



MAKING
INDIA
PROUD

**PROTECTING
OUR HEROES**

mku[®]



INCREASING CAPABILITY
REDUCING RISK

***mk*u**[®]

Corporate

About Us



INCREASING CAPABILITY
REDUCING RISK

VISION

“Foster safe and secure environment in the world by increasing capability and reducing risk”

MISSION

“Provide an edge to soldiers in challenging situations”

PRODUCT VERTICALS

Personal
Protection

Vehicle
Protection

Electro
Optics





Trusted by more
than 230 forces in
over 100 countries

Reputed manufacturer of personal and platform
armour with rich experience in Homeland Security
& Defence sector

3ecades
of protecting people
and platforms

2+million soldiers  | **2000+**
Land, Air, Sea platforms
Protected till date

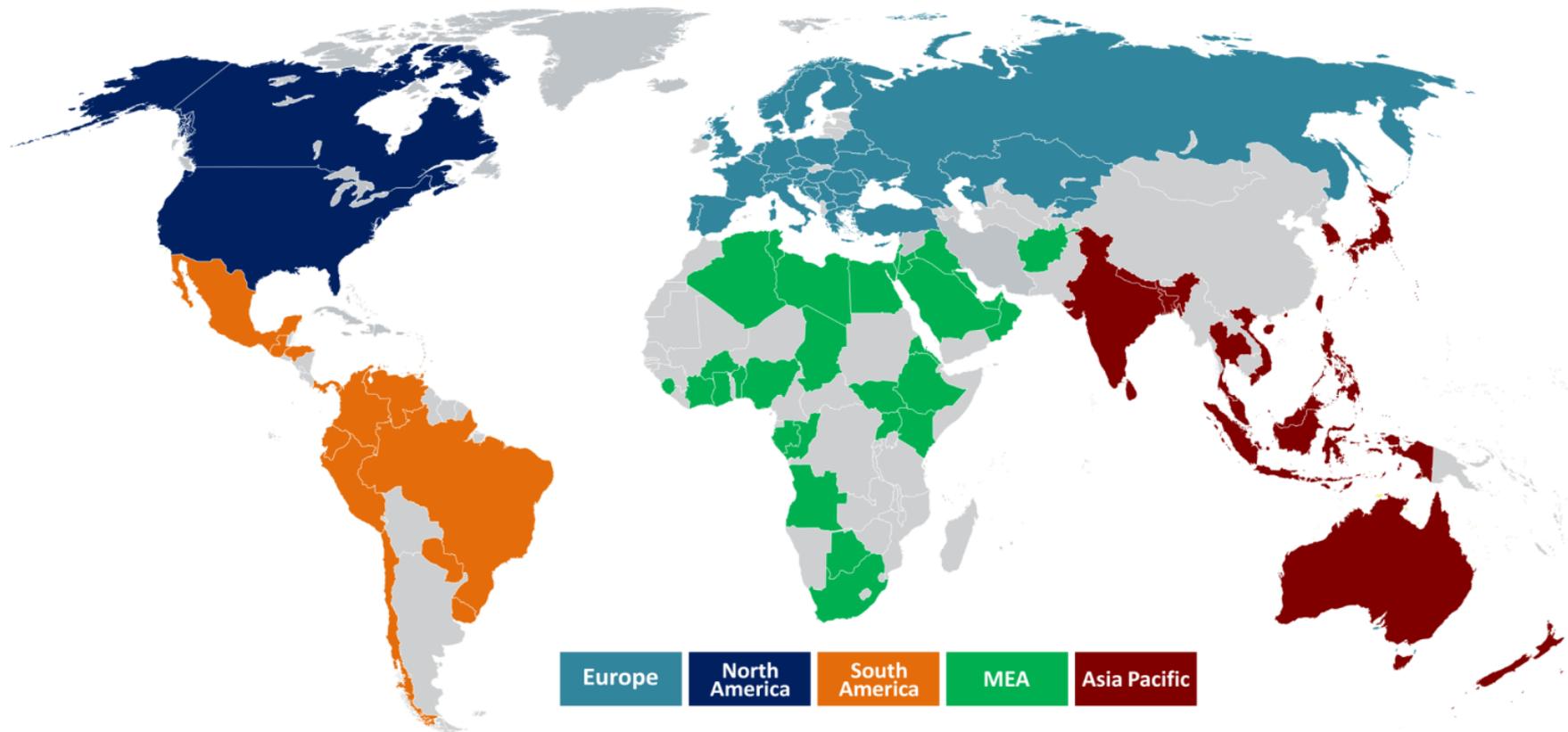
Registered supplier:

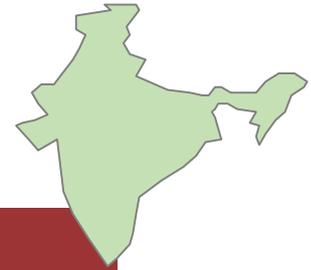


United Nations • North Atlantic Treaty Organization •
Supreme Headquarters Allied Powers Europe • Organization for Security and
Co-operation in Europe



INCREASING CAPABILITY
REDUCING RISK

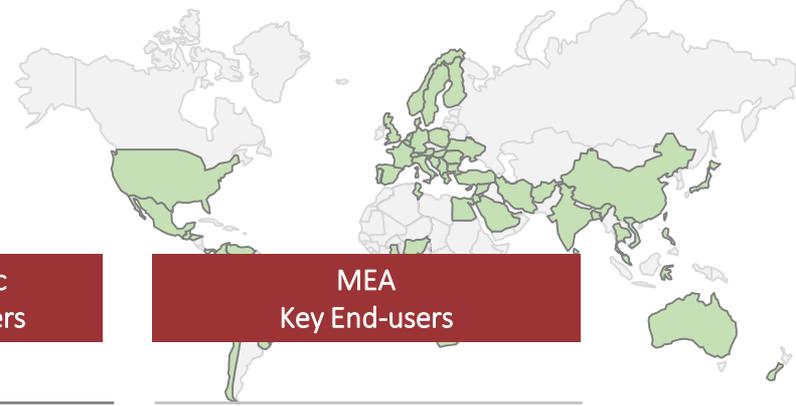




Reputed Customers -Domestic

Min. of Home Affairs	Min. of Defense	PSU & Private	Ship Yards
Chattisgarh Police	ARMY	OPF Kanpur	GRSE, Kolkota
Gujrat Police	HQ Cntrl Command, Lucknow	BhilaiSteel Plant	GSL, Goa
UP Police	HQ Eastern Command, Kolkota	NPCL, Tirunelveli	L & T Marine Div, Powai
Orissa Police	HQ Northern Cmmnd, Udhampur	NPCL, Tirunelveli	Mazgaon Docks Ltd, Mumbai
Haryana Police	HQ Southern Command, Pune	HPCL, Vishakhapatnam	Fibroplast Marine, Noida
J&K Police	NAVY	GAIL, Assam	Titagarh Marine, Kolkota
Jharkhand Police	HQ Eastern Naval Command, Visakhapatnam	NMDC, Jharkhand	West Coast Marine, Mumbai
Assam Rifles	HQ Western Naval Command, Mumbai	Vikram SaraBhai Space Centre, Kerala	ABG Shipyard, Mumbai
Pondicherry Police	AIRFORCE	NPCL, UP	Western India Shipyard, Goa
CRPF, New Delhi	HQ Western Air Command, New Delhi	NPCL, Karnataka	Pipavav Shipyard. Gujerat
SSB, New Delhi	HQ Central Air Command, Allahabad	NPCL, Rajasthan	Mahindra Odyssey, Mumbai
PHQ, M.P Bhopal		GMR Group, N. Delhi	Marine Frontiers, Mumbai
SPG, New Delhi		VRDE, Ahmednagar	Bristol Boats, Kerala
SSB, New Delhi		Vehicle Factory, Jabalpur	Timblo Dry Docks
IGP, U.T. Chandigarh		BEL, Bangalore	
PHQ, M.P Bhopal		PHQ, M.P Bhopal	
CISF HQ, New Delhi		Ordnance Factory MedakHyderabad	

INCREASING CAPABILITY
REDUCING RISK



**America
Key End-users**

Army & Police, Mexico
 Army & Navy, Brazil
 Navy & Police, Chile
 Police & INPEC, Colombia
 Army & Airforce, Peru
 National Police, Venezuela
 Army & Police, Ecuador
 Police, Paraguay
 Police Deptt. USA
 Police, Trinidad & Tobago
 Private Security, Uruguay

**Europe
Key End-users**

Ministry of Defense, UK
 Army & Police, Italy
 Army , Portugal
 Army & Police, Bosnia
 Police & Army, Germany
 Army, Turkey
 S&D Dept., France
 Army, Bulgaria
 Army, Georgia
 Army, Spain

**Asia Pacific
Key End-users**

MOD & MHA, India
 Civil Def. Force , Singapore
 Police, Australia
 Police, China
 Police & Army, Afghanistan
 Army, Indonesia
 Police, Vietnam
 Police, Kazakhstan
 Police, Japan
 Police, Taiwan
 Army, Korea
 Police, Thailand
 Army & Airforce, Bangladesh
 Army & Navy, Malaysia

**MEA
Key End-users**

Police, Egypt
 Public Security,, Border Guard & Civil
 Defense Saudi Arabia
 Army & Police, Ghana
 Police, Burkina Faso
 Army, Algeria
 Police, Tunisia
 Police, Botswana
 Army, Benin
 Police, Oman
 Army, Ethiopia
 Police & Navy, Nigeria

 Customer locations

Landmark Projects

Personal Protection

- **Ministry of Home Affairs, India – 59,000 Body Armour**
- **Indian Army - 158,279 BP Helmets**
- Ecuador Police- 40,000 Body Armour
- MoD, UK - 20,000 Armour Inserts
- French Navy – 8,000 Armour Inserts
- Spanish Army – 20,000 Armour Inserts
- US Law Enforcement – 40,000 Helmets

Platform Protection

- **Indian MHA – Armouring of 200 Patrol Boats**
- **Coast Guard India - 12 Hovercrafts**
- German Army – Armouring of 40 Helicopters
- French Land Forces – 1,000 Armour Kits for Troop Carriers
- German Navy – Armouring of 4 Frigates



Technology

Proven expertise, Advanced technology

- First Indian company to develop light weight hard armour technology,
- Patented technologies - globally recognised, including US and Europe
- First Indian company with NIJ 06 Certification – the most stringent body armour certification in the world

INSTAVEST™
INSTANT RELEASE ARMOR VEST

bol free **IPS**
HELMETS

SERIES | 06
NIJ CERTIFIED SOLUTIONS



INCREASING CAPABILITY
REDUCING RISK

Innovative Products

REVOLUTIONARY
Quick Release System

INSTAVEST™
INSTANT RELEASE ARMOR VEST



*Patent applied



Introducing
RHT TECHNOLOGY
for Helmets

Reduced Helmet Trauma
Technology

Personal
protection

6th
GENERATION
ARMOUR TECHNOLOGY



POLYSHIELD **6**

Lightweight
Protection





Only company in India to offer Integrated Light Weight Armouring Solutions for Platforms

Design > Development > Manufacturing > Integration
of light weight armouring solutions for:

- **LAND VEHICLES**
- **AIRCRAFT**
- **NAVAL VESSELS**
- **OBJECTS**

Land Vehicles Armoured 1200+ Vehicles



- **Combat Vehicles**
- **Civilian Vehicles**
- **Multi Barrel Launcher (MBRL)**
- **Tanks**
- **Containers**
- **Turrets**
- **Doors / Hatches**

Aircraft Armouring

Armoured 200+ / 20 types of Aircraft

- Lockheed C-130
- De Havilland DHC-6 Twin Otter
- Pilatus PC-6 Turbo Porter
- Bell UH-1/212 Huey-Types
- Boeing CH-47
- Euro copter BO-105
- Puma/Super Puma/Cougar
- Sikorsky S-70
- Sikorsky Black Hawk
- Sikorsky UH 60, UH 60M
- Westland Sea Lynx MK-88
- MIL MI-8/17
- NH Industries NH-90
- Euro copter FENNEC





Naval Vessel Armouring Armoured 500+ Naval Vessels

- RIB
- Fast Patrol Boat
- Fast Interceptor Crafts (FIC's)
- Work Boats/Crew Boats
- Hovercrafts
- Mega Yachts
- Frigates and Corvettes



Why MKU?



mkU

INCREASING CAPABILITY
REDUCING RISK

Manufacturing Facilities in India – Germany



mkU

INDIA



mkU GmBH

GERMANY



Rooma
Kanpur



Malwan
Kanpur



Sittensen
Germany



Optics Unit
Kanpur

Research & Development

- MKU Technical Centre for research & development with 40+ engineers in India and Germany



Capability – Production Capacities



200,000

Helmets

2,000

Armour Kits

150,000

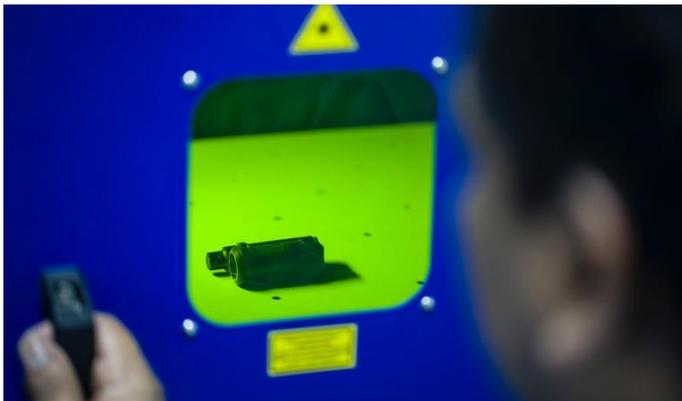
Body Armour

15,000

Electro Optic Devices

300,000

Armour Inserts



Capability – Management Systems & Certifications

- **ISO 9001:2015**
 - Quality Assurance System
 - **ISO 14001:2004**
 - Environmental Management System
 - **AS 9100 Rev D**
 - QMS for AD&S Industry
 - **OHSAS 18001-2007**
 - British Standard for occupational health & safety management systems
- **BA 9000:2016**
 - Body Armour Quality Management System
 - **NIJ 0101.06**
 - Ballistic Standard for Body Armour
 - **Govt. recognized R&D Unit**
 - Ministry of Science & Technology, Govt. of India



Some Major Associates, Partners & Suppliers

THALES



PHOTONIS
Night Vision

SCHOTT
glass made of ideas

Honeywell



TEIJIN
Human Chemistry, Human Solutions

CeramTec



Industrie
Bitossi

SAINT-GOBAIN

Personal Protection – Expert Solutions, Patented Technologies

- 1000+ solutions against more than 100 types of threats including bullets, stab and fragments
- Multi threat protection
- Over 16 Patented technologies that are recognised in US, Europe and other parts of the world
- Certified Solutions with 70+ quality checks



Personal Protection – Infrastructure that inspires



Moulding



Gerber Cutting



Automated Cutting



Laser Cutting

Research & Development



सूचना
का अधिकार

TELEGRAM : SCINDRECH
दूरभाष / TEL : 26962819, 26567373
(EPBAX) : 26565694, 26562133
: 26565687, 26562144
: 26562134, 26562122
फैक्स / FAX : 26960629, 26529745
Website : <http://www.dsr.gov.in>



सत्यमेव जयते

भारत सरकार
विज्ञान और प्रौद्योगिकी मंत्रालय
वैज्ञानिक और औद्योगिक अनुसंधान विभाग
टेकनोलॉजी भवन, नया महरौली मार्ग,
नई दिल्ली - 110 016
GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
Department of Scientific and Industrial Research
Technology Bhavan, New Mehrauli Road,
New Delhi - 110 016



F. No. TU/IV-RD/3977/2018

Dated: 26th July, 2018

M/s. MKU Ltd.
13, Gandhi Gram, G. T. Road
Kanpur - 208 007
(Uttar Pradesh)

Subject: Registration of Research Institution, other than a Hospital, for the purpose of availing Customs duty exemption in terms of Government Notifications No. 51/96 - Customs dated 23.07.1996; No. 24/2007 - Customs dated 1.03.2007; No. 43/2017 - Customs dated 30.06.2017; No. 45/2017-Central Tax (Rate) & 47/2017-Integrated Tax (Rate) dated 14.11.2017; No. 9/2018 - Central Tax (Rate), No. 09/2018 Union Territory Tax (Rate) & No.10/2018-Integrated Tax (Rate) dated 25.01.2018; and State Tax (Rate) as applicable and all notification as amended from time to time.

CERTIFICATE OF REGISTRATION

This is to certify that the in-house R&D unit(s) of M/s. MKU Ltd, located at (i) 625 Part 638-639 Khujapur, Salempur Mode, Rooma, Kanpur and (ii) B-30, UPSIDC Industrial Area, Malwan, Fatehpur is/are registered with the Department of Scientific & Industrial Research (DSIR) for purpose of availing customs duty exemption in terms of Government Notification No. 51/96 - Customs dated 23.07.1996; No. 24/2007 - Customs dated 1.03.2007; No. 43/2017 - Customs dated 30.06.2017; No. 45/2017-Central Tax (Rate) & 47/2017-Integrated Tax (Rate) dated 14.11.2017; No. 9/2018 - Central Tax (Rate), No. 09/2018 Union Territory Tax (Rate) & No. 10/2018-Integrated Tax (Rate) dated 25.01.2018; and State Tax (Rate) as applicable and all notification as amended from time to time. The registration is subject to terms and conditions mentioned overleaf.

This registration is valid upto 31.03.2021.

(Dr. S. K. Deshpande)
Scientist - 'G'

MKU Technical Centre – 30 proactive engineers constantly improving and developing armour solutions

Recognised R&D centre by the Ministry of Science & Technology, India



Personal Protection – Testing & R&D

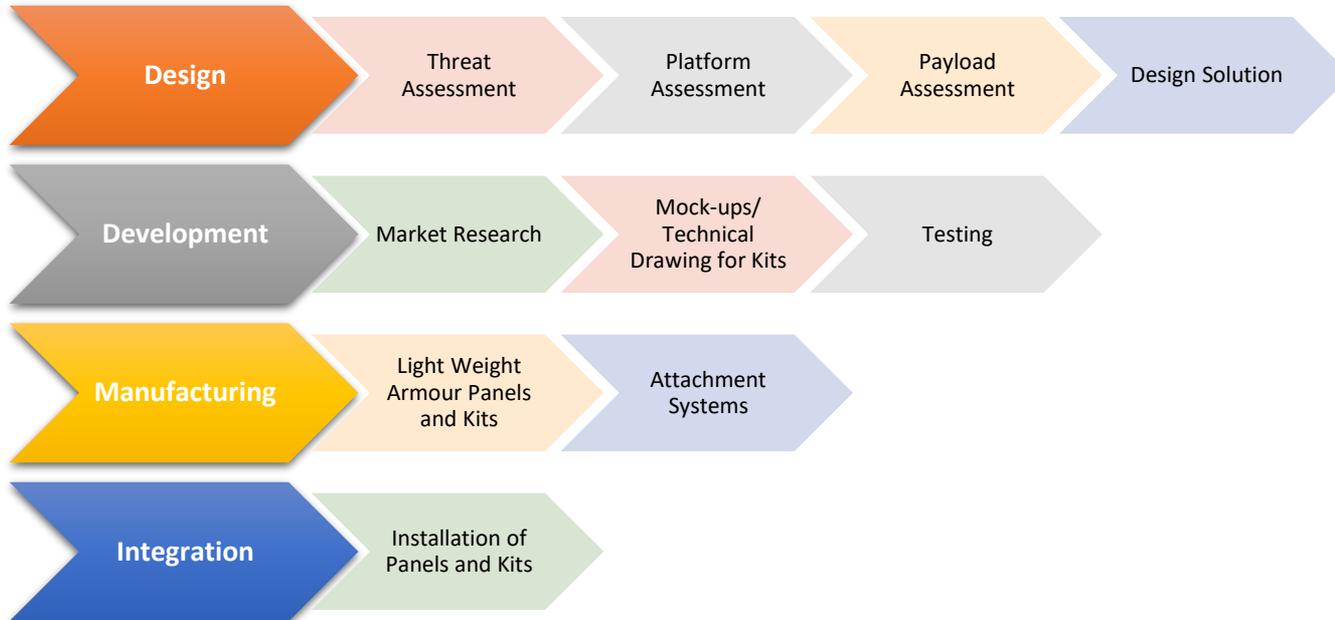
In-house Ballistic & Performance Testing Lab



Platform Protection

End to End Solutions - Complete system house for Land, Air, & Naval platform armouring

DESIGN > DEVELOPMENT > MANUFACTURING > INTEGRATION



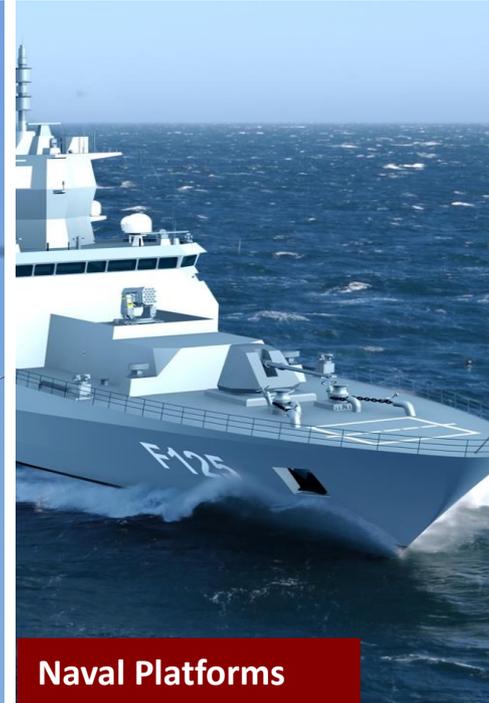
Platform Protection - Land Vehicles, Aircraft & Naval Platforms



Land Platforms



Air Platforms



Naval Platforms

Platform Protection – Infrastructure

Water-jet, Large presses, Autoclave



Waterjet Cutter



12 Daylight Press



Autoclave

Amongst the largest manufacturing capacities in the world

- *enough to meet the entire requirement of the Indian Army in a single year*

ITEM	INSTALLED CAPACITY
Ballistic Helmets	200,000
Ballistic Over vests	150,000
Armor Inserts	300,000
Up Armour Kits	6,000



In-house Technical Centre and Ballistic Testing Lab



- In house Ballistic Testing Laboratory at Germany equipped for testing as per:
 - NIJ
 - VPAM
 - STANAG
- MKU Technical Centre – a dedicated center for further R&D and enhancements

Certified and Trusted Solutions

Certified Quality Management Systems.

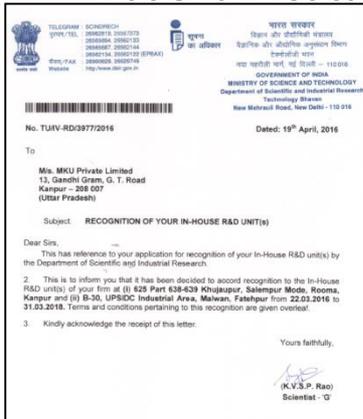
- AS 9100 Rev C
- ISO 9001:2008
- OHSAS 18001
- ISO 14001 (Environmental Management System)



R&D capabilities recognised by Ministry of Science & Technology, India

Products certified by:

- National Institute of Justice (NIJ), US



Electro Optics Division – Manufacturing Night Vision Devices In India

- **Ownership of IPR**
 - Complete freedom on product development, modification and customisation
 - Chose against licensed production which is very restrictive
 - No dependencies on principal companies
 - No restrictions on sale to anywhere in the world
- **Complete Blueprint and component level drawings with MKU for:**
 - Optics
 - Electronics
 - Mechanical parts
- **Sensor Manufacturing in India**

Complete Transfer of Technology agreements with various partners for indigenous manufacture of sensors

 - II Tubes for NVD's
 - Engines for Uncooled Devices etc.

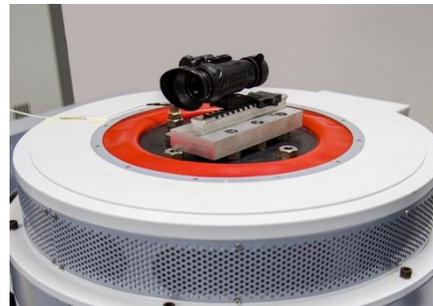


Electro Optics – Infrastructure

State-of-art manufacturing facility in Kanpur, UP

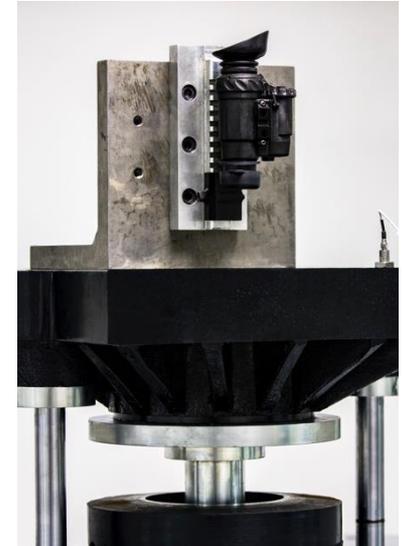
Equipped with the latest machinery and equipment

- Electrical Sub Assembly
- Optical Sub Assembly



Electro Optics – Infrastructure

- **Testing facility conforming to MIL STD 810G / JSS-55555 for Electro Optics**
- **Photometry tests for NVD's and II Tubes**
- **Class 10000 clean room**



Awards & Accolades

Best EOU (MSME)

Received in 2011

- Awarded by Minister of State for Commerce & Industry, Mr. Jyotiraditya M. Scindia.

Outstanding Performance in Exports

Received in 2013

- Awarded by Dr. (Mrs.) D. Purandheswari, Minister of State for Commerce & Industry.

Outstanding Performance in Exports

Received in 2015

- Awarded by Ministry of Commerce & Industry.

Innovation Excellence

Received in 2015

- Awarded by Hon. Union Minister for Science & Technology Shri Y. S. Chowdhary at 3rd Innovation Summit organized by Assocham.

Best SME

Received in 2016

- Award conferred by Shri Kalraj Mishra, Hon'ble Union Cabinet Minister for MSME, in the presence of Shri Suresh Prabhu, Hon'ble Minister of Railways, Govt. of India , Ms. Shikha Sharma, CEO & MD, Axis Bank.



MKU wins award for export performance for 2010-11 for the second time on 30th September 2013, in Delhi
It was conferred by Dr. (Mrs.) D. Purandheswari, Hon'ble Minister of State for Commerce & Industry,



MKU wins award for Innovation Excellence for the innovative Quick Release Bullet Proof Jacket - **Instavest**
It was conferred by Shri. Y.S. Chowdhary, Hon'ble Minister for Science & Technology

mkku

INCREASING CAPABILITY
REDUCING RISK

2007 के वर्ल्ड कप में बांग्लादेश से हारने के कारण बाहर हुआ था भारत

स्ट्रैटिजिक रोटेट करने में बेहतर भारतीय बल्लेबाजों को फायदा

गया सरकारी बस स्टैंड पर हथियार सप्लायरों ने दिनदहाड़े मारी गोली बुलेटप्रूफ जैकेट में फंसी गोली बच गये सीआरपीएफ कमांडेंट

वरीय संवाददाता, गया

हथियारों के साथ तीन हमलावर पकड़ाये

गया शहर स्थित सरकारी बस स्टैंड के पास भाकपा-माओवादी संगठन को हथियार सप्लाई करनेवाले गिरोह ने बुधवार को सीआरपीएफ (159 बटालियन) के कमांडेंट धीरज कुमार को दिनदहाड़े गोली मार दी. हालांकि, गोली बुलेटप्रूफ जैकेट में फंस गयी और कमांडेंट सकुशल हैं.

इस दौरान कमांडेंट व उनके बाईंगार्डों ने हमलावरों को दौड़ा कर हथियारों के साथ पकड़ लिया. पकड़े गये तीनों हमलावरों को रामपुर थाने की पुलिस को सौंप दिया गया. उनके पास से दो पिस्टल, एक कारबाइन व एक राइफल सहित 10 कारतूस बरामद किये गये. सीआरपीएफ जवानों ने घटनास्थल से एक बाइक भी बरामद की. सूचना मिलने पर एसएसपी पी कंत्रन व सिटी-एसपी राकेश कुमार ने कमांडेंट से बात कर घटना की जानकारी ली. इसके बाद शहर से बाहर निकलनेवाले सभी रास्तों पर नाकिबंदी कर दी गयी.



कमांडेंट के सुरक्षाकर्मियों के हाथ में बुलेटप्रूफ जैकेट, जिससे गोली टकरायी.

देखें पेज 03 भी

कार्रवाई के दौरान किया हमला
कमांडेंट ने बताया कि हथियार सप्लाई करने की सूचना पर कार्रवाई की गयी. लेकिन, सप्लायरों ने हमला कर दिया. एक युवक ने उन्हें गोली मारी. गोली बुलेटप्रूफ जैकेट में

फंस गयी. घटनास्थल से तीन युवकों को पकड़ा गया है. पूछताछ की जा रही है. उनके पास से दो पिस्टल, एक कारबाइन, एक राइफल सहित 10 कारतूस व दो खोखे बरामद किये गये हैं.

हथियार सप्लायरों को गिरफ्तार करने पहुंचे थे कमांडेंट

कमांडेंट को बुधवार की शाम करीब चार बजे सूचना मिली कि सरकारी बस स्टैंड के पास माओवादी संगठन को हथियारों की सप्लाई की जानी है. उन्होंने सीआरपीएफ अधिकारियों व जवानों की दो टीमों के साथ बस स्टैंड के पास सिविल ड्रेस में घेराबंदी की. करीब 4:15 बजे कमांडेंट व सीआरपीएफ के जवान एक टाटा सूमो विटा से बस स्टैंड से आगे एक चाय दुकान की ओर बढ़े. दुकान के आगे तीन युवक खड़े थे. कमांडेंट ने गाड़ी रोक कर युवकों से पूछताछ करनी चाही. इसी दौरान एक युवक ने पिस्टल निकाली और कमांडेंट पर गोली चला दी. गोली उनके सीने पर लगी. बुलेटप्रूफ जैकेट पहनने की वजह से गोली का असर नहीं हुआ. डर, गोलीबारी के बाद कमांडेंट के इलाखर रह सीआरपीएफ जवान हरिशंकर यादव, जवान शेष पेज 17 पर

MKU BP Jacket
saves life
of
159 Bn CRPF
Commandant
Shri Dheeraj
Kumar

PM to Review FDI Policy at High-Level Meet Today
ECONOMY: MANOJ, NARAYAN & MORE → 11

Trump Says He'll Be 'Angry' If Senate Healthcare Bill Pllops
AROUND THE WORLD → 13

Federer Two Wins Away from 8th Wimbledon Title
SPORTS: THE GREAT GAMES → 15



Army Gets First Batch of Hi-tech Helmets

Move aimed at ensuring 'survivability' of soldiers, especially those deployed along LAC and LoC; new ballistic helmets also come with communication device

Shaurya Gurung
@timesinternet.in

New Delhi: Aimed at ensuring "survivability" of its soldiers, the Indian Army has received its first lot of high-tech ballistic helmets. This first tranche is part of a much larger set of such helmets, which will replace the older helmets being used by the army. These older helmets offered little or no protection from bullets and shrapnel. Instead, the new helmets will be given to soldiers engaging terrorists in Jammu and Kashmir and those deployed against China.

While taking giant strides into the future the army also wants that its soldiers should not only have helmets that protect their heads, but also give them situational awareness. The army wants that the helmets should also have a communication device, a night vision device and a display for showing maps.

Meanwhile, the army received its first lot of 7,500 ballistic helmets from an Indian defence firm, MKU, which supplies military equipment to the UN and NATO, defence ministry sources said. Out of this lot, 2,500 helmets have been given to Indian Army soldiers deployed in UN peacekeeping missions. The remaining 5,000 helmets will be issued shortly. In addition, 6,000 more helmets will be undergoing trials at DRDO's Terminal Ballistics Research Laboratory (TBRL) in Chandigarh, which assesses the terminal effects of military weapons.

These helmets are part of the procurement of a larger set of ballistic helmets amounting to 1.58

Better Equipped

Indian defence firm MKU providing helmets

Indian Navy will also be given new helmets	Helmets offer effective protection against 9mm bullets fired as close as 10 m away	Offer protection from shrapnel from explosions	Helmet also compatible with three types of radio sets
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Army also wants helmet with thermal sensors, night vision device, audio headset and display monitor



lakh costing about Rs 170 crore, which is to be procured from MKU. In addition, the total procurement of ballistic helmets, including these 1.58 lakh helmets, amounts to 3.28 lakh, which the Centre has approved.

The 1.58 lakh new helmets has been planned to be given as part of the "standard kit" to soldiers deployed across the different theatres where the army operates. "These helmets are for the battalions deployed in counter-terrorist (in J&K) and counter-insurgency (in the North-East) operations and along the Line of Actual Control (LAC) with China and Line of Control with Pakistan," said a senior defence ministry official, adding that about 13,981 helmets are to be for the Indian Navy.

Two types of ballistic helmets The new helmets comes in two kinds. The first is the "normal hel-

met", which merely offers protection to a soldier's head. Head is normally the first body part exposed in any combat situation. These helmets offer effective protection against 9mm bullets fired as close as 10 m away. But quite often it is not a bullet hit to the head which proves fatal, instead shrapnel from nearby explosions or cranial impacts from shock waves prove fatal for soldiers. MKU, in its website, explains that these issues warrant ballistic head protection as an essential gear. It adds that the MKU's ballistic helmets provide protection against bullets and fragments.

The ballistic helmets will certainly be much better as compared to the older helmets which could only protect a soldier from splinters, rocks and a bullet that has ricocheted and grazed the helmet. But if a bullet directly hits one of

these older helmets, it would not protect the soldier wearing it.

As an alternative, the army began using patkas, which is an improvisation to the older helmets. But a patka can only protect one's forehead, not the rest of the head.

Army personnel explained that these patkas which are being used in counter-terrorist and counter-insurgency operations in Jammu and Kashmir and the North-East, will not be best suited for war-time use, as it provides only limited protection.

On the other hand, a ballistic helmet is being seen by the army as a protective gear for soldiers to be used during war and counter-terrorist operations. Furthermore, the other type of ballistic helmet is called the "commander helmet". It has a communication device and has compatibility with three types of radio sets.

Indian Army awards 158279 Bullet Proof Helmet Contract to MKU



INCREASING CAPABILITY
REDUCING RISK

Thank You