save existing hardware from getting transformed to scrap or become obsolete.

Most exposed to threats are normally the gunners who are manning the guns mounted on the APC or the vehicle roof. They are vulnerable to not only direct line of fire but they also lie prone to indirect firing especially while conducting operations in the urban built-up areas where unpredictability and ambushes play a key role and gunners have to remain on a 360 degree swivel constantly. Not only do they need personal protection gear like enhanced Body Armour including Helmets with communication headsets but also a protective barrier such as turret to protect them from heavier rounds including shrapnel's and fragments from RPG attacks. For gunners on most APC's and combat vehicles, MKU offers Up Armoured Turrets which can be easily customised in terms of protection levels and configurations and constellations they might be required in to fit complex and diverse needs and requirements of the combat role the vehicle is likely to perform.

MKU offers less expensive and high quality solutions which save existing military hardware from getting transformed into scrap. MKU's technologically advanced 6th Generation solutions demonstrate improved resistance to environmental conditions like UV radiation, water, sunlight and sudden temperature changes.

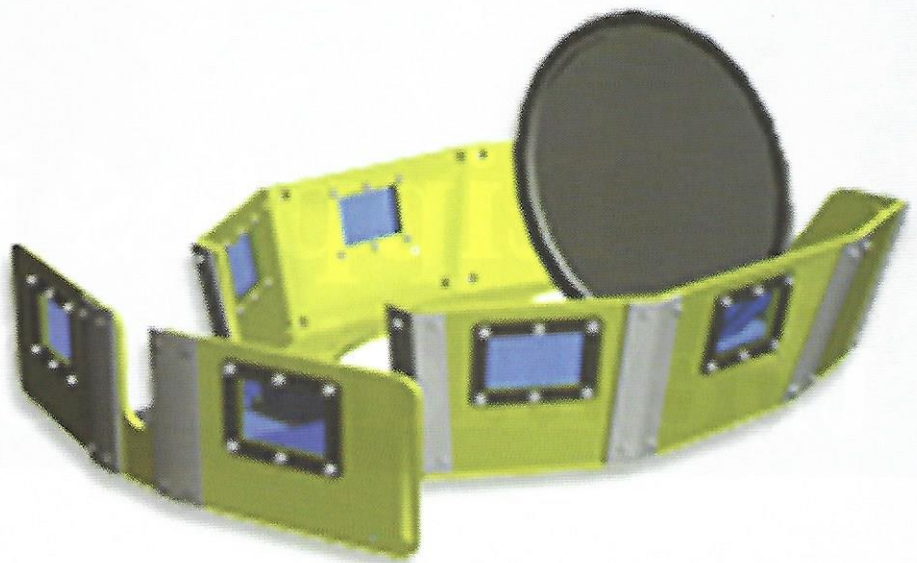
MKU offers armour solutions for Land Platforms in a variety of constellations namely : Stand-alone Armour, Customized Panels, Pre-Engineered Kits, Add-on Armour or Spall Liners, depending upon the end use, user specifications and in-theatre role intended for the land platform.

POLYSHIELD V is lightweight armour made of

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Polyethylene Fibers (UHMWPE-Ultra High Molecular Weight Polyethylene) capable of enduring temperature from -40°C to 65°C. POLYSHIELD V provide protection against different threat level as per NIJ 0108.01 Level I to III, EN 1522 Level FB4 to FB7 and STANAG 4569 Level I

FLEXAR panels are flexible and lightweight. These



panels are made by using Aramid fibers and special rubber matrix. These panels can withstand temperature ranging from -40°C to +80° C. It also has excellent spall properties. FLEXAR panels are fire, corrosion, chemical resistant and water repellent. Stand-alone panels can give protection against threats NIJ 0108.01 Level III A, EN 1522 Level FB4

Cerazone panels from MKU are made using wide range of ceramics including advance ceramics and various fiber combinations. Cerazone offer multi-hit capability against threats like NIJ 0108.01 Level I to IV, EN 1522 Level FB5 to FB7, STANAG 4569 Level I to Level IV and VPAM PM 2007 Level PM1 to PM14. 