

GOVERNMENT OF INDIA
MINISTRY OF DEFENCE



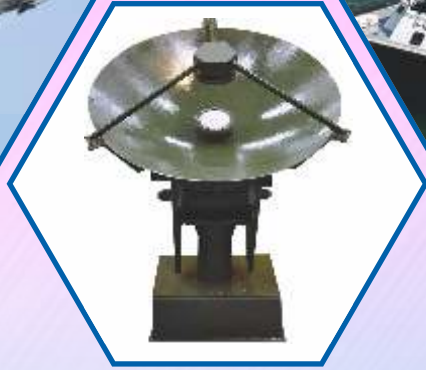
DEPARTMENT OF
DEFENCE PRODUCTION

सत्यमेव जयते

75
Azadi Ka
Amrit Mahotsav

CATALOGUE INDIAN DEFENCE INDUSTRY 2022









Index of Companies by Sector



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3		BEML LTD	5	√	√	√				√
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Land Sector





Armoured Vehicle Nigam Limited

Land

Mine Protected Vehicles (MPV)

Naval

CRN, Naval Gun, Kavach MOD-II Chaff Rocket Launcher

Address : Armoured Vehicles Nigam Limited HVF Road, Bhaktavatsalapuram, Avadi, Chennai, Tiruvallur Distt, Tamil Nadu - 600 057
Telephone: 044-26725000 | Fax No: 044-26725001
E-mail- exportnavnl.co.in, marketingnavnl.co.in | Website : <https://www.avnl.co.in>

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Armoured Vehicles Nigam Limited (AVNL)

AVNL is a Govt. of India enterprise which is fully owned by the Govt. and has its Headquarter in Chennai. It has five major production units in its fold which are i) Heavy Vehicles Factory (HVF), Avadi, Chennai, ii) Engine Factory Avadi (EFA), Chennai, iii) Ordnance Factory Medak (OFMK), Hyderabad, iv) Vehicles Factory Jabalpur (VFJ) and v) Machine Tool Prototype Factory (MTPF), Ambernath, Mumbai.

AVNL is the world class manufacturer of various Armoured Vehicles such as Tanks, Infantry Combat Vehicles and their variants, Mine Protected Vehicles, Bullet Proof Vehicles and Military Vehicles used by the Land forces. It also manufactures products for the use by the Naval forces which are Anti Air Craft Gun and Decoy systems mounted on the naval ships.

AVNL is one of the seven companies which have been carved out of the Ordnance Factory Board and has started its operation from 1st October 2015. However, all its units have rich experience of manufacture of the above products.

Certifications: ISO 9001:2015, ISO 14001:2015, EMS, ISO 26262:2018, OHSMMS

Kavach MOD-II Chaff Rocket Launcher

The KAVACH MOD-II system is designed to counter the threat of various anti-ship missiles by using chaff decoys. The system provides soft kill defence in a three-layered defence scheme. Multi barrel chaff rocket launcher is available both in long range and short range.

Specifications of LRMR launcher:

Overall weight : 5000 kgs

Overall Height : 2000 mm

Overall Width : 2000 mm dia

Overall Length : 2000 mm dia

Mode of operation : Power and Manual

Bore of barrel : 50.8 + 1.2 mm



Mine Protected Vehicle (MPV)

The MPVs can carry upto a dozen fully armed personnel and have a provision for gun sights in bullet proof glass from where troops can take on targets outside. There is also a provision to install a rotating heavier gun on top of the vehicle. MPVs can move cross-country across most terrain even while taking fire and hitting back at terrorists.

Specifications:

- h Dimensions : 4.77 m hlengthi, 2.07 m hwidthi, 2.78 m hheighti
- h Ground Clearance : 278 mm
- h Speed : 68 kmph max
- h Patrol Speed : 87 kmph
- h GVW uPay Load : 5.5 tonsu 777 kgs
- h Range : 5777 km
- h Protection Level : Mine Blast 57 kgs TNT under wheels 57 kg TNT under Hull
- h Small Arms : 1.07 SLR Rifle firing from a distance of 57 meters on all sides of vehicle



CRN 91 Naval Gun

CRN 91 Gun is a modular based, flexible and effective weapon intended for use against armoured targets and air targets flying at low altitudes. The range is 2 km for AP and 7 km for HE projectiles. The cannon can hit slow moving objects in air at a height of 2777 m and has a total range of 2777 m.

Specifications:

- h Diameter : 2877 mm
- h Height : 2577 mm
- h Designation : ZA72
- h Caliber : 77 mm
- h Rate of Fire : Slow : 277 to 777 rounds per min, Rapid : 887 rounds per min
- h Binocular Type : BPK 2-72



14.5mm Artillery Trainer

The Artillery Trainer Calibre 14.5mm is a close range training equipment well suited for training of Gun Crews. Fire controllers and specially used for training of artillery men.

Specifications:

- h Calibre of Barrel : 14.5mm
- h No. of Rifles : 2
- h Length of Barrel : 820mm
- h Setting Range : 5777 metres
- h Elevation : $-8^{\circ} \pm 0.5^{\circ}$
- h Traverse : $7^{\circ} - 70.5^{\circ}$
- h Height of Trunnion above ground : 578mm
- h Ammunition : Cartridge of 14.5mm x 85mm in 2 different charges.

Shipping details:

- Length 7587mm
- Width 777mm
- Height 728mm
- Weight 70Kg



T-72 Blt & Main Battle Tank Arjun

BLT-72 is a variant of T-72 M5 tank and has an option to carry long Military Load Classification 17 bridge, which can be used to cross canalu stream u river by all tracked t wheeled vehicles in service with Indian Army.

Main Battle Tank hMBTi Arjun is a multi-laboratory programme of DRDO with CVRDE as the lead Laboratory. It is a state-of-the-art tank with superior fire power, high mobility, and excellent protection. The Arjun main battle tank entered service with the Indian Army in 2777.





Aapki Jeet. Hamari Jeet.

Ashok Leyland Ltd.

Land

Military vehicles from load carrier to Ambulance, Recovery, Fire Fighting, Refrigerated Lorry, Fuel & Water Browsers

Armament & Ammunition

BMP Comprehensive Upgrade

LAND SECTOR

Address : No.5, Sardar Patel Road, Guindy, Chennai 600 032
Phone no. +91-44-22270777 | Fax no. +91-44-22270775
Email: gayathri.r@ashokleyland.com | Website : www.ashokleyland.com

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Ashok Leyland, flagship of the Hinduja group, Headquartered in Chennai, 6 manufacturing plants gives an international footprint - 1 in India, a bus manufacturing facility in Ras Al Khaimah (UAE), one at Leeds, United Kingdom and a joint venture with the Alteams Group for the manufacture of high-pressure die-casting extruded aluminum components for the automotive and telecommunications sectors, Ashok Leyland has a well-diversified portfolio across the automobile industry.

Ashok Leyland has a product range from 5T GVW (Gross Vehicle Weight) to 80T GVW (Gross Trailer Weight) in trucks, 6 to 12-seater buses, vehicles for defence and special applications, and diesel engines for industrial, genset and marine applications. With the fleet of logistics vehicles deployed in the Indian Army and significant partnerships with armed forces across the globe, Ashok Leyland helps keep borders secure.

Certifications: ISO 9001:2015,
IATF 16949:2016, EMS 9001:2015
OHSAS 18001

GURU 4x4 – 715

Guru 4x4 - 715 is a light duty, general service logistic vehicle dedicated to operate in tough terrains under adverse weather conditions. It is fitted with H4 engine, 4 Speed GB, 3 speed AGB, Fully Floating Axles, Full Air-Dual Line Brakes that provides excellent mobility and maneuverability.

Applications : Troop Carrier, Ambulance, Ultra Light Recovery Vehicle, Water Bowser, Load Carrier



Stallion 4x4

Stallion 4x4 is a medium duty, general service logistic vehicle dedicated to operate in tough terrains under adverse weather conditions. It is fitted with H4 engine, 4 speed GB, 3 speed AGB, Fully Floating with diff lock at Rear Axle, Full Air-Dual Line Brakes that provides excellent mobility and maneuverability.

Applications : Troop Carrier, Water Bowser, Fuel Bowser, Light Recovery Vehicle



Super Stallion 6x6

Super Stallion 6x6 is a heavy duty vehicle catering to wide range of applications, dedicated to operate in different terrains under extreme weather conditions. It is fitted with N4 engine, 6 speed GB, 3 speed AGB, Hub reduction axles and pneumatic brakes with ABS that provides excellent mobility and maneuverability.

Applications : Field Artillery Truck, Rocket Launcher, Truck Mounted Crane, Load Troop Carrier.



LSV 4x4

It is a Light Specialist, Troop mobility vehicle dedicated to operate in tough terrains under adverse weather conditions. It is fitted with H4 engine, 4 speed GB, 3 speed AGB, Independent Suspended axles, Hydraulic brake system that provides for excellent mobility & maneuverability with all four sides protected for STANAG level armoured cab as per customer requirement.





Beml Ltd.

Land

Land Mobility Solutions; Mining solutions, Bridging solutions Maintenance & Life-cycle Support.

Aerospace

Ground support solutions

Armament & Ammunition

Missile Aggregates for Akash

LAND SECTOR

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Email: corpcom@beml.co.in | Website : www.bemlindia.in

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BEML Limited, a Schedule VI Company under Ministry of Defence, Govt. of India was established in May 1967 as a Public Sector Undertaking for manufacture of Rail Coaches, Mining Equipment and spare parts at its Bangalore Complex.

BEML Limited is now a listed Company where presently Government of India owns 87 percent of total equity and rest 13 percent is held by Public, Financial Institutions & Employees. It plays a pivotal role to serve India's core sectors like Defence, Mining, Rail, Power and Infrastructure. The Company operates under three major business verticals viz. Defence & Aerospace, Mining & Construction and Rail & Metro.

The company has a dedicated R&D to meet the technological demands. BEML products are sold and serviced through its large marketing network spread all over the Country and are exported to more than 45 countries. The service centers and parts depots offer total equipment care, maintenance contracts and rehabilitation services.

Certifications: ISO 9001:2015, ISO 14001:2015, OHSAS 18001:2014, AS 9100

Medium Bullet-Proof Vehicle (MBPV) & Mobile Standby Command Post Vehicle (MSCPV)

MBPV is a bullet proof vehicle which conceals crew and troops from Ballistic Arm Fire, Hand Grenades, and Fragment Simulated Projectiles etc.

- h Variants - Ambulance, Command post, Reconnaissance, UAV carrier etc.
- h Optional attachments: Ground penetration radar, Mine rollers, Surveillance systems, Electronic warfare systems, Jammers and Remote weapon system

Mobile Standby Command Post Vehicle (MSCPV): Mobile Standby Command Post bullet proof vehicle which is capable of rapid deployment and is integrated with all the security systems connected through wireless technology, as the command and control centre.



BEML- High Mobility Vehicles

The BEML High Mobility Vehicle is one of the best vehicles for all terrain, difficult climatic and environment conditions, having excellent fording abilities and is providing trouble free service to Indian Armed forces over the years. The Air-cooled engine is well suited for extremely hostile environment.



Bridge Systems

- h Bridging solutions with High mobility launching platform and Multi-span capability up to 18 Mtr.
- h Can be used as a emergency bridge during natural calamity



Ground support solutions for aircrafts

Crash Fire Tender & Aircraft Towing Tractor, BEML-Crash Fire Tender (CFT) is used for extinguishing fire in the event of air-crash.

Aircraft Towing tractor with higher HP engine for sustained power and power shift with automatic power load matching.



Armoured Recovery & Repair Vehicle – Arjun (ARRV)

Arjun Armoured Recovery and Repair Vehicle (ARRV) is built as a variant of Main Battle Tank Arjun MBT. Arjun ARRV can recover, repair and replenish disabled combat tanks to make them ready for battle again.



BHARAT FORGE



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Kalyani Strategic Systems Limited, Pune Cantonment, Mundhwa, Pune, India

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Email : contact.defence@bharatforge.com | defence.sales@bharatforge.com

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Bharat Forge Limited

LAND SECTOR

Land

Artillery Systems, Protected Vehicles

Naval

Shafting & Propulsion shafting Integrator
(PSI), Naval Gun, Control system for
steering Gear, AUV etc

Aerospace

Smaller Jet Engines, Engine Components,
structures, Landing Gear Components,
Transmission etc.

Armament & Ammunition

Spares & Ammunition (only empties), Small
Arms

Electronics, Communication & ICT

UGV, BCP, DTMD, Electronic Manufacturing,
Embedded Control systems, INS & IOT
sensors

Bharat Forge Ltd. (BFL) is a leading global supplier of forged and machined products with manufacturing and engineering facilities spread across 57 locations and five countries - four in India, three in Germany, one each in USA, Sweden and France, BFL has the capability to meet the global demands of its customers with seamless engineering and design support. BFL manufactures a wide range of safety and critical components for the Automotive, Transportation, Energy, Defence, Aerospace, Mining & Construction equipment, Hydrocarbons and other industrial sectors. The company has a strong, highly skilled, global base of engineers and technicians at its various manufacturing locations.

In its Defence vertical, Bharat Forge Ltd is focusing on areas like Artillery systems, Protected Vehicles, Armoured Vehicles Upgrade, Ammunition (only empties), Air Defence solutions, Small Arms, Defence Electronics and Aerospace. BFL has expanded its infrastructure & facilities and has set up state-of-the-art manufacturing facilities at selected locations in India to offer end-to-end solutions in all its focus areas.

Certifications: ISO 9001:2015, ISO 14001:2015, IATF 16949:2016, AS 9100:2016, NADCAP

Advanced Towed Artillery Gun System & Bharat ULH (ATAGS)

Advanced Towed Artillery Gun System & Bharat ULH (ATAGS) is a 55mm calibre artillery system configured with an all-electric drive. It has better accuracy, advanced fire control system, extended range and multiple round simultaneous impact capability with surveillance and sighting systems onboard.

Bharat ULH is capable of quick emplacement, digital fire control, high rate of fire, reliability and easy maintenance.



Armament & Ammunition

Spares and Ammunition

Ammunition (only Empty) of various types 12.7mm to 155mm supplied in ready to fill condition such as Artillery Shells, Mortar, Rocket Warhead

55 Kg Bomb bodies, Kinetic Munitions 12.7mm Mk.II FSADPS

Powertrain Spares such as Turbo-charger, Supercharger, Crankshaft, Gearbox, Cylinder liner, Connecting rod etc.

Running gear spares such road wheels 12.7mm, BMPi, track assemblies, Sprocket arm etc.



Artillery Gun System Garuda 105_v2 & Bharat 52

Garuda 105_v2 is a 105mm caliber gun is a light weight field gun based on the 105mm Indian Field Gun and incorporates state-of-the-art soft recoil technology resulting in a lightweight, modular, high-performance howitzer that can be integrated with many types of combat transportation.

Bharat 52 is a long-range 155mm caliber futuristic towed gun, providing a highly maneuverable field artillery solution for armed forces.



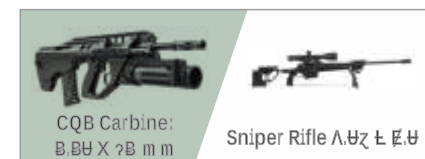
Protected Vehicles

Mine Protected Vehicle, Armoured Personnel Carrier, Kalyani M2, Kalyani Maverick, Light Tactical Vehicle, LBPV



Small Arms

Several new developments have been made to meet the global needs of Small Arms market. Collaborating with global OEMs to bring in niche technology. Current portfolio consists of CQB Carbine 12.7mm, Assault Rifle 14.5mm, Sniper Rifle 14.5mm, and Light Machine Gun 14.5mm.



Mahindra Defence Systems Limited

Land

Land Mobility solutions, Armoured Personnel Ambulance, Light Bullet Proof Vehicle (LBPV), Light Specialist Vehicle (LSV),

Naval

Torpedo Launchers (heavy And Light Weight), Decoy Launchers, Winches, Sonar Domes, Missile, Torpedo And Munition Loaders, Composite Containers, Ammunition Fuzes, New Torpedo Defence System, Integrated ASW Defence Suite

Aerospace

Composite Deck Panels, Hinge Rib Skins

Armament & Ammunition

Remote Controlled Weapon Station (RCWS)

Mahindra Defence Systems Limited is a wholly owned subsidiary of Mahindra & Mahindra Ltd. MDLS Land Systems is focused on Design, Development, Manufacture and Through Life Support of various types of land mobility solutions.

MDLS Naval Systems is focused on Design and Development of New Torpedo Defence Systems, Integrated ASW Defence Systems, Torpedo Launchers, Decoy Launchers, Sea Mines, Composites for space and aerospace, Ammunition Fuses and anti-submarine bombs, Tank Tracks, 52 mm Thermal Jackets for T-72 tanks, Recoil Systems, Missiles & Rocket parts, various types of ammunition loading, unloading and handling gears, composite containers for storage and transportation of critical missile systems, composite Radom for missiles and Naval Sonar Domes.

MDSL also imparts simulator training to all Indian Air Force pilots on C-130 and C-174 Globe master. MDSL also is a leader in providing Consultancy in Physical Security, Cyber Security and Corporate Fraud Risk. Large No of Corporates and Govt agencies are our clients.

Certifications: ISO 9001:2015, ISO 14001:2015, ISO 27001:2015

Mine Protected Armoured Personnel Carrier 6x6 (APC 6x) & Personnel Ambulance

A 6x6 Mine Resistant Ambush Protected vehicle, designed & developed indigenously by Mahindra Defence Systems Ltd. Built for Armed forces to give superior protection with high mobility during Anti Naxal Antiterrorist operations.

A 6x6 Mine Resistant Ambulance equipped with advance lifesaving systems. All equipment as per international medical standards.



Light Bullet Proof Vehicle (LBPV) and Light Specialist Vehicle (LSV) & Marksman Vehicle (RCWS)

Light Bullet Proof Vehicle (LBPV) is meant for providing protected mobility to troops in counter insurgency areas and for carrying detachment loads. LBPV is having spacious driver and Codriver area with excellent ergonomics and good visibility. LBPV is having ample storage for Ammunitions and detachment loads and option of roof suspended outward facing seats for crew.

Light Specialist Vehicle (LSV) is specifically designed & development for role of Weapon Carrier (MMG, ATGM & AGL), Recce and Quick Reaction Team by providing armoured protected mobility for 2 nos. of crew with battle load having ample stowage space for Arms & ammunitions inside crew compartment and additional 277 Kgs cargo load carrying capacity.



Remotely Controlled Weapon Station (RCWS)

A Remote Controlled Weapon Station (RCWS) is a remotely operated weaponized system for light and medium caliber weapons which can be installed on ground combat vehicle or sea and air-based combat platforms. RCWS is bore sighted with an optics module with a Laser Range finder to get distance of the target to be engaged.



Torpedo Launchers & Sonar Dome

MDSL is manufacturing Light Weight Triple Tube Torpedo Launchers. The system is used for firing light weight torpedoes and contains 100% indigenous content.

Sonar Dome : Mahindra Defence Systems has clocked years of experience by delivering best-in-class Sonar Domes for the Indian Navy. We have the capability to supply domes that offers Reduced Acoustic Signatures, made of high-grade Corrosion Resistant Materials.



Expendable Decoy Launcher (EDL) & RBU 6000 Naval Rockets

Mahindra Defence Systems also offers Expendable Decoy Launchers to meet the anti-torpedo defence systems requirement of naval ships. These launchers are designed, developed and manufactured by Mahindra and is capable of housing and firing up to 12 Decoys.

RBU 6000 Naval Rockets : Mahindra Defence Systems is an established supplier for RBU 6000 Anti-submarine naval rockets (without explosives) to Indian Navy.





Mishra Dhatu Nigam Limited

Land

Special Steels, Nickel Alloys, Titanium Alloys

Naval

Special Steels, Titanium Alloys, Weld Consumables, Castings, Fasteners

Aerospace

Special Steels, Nickel Alloys, Titanium Alloys

Armament & Ammunition

Special Steels, Armour Steel, Armour products like Bullet Proof Protective Equipments, Vehicle Armouring, etc.,

LAND SECTOR

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Mishra Dhatu Nigam Limited (MIDHANI), A Govt. of India Enterprise company under Ministry of Defence, is one of the few integrated and modern metallurgical plants in the world manufacturing a wide range of superalloys, titanium and titanium alloys and special steels in various mill forms using state-of-the-art production facilities. Since its inception, MIDHANI has been playing a significant role in supply of materials to various strategic sectors like Space, Defence, Aero and Energy.

MIDHANI, incorporated under the companies act as a Public Sector Undertaking (PSU) in November 1962, was conceived to help India achieve self-reliance in the manufacture of a wide spectrum of critical and complex alloys. The manufacturing facilities of MIDHANI include some of the most sophisticated equipments.

MIDHANI is currently going through a major expansion & diversification phase. Several facilities such as Wide Plate Mill, Armour Manufacturing Facility, Spring Manufacturing Facility, Higher capacity skull melting furnace, Higher capacity Vacuum Induction melting furnace, Additional melting line for Titanium, etc. are being setup.

Certifications: ISO 9001:2015, ISO 14001:2015, AS 9100:2016, NABL accredited labs

Raw materials (Ingots / Cast Sticks/Forgings/Plats/Sheets)

Characteristics

Remelted Ingots, Cast Sticks, Forged bars, billets, Wide plates, sheets of Super alloys, Titanium alloys and Special steels available in various dimensions and sizes.

The same is processed through various required processes



Raw materials (BARS/ Wires/ Rings/ Investment Castings)

Bars, rods, wires, Rings, Investment Castings of super alloys, titanium alloys



Bullet Proof Patka & Helmet

Bullet Proof Patka :

BP Patka hSteeli without skull protection γ 5.7 kg + 577

BP Patka hSteeli with skull protection γ 5.8 kg + 577

Capability:

Front Armour Protection: 1.4 x 2 x 2 m HSC

Rear Protection: 1.4 x 2 m Ball

Bullet Proof Helmet :

Made of Aramid hKevlari Composite material, Light Weight, High Strength, High-energy absorption-to-weight ratio

- Outstanding long-term stability

- Multi-Layer Construction, Durable & Comfortable Suspension Straps

h Sizes: M, L

Protection Level:

Level IIIA NIJ, BFS: 577 mm max



Bullet Proof Jackets/ Vests & Bullet Proof Morcha

Bullet Proof Jackets v Vests :

BIS Level B: 1.4 kg hlarge sizei γ without 777 protection, BFS: 2B mm

BIS Level B: 1.4 kg hlarge sizei γ with 777 protection, BFS: 2B mm

Capability γ Protection against BIS Level B and can be increased to BIS Level H, depending upon user requirements.

Bullet Proof Morcha: Large Morcha hwith v without BR glass viewporti and Small Morcha hwith v without BR glass viewporti

Capability γ Protection against 1.4 x 2 x 2 m HSC and the same can be customised as per user requirement



Vehicle Armouring & Weapon System

Composite Solution: Light weight laminate to ensure high power to weight ratio

BP Glass: No degradation of visibility up to five years

Bullet Proof Tyres: up to 577 km safe running after a hit

Firing Platform: Customised solution for each

Weapon System Protection against secondary projectiles: By Spall Liners

Road Testing: VRDE or ARAI or ICAT

Reconnaissance & Surveillance: Upgradation as per increased weight post armouring



Helicopter Armouring

MIDHANI is providing Composite Armouring Solution for Helicopters engaged in Military operations & other missions. Indigenously developed panels by MIDHANI are cheaper by 777

Key benefits

h Provide protection to crew against Small Arms Fire

h Increased fuel efficiency, service ceiling and speed





**INCREASING CAPABILITY
REDUCING RISK**

MKU Limited

Land

Electro Optics, monocular, binoculars and weapon sights, Personal Protection, Body Armour, Ballistic Helmets, Ballistic Shields, Bomb Suits and Blankets, Platform protection, armour and solutions for large platforms and assets including Land Vehicles, Aircraft, Naval Vessels and Objects.

LAND SECTOR

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MKU is a leading manufacturer of electro-optic devices, personal and platform armor solutions for military and homeland security forces with a customer base in over 50 countries. Operating out of India and Germany, MKU has provided protection to over 2 million soldiers and 2000+ platforms across 200 forces till date. Over the years, MKU has developed several patented products that increase the capability and reduce the risk for soldiers in the line of duty.

MKU was founded by Mr. GK Gupta in 1982 to manufacture and supply fibre glass helmets to the Indian Armed Forces. It started manufacturing body armour in the year 2000. MKU resolved to bring the best armour technology to India and set course to start developing and manufacturing advanced light weight armour in India.

Today, MKU is at the forefront of technology and expertise in armouring. It has already provided protection to over 2 million soldiers and 2000+ platforms across the world. MKU diversified into Electro Optics in the year 2002 and acquired the entire technology to indigenously manufacture night vision and thermal devices in India.

Certifications: ISO 9001:2015, ISO 14001:2015, ISO 26262:2018, AS 9100, ISO 9001:2015/BA 9100:2015

Instavest

The 6th generation Instavest offers protection from handgun ammunition, RCCs and FSPs at vastly improved energy absorption and dissipation levels. The unique patented Quick Release (QR) system in Instavest G6 enables swift doffing and donning of the vest in emergency situations.



Reduced Helmet Trauma (RHT) Technology with Boltfree Helmets

Double protection from threats and resulting trauma regular helmets protect against bullets and fragments but are not efficient in dealing with the Behind Helmet Blunt Trauma (BHBT) caused due to their impact. The back face deformation caused due to the high energy impact of the projectile transfers considerable trauma to the head which could lead to injuries to the brain or skull.

MKU uses its RHT technology in helmets which reduces the resultant trauma of projectiles by over 77% compared to standard helmets.



Armor Inserts

Energy Absorbent Backing Systems

Armor Inserts available from MKU can normally be classified as either 'Stand-alone' or 'Vest Dependant'. Standalone inserts are designed to stop ballistic threats using the plate alone. These types of armour inserts are usually preferred for tactical operations or anti-terrorist work where the ammunition threat is unknown, or if a higher safety margin for the user is required.

As modern-day body armour gets more ergonomic, the right shape, sizes and contours of armour inserts become more critical as this ensures comfort over extended use. MKU manufactures a wide range of Armour Plates in flat, curved and multi-curved shapes (single curve, double curve, triple curve, etc.).



Platform Protection

Light Weight Armouring - Land, Air & Naval Systems.

Armouring solutions from MKU come in a wide range of lightweight rigid, flexible and transparent armour panels and engineered kits in various configurations for standalone applications or as add-on armour for platforms that need to be protected from various ballistic threats.



Electro Optics Solutions

Netro NW-7777 Night Vision Weapon Sight: A compact and rugged, high resolution, energy efficient night vision weapon sight with a wide field of view.

Netro NM-7777 Night Vision Monocular: Light weight and compact, multi-functional night vision monocular ideal for swift tactical movements.

Netro NC-7777 Night Vision Bi-Ocular: A high quality, single tube night vision bi-ocular goggle with two eyepieces for relaxed stereoscopic vision for continuous observation and tactical movements.

Netro TW-7777 Thermal Weapon Sight: An easy to use long range thermal weapon sight with high quality optics, a digital SVGA display.





SMPP Private Limited

Land

Ballistic (Bullet Proof) Vests, Ballistic (Bullet Proof) Helmets, Hard Armor Plates, Ballistic Shields, Shelters, Armor for Military & VIP Vehicles

Naval

Armor for Boat and Naval Ships.
Ballistic Floatation Vests.

Aerospace

Armor Kits for Aircrafts and Helicopters
Pilot Ballistic Vests

Armament & Ammunition

Tank & Artillery ammunition and its components, Combustible Cartridge Cases for 5.56mm and Modular Charges for 82mm

Address : SM House, Building No. 6, Panchsheel Community Centre,
N. Delhi 110028, India
Mobile: +91-8860088888 / +91-8860088888 / +91-8860088888
Phone : +91-88-60088888 / +91-88-60088888 | Fax : +91-88-60088888
Email: contact@smgroupindia.com | Website : www.smgroupindia.com

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SMPP is India's pioneer in development of crucial technologies for vital Defence products and in finding highly innovative solutions in some of the most challenging areas. Established in 1998, the company started as a producer of Combustible Cartridge Cases (CCCs) and ammunition products. Propelled by in-house R&D, SMPP became one of the few global companies to manufacture Boron Carbide ceramics for Ballistic applications and gradually expanded into the armoring of Land, Sea and Aerial platforms. With more than 25 years of technology-driven innovation and sustained growth, SMPP has presence in diverse areas like:

- Personnel Protection: Bullet Proof Jackets, Helmets, Shields etc.
- Armouring of Air, Land and Sea platforms.
- Tank Munitions: 5.56mm and 82mm
- Artillery Munitions: 82mm, 127mm and 160mm

Ballistic Vests & Ballistic Helmets

Catering to the varied needs of the diversified users, SMPP Vests & Jackets are offered in highly customized solutions. Covering entire range of threats (Ballistic & Stab Protection), using in uniformity or in hybrid materials from renowned & reliable suppliers ensures maximum safety along with minimum weight.

• Protection Offered as per NIJ Level IIIA to Level IV.

• No. of shots: Multiple • Protection

• Ammunition - 9mm, .38 Mag, 12.7 X 39mm Nato Ball, 12.7 X 39mm, 12.7 X 39mm API, 12.7 X 39mm Nato AP, 5.56 X 45mm, 12.7 X 39mm API, 12.7 X 39mm M2AP • Protection Areas • Front, Back, Sides, Collar, Shoulder, Groin.

SMPP Helmets are based on the design of new generation Advanced Combat Helmet. We produce ACH, TCH, MICH PASGT Ballistic Helmets. They are available in small, medium, large & XL size.



Certifications: ISO 9001:2015

Hard Armor Plates & Ballistic Shields / Bullet Proof Shields

Made from the best quality CaraPRO & CaraSTOP material, these plates and shields are available in various shapes, sizes & specs.

Protection Offered γNIJ TS TS TH Level III to IV

No. of shots: Multiple

Protection Against - 6 mm v.?? Mag, 1.4X B5 mm NATO Ball, 1.4X X 76 mm, 1.4X X 76 mm API, 1.4X X B5 mm NATO AP, SS576, 1.4X X B7 B7Z API, 1.4X X 47 MZAP.



Platform Armouring (Vehicles/Aircraft/ Helicopters/Boat & Ships)

Made from Top of the line CaraPRO & CaraSTOP material like hUHMWPE, Boron Carbide etc, these solutions have been certified by world renowned testing laboratories.

These panels gives protection to the vulnerable areas of Aircraft, Helicopter, Strategic Purpose Vehicles Carrier like missile carriers, Boats, Ships, VIP Vehicles etc. as per various protection levels including STANAG 7B46 NIJvBIS etc.



Boron Carbide (B4C) Ceramic Plates (for Armor Application)

CaraSTOP B7C with high hardness, high elastic modules and low density, is the most advanced system to provide Light Weight protection against deadly bullets like the Armor Piercing round.

We produce large monolithic plates in standard and tailor made sizes hFlat, Single curve, Multi-curve, Front, Back Side & Groin Platesi. Modular panels, custom designed, to form complex shapesucounters for vehicles, Aircraft, Helicopters etc.



Combustible Cartridge Cases for Tank and Artillery Ammunition

Manufacturing Combustible Cartridge Cases for MBTsy Arjuna , T-72 & T-74.

Tank ammunition : 57MM and 57BMM hFSAPDS and HESH.

Artillery ammunition : 57BMM and 57BMM hLZ & HZi, 57MM hFVC and RVCi.

Augmenting Cartridges for Mortar Bombs γB5 mm, 65 mm & 57 mm





Troop Comforts Limited

Land

Life Cycle clothing, Improved Combat Kit, Special Clothing for Mountaineering Cold Climate, Supply Drop Equipments, Supply Drop Equipments, Tents

LAND SECTOR

Troop Comforts Limited Corporate HQrs, G.T. Road, Kanpur- २०८००१
Tel. No. +९१ ५२२ २७७८७२ | FAX: +९१ ५२२ २७७८७२ | २०८००१
Email: info@troopcomfortslimited.co.in | Website: www.troopcomfortslimited.co.in

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Troop Comforts Limited

Troop Comforts Limited is a Public Sector Undertaking, under the Department of Defence Production of the Ministry of Defence, Government of India. Headquartered at Kanpur, TCL is a conglomerate of four Factories & Training institutes. TCL is engaged in production, testing, logistics, research, development and marketing of a comprehensive product range for the troop comforts.

TCL is involved in manufacturing of Life Cycle Clothing (LCC), Extreme Cold Climate Items (ECCI), Special Clothing & Mountaineering Equipment (SCME), Supply Drop Equipment (SDE), Water Storage Equipment, Covers, Tents, Leather Items, Arrester Barrier, General Stores, etc for Defence Services and Civil Sector

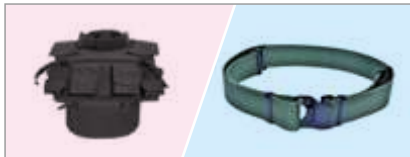
Life Cycle Clothing

- h Coat Combat Poly Disruptive With Indian Army Logo
- h Combat Uniform Jacket & Trouser With Army Logo
- h Uniforms
- h Overall Combination Disruptive Pattern with Indian Army Logo
- h Blanket Superior OG



Improved Combat Kit

- h Haversack h Modified i
- h Pouches Am m n ICK
- h Pack ICK with Aluminium Frame
- h Frog bayonet L Belt



Special Clothing for mountaineering / Cold Climate

- h ECWCS
- h Coat ECC
- h Poncho Glacier
- h Cap Glacier
- h Bag water Proof
- h Bag Carrying Rescue



Supply Drop Equipments

- h ECAD parachute E.BM Complete with Pack
- h Set Harness Webbing type SDM strap H. S M
- h ECAD Parachute E.BM cotton line static H. S M
- h PCAD for AN-22
- h Skid Board MI-E



Tents

- h TEFS 2M with mild steel joints L flooring with FMUB
- h TEFS 3M with mild steel joints L flooring with FMUB
- h Tent Arctic





Yantra India Limited

LAND SECTOR

Land Systems

Armament & Ammunition

Spares & Ammunition (only empties) - Artillery Shells, Mortar bodies, Rocket Warheads, Kinetic munitions, 800Kg bomb bodies, Powertrain components, Running Gear Components etc.

Small Arms - JVPC, CQB Carbine, Sniper Rifle & LMG

Marine / Naval

Shafting & Propulsion shafting Integrator (PSI), Naval Gun, Control system for steering Gear, AUV etc

Electronics

UGV, BCP, DTMD, Electronic Manufacturing, Embedded Control systems, INS & IOT sensors

Air Defence

Close In- Weapon Station

Address : Yantra India Limited, CoO Ordnance Factory Ambajhari,
Amravati Road, Nagpur Maharashtra 441105
Phone : 020-26222222 | Fax : 020-26222222
Email : graynyantraindia.co.in | Website : https://www.yantraindia.co.in

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Yantra India Limited, Nagpur (CIN No. U72900MH2005GOI000001) is one of the seven Defence Public Sector Undertakings, carved out of erstwhile- Ordnance Factory Board, Kolkata. The company is fully owned by Government of India and is incorporated under Companies Act 2013 with authorized share capital of Rs. 5,000 Cr with asset valuation of Rs. 5,000 Cr.

Yantra India Limited is a conglomeration of 6 production units, Training Institute, Regional Controllerate of Safety and Recruitment Centre. The production units are located in West Bengal, Uttar Pradesh, Madhya Pradesh, Maharashtra and are named as under :

- Metal and Steel Factory, Ishapore, West Bengal
- Ordnance Factory Dum Dum, West Bengal
- Ordnance Factory Muradnagar, Gaziabad, Uttar Pradesh
- Ordnance Factory Katni, Katni, Madhya Pradesh
- Grey Iron Foundry, Jabalpur, Madhya Pradesh
- Ordnance Factory Ambajhari, Nagpur, Maharashtra
- Ordnance Factory Bhusawal, Maharashtra
- Ordnance Factory Ambarnath, Thane, Maharashtra

Ammunition hardware

The company possesses state of the art plant and machinery for production of small to medium to high caliber shell body hardware for Artillery & Tank Guns, mortars, rockets, pod assembly, air dropping bombs and cartridge cases. Mechanical and Electronic Fuze hardware are also manufactured.



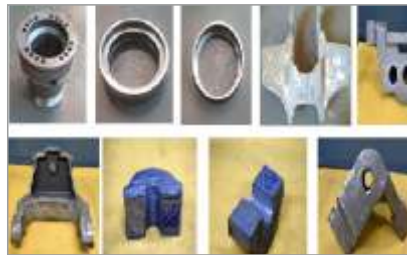
Assault bridges and air drop platform:

High strength aluminum alloy extruded profiles are produced, machined and fabricated to build assault bridges and air drop platform.



Metallurgical:

Special grade alloy steel, having superior metallurgical properties, is produced and converted to forgings and castings for manufacture of vital Ordnance components such as gun barrel, breech ring, breech block, obturating spindle, yoke, house etc. The company has a state of the art radial forging plant to produce forgings, heat treatment facilities and matching machining capability. The company boasts of its strength of melting and producing non-ferrous alloys, high strength air worthy aluminum extrusions.



Gun Integration :

Mounting of 58mm, 75 caliber ordnance on carriage of 57mm M79 Guns under Upgunning Project.



Ammunition Packing Solutions :

Manufacturing of final issuing and transit ammunition boxes for safe handling and weather protection.





ZEN TECHNOLOGIES LIMITED
Integrated Training Solutions for 24/7 Combat Readiness

Address : Plot No. B-22, Industrial Estate, Sanath Nagar, Hyderabad - 500 076.
Tel.: +91-97-77777777
For Sales in India: sales@zentechnologies.com, info@zentechnologies.com
For International Sales: isales@zentechnologies.com, exports@zentechnologies.com
Website : <https://www.zentechnologies.com>

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Zen Technologies Limited

Land

Zen Infantry Weapons Training Simulator
(Zen IWTS), Containerized Tubular
Shooting Range (CTSR), Combat Training
Centre (CTC)

Aerospace

UAV Simulators

Electronics, Communications & ICT

Zen Anti Drone System

Zen Technologies Ltd. designs, develops and manufactures state of the art combat training solutions for the training of defence and security forces worldwide headquartered in Hyderabad, INDIA.

Zen is one of the leading Indian Defence production companies in the private sector and recognized by the Department of Science of Technology (DST) for in-house R&D Unit. It produces over 25 different Live Fire, Live Instrumented, Virtual and Constructive training systems to support individual and collective training capabilities. With over 5,000 training systems shipped around the world, Zen Technologies is a proven leader in building training systems for developing and measuring Combat Readiness.

Zen Technologies is built on strong R&D capabilities and has filed or received over 50+ patents.

Certifications: CMMI Dev@B,
ISO@IEC 27001:2017, ISO@MS,
ISO 9001:2015, ISO@B@MS

Zen Infantry Weapons Training Simulator (Zen IWTS®)

Zen Infantry Weapons Training Simulator or IWTS is a laser based shooting simulator that enables shooting of all small arms, machine guns etc. IWTS offers basic shooting exercises (Grouping, zeroing, target shooting, Annual Range Course etc.) and goes on to scenario shooting and judgemental shooting exercises. Security personnel also get to practice in actual settings like inside an airport, school, shopping mall etc.

IWTS enables engagement of targets in simulated operational tactical scenarios by individual firers and as part of a sub-unit/team. Scenarios are created with Scenario Builder software and by video shoot.



Containerized Tubular Shooting Range (CTSR)

Zen CTSR is a secure indoor substitute for live firing. It is self-contained, transportable and reduces considerably the area required for a range.

Two trainees can fire at a time. There is no injury-risk for the shooters, even from accidental fire as each shooter is confined to a tubular booth. The design of the tubular booth is such it does not allow the fired bullets escape from it. Fire retardant materials have been used to ensure the range is safe for training and testing and it is fitted with emergency lighting.



Combat Training Centre (CTC)

Combat Training Centre (CTC) is a one-stop training infrastructure solution for Defence, Security Paramilitary and the Police forces. The secure facility, equipped with modern training equipment and infrastructure, free from routine encumbrances and other disturbances, is designed to provide performance oriented training in realistic, tactical and operational environment. The CTC consists of simulators and live training solutions to enable coordinated team training under various realistic threat scenarios. This centre can train people who are in the business of protecting various infrastructure, crowd management etc.



UAV Simulators

UAV Mission Simulator - is a comprehensive system developed to train External Pilots, Internal Pilots, Mission Commanders, Observers and Special payload operators (COMINT, ELINT, SAR etc.) Operators and Image Interpreters.



Zen Anti Drone System

The Zen Anti-Drone is a multi-layer system aimed at providing security against drone attacks. It is capable of integrating 3D/2D Radar for detection, as well as AD weapons (guns) for hard kill.





Naval Sector



Address : H-5, Garden Reach Road Kolkata, WB- 700032 INDIA

Phone: +91-33-23467789 & 23467789

Email: hr@grse.co.in & gr@grse.co.in

Garden Reach Shipbuilders & Engineers Ltd

Land

Bridging Solutions

Naval

Advanced Stealth Frigates, Offshore Patrol Vessels, Missile ASW Corvettes, Landing Crafts, Landing Ship Tank, Fast Attack Crafts, Fast Interceptor Boats and Hovercraft.

Garden Reach Shipbuilders & Engineers

Ltd is under the administrative control of Ministry of Defence, Government of India is located at Kolkata, India. At present, the shipyard has the capacity for concurrent construction of 27 ships & vessels including Large Ships and 52 Medium & Small Ships. With the ongoing modernization program of its Raja Bagan Dockyard unit, a facility dedicated to medium and large ships, this capacity would be further enhanced to 32 Ships.

Since 1967, warship building being the primary role, GRSE has built and delivered warships for various roles.

GRSE is a premier manufacturer of Portable Steel Bridges (Bailey type) in India and has around 87% market share within India. GRSE is also a major manufacturer of Deck machinery Equipment and Marine pumps.

The company is also having a dedicated Marine Engine Division for undertaking Assembly, Overhauling, Testing and Repair of Marine Diesel Engines.

Certifications: ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, ISO 50001:2018, ISO 27001:2017, ISO 28000:2017

Offshore Patrol Vessel

This ship, equipped with Helicopter Operation, is capable of carrying out multi mission roles including Anti-Piracy, Search & Rescue, Anti-Smuggling Surveillance, Protection of EEZ, Fisheries Protection, Logistic Support, Transportation of Small Detachment of Troops & Personnel, Pollution Control Operation, External firefighting etc.



Anti-Submarine Warfare and Missile Corvette

Anti-Submarine Warfare Corvette: This is a frontline warship with Stealth features and superior ASW capabilities. Its superstructure is made of composite carbon fibre material that reduces Weight, Magnetic signature and RCS (Radar Cross section). The Ship is also provided with Helicopter landing platform and Hanger.

Missile Corvette: This is a frontline warship armed with SRGM Gun, Surface-to-Surface and Surface-to-Air Missiles and Anti-aircraft Guns, Electronic Warfare System and CIWS. It has a Helo Landing Deck



Landing Craft Utility

Landing Craft Utility (LCU) are deployed to transport troops and equipment from ship to shore and vice versa.

- Medium Machine Guns (MMGs)
- 7 Nos. Heavy Machine Guns (HMGs)

Landing Ship Tank

This is a large amphibious warfare vessel capable of transportation of troops, vehicles and armaments for military operations. The ship is equipped with bow door for handling the combat equipment and vehicles.

Specification:

- Length - 27M
- Beam - 5.8M
- Displacement - 2500T
- Speed - 18Kn



Fast Interceptor Boat

Fast Interceptor Boats are well utilized as Day & Night Surveillance & Investigation Vessels operating in shallow water for Coastal Policing, Anti-Smuggling, Fishery Protection and Search & Rescue Operation.

Hovercraft

This is an amphibious craft capable of travelling over land, water, mud and other surfaces. This is used for search and rescue operation as well as anti-piracy activities.





Goa Shipyard Limited

Naval

Patrol Vessels, Special Purpose Warships, Survey Vessels, Landing Crafts, Fast Attack Crafts, Sail Training Ships, Offshore Supply Vessels, Hovercrafts, High Speed FRP Interceptor Boats, Tugs, Yard Crafts, Logistic Ships, Deep Sea Fishing Vessels, MCMVs, Missile Frigates, Training Simulators, Pollution Control Vessels, Passenger Ferries, Maintenance and Life Cycle Support

NAVAL SECTOR

Address : Vasco-Da-Gama, Goa, India
Phone: +91-832-252525 to 25252525
Fax: +91-832-252525, 25252525, 25252525
Email: contactus@goashipyard.com | Website: www.goashipyard.in

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Goa Shipyard Limited (GSL), established in 1964, is a Defence Shipbuilding & Research Establishment, located on the west coast of India with state of the art infrastructure, functioning under the administrative control of the Ministry of Defence, Government of India.

Capable of designing and building high technology and sophisticated ships, GSL, has completed 47 years of illustrious and challenging journey, rising to be the most reliable Indian Shipyard with capability of designing and constructing state of the art advanced seafaring platforms.

With a track record of timely execution and delivery at fixed cost of over 250 Ships and more than 500 Fast Interceptor Boats, GSL stands as the success story of the changing face of Indian Defence Shipyards.

A modern shipbuilding yard spread over 18000 sq mts with a 1000T Ship Lift and Ship Transfer system, dry berths for simultaneous construction and repair of ships, etc.

GSL has an inhouse R&D unit recognised by the Department of Scientific and Industrial Research (DSIR), Government of India and has proven capability in construction of Steel, Aluminium, GRP & FRP vessels.

Certifications: ISO 9001 : 2015, ISO 14001 : 2015, ISO 45001 : 2018

Offshore Patrol Vessels & Naval Offshore Patrol Vessels

Offshore Patrol Vessels : Designed for patrolling and policing maritime zones, search and rescue, pollution control, external fire fighting and embarkation & operation of Advanced Light Helicopter for long range search and surveillance.

Naval Offshore Patrol Vessels : Capable of fleet support operations, coastal and offshore patrolling, ocean surveillance and monitoring of Sea Lines of Communication (SLOC), protection of national assets, search & rescue operations, limited external fire fighting capability.



Damage Control Simulators

This training facility simulates a realistic and stressful but controlled environment for crew training in ship damage control and repair in various damage scenarios. To contain the damage and save the vessel, the crew needs to be able to respond to the threat with efficiency, expertise and confidence gained from training in similar situations.

Fast Patrol Vessels

Designed for patrolling, anti-smuggling and anti-terrorist operations, the vessel can support the Navy during wartime as a coastal convoy escort and as a communication link. Driven by three water jets and capable of top speed of 28 Knots, the vessel is designed to withstand continuous heavy sea conditions, stable in all conditions and optimised for long periods at sea.



Sail Training Ships

Sail Training Ships (STS) are increasingly being used for basic seamanship and character building platforms by Navies the world over. The ship is steel hulled, round bilged, three-masted sailing ship, square rigged on the forward and main mast and fore and aft rigged on the mizzen mast and has eighteen sails with a sail area of approx. 5700 sq. m.



Ocean Going Tugs

Designed to tow large vessels safely to and from the harbor, un-beach grounded vessel, carry out salvage operations including rendering of first aid repairs, to a vessel in distress. Capable of fire fighting, search & rescue and salvage operations at high seas. The Tugs have the ability to support vessels berthing and unberthing in and around naval and civilian harbours. Ready designs of Tugs in various capacities and roles are available.



High Speed Patrol Boats & Fast Interceptor Boats

The boats shall be day/night surveillance and investigation vessels operating in shallow waters in and around harbour and anchorage. The boats are highly seaworthy, unsinkable type (having 5% reserve buoyancy even when filled with water).

Fast Interceptor Boats (FIB) are capable of performing high speed pursuits and interception in various border protection roles including anti-smuggling, anti-infiltration, fisheries, patrol and immigration and anti-terrorism activities. The vessel can also be used for search and rescue operations.





Hindustan Shipyard Limited

Naval

Offshore Patrol Vessel (OPV), Inshore Patrol Vessel (IPV), Voith Tug, 8,000 DWT Bulker

NAVAL SECTOR

Address : Gandhigram (PO), Gandhigram, Visakhapatnam - 531128, AP, India
Tel: +91-91-232-232222 | Fax: +91-91-232-232222
Email: cmdoffice@hslvizag.in | Website : www.hslvizag.in

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Hindustan Shipyard Ltd is a strategically located, first green field shipyard on the east coast of India. Set up in the year 1969 by the Scindia Steam Navigation Company, the Shipyard after its initial foray in shipbuilding in pre independent era, was partially taken over by Govt. of India in 1972 and subsequently became a fully owned under-taking of Govt. of India in Jul 1985 with its administrative control under the Ministry of Surface Transport & Shipping. As the national strategic commitments increased, HSL was brought under the aegis of Ministry of Defence on 22 Feb 1987.

Ship construction at HSL commenced in 1970. Keel for the first two 8,000 tonne DWT steam ships *ALAUSHA* and *ALAPRABHA* were laid on 22 June 1970 and 22 Aug 1970 respectively.

HSL has been a force to reckon with in the realms of ship building and has successfully diversified into repairs of Ships, Submarines and Offshore & Onshore platforms, with passage in time.

Since inception, HSL has built and repaired various category of ships for varied number of customers like Indian Navy, Indian Coast Guard, ONGC, GML, Port trusts, DCI, SCI, Andaman & Nicobar administration etc.

Certifications: ISO 9001:2015, ISO 14001 OHSAS, ISO 45001

Offshore Patrol Vessel (OPV)

The Offshore Patrol Vessel is equipped with sophisticated state of the art of weapons and sensors viz Bofors anti-aircraft gun, Racal Decca 3000 search radar and BEL 5000 navigation radar. The 5000 tonnes vessel is the biggest NOPV developed at HSL. It has state of the art communication and navigation System.



Inshore Patrol Vessel (IPV)

IPV is designed and developed for coastal patrolling, anti-smuggling, search and rescue operations, fisheries protection, monitoring, and providing communication links. It has provision for dynamic reorientation of the ship in the planning mode with the use of interceptors.



Voith Tug

Tug is designed and developed for towing and assisting naval ships, submarines and crafts in harbour and restricted water, conducting fire fighting operations, carrying out search and rescue operations and tow ships up to 20000 displacement in harbour, towing of two or more small ships up to 1000 tonnes displacement.



53,000 DWT Bulker

Designed and developed for Carriage of 53,000 Dwt bulk cargo materials, vessel is accommodated with 8 cargo holds and equipped with heavy cranes for loading and unloading cargo. Constructed and equipped to carry dry bulk, break bulk, grain, metal concentrates, iron ore, scrap metal, coal, bauxite, salt and sugar, general cargo such as steel products, forest products, package freight and palletized cargo, besides long cargo like pipes and bagged cement and bagged cargos etc.





LARSEN & TOUBRO

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Saki Vihar Road, Powai, Mumbai - 400074
Phone : +91-22-41782500
Email : Intl.defence@larsentoubro.com | Web : www.larsentoubro.com

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Larsen & Toubro Limited

Land

Artillery Systems, Pinaka Multi Barrel Rocket Launcher, K9 Vajra T 155 mm 52 Cal. Self-Propelled Tracked Gun System, Upgrade Solutions, BMP Power-pack Upgrade, Grad BM-21 Upgrade, Armoured Vehicle Upgrade, Bridging Systems, Combat Engineering Systems, Remote Weapon System

Naval

Submarines, Offshore Patrol Vessel, Interceptor Boat, Anti-Submarine Warfare Systems, Naval Engineering Systems, Power Generation & Distribution (PGD) Systems, Unmanned Marine Systems, Coastal Surveillance System

Electronics, communication & ICT

Radars, 3D Air Surveillance Radar, Fire Control Radar, Rapid Deployed Communication System, Communication Gateways, Portable Chemical Agent Detector Counter Drone Solutions

L&T is India's leading, multibillion dollar conglomerate, with activities spanning in the fields of Engineering, Manufacturing, Construction, Technology and Financial Services. L&T Defence is India's leading private sector company for the development and supply of Defence Equipment and Systems, with over 77 years of experience in the field. L&T manufactures and supplies custom designed & engineered critical equipment and systems for the defence sector. L&T has long experience of working with Defence Research and Development Organization (DRDO) for realization of multiple developmental programmes and is a trusted supplier to the Indian Armed Forces. Product portfolio of L&T includes naval platforms, missile launch systems, anti-submarine warfare systems, propulsion & naval engineering systems, platform management systems, artillery platforms, weapon delivery systems, bridging solutions, combat engineering systems, upgrade solutions for armoured platform and guns, combat engineering equipment, aerospace solutions, airborne assemblies and systems, avionics, radar systems, communication systems, unmanned systems and NBC Systems.

Certifications: ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, OHSAS 18001:2017, AS 9100:2016, ISMS 27001:2017, CM MILE LEVEL B

Pinaka Multiple Rocket Launch System (MRLS) & K9 VAJRA-T : 155 mm/52 Cal. Tracked Self Propelled Gun

The PINAKA MRLS is a state of the art, all-weather, long range area fire artillery system built on 6x6 HMV chassis with high cross-country mobility. The twin pod launchers comprise six rockets each of 260 mm calibre which can be fired in a single or salvo mode.

K9 VAJRA-T is an adaptation of K-9 Thunder which is the World's most widely used 155 mm 52 Cal self-propelled gun. The gun has been developed in partnership with Hanwha Land Systems, Korea.





LET Offers variety of bridging solutions which include:-

Modular Bridging Systems (MBSi) -
Single span, vehicle mounted,
mechanically launched, with spans
options from 37 m to 74 m in steps of
11.8 m Armoured Vehicle Launched
Bridge (AVLBi)

Short Span



Mazagon Dock Shipbuilders Limited

Naval

Destroyers, Frigates, Corvettes, AOPV & OPV, Missile boats, FIB, Submarine, Rescue & Police vessels, Other vessels, Maintenance & life Cycle support

NAVAL SECTOR

Address : Dockyard Road, Mazagon, Mumbai-400 014
 Phone : +91 22 2777 7777 | Fax : +91 22 2777 7777
 Email: bgeorge@mazdock.com | sdipu@mazdock.com
 mdmktg@mazdock.com | Website : www.mazdock.com

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Mazagon Dock Shipbuilders Ltd. (MDL), Mini Ratna Defence Public Sector Undertaking under Ministry of Defence is the premier Defence Shipyard in India primarily catering to the Maritime Defence of our country by building frontline Warships and Submarines.

The history of Mazagon Dock dates back to 1861 and MDL have a rich Legacy of building a wide spectrum of ships for military and civil sectors since 1961. MDL is integrating high technology from various national and international state of the art equipment providers on a common platform.

Since 1961, MDL has built a total number of 1400 vessels including 25 warships and 8 submarines. MDL has also delivered cargo ships, passenger ships, supply vessels, MSVs, water tankers, tugs, dredgers, fishing trawlers, barges etc for various customers in India and abroad.

MDL is recognised as an in-house R&D unit by Department of Scientific and Industrial Research (DSIR), Ministry of Science and Technology

Certifications: ISO 9001:2015, ISO 14001:2015, OHSAS 18001:2014

Stealth Guided Missile Destroyers

State of the art frontline warship equipped with potent blue water capabilities, surface warfare, anti-submarine warfare and anti-air warfare. The weapon and sensor suite comprises Long Range Surface to Air Missiles (LR-SAM), Long range Surface to Surface Missiles, Rocket Launchers and Torpedoes, CIWS and MR Guns.



Frigates & Corvettes

Frigates: Stealth frigate is a multi-role high tech platform equipped with modern weapons and sensors, advanced platform and combat management system designed with reduced radar reflections, changed geometry of structures on top, very few projections on the upper deck that is normally a giveaway for other warships, muffled noise and vibration as well as lower magnetic and heat signatures.

Corvettes: State-of-the-art warship designed for good maneuverability, speed and striking ability with the capacity of helicopter operations.



Missile Boat

Warship designed for handling asymmetric threats

- h Anti-ship warfare h Surface warfare
- h Nuclear, Biological and Chemical Defence h NBCD
- h The weapon suite comprises of SSM, SAM, Torpedo Tube launchers & Chaff Launcher



Submarines-SSK

Capable of offensive operations across entire spectrum of naval warfare including anti-surface warfare, anti-submarine warfare, intelligence gathering, mine laying and area surveillance.



Offshore Patrol Vessels

These are long range surface ships which are capable of coastal and offshore patrolling.

- h Well equipped with firefighting at sea
- h Fitted with pollution control equipment to combat oil slicks at sea
- h Designed to carry a helicopter on-board to facilitate search and rescue operations
- h Meant for h Patrolling h Policing
- h Anti-Smuggling
- h Variants available with lengths 84m, 98m, 118m, 138m and 158m and with speeds ranging from 28 knots to 32 knots



Multi Support Vessel

Suitable for carriage of Deck Cargo, Diesel Fuel and Fresh Water

- h ROV handling capability from both port and starboard side through the moon pool.
- h Fitted with DP-2 system for automatic position and heading control of the vessel
- h Equipped with an offshore crane with maximum lift of Single Fall 500 tons and Double Fall 300 tons with active Heave compensation system
- h State-of-the-art Helicopter Deck of 22.2m diameter suitable for Sikorsky S-62 or Equivalent
- h Roll Reduction Tanks





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Wagle Industrial Estate,
Thane (Mumbai), India 400 607.
Tel: +91-22-2557 7755/2557 7756
Fax: +91-22-2557 7757

Shipyard: Kaladhra, Off Dahej Road,
Bharuch, Gujarat, India 392 007.
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Fax: +91-260-2557 7758
Email: seplnshoft.in
Website: <https://www.shoft.in>

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Shoft Shipyard Private Limited

Naval

Low Weapon Intensive Warships, AUX. & Support Vessels, Minor Naval Combatant & yard Craft, Modular Block & Hull Construction, Hull & Eng. Outfit Onboard Submarines, Major Repairs & Refit of FPVs & IBs

NAVAL SECTOR

SHOFT, established in 1974 is now a privately held medium sized shipbuilding company managed and run by Naval Architects and professionals. Shoft has the necessary infrastructure, skillset, management and planning experience to tackle complex and large defence projects current build capacity allows simultaneous building of 6 vessels of varying sizes upto 50m length and launching weight upto 4000 tonnes. Constructed and delivered 47 vessels in the last 30 years. Shoft has been involved in Defence Shipbuilding Projects and supports Indian Navy and Indian Coast Guard for over 30 years.

INS Astradharini A61 Torpedo Launch and Recovery Vessel

Warship construction License issued by Govt. of India for Design and Construction of Low Weapon Intensive Warships (Survey and Research ships, LCV, OPV, ASW craft, Missile Vessels, Training Ships, Pollution Control Vessel and MPV).

Up to maximum light weight ship displacement 2000T, LOA 50m, beam 7m and draught 2.5m.



Certifications: ISO 9001 : 2015
ISO 14001 : 2015

Coast Guard Support Vessel & Feed Water/ Fuel Barge

Designed to operate in support of coastal combatant ships. Customized with low weapon role.

Vital Yard Craft to serve Navy's Aircraft Carriers. Fitted with stainless steel tanks of capacity 877T for carrying distilled water for boilers feeding the propulsion turbines.



Cutter Suction Dredger & Project Ship For Transportation Of Modular Sections Of Destroyer/ Frigate

A 5777 Cu.M capacity Cutter Suction Dredger, was designed indigenously and built by SHOFT.

Customized for transportation of modular sections of destroyer and frigate weighing up to 287 T each with total capacity of 5777 T.



Multi Utility Craft (Bollard Pull Range 10-50t) & Self Propelled Crane Barge

The Multi-Cat-5 of triple screw propulsion for operations in areas where draft is an issue.

Self Propelled Crane Barge: Built with features a 27 tons hat 28m radius Mac-Greggor crane.



275 Men Accommodation Barge and Support Vessels & Service

275 Men Accommodation Barge: Vikrant Dolphin - 275 Men DP2 Offshore Construction Accommodation Barge. The first of its kind ever built in India. Unique, stand alone, DP2 redundancy architecture, perhaps the very first in the offshore world. Equipped with 2 point mooring and a 287t crawler crane.

Service: Major repairs & Refit of warship. Yard has the capacity to undertake repairs of ships up to 2877 tonnes displacement and 587m length with draught 2.8m.





Aerospace Sector



Dynamatic Technologies Limited

Land

Mobile Surveillance Vehicles (MSVsi),
Monitoring & Surveillance Systems

Aerospace

PATANG - Long Endurance Unmanned
Aerial Vehicle, Airframe Structures &
Engineered Products

AEROSPACE SECTOR

Dynamatic Technologies Limited designs and builds highly engineered products for Automotive, Aeronautic, Hydraulic and Security applications. With futuristic design, engineering and manufacturing facilities in Europe and India, the company is able to meet customers' exacting requirements on all continents.

Lean. Green. Clean. Dynamatic Technologies is vertically-integrated, with its own alloy-making and casting capabilities as well as its own captive green energy sources. The company's facilities are designed to support neighboring communities and the environment.

Dynamatic-Oldland Aerospace (DOA) division of Dynamatic Technologies Limited, commenced operations as a garage start-up in 2008. DOA is a pioneer & a recognized leader in the Indian Private Sector for the development and manufacturing of exacting Airframe Structures and Precision Aerospace Components. Dynamatic-Oldland Aerospace has closely partnered agencies of national importance like the Ministry of Defence

Capabilities to Build Aerostructures For Supersonic Fighter Aircraft

Dynamatic is the supplier for Tejas Light Combat Aircraft (LCA) Front Fuselage Assembly for Hindustan Aeronautics Limited (HAL) - LCA Division. Dynamatic manufactures detail parts and assemblies along with the jigs and fixture requirements. This is the first time a complex fuselage section for a supersonic fighter aircraft has been built by a private sector company.

Dynamatic has been a preferred production partner for Hindustan Aeronautics Limited (HAL) for over three decades on all their major platforms.

MAIN FUSELAGE
ASSEMBLY
TEJAS (LCA)



Certifications: AS9100 NADCAP

Mobile Surveillance Vehicles (MSVs)

The Dynamatic Technologies Rakshak is a unique Mobile Surveillance Vehicle (MSV) developed for India's Security Forces, which is capable of monitoring infiltration on the Country's borders, as well as providing real-time Visual Intelligence within Cities. The Rakshak is a 2-wheel drive vehicle specially built for deployment on any kind of terrain, and, is equipped with a sophisticated surveillance system including Day Light Camera, Infra Red Camera and Laser Range Finder, capable of detecting, scanning and recording in day-night conditions.



Monitoring & Surveillance Systems

Dynamatic Homeland Security designs, develops and custom-builds sophisticated monitoring & surveillance solutions for mobile and stationary applications, which are capable of monitoring infiltration and gathering real-time visual intelligence in cities as well as in remote and hostile environments.

These special monitoring and surveillance systems which can combine Special Multi Sensory Heads, Day Light and Infra Red Cameras and Powerful Radar Systems with the necessary customized software, offer a highly effective integrated day/night observation platform that delivers performance under the most exacting conditions.



PATANG™ - Long Endurance Unmanned Aerial Vehicle

Dynamatic Patang is a light-weight, easily deployable vertical take off and landing Unmanned Aerial Vehicle, capable of being launched from an area of 25m² or less, with no need of preparation of surfaces. Rapid deployment and quick turnaround, ruggedness and reliability, long endurance and mission time, negligible audio signature, no need of launching aids and complete autonomy makes Patang an ideal platform for the para military for ISR activities.



Airframe Structures & Engineered Products

Cabinets to house Critical power and Mission Equipment for Boeing P-8 Navy Reconnaissance Aircraft.

Complex artisanal and flight critical assemblies Aft Pylon & Cargo Ramp for Boeing Chinook CH-47.

Flap-Track-Beam assemblies for Airbus A320 Family & A321 aircraft as Global Single Source. Major Airframe Assemblies for the Bell 429 Cabin on the Bell Helicopter.





Address: C/o Ordnance Equipment Factories Group Headquarters,
Ayudh Upaskar Bhawan, G. T. Road, Kanpur - 208002.
Phone: 0512-2666778
Email: corporate@glidersindia.in | Website: www.glidersindia.in

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Gliders India Limited

Aerospace

Parachute Tactical Assault - Main (PTA-M), High Altitude Parachute (HAP), Brake Parachute for Jaguar AvC, Brake Parachute (Hybrid) for LCA (Tejas), Brake Parachute for SUKHOI Aircraft (SU-26) & MIG Series Aircraft

Gliders India Limited (GIL) Kanpur is a Government of India Enterprise, Ministry of Defence has been established by Government of India to cater the need of the Indian Army, Indian Air Force and Indian Navy and Central Armed Para Military Forces etc.

GIL is a pioneer manufacturing unit for the manufacture of various parachutes viz. Man Drop Parachutes, Brake Parachutes, Pilot Parachutes, Recovery Parachutes, Supply Drop Parachutes, Heavy Drop Parachutes, Illuminating Parachutes. Gliders India Limited has state of the art manufacturing Plant & Machinery along with highly skilled manpower and has dedicated and well qualified engineers of various discipline.

Gliders India Limited (GIL) has full-fledged NABL accredited laboratory

Brake Parachute For Sukhoi Aircraft (SU-30) & MIG Series Aircraft

The brake parachute is intended to reduce the Aircraft landing run of the aircraft and provides additional safety during emergencies.

SALIENT FEATURES:

Aircraft landing speed Normally 200 Kmph

Emergency 220 Kmph

Max. Operational load 2200 N

Max. mass of parachute system 2 kg.

SALIENT FEATURES:

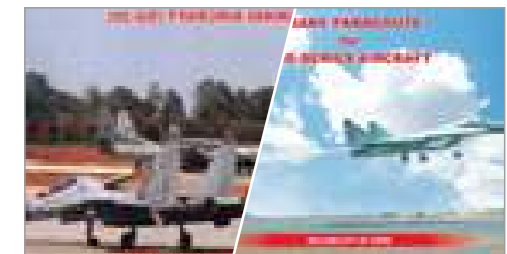
MIG-29, MIG-27, MIG-28 & MIG-26

Normal landing speed: 180 kmph, 180 to 200 kmph, 200 kmph & 180 kmph respectively

Emergency landing speed

200-220 kmph, 220-240 kmph, above 240 kmph & 250 kmph

Certifications: ISO 9001
ISO 9001 OHSAS 18001



Parachute Tactical Assault - Main (PTA-M)

The Parachute Tactical Assault - Main (PTA-M) has been developed for tactical military assault applications and for normal training purposes.

High Altitude Parachute (HAP)

The High Altitude Parachute (HAP) assembly has been designed for use during paratrooping operation and normal para-jump training from transport aircraft. This is a single stage static line parachute for high altitude and normal jump.



Float Assembly & Paulin Assembly Float

The Float is pneumatic and when inflated, it serves as a floating pier for the KM Bridge. The float has six equal capacity outer compartments with one valve each and one inner centre compartment with two valves. When inflated it is prism-shaped with lifted bow and stern ends, which are reinforced with rubbing protection strips at corners.

The float bottom is also provided with six numbers of rubbing protection strips. Both float is provided with six straps for tying the saddle assembly to the float. It is deflated, rolled up and packed in a cover (Paulin Assembly).



Brake Parachute for Jaguar A/C

The Brake Parachute is used to reduce the landing run of the aircraft. The parachute is stowed directly into a metal container with the parachute connecting riser protruding at the aircraft end.

The Brake parachute system is designed to operate normally at streaming speeds of up to 500 knots, but can be operated at a speed up to 550 knots in an emergency. The life of this parachute is 20 years.



Brake Parachute (Hybrid) For LCA (TEJAS)

Light Combat Aircraft (LCA) Tejas is a multi-role Combat Aircraft which uses a brake Parachute as retardation device to reduce the landing roll. Brake Parachute system is an effective device used for retarding and shortening the landing run of an Aircraft on its landing roll as well as during aborted take-off.

Deployment Speed (Normal): 250 Kmph

Deployment Speed (Emergency): 300 Kmph

Mass of Parachute: 50 Kg



Hindustan Aeronautics Limited (HAL)

AEROSPACE SECTOR

Aerospace

Fixed Wing Platforms:

Fighter & Lead in Fighter Trainer (LIFT)

Light Combat Aircraft (LCA) - Tejas

Basic Trainer

Hindustan Turbo Trainer (HTT) - 32

Transport

HAL Do-329 twin turbo-prop

Rotary Wing Platforms:

8.8 Ton: Advanced Light Helicopter (ALH) variants

8.8 Ton: Light Combat Helicopter (LCH)

2.2 Ton: Light Utility Helicopter (LUH)

Hindustan Aeronautics Limited has developed core competence in the areas of Design, Development, Manufacture, Overhaul and Upgrade of advanced fighters, trainers, helicopters, transport aircraft & their associated aero-engines, accessories, avionics and airborne systems, over eight decades. Over the years, HAL has produced over 2000 aircraft, 5000 aero-engines and has also carried out over 55,000 overhauls of aircraft and 22,000 overhauls of engines, besides manufacture and overhaul of related accessories and avionics.

HAL has also acquired skills in assimilating technologies by manufacturing of several foreign origin platforms from leading global OEMs and are well versed in absorption of such ToTs, of both Western and Russian origin platforms.

Certifications: AS9001D, AS9100C, ISO 9001:2015, ISO 14001:2015, ISO 13001:2015, NADCAP

Light Combat Aircraft(LCA) & Light Combat Helicopter (LCH):

The LCA is a multi-role supersonic single engine fighter aircraft. The aircraft is fitted with state of the art Indigenous Avionics equipment and has a high percentage of composite material providing stealth characteristics and powered by a single GE F404-IN97 turbofan engine. The aircraft has four variants namely Air Force (Fighter & Trainer) and Naval (Fighter & Trainer).

Light Combat Helicopter (LCH): LCH is a twin-engine, dedicated combat helicopter of 8.8-tonne class. It has a narrow fuselage and tandem seating configuration for Pilot and Co-pilot & Weapon System Operator (WSO).



HAL Do-228

HAL Do-228 is a highly versatile, multi-purpose, fuel efficient, rugged, reliable and light weight twin turbo-prop aircraft. This aircraft can be used for diverse role like Utility, VIP & Commuter & Troop Transport, Maritime Patrol, Airfield Navigation Calibration, Flying Test Bed etc., This aircraft is specially designed for operation from semi-prepared runways with excellent short take-off and landing capabilities.

The typical tasks performed by Do-228 Maritime variant are:

- h Maritime Surveillance & Patrol of Exclusive Economic Zone.
- h Pollution detection and control.
- h Search and Rescue.
- h Surveillance of fishery activities.



Hindustan Turbo Trainer (HTT)-40

HTT-40 is an ab-initio trainer aircraft designed to meet primary training requirements. This fully aerobatic tandem seat turbo trainer will have an air-conditioned cockpit, modern avionics and zero-zero ejection seats. Built around a proven turbo prop engine, it is designed to have good low speed handling qualities for better training effectiveness. The aircraft will be certified to FAR-23 Standard.



Advanced Light Helicopter (ALH)

The ALH Dhruv is a multi-role, multi-mission, new generation helicopter in the 2.5 tonne weight class meeting Federal Aviation Regulations (FAR) norms. It is designed to meet the requirements of both civil and military operations. Dhruv has gone through various upgrades to the present ALH Mk.III&IV.



Light Utility Helicopter (LUH)

LUH is a new generation utility helicopter in the three tonne weight class designed to meet the requirements of both military and civil operators. LUH is powered by a single turbo shaft engine with adequate power margins to accomplish high altitude missions in the Himalayas with ease.









Advanced Weapons and Equipment India Limited

ARMAMENT & AMMUNITION SECTOR

Armament

Small Arms, Mortar Equipment,
Medium & Large Calibre Weapons

WEAPONS & EQUIPMENT

SMALL ARM

MOTOR EQUIPMENT

85 mm MORTAR

120 mm MORTAR

127 mm MORTAR

MEDIUM CALIBER ARM

AK-47 Gun

7.62 mm LAR Gun System (Upgraded)

12.7 mm RL MK-III System

LARGE CALIBER

105 mm Light Field Gun System

UPGUNNED 155 mm SHARANG Gun system

155 mm Dhanush Gun System

KAVACH Launcher

Address : Advanced Weapons and Equipment India Limited
Ordnance factory Kanpur, Kalpi road, Kanpur, Uttar Pradesh,
PIN-208 006, India
TEL +91-522-252-2525
Email: marketing@aweil.in | Website : <https://www.aweil.in>

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Advanced Weapons and Equipment India

Ltd. (AWEIL) is one of the seven new Defence PSUs formed by converting the Ordnance Factory Board into fully Government owned Enterprises. AWEIL has been incorporated under the Companies Act 2013 on 1st August, 2013 however, its commencement of business took place on 1st October 2013 notified by DDP.

It comprises of the following production and non-production units:

- Rifle Factory Ishapore,
- Small Arms Factory, Kanpur,
- Gun & Shell Factory, Cossipore,
- Ordnance Factory Tiruchirapalli,
- Field Gun Factory, Kanpur,
- Ordnance Factory Kanpur
- Gun Carriage Factory, Jabalpur
- Ordnance Factory Project Korwa
- Ordnance Factories Institute of Learning Ishapore
- Controllerate of Safety, Kanpur.

Certifications:

ISO 9001:2015
ISO 14001:2015
ISO 45001:2018
ISO 26262:2018
ISO 9001:2015
ISO 14001:2015

155 MM Dhanush Gun

Dhanush is a state of the art gun system that has proved to be one of the best in class you can engage stationary and moving targets both day and night, based on a unified cycling system it can strike targets in the range of 25 kms and best of all 100% of business part it is a true make in India effort. With Dhanush, India has developed the capability manufacturing 155mm caliber Gun.



5.56 x 30 mm JVPC Carbine & 7.62 x 51 mm MAG

5.56 x 30 mm JVPC Carbine: The Joint Venture Protective Carbine (JVPC) is a unique caliber weapon system for CQB operations. Its modular trigger mechanism and optical ergonomic design ensures excellent performance under extreme climatic and terrain conditions. The semi Bull-pup design with magazine feeding through pistol grip located at weapon CG enables Single Hand firing with retractable butt makes it fully compact and balanced weapon.

7.62 x 51 mm MAG: A highly reliable gas operated, air cooled Belt fed medium machine gun. The Gun is perfect for Co-axial and turret role and the most successful weapon system for Infantry roll. The firing cycles can continue for prolonged period without adverse effect.

Multi Grenade Launcher & 155 MM/45 Cal Sharang Ugun

Multi Grenade Launcher popularly known as MGL 40 mm. This grenade launcher is perfect for counter insurgency and low intensity conflict deployable in built up and forest areas. Six shots can be fired in revolver operation 40 mm indigenous. MGL have been supplied to Indian armed forces and paramilitary forces.

155 MM/45 Cal Sharang Ugun is an indigenously developed weapon that is aimed at meeting the Indian Army's requirement to replace existing Russian-made 155 mm caliber M-45 towed guns. The Sharang, fully indigenous solution.

120mm MORTAR and 51mm & 81mm MORTAR

A very effective light artillery weapon which fires HE, smoke and illuminating ammunition. Capable of being carried manually over short distances and transported by animal pack, towed behind a jeep and para-dropped. Provided with a base plate consisting of upper plate having a rotating socket and two housings for the clamping collar pivot axis. The lower part has three sets of ribs and spades which provide stability to the plate.

51mm & 81mm MORTAR is a light-weight weapon, which can be easily deployed. The base plate is star shaped with rotating socket in the centre and three sets of ribs and spades which provide all round traverse without movement of the plate and ensures equipment stability in all types of ground conditions.

Kavach

KAVACH is a fast response anti-missile naval decoy system back to back self defence against radar guided enemy missiles using tactical chat it is available in two versions for long and short distance deployment and its wholly made in India





Bharat Dynamics Limited

ARMAMENT & AMMUNITION SECTOR

Naval

Underwater Weapons

Armament & Ammunition

Surface to-Air Missiles, Anti-Tank Guided Missiles(ATGMs), Air-to-Surface Weapons

Electronics, Communication & ICT

Counter Measure Systems

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Financial District, Gachibowli, Hyderabad 500032, TS, INDIA
Phone No. +91- 782- 2278057
Email: bdbd@bdl-india.in | Website : www.bdl-india.in

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Headquartered in Hyderabad, India **Bharat Dynamics Limited (BDL)**, was incorporated on 29 July, 1997 as Public Sector Undertaking under Ministry of Defence, Government of India.

The company deals with manufacture and supply of Guided Missiles, Underwater Weapons, Air-borne products and allied defence equipment for Indian Armed Forces. BDL also offers Product Life Cycle Support and Refurbishment & Life Extension of vintage Missiles. Recent trends indicate rapid strides are being made by countries over the globe in utilizing Artificial Intelligence (AI) based technologies for development of Next Generation of weapon systems. Taking cognizance of this fact, BDL has started undertaking development of products for the Armed Forces with AI based technologies. BDL has forayed into international market by offering its products to foreign countries. Thrust is also being given to explore tie-ups with other foreign OEMs for new missiles and underwater weapon programmes with potential Transfer of Technology.

Certifications: AS9100D, ISO 9001:2015, ZYSB, ISO/IEC 27001:2017, ISO/IEC 27002:2017, ISO 14001:2015, ZYSB

Underwater Weapons

Light Weight Torpedo (HAL & XPI) &
Heavy Weight Torpedo (Varunastra)

Light Weight Torpedo (LWT) is a state of the art underwater weapon which can be launched from a ship and/or a Helicopter. Has an operating depth upto 200 m with a maximum speed of 22 knots.

Heavy Weight Torpedo or Varunastra is an advanced state-of-the-art, ship launched heavy weight, anti-submarine Torpedo capable of targeting submarines operating in shallow & deep waters.



Surface to Air Missiles

Akash Weapon System : Akash Weapon System (AWSi) is a short range surface-to-air missile having a range of 25 kms. The all-weather, air defence weapon system, uses a high explosive, prefragmented warhead that can engage multiple threats simultaneously.

Astra Weapon System: Astra is an Air to Air, Beyond Visual Range missile. The Weapon System comprises of Astra Missile and Launcher.



Anti-Tank Guided Missiles (ATGMs)

Man-portable Anti-Tank Guided Missile : Amogha (III) is a third generation fire-and-forget ATGM.

Nag is a third generation (Fire and Forget) mechanized infantry ATGM.

Konkurs - M is a second generation, mechanized infantry ATGM.

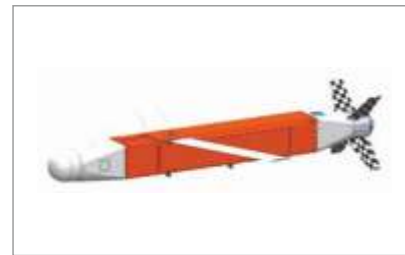
Milan (I) T is a man portable (Infantry) second generation ATGM



Air to Surface Weapons

Smart Anti-Air Field Weapon (SAAW) is a long range, standoff precision air-to-surface weapon capable of engaging ground targets from Jaguar & Su-30 MKI aircrafts. Has range of upto 40-50 km based on release conditions.

HELINA (Dhruvastrai) is an abbreviation for Helicopter Launched Nag. HELINA is an Air to-Surface Missile System. Can be launched from Advanced Light Helicopter.



Counter Measure Systems

Counter Measures Dispensing System (CMDSi) is a state-of-the-art Flare and Chaff Dispensing System. It is an airborne defensive system providing self-protection to the aircraft against Radar guided & IR seeking missiles by dispensing Chaff and Flares.





BrahMos Aerospace Private Limited

ARMAMENT & AMMUNITION SECTOR

Land

Shore based Supersonic Cruise Missile System, Maintenance & Life-cycle Support

Naval

Ship based Supersonic Cruise Missile System, Maintenance & Life-cycle Support

Aerospace

Air based Supersonic Cruise Missile System, Maintenance & Life-cycle Support

Address : 54, Cariappa Marg, Kirby Place
Delhi Cantt., New Delhi 110057, India.

Mobile: +91-9876543210 | Phone : +91-11-2222 2222 | Fax : +91-11-2222 2222
Email: praveenpathak@brahmos.com | Website : www.brahmos.com

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BrahMos Aerospace Joint Venture was formed through an Inter Governmental Agreement between India and Russia signed on 27th February 2002, with Defence Research and Development Organisation (DRDO), Govt. of India and NPO Mashinostroyeniya (NPOMI), Govt. of Russian Federation as shareholders. BrahMos Joint Venture Company is registered as a private enterprise at New Delhi as per the Company Act 1956.

BrahMos Aerospace is the designer, developer and producer of the World's best Supersonic Cruise Missile known for its Speed, Precision and Lethality. It is the only universal missile which can be launched from Land, Sea and Air Platforms against sea and land targets making it the most versatile weapon system.

Salient Features:

- h Range of 200 km with supersonic speed upto 2.5 Mach all through the flight
- h Can be launched from air, land, sea and underwater platforms
- h Shorter flight time leading to lower target dispersion and quicker engagement
- h Wider range of flight trajectories
- h Based on 'Fire and Forget' principle of operation

Ship Based Weapon System

BrahMos missile system is capable of launching either from inclined launcher or from vertical launchers installed onboard ships for destroying enemy ships.

BrahMos has a core competence of designing the launchers for surface ships and interface of missile and launcher systems with the ship systems

Advantage:

- h High lethality with greater effectiveness
- h Land attack/Anti-ship capability
- h Large engagement envelop
- h Waypoint capabilities
- h High rate salvo
- h Underwater Launch capability
- h All weather & day & night operation
- h Maritime superiority for littoral and coastal operations



Land Based Weapon System

Land based BRAHMOS Missile System is designed for high precision strike missions against high threat targets or highly defended targets on land up to the range of 290 km.

Coastal Defence System is designed for high precision strike missions against high threat targets or highly defended targets at sea up to the range of 290 km.

Advantage:

- h Maximum engagement radius
- h Network Centric Architecture
- h Minimum Deployment Time
- h Land Attack/Anti-Ship Capabilities
- h All weather & day & night operation
- h Waypoint capabilities



Air Based Weapon System

Air launched BrahMos Missile System is designed for high precision strike missions against high threat targets or highly defended targets at sea or on land up to the range of 290 km.

The state-of-the-Art launcher system along with the Peripheral Control Device have been designed and developed indigenously for launching of the system.

The system has been successfully integrated with Su-30MKI Platform.

Advantage:

- h High Standoff range
- h Air to Land & Air to Anti-Ship Capabilities
- h Precision Strike with Improved penetration against hardened targets
- h Open integration architecture with air platform





ARMAMENT & AMMUNITION SECTOR

- Small, Medium and Large Calibre Sporting Ammunition
- Mortar Bombs
- Signaling and related stores
- Rockets
- Grenades
- Air Bombs
- Fuzes
- EXPLOSIVES**
- Propellant
- Charges
- Primers
- Military Explosives
- Chemicals
- Industrial Explosives

Address : Munitions India Limited
Registered Address: Ammunition Factory Kirkee,
३९, Coldicott Road, Ordnance Estate, Kirkee, Pune, Maharashtra-४११ ००४
Email: exports@munitionsindia.co.in | Website : <https://www.munitionsindia.co.in>

MIL is also a market leader in the field of chemicals, Military and Industrial Explosives provides a complete solution and has an integrated base for indigenous production of Ammunition and related stores.

155 mm AMMUNITION

MIL has full range of 82mm Artillery Shells of HE, Smoke and Illuminating along with various Charges, Primers and Fuzes. The ammunition is compatible with most of the 82mm Artillery Gun systems used globally and is being regularly exported.

- h Shell §BB m m HEERFB BT
- h Shell §BB m m HEERFB BB
- h Shell §BB m m HE M §TA
- h Shell §BB m m HE M AAB
- h Shell §BB m m Illuminating ERFB
- h Shell §BB m m Screening Smoke ERFB
- h Electronic PD Fuze
- h Primer M §ø§ AZ
- h Bi Modular Charge System hBMCSi Mø§ L Møz
- h Charge ø L ø
- h Charge M ?AZ



Certifications: ISO 9001:2015,
ISO 14001:2015, ISO 45001:2018, ISO 27001:2017
ISO 26262:2018, IATF 16949:2016

Ammunition Small Caliber Ammunition

CARTG. SA B.BH x 7B m m BALL MEBBUM S#?

CARTG. SA A.HZ x B\$ m m BALL MEXU TCR M HZ

CARTG. SA A.HZ x B\$ m m BALL E TCR LINK

CARTG. SA A.HZ x 7# m m BALL

CARTG. SA # x \$# m m BALL u TRACER

CARTG. SA \$Z. A x \$7# m m API u APIT

CARTG. SA .ZZ3RF BALL

CARTG. SA \$?.B m m ARTILLERY TRAINING

CARTG. Z7 m m AMR TP u TPT u HEI u SAPHEI



Medium Caliber Ammunition

CARTG. 77 m m BMP-II AP u T, HE u I, HE u T

CARTG. 77 m m hAK-H77i HE u I, HE u T, PRAC

CARTG. 77 m m ADEN GUN HE, PRAC

CARTG. 77 m m GHASHA HE, INERT

CARTG. 77 m m PFFC, HE, TPT

Mortar Ammunition

B\$ m m MORTAR HE u SMOKE u ILLG

#\$ m m MORTAR HE u SMOKE u ILLG

\$Z7 m m MORTAR HE u SMOKE u ILLG

CARTG MORTAR TRAINING \$Z7 m m u # \$ m m MORTAR



Ammunition Large Caliber Ammunition

SHELL \$7B m m HE u HEER u ILLG u BE, SHELL \$7B m m Screening E Colour Smoke, SHELL \$77 m m HE, CARTG \$77 m m Full Charge u Reduced Charge, SHELL \$BB m m HE M\$7A u MAA B, SHELL \$BB m m HEERFB hBT u BBi, SHELL \$BB m m Illuminating, SHELL \$BB m m Screening Smoke, ROCKET #? m m HE ?? \$ u HEAT BB \$ u ILLG. B?B u TPT u B, ROCKET #? m m HEAT AB \$ u HEDP u SMOKE, TANK AMMN \$Z7 m m HESH u FSAPDS, ANK AMMN \$ZB m m HE u HEAT u FSAPDS, CARTG. A u HZ SRGM AA FLASH u TP u TPT, CARTG. A u HZ SRGM HEDA u CLEARING CHARGE, CARTG. A u HZ m m HE PRE FRAG, PRAC, CLEARING CHARGE,

Rocket & Aerial Bomb

ROCKET H# m m HE u HC u PRACTICE, ROCKET RGB \$Z u RGB H# HE E PRACTICE, ROCKET \$77 m m HE u PRAC u FLASH FILLED PRAC, BOMB \$777 LBS HE u BOMB \$77-\$Z7 KG, BOMB ?B7 KG HSLD, BOMB ZB7 KG PRE FRAG HE u HSLD, BOMB ZB LBS PRACTICE u BOMB ? KG PRACTICE



Propellant & Explosives Charges & Propellant

Bi Modular Charge System for \$BB m m M# \$ E M# Z, Base Bleed Charges for \$BB m m BB, Charge M?AZ for \$BB m m, Charge # E # for \$BB m m, Propellants u Ball Powder for SAA, Propellants for Large and Medium Caliber Ammn., Charge Demolition, Depth Charge, Augmentation Charges, NC NG Based Rocket Propellant, Various SB HEPTA Tubular Propellants, Primers for Various Ammunition

Chemical & Explosives

TNT, DNT, HNS, Ammonium Perchlorate, RDX u TNT H7:77 A E B; BB:7B, #7:Z7 Hexolite-B, RDX u Wax #E:\$Z E #B:B, HMX, PETN, Low Temperature Plastic Explosives, Picrite hNitroguanidinei, Cord Detonating, Nitro Cellulose, Composition Exploding, Slab Demolition, CE Primer





Electronics, Communication & ICT



Alpha Design Technologies Pvt Ltd

ELECTRONICS, COMMUNICATION & ICT

Electronics, Communication & ICT

Thermal Imager Fire Control System (TIFCS) for T-72 Tanks, Night Vision Devices
Weapon Sights, Long Range Reconnaissance and Observation Systems

Alpha is set up to utilize Government of India's policies for liberalization of Indian economy and opening of Defence Production to Private Sector Industries.

Alpha responds in a very unique and innovative manner to the needs of India's defence and para military markets.

Established in Bangalore, India's high-tech metropolis, the Company is structured to offer technical support, indigenous assembly/manufacture facilities and technology integration services for a wide range of products to Indian and international organizations.

Focused areas are Optronics & LRF Based Products, Laser Aiming Systems, Thermal Imagers & Fire Control Systems, Navigation Systems, Tactical Communication, Radar and C&I Systems, EW Systems, Simulators, Microwave Components & RF Units, Aero-space, Space Technology.

Certifications: ISO 9001:2015, ISO/IEC 27001:2017, NABL Accreditation, CMMI Certification

Thermal Imager Fire Control System
The TIFCSi is a battle proven Fire Control System fitted on the T-72 Tanks in the professional armies, of the world. The system improves the combat effectiveness and lethality of the Tank under day, night or poor visibility conditions.

It features high accuracy, along with a complete



Bharat Electronics Limited

ELECTRONICS, COMMUNICATION & ICT

Land

Defence Electronics, Communication, Radars, Opto-Electronics, Telecom & Broadcasting equipment.

Naval

Systems & Equipment for Naval Ships, Submarines and Aircrafts

Air

Air Defence Weapon System with Guided Missile System: Akash, upgrade solutions for equipment like Radars and Air Defence Guns

Electronics, Communication & ICT

Systems & Equipment for airborne, naval and land platforms. The equipment range from Intelligence Gathering, Intercepting and identifying and muting explosive devices. Drones, UAVs.

Address : International Marketing Division (IMDi),
Management Block, Bharat Electronics Limited, Jalahalli P O, Bangalore- 560075?
Phone : +91-81-25777777, 25777777, 22222222
Fax : +91-81-25777777
Email: imdjnbel.co.in | Website : www.bel-india.in

Bharat Electronics Limited is a Government of India enterprise under Ministry of Defence, set up in Bengaluru in the year 1969. It is the premier electronics company for the development and manufacture of professional-grade electronic equipment, systems and components. The company has achieved progressive self-reliance in the areas of design and manufacture of equipment for Defence Communications, Electronic Warfare Systems, Radars & Sonars, Opto-Electronics, C&I Systems, Turnkey Solutions, Tank Electronics, Meteorology, Space Electronics, Civil Aviation, Medicare, Solar Photovoltaic based Systems and the Electronic Components.

Exports have been a prime area of focus playing a key role in BEL's strategic perspective. Products exported include Radars, Radar sub-systems, Defence Communication equipment, Secure Communication products, Microwave Communication equipment, Telecom equipment and networks, Broadcasting equipment, Electronic Components and Energy saving products.

Certifications: CM Mi Level B, AS9100 Ver D:
ISO 9001, ISO 14001, ISO 27001, ISO 50001
OHSAS 18001

Drone Based Products

- h The Anti-Drone System is a state of the art product to detect, track and neutralize the intruding rogue drones involved in un-authorized airborne surveillance and other potentially malicious activities.
- h Various types of Drones (hexacopter, quadcopter, etc).
- h Tethered UAV based electro-optic surveillance system.
- h Swarm Drone System (SDSi) is a group of UAVs operating in a networked collaborative environment to perform tasks for diverse applications. All drones will fly at the same time and be controlled from single ground station.



Remote Controlled Weapon Station & Ground Based Radars

The Remote Controlled Weapon Station (RCWS) for Tank is intended to lay and Stabilise the 125 mm machine gun along with the optical sensors in traverse and elevation mounted on the MBT turret.

Bharat Electronics Limited offers a wide range of Radars:

Low Flying Detection Radars, Fire Control Radars, Battle Field Surveillance Radars, Tactical Control Radars, Weapon Locating Radars, 2D Static Radars for Long Range Air Surveillance, 2D Mobile Radars for Medium and Long Range, Air Surveillance, IFF, Secondary Surveillance Radars, Customized Variants.



Opto-Electronics & Electronic Warfare System Avionics and Satellite System & Naval Systems

The range of Opto-Electronic devices enables effective surveillance, pin point target location and find accurate distance of targets.

Electronic Warfare System Avionics and Satellite System:

EW products and solutions portfolio covers the a wide range of Intelligence Gathering, Intercepting and identifying, muting explosive devices.

Majority of the electronic equipment fitted on-board Indian Naval Ships, Submarines and Aircrafts



Communication Equipment & Akash Air Defence Weapon System

Bharat Electronics Limited delivers requirements of India's military, paramilitary, homeland security, state police and other security forces with a variety of small hand-held radios, Base stations, Man packs, Portable Radios, Static Stations to highly sophisticated communication networks.

The Akash air defence missile system is a medium range, surface-to-air missile system which provides area air defence against multifarious air threats to mobile, semi mobile and static vulnerable forces and areas



Artificial Intelligence & Futuristic Technologies & Ground-Based Mobile ELINT System (GBMES)

A wide range artificial intelligence products and solutions like Adversary Network Analysis Tool, AI Based Person Identification, Tracking & Anomaly Alert Generation, Video Surveillance & AI, Based Analytics System, Face Recognition System, Navic Receiver, Ads-B In Receiver Module, Digital Voice Application Cum Recording Server, GPS Based NtpPtp Time Serve, Lte For Nib, Secure Mobile-Lte, Power Amplifiers For Sonar Application.

Ground Based Mobile ELINT System is capable of detection, monitoring, location fixing, complete analysis of RF signals in the frequency range of 17 MHz to 27 GHz.



Address : Corporate Head Quarters, India Optel Limited,
OFIL Campus, Raipur, Dehradun-249174
T

India Optel Limited

India Optel Limited, a fully owned Government of India, Enterprise, under Department of Defence Production, Ministry of Defence has been incorporated to achieve self-reliance in the field of Optoelectronics solutions for Armed Forces, and Paramilitary Forces of Ministry of Home Affairs along with other customers.

It comprises of state of the art, three manufacturing units (Opto-Electronics Factory, Dehradun (OLF), Ordnance Factory, Dehradun (OFD) & Ordnance Factory, Chandigarh (OCFD) of erstwhile Ordnance Factory Board, with a rich experience in their respective area of businesses

Binocular & Passive Night Vision Google

High resolution binocular is DAY OBSERVATION DEVICE High Resolution Binocular with 7X magnification. The broad Characteristics are

Magnification : 7X

Field of view : 5.7 m

Diopter setting : + 8 DPT to - 8 DPT

Weight : 470 gms

Main Products / Services

Passive Night Vision Google is a NIGHT OBSERVATION DEVICE (GNVP) I.I. Tube based

The broad **characteristics are**

Magnification : 5x

Field of view : 27°

Diopter setting : - 2D to + 2D

Weight : 1.85 kg

Detection (Group of men) : 225 m

Detection (Vehicle) : 277 m

Recognition (Group of men) : 557 m

Recognition (Vehicle) : 225 m

The India Optel Limited delivers the requirement of Indian Armed Forces, homeland security and other security forces with a variety of high end communications cables, Field cables JWD-S, Air field Lighting cable, cable Cable quad & cable harness for armoured vehicles.

These cables are specially developed to provide excellent tele phone connection in rough terrain, carrier trunk connections for DRDO, Army, ODD, Paramilitary etc.

The passive night vision device provides the driver with a direct and bright vision a road or terrain in-front of him in Star light conditions.





Tata Advanced Systems Limited

Land

Rocket & Missile Launchers, Land Mobility Solutions, Protective Equipment, Armoured Systems, Simulation, Maintenance & Life-cycle Support.

Naval

Systems & Equipments, Underwater Systems, Simulation, Maintenance & Life-cycle Support, Ancillary Industry & Spare Parts

Aerospace

Aerostructures & Aero-engines, Remotely Piloted Aircrafts, UAVs, Avionics, Maintenance & Life-cycle Support, Ancillary Industry & Spare Parts

Armament & Ammunition

Artillery and Armoured Systems, Simulation, Maintenance & Life-cycle Support.

Electronics, Communications & ICT

Radar Systems, Electronic Warfare Systems, Optronics, C&ISR, Surveillance & Security Systems, Cyber Defence, Simulation, Maintenance & Life-cycle Support.

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Mobile: +91-98999 88888 | Phone: +91-22-4444 4444 | +91-22 4444 4444 | Fax: +91-22 4444 4444

Email: tata-and@tataadvancedsystems.com | Website: www.tataadvancedsystems.com

Tata Advanced Systems Limited, established in 1998, is Tata Group's strategic entity in the Aerospace & Defence industry. Tata Advanced Systems has indigenously Designed, Developed, Produced, Integrated and Supplied mission-critical Aerospace & Defence Systems of national importance. With the requisite capabilities, resources and scale, it is equipped to deliver end-to-end innovative solutions encompassing systems, hardware, software, technology, and digital solutions, all of which can be fully integrated across the key platforms necessary to secure India's land, sea and skies. Tata Advanced Systems has a strong portfolio of partnerships and joint ventures with leading global aerospace and defence firms, making it an integral partner in the international supply chain and in some instances, a global single source provider for leading defence OEMs.

Certifications: AS9100, ISO 9001:2015, CMMLB Dev vs. 2, ISO 14001:2015, ISO 26262:2018, BS OHSAS 18001:2017, ISO 13001:2015, ISO 22716:2017, ISO 22717:2017

Aerostructures, Aero-engines & Unmanned Aerial Vehicles (UAVs)

End-to-end turnkey solutions including design and engineering, advanced complex machining, composites etc. that provide unique precision manufacturing capabilities to cater to high standards of precision required for aero-engine components and sub-assemblies in global contracts.

Indigenously designed and developed range of fully autonomous man-portable, field deployable small UAVs, which can deliver an unprecedented situational awareness to combat soldiers.

UAVs on Offer:

- Fixed Wing Mini UAVs
- Vertical Take-Off and Landing (VTOL) UAVs
- Tactical UAVs



Rocket and Missile Launchers & Advanced Towed Artillery Gun System (ATAGS)

Centre of Excellence for Design, Development, Manufacture and Supply of several important missile and rocket artillery programs of national importance such as Pinaka Multi Barrel Rocket Launchers, Akash Air Force and Army Launchers, MRSAM Launchers for Air Force and Army, Advanced Air Defence Launchers etc.

ATAGS is a 500mm calibre artillery system, jointly developed with DRDO and is configured with an all-electric drive. It has better accuracy, advanced fire control system, extended range and multiple round simultaneous impact capability with surveillance and sighting systems onboard. It can fire any type of ammunition.



Land Mobility Solutions

Leading Indian Defence OEM for supply of combat, light armoured, combat support & logistic vehicles that continues to deliver on varied and demanding requirements of India's military, paramilitary, homeland security, state police and other security forces with a variety of wheeled platforms.

All wheeled platforms feature proven and robust designs, which deliver outstanding performance in hot and dusty desert conditions, high-altitude extreme cold weather environments, humid jungle terrains and corrosive coastal climates.

Built and delivered thousands of wheeled platforms ranging from Light Mobility, Mobility, Utility Platforms, Engineering, Special Mission, Armoured, Command Posts, Nuclear, Biological, Chemical (NBC) and Infantry Carrier Vehicles (ICV).



RAJAK - Thermal Imaging and Night Vision Devices

A wide range of EO systems viz. Night Vision Devices, Uncooled & Cooled Thermal Imaging Systems, 2nd Generation Image Intensifier Tubes of FoM ≥ 5000 and complex Electro-Optic (EO) payloads to meet every requirement at the best price & performance ratio.

RAJAK Product Range and Solutions:

- h Long & Ultra Long Range Surveillance System
- h Multipurpose Night Vision Monoculars and Binoculars
- h Aviation Goggles
- h Thermal & Night Vision Weapon Sights
- h Cooled & Uncooled Thermal Hand-held Monoculars, Binoculars Multifunction Imagers
- h Drivers Night Sights



Radars, Sonars, Maritime Systems and Electronic Warfare Systems

Indigenously developed Integrated Platform Management System, Integrated Bridge Management System, Combat Management Systems, Integrated anti-submarine warfare defence suite for modern Naval vessels.

Partnered with global leaders in radar technology for land and air systems to meet Indian requirements such as the Surface Surveillance Radars and the 2D Air Surveillance Radars

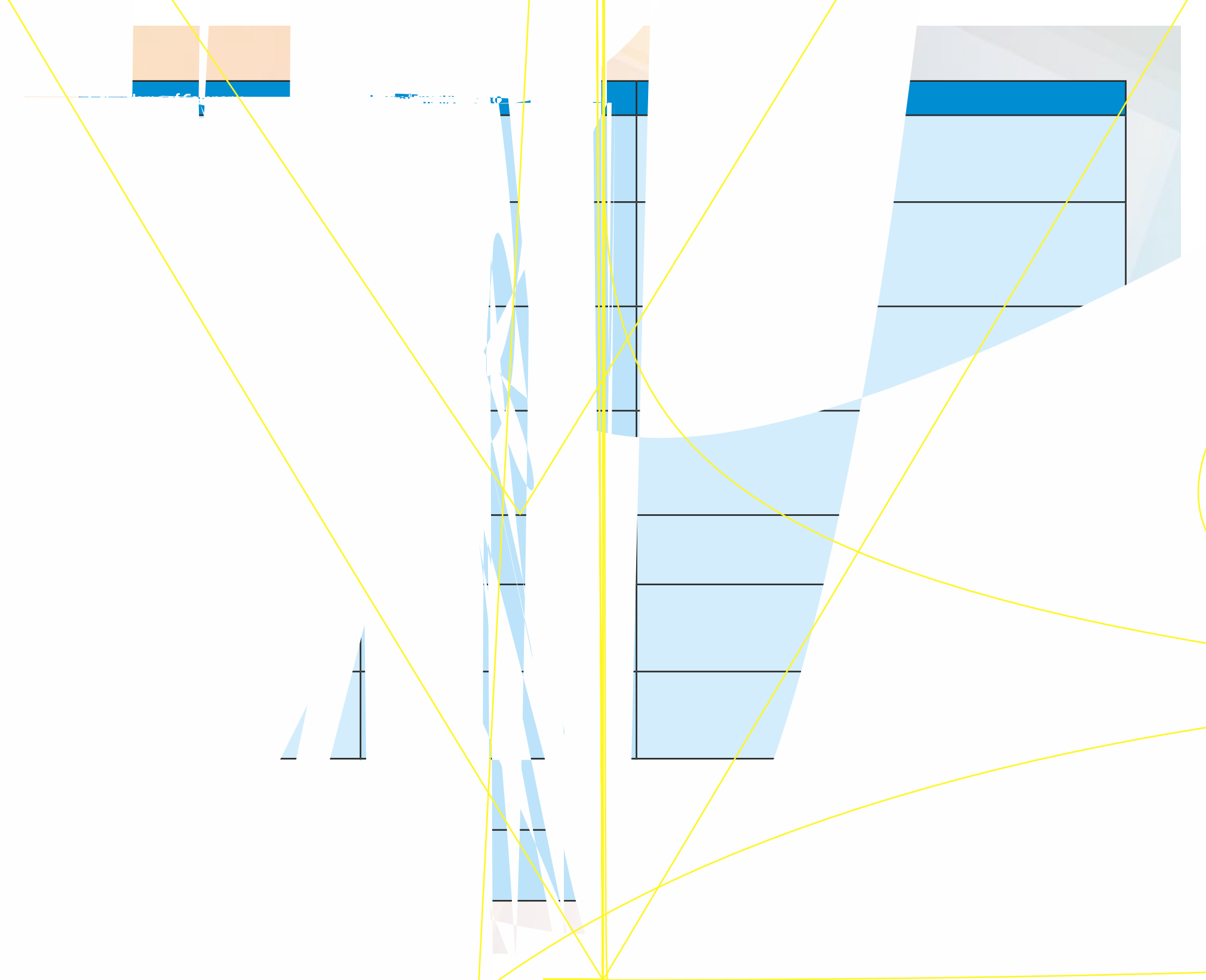
A wide range of integrated and standalone EW products and solutions that include Fast Scan Receivers, Reconnaissance and Direction-Finding Stations, Jammer Stations etc. that cover the entire spectrum of surveillance, detection, interception and jamming of both communication and non-communication (Radars) targets.





Ancillary Indian Defence Companies



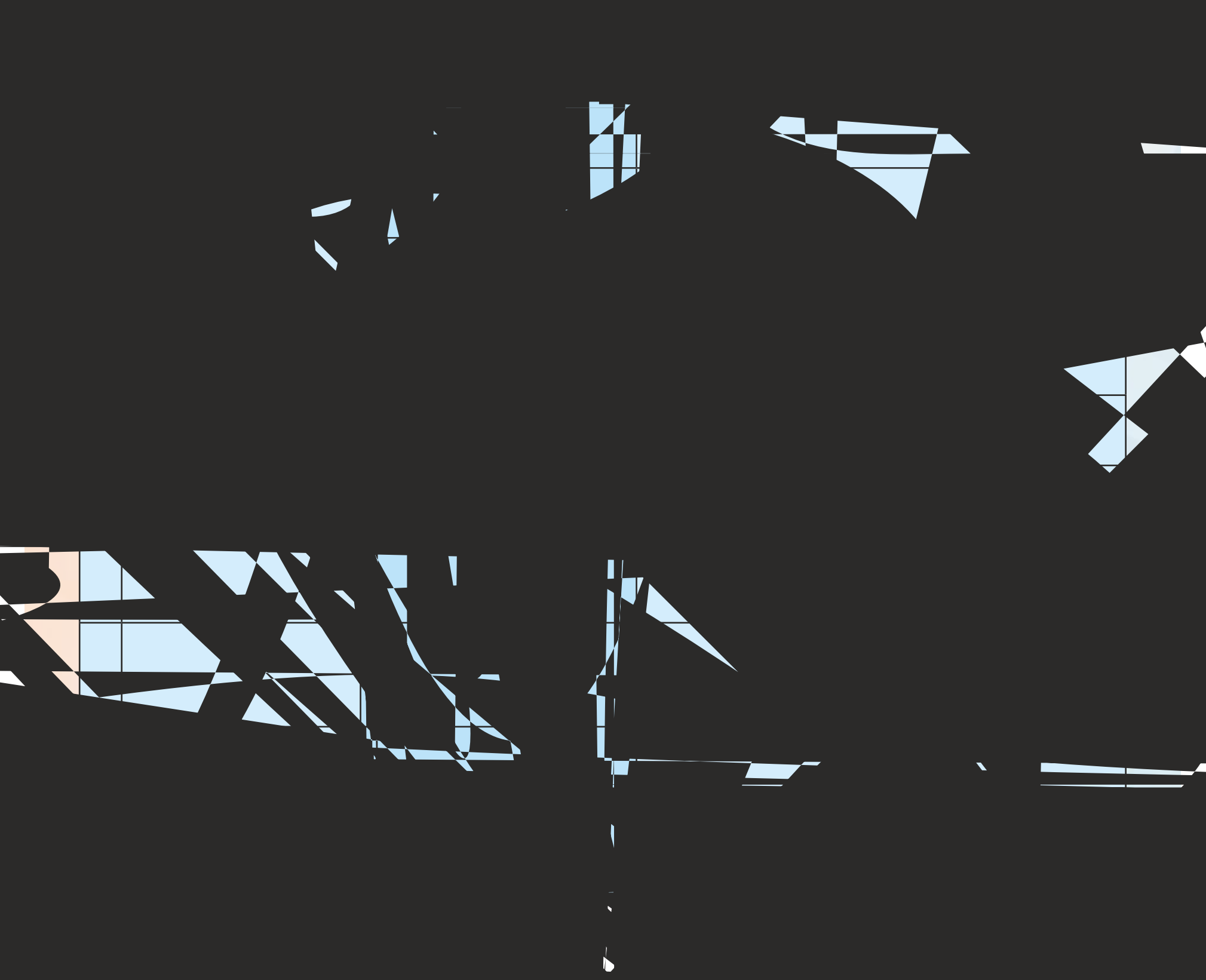


10	Allison Transmission India Pvt Ltd 411, Elegance Towers, 8 District Centre Jasola, New Delhi-110025	☎ : +91-11-41200440 📞 : +91-9582500637 ✉ : br.subhash@allisontransmission.com 🌐 : www.allisontransmission.com	Aerial Platforms other than UAS, Aerospace MRO, Ground Support Equipments, Materials Handling, Raw Materials and Semi-Manufactured Products, Spares, Subsystems and Components, Tools and Equipment, Unmanned Aerial Systems (UAS).
11	Alpha Design Technologies Pvt Ltd 09 Service Road, HAL 2nd Stage, Indiranagar,Bangalore – 560008	📞 : +91-9986112031 ✉ : alphacorp@adtl.co.in 🌐 : www.adtl.co.in	Thermal Imager based Fire Control System for Tanks /ICVs /Guns; TI based Rifle Sights, Long distance surveillance systems, SDRs, C3I Systems, Radio Relays Tank, Communication System, EW System, RF Seekers for Missiles, Helicopter Upgrades, Radar/Missile Upgrades, AD Radars, Fighter aircraft/ Missiles/ICVs/Hptr, Simulators, IFF, LCA rear fuselage, Aileron/Flapperons for SU30, UAVs.
12	Alpha-Elsec Defence & Aerospace Systems Pvt Ltd 193 - B, 4th Cross, 1st Stage, Peenya Industrial Area, Bangalore - 560 058	☎ : +91-80-46610112 📞 : +91-9880169197 ✉ : anilbhanu@alpha-elsec.com 🌐 : www.adtl.co.in	Optronics & LRF Based Products, AFV Sights, Laser Aiming Systems, Thermal Imagers & Fire Control Systems, Night Vision Devices, Weapon Sights, Long Range Electro Optic Observation System, Platform Upgrades, Unmanned Aerial Systems (for reconnaissance, intelligence gathering and Loitering Munitions), Composite Mfg for Aerospace applications.
13	Altem Technologies Pvt Ltd No 4, Asha Mansion, 1st Floor, 6th Cross, 6th Block, Koramangala, Bangalore - 560095	☎ : +91-80-41506070 📞 : +91-9820612882 ✉ : prasad.rodagi@altem.com 🌐 : www.altem.com	PLM Solutions, CAD/CAM/CAE/Rapid Prototyping, CAESimulation Solutions,

19. Anant Defence Systems Pvt Ltd
Casablanca, Office No. 1 & 2
Bangam Press Road,

28	Applied Systems 128, Shanti Industrial Estate, S N Road, Mulund West, Mumbai - 400080	☎ : +91-22-25604470 ☎ : +91-9768064400 ✉ : appliedsystem@gmail.com 🌐 : www.appliedsystems.in	Electronics, Healthcare Counter Covid-19 Products, Life Protection Equipment, Protection and Security Systems, Protective Clothing and Equipment
29	Aquascape Engineers Pvt Ltd Rakanpur Road, Village Rakanpur. Dist. Gandhinagar, Gujarat- 382721	☎ : +91-9978864774, 9274000201 ✉ : md@aerospaceengineering.in 🌐 : www.aerospaceengineering.in	Defence and Aerospace Components and Assembly
30	Arcelormittal Nippon Steel India Ltd Amns House, 27 KM, Surat-Hazira Road, Hazira, Surat, Gujarat- 394270	☎ : +91-22-25613592 ☎ : +91-9819730706 ✉ : sunil.patil@amns.in 🌐 : www.amns.in	Raw material for various ballistic protection, high strength steel for armoured Vehicle, under water vessels, missiles, 155mm gun.
31	Arieckal Industries Panvel, Navi Mumbai, Maharashtra 410206	☎ : +91-22-20873888 ☎ : +91-9820439656 ✉ : arieckal.industries@gmail.com 🌐 : www.ari Eckalindustries.com	Wide Range of Treadmill, Solar Energy, Health Club Equipments, Magnetic Level Indicator within Preset Time Limit.
32	Arihant Electricals Arihant Electricals, A-82, Okhla Industrial Area, Phase - 2, New Delhi - 110020	☎ : +91-11-47637300 ☎ : +91-9560389995	

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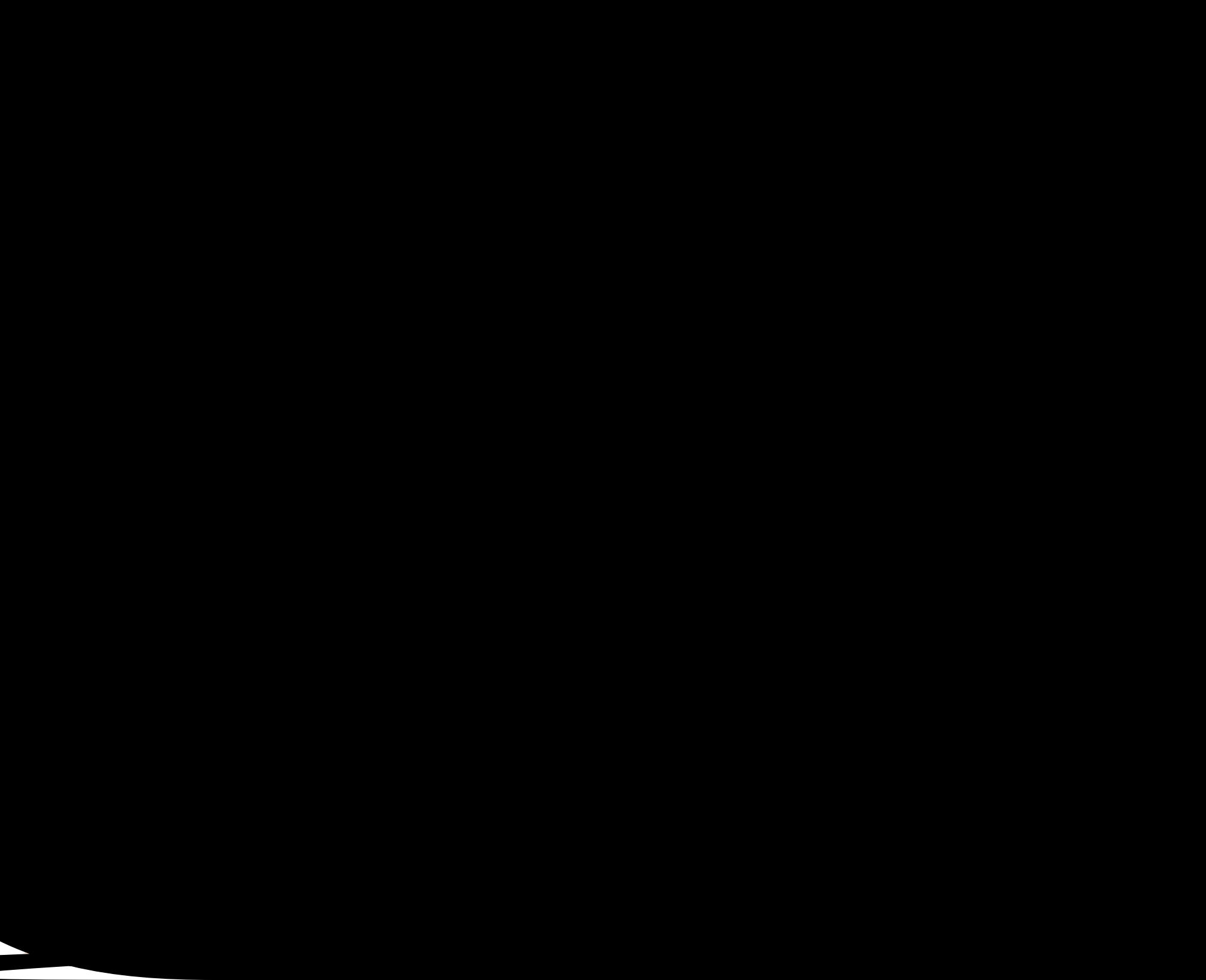


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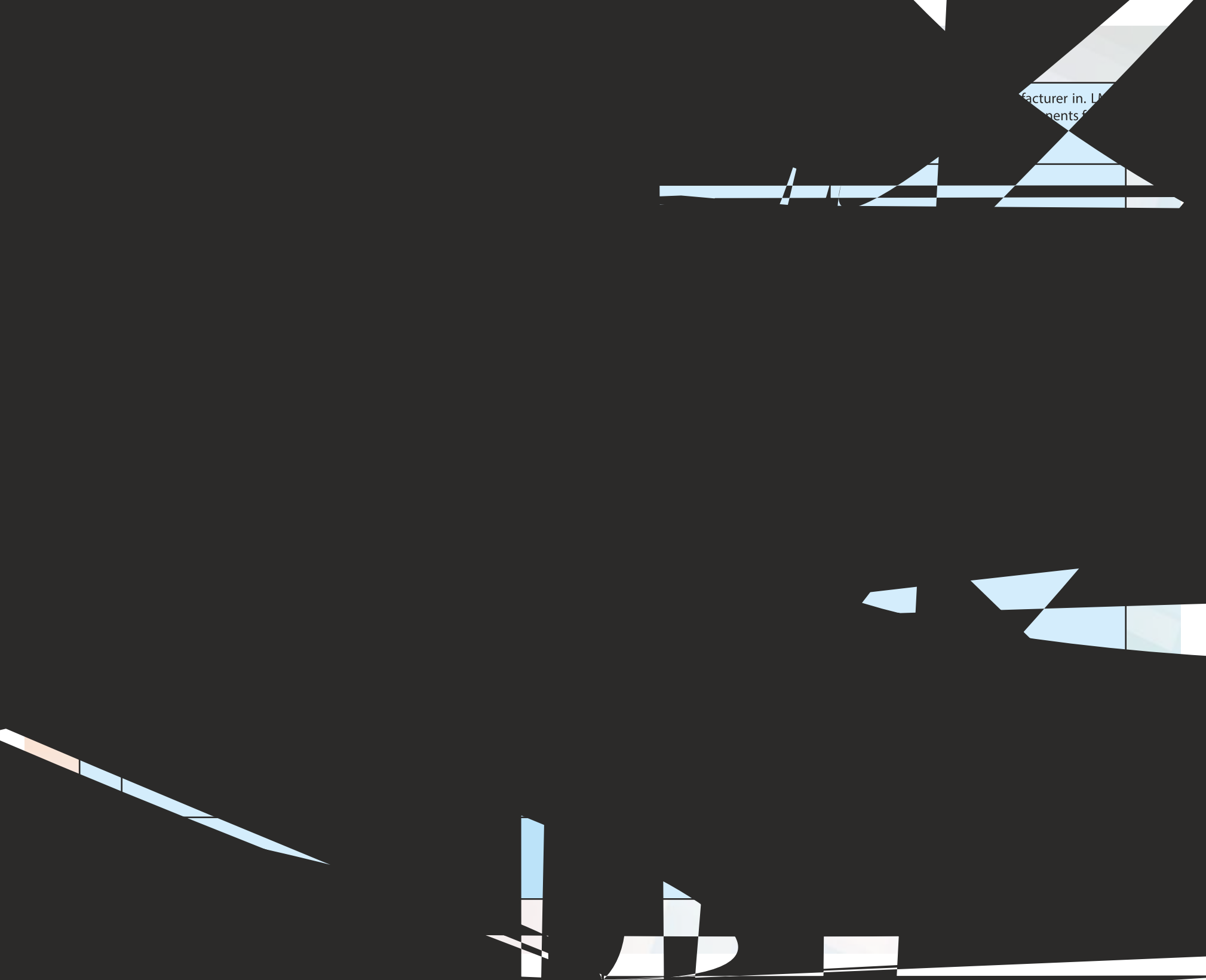


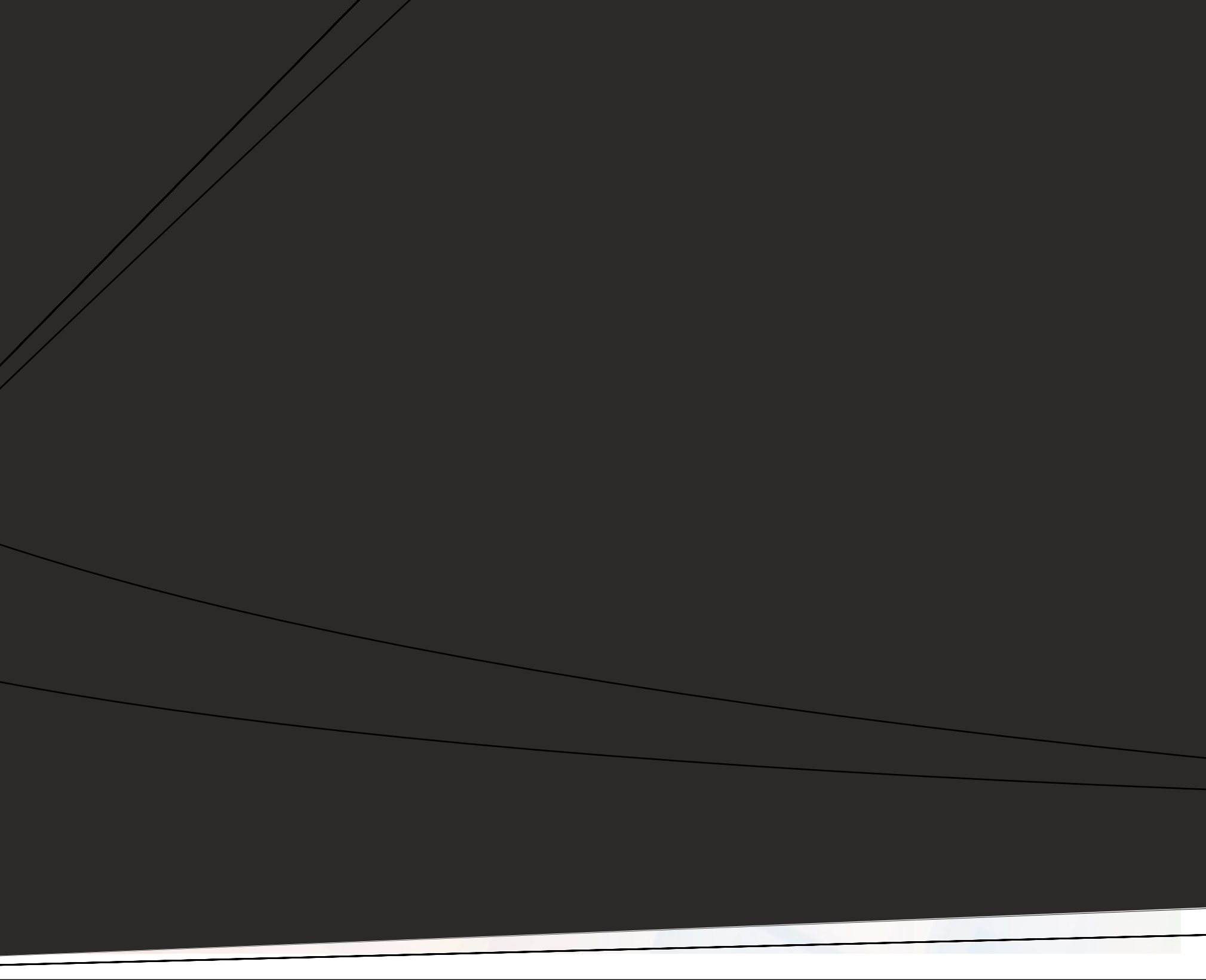
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200	Jupiter Electronics Pvt. Ltd. W 50, Sector 11, Noida - 201301	+91-11-40644527 +91-11-40891489 jupitertools.com jupitertools.com	Plastic Mask, and plastic s s Cleaning Products.
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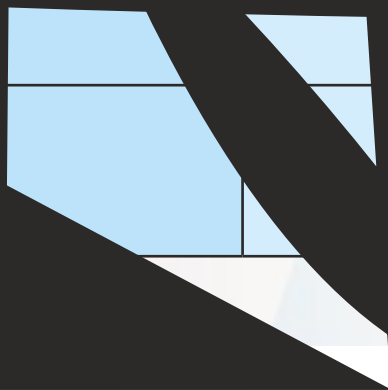
Manufacturer in. L.L.
Components for





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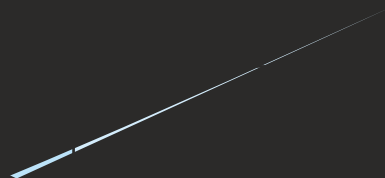
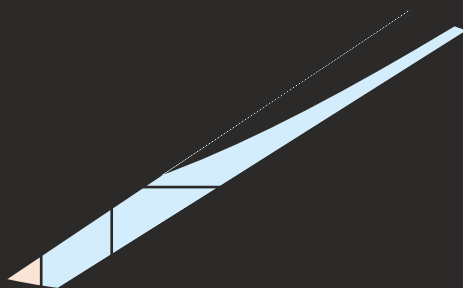
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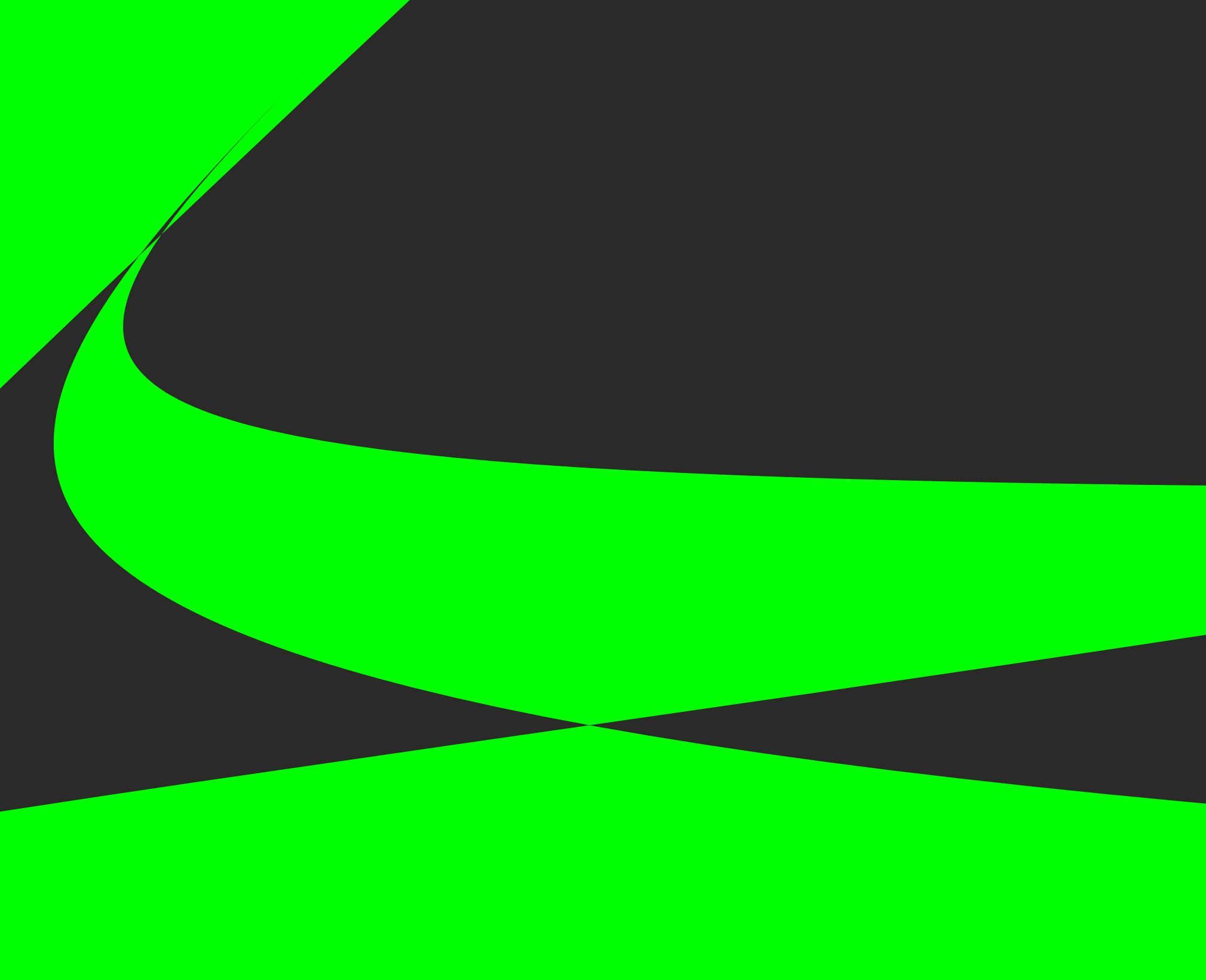
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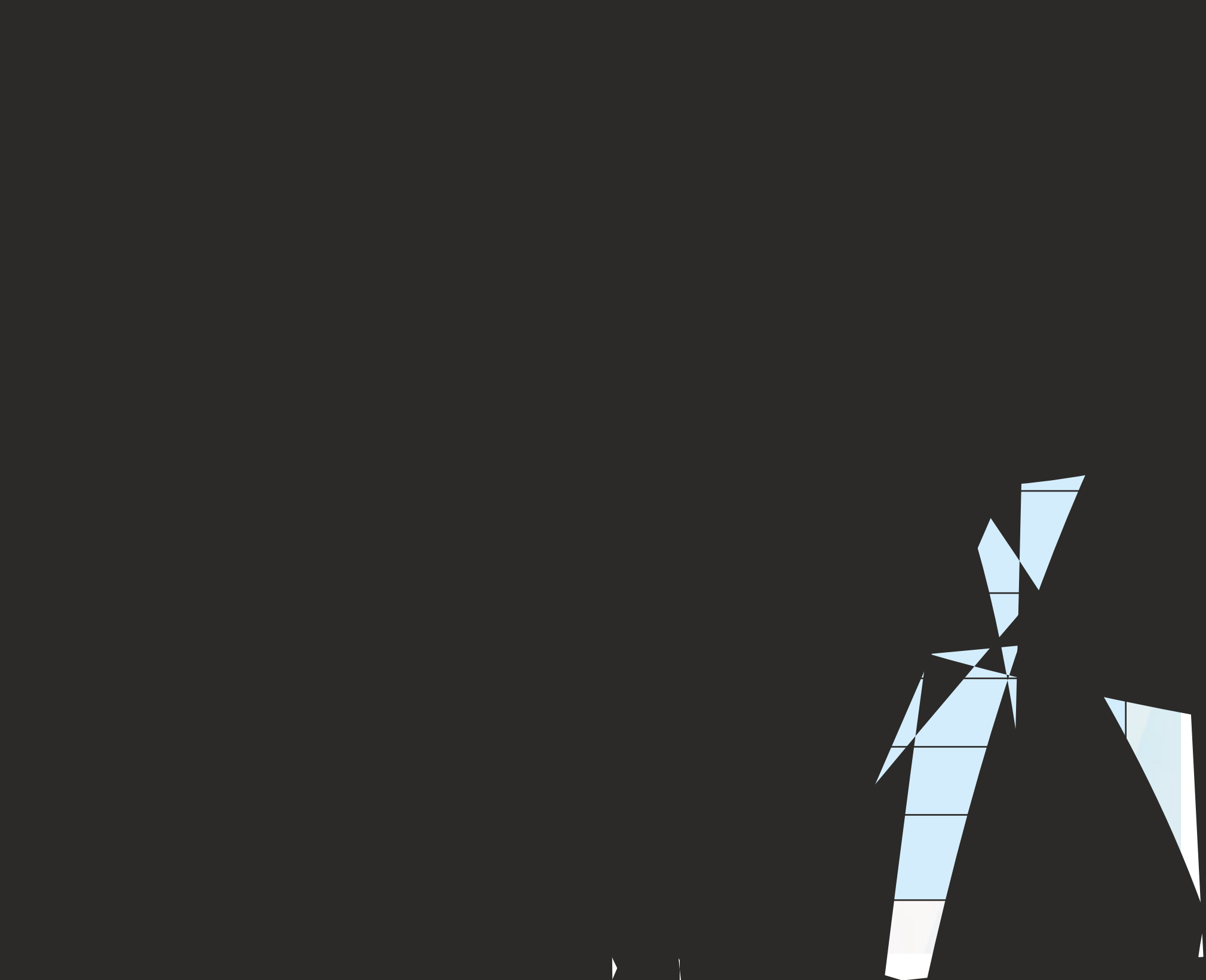
🌐: www.n9world.com

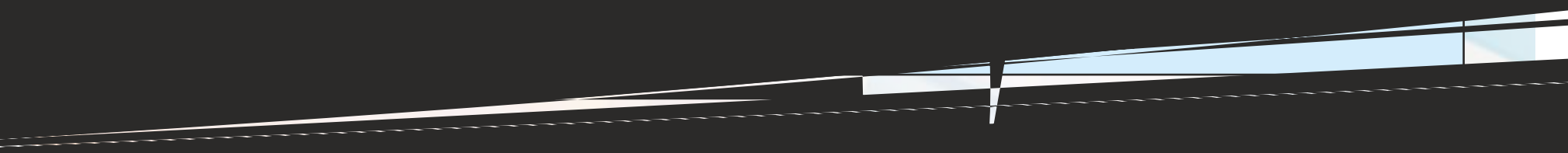
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277	Nimbusparc Technolab Pvt Ltd B5, 1st B Cross, 34th Main Bhavan 10th, Floor Bangla N		









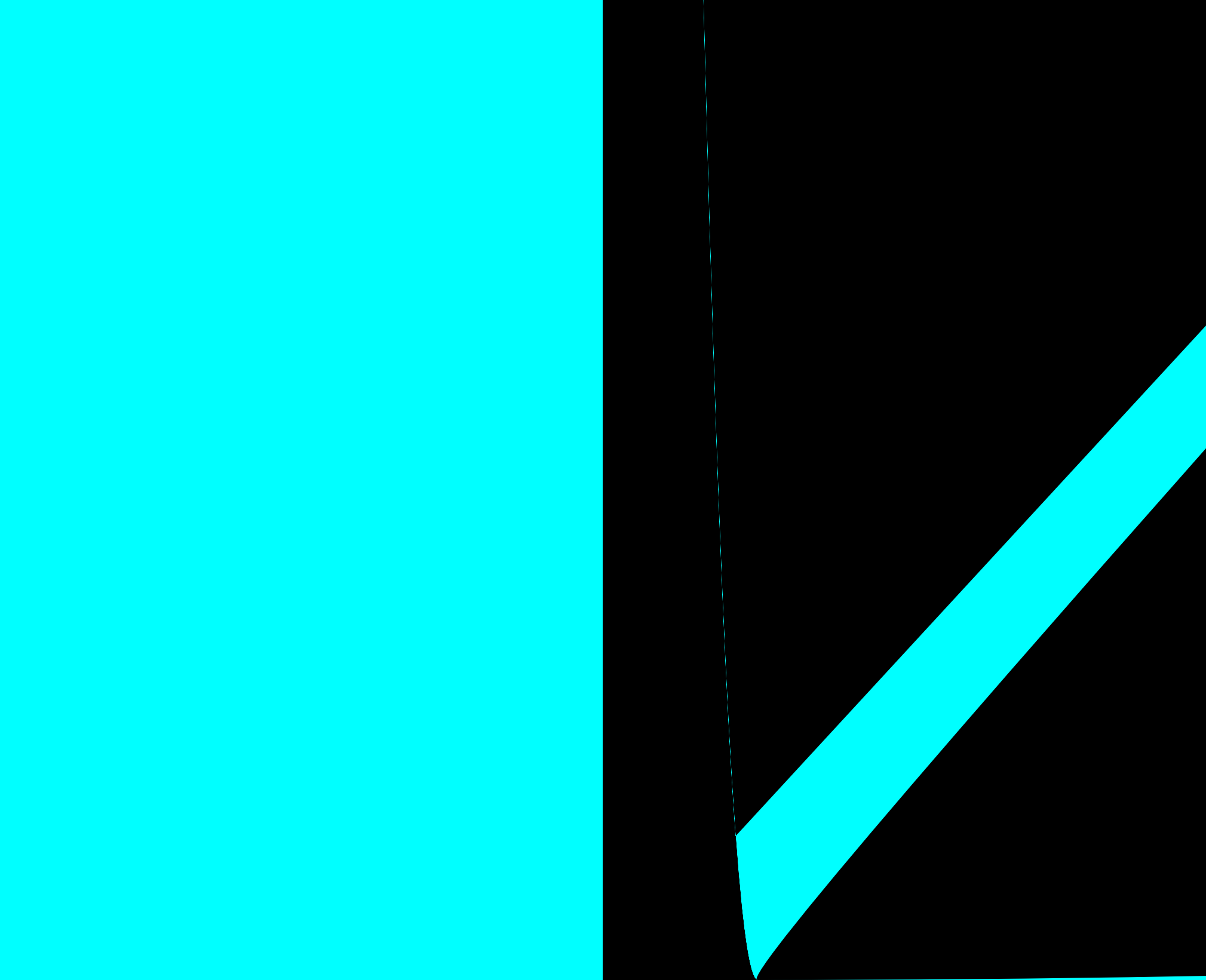


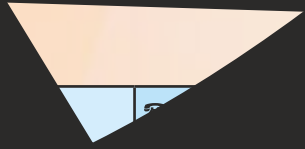
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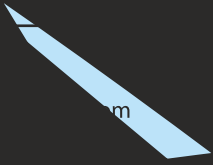
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