

DEFENSE HERE

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Defensehere is an online defense industry media platform that publishes in six languages: English, Arabic, Turkish, French, Russian and Ukrainian. It delivers multilingual coverage of global defense developments while highlighting the rapid progress of the Turkish defense sector. With original reporting, interviews and industry insights, Defensehere supports marketing, visibility and business development for defense companies worldwide.

Beyond daily coverage, Defensehere produces in-depth reports, exclusive interviews and exhibition-focused content that connect industry stakeholders, policymakers and experts. By combining multilingual journalism with on the ground presence at major defense events, the platform serves as a bridge between companies and global markets, ensuring timely, accurate and professional coverage of the defense sector.

Defensehere Magazine is published exclusively for defense exhibitions. Each issue is prepared in two languages, one in English and the other in the language of the host country. The magazine is distributed to exhibiting companies' stands and delivered to the civilian and military delegations attending the event.

This is the thirty fourth issue of Defensehere Magazine. The 34th issue, prepared in English, will be distributed at DSEI in London on 9-12 September 2025. In addition to the printed version, the digital format of Defensehere Magazine, which aims to contribute to the business development and marketing of defense industry companies, is also sent by e-mail to more than 10,000 defense industry professionals, officials and stakeholders in over 50 countries.

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BEYOND TECHNOLOGIES



ABOUT BEYOND TECHNOLOGIES

Beyond Technologies has contributed to the defense industry for about four years by developing unique technologies that add significant value to the sector. Focused on R&D and production, the company specializes in creating advanced military platforms and software.

By combining expertise in artificial intelligence, autonomous systems, and communication technologies, it offers innovative solutions tailored to the evolving needs of the defense industry.

With a strong vision of operational reliability and mission adaptability, Beyond Technologies continues to deliver systems that meet the rigorous demands of modern warfare.

BAZNA – KAMIKAZE DRONE

BAZNA is an advanced kamikaze drone tailored for critical and time-sensitive missions, designed to excel in covert operations, reconnaissance, and surveillance.

It provides seamless performance even in environments with active jamming, making it an indispensable tool in modern defense.

The system integrates night vision and thermal imaging technologies, allowing operations during both day and night under challenging visibility conditions. Its body is fully water resistant, ensuring durability in adverse weather and terrain, while the modular ammunition structure enables the drone to be equipped with different types of warheads depending on mission requirements.

The four-stage safety system enhances operational security, reducing risks during deployment.

Vertical take-off and landing capability allows for easy operation in confined areas, and real-time tracking with FPV goggles provides the operator with instant situational awareness. Furthermore, mission footage can be directly transmitted to the command center through encrypted communication channels, ensuring secure data flow in contested electronic warfare environments.

In terms of performance, BAZNA offers a maximum flight range of up to nine kilometers, maintaining stability at altitudes under electronic interference. It can reach speeds as high as 120 kilometers per hour, allowing for rapid target engagement. With a standard payload, the drone can operate for approximately fifteen minutes, and although the total weight of the platform is only 1,180 grams, it can carry payloads up to 600 grams, adaptable for a variety of mission-specific explosives. Its operational temperature range between -10°C and 45°C ensures reliable performance in diverse climates, from cold mountainous terrains to hot desert environments.

ZİFİRİ – UNMANNED GROUND VEHICLE

ZİFİRİ is an unmanned ground vehicle designed to perform complex battlefield operations while minimizing human risk. It has been engineered for deployment in high-risk environments such as caves, tunnels, and densely built urban areas where traditional systems face limitations. Thanks to its specialized communication modules, ZİFİRİ maintains uninterrupted connectivity even in areas with low signal strength, reaching distances of up to 180 meters underground or within structures.



BEYOND

TECHNOLOGIES

The vehicle is equipped with front and rear night vision cameras, enabling effective reconnaissance and operational awareness in complete darkness. Unlike conventional systems, it performs route mapping without LiDAR, relying instead on robust alternative navigation algorithms. Its strong mechanical design incorporates anti-tipping systems on both sides, enhancing stability while maneuvering in uneven terrain or narrow passages. ZİFİRİ's towing capability of up to 2,500 kilograms combined with a payload capacity of 400 kilograms allows it to conduct both logistical support and casualty evacuation in conflict zones.

With an operational endurance of two and a half hours, ZİFİRİ can sustain missions for extended durations, while its surveillance systems can remain active for up to 24 hours, ensuring continuous monitoring of the battlefield. The platform weighs approximately 100 kilograms and can overcome vertical obstacles as high as 60 centimeters. While its maximum speed of 3.6 kilometers per hour prioritizes stability over velocity, this pace ensures safe operation during sensitive tasks such as transporting injured personnel or supporting armed units.



VANAV – VISUAL-AIDED NAVIGATION SYSTEM

VANAV is a visual-aided navigation system designed to counter electronic warfare threats such as GPS jamming and spoofing, which have become increasingly common in modern combat environments. It is equipped with autonomous mission execution features, enabling it to continue operating even in the absence of direct operator input. The return-to-home mode guarantees the safe retrieval of the platform in case of disruptions, while low power consumption and a compact design make it suitable for integration into small and medium-sized unmanned platforms.

The system addresses key challenges in electronic warfare, such as sensor malfunctions, satellite communication interruptions, and adverse weather conditions that may compromise navigation. VANAV combines advanced visual recognition technologies with artificial intelligence algorithms, allowing it to maintain accurate positioning in GPS-denied environments. Its scanning speed of nine square kilometers per second and GPS accuracy of ± 20 meters provide high levels of precision even in rapidly changing battlefield conditions.

Operating at altitudes between 300 and 900 meters, it ensures mission flexibility across reconnaissance, targeting, and navigation tasks, making it an ideal solution for demanding and high-risk scenarios.

TARNAV – ENVIRONMENTAL SENSING SYSTEM

TARNAV is an advanced environmental sensing system designed to autonomously perform critical tasks while minimizing human intervention. It is especially effective in rescue operations, firefighting, surveillance, mine clearance, bomb disposal, logistics, and combat support missions. By autonomously executing tasks that are dull, dirty, or dangerous, TARNAV enhances both the efficiency and safety of operational forces.

The system incorporates ground segmentation capabilities, advanced obstacle detection, and intelligent object tracking functions. Its ability to predict both the velocity and future location of moving objects makes it a powerful tool in complex and high-risk scenarios where real-time decisions are essential. Beyond its standard sensing functions, TARNAV leverages artificial intelligence to identify anomalies in its environment, enabling it to adapt dynamically to unexpected threats or operational changes. This fusion of environmental awareness and predictive analytics ensures reliable mission execution with minimal human oversight.

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At IDV we devise, design and build vehicles that people's lives depend on, protecting communities and regions, and assuring operational outcomes. Our mission is to ensure the highest levels of protection and the maximum mobility in all conditions. To become stronger every day. **Together.**

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METEKSAN



METEKSAN DEFENCE INDUSTRY INC.

Established in 2006, Meteksan Defence Industry Inc. is a leading private defense electronics company located in Türkiye. The company specializes in the design and production of cutting-edge indigenous defense products. Its extensive product portfolio includes advanced technologies such as radars, sonars, communication systems and electronic warfare solutions.

Furthermore, Meteksan is renowned for its training and simulation systems, which are crucial for preparing military personnel for diverse operational scenarios.

Meteksan Defence is a proud subsidiary of Bilkent Holding, one of the largest and most respected conglomerates in Türkiye. The holding is owned by Bilkent University, the country's largest private, non-profit educational institution, which underscores Meteksan's commitment to academic excellence and innovation in science and engineering.

This strong academic foundation has significantly contributed to the company's ability to develop high-tech defense solutions tailored to meet the needs of contemporary warfare.



METESAN

SAVUNMA

The company has a proven track record of delivering high-quality, ITAR-free systems that have been utilized by Armed Forces in over 20 countries, spanning across Asia, Middle East, Africa, South America and Europe.

Meteksan's products are designed to meet the highest standards of reliability and performance, ensuring that defense forces can operate effectively in complex and challenging environments.

Driven by a vision for global outreach, Meteksan Defence continues to enhance its technological capabilities and expand its international partnerships.

The company's unwavering dedication to research and development, along with its emphasis on innovative solutions, positions it as a key player in the global defense industry.

With a focus on providing state-of-the-art technology, Meteksan Defence is committed to supporting the security and defense needs of its clients around the world.





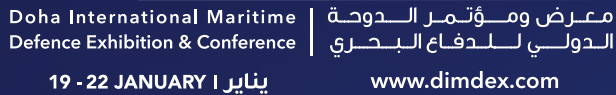
ADVANCED F-16 EW WITH VIPER SHIELD™

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The L3Harris Viper Shield all-digital electronic warfare (EW) system is designed for the F-16 Block 70/72 and legacy F-16 blocks to maximize survivability and mission success against modern and evolving threats. Building on decades of industry-leading EW expertise, Viper Shield delivers state-of-the-art capabilities to detect and defeat enemy threats across the spectrum. Developed in partnership with Lockheed Martin and the U.S. Air Force, Viper Shield can be configured internally on the F-16 or in a podded solution and will provide U.S. allies with cutting-edge countermeasures against sophisticated, ever-changing threats. This advanced EW system provides a virtual electronic shield around the aircraft, enabling warfighters to complete missions safely in increasingly complex battlespace scenarios.



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BMC

Founded in 1964 and one of Türkiye's largest commercial and military vehicle manufacturers; BMC offers unique solutions for the automotive and defense industries with its wide range of products at high quality standards, qualified workforce, and high production capacity.

BMC, which develops and produces commercial and defense industry vehicles in different configurations ranging from buses to trucks, mine-resistant armored vehicles, tactical wheeled vehicles, tracked vehicles and unmanned land vehicles; continues to work and produce on its way to becoming a world brand.



AMAZON 4x4 MULTI-PURPOSE ARMORED VEHICLE

AMAZON 4x4 can reach a speed of 110 kilometers per hour with a range of 800 kilometers. With a maximum loaded weight of 16 tons, the vehicle can be manned by 7 personnel. AMAZON 4x4, which has ballistic, mine and improvised explosive device protection, provides deterrence with its remote-controlled weapon station.

The vehicle has equipment such as fire extinguisher and air conditioning systems, runflat tires, and central tire inflation system.



BMC

Visit BMC in
N7-235

KİRPİ II 4x4 MINE-PROOF VEHICLE

The KİRPİ II, the renewed version of the KİRPİ, which has become a legend with its superior level of protection in the mine-resistant vehicle class, features an independent suspension system. KİRPİ II stands out with its monocoque-type armored cabin and special armored windows, shock-absorbing seats, weapon station and emergency exit hatch features, as well as many mission-oriented equipment (CBRN protection system, firing location target detection system, automatic fire extinguishing system, internal speaking system, jamming reinforcement system, etc.) and a specially designed explosive discovery and disposal robot arm version.



ALTUĞ 8x8 ARMORED PERSONNEL CARRIER

ALTUĞ 8x8, which has a high level and expandable modular ballistic mine, IED and CBRN protection system, provides an advantage with its firing location detection system while being a fortress on the battlefield. Capable of carrying all types of weapons from 7.62 millimeters to 120 millimeters, ALTUĞ 8x8 provides superior protection against mines and improvised explosive devices. ALTUĞ can carry a payload of up to 8 tons. With its removable and replaceable vehicle roof concept, ALTUĞ 8x8 has a "multi-mission capability on a single platform" and operates with advanced maneuverability thanks to its 4-axle steering.



ATEŞÇİ



Established in 2002, Ateşçi has grown into a globally recognized manufacturer and designer of fully integrated ammunition production lines for small and medium calibers.

With more than 20 years of experience and operations in over 40 countries across five continents, the company delivers turnkey solutions tailored to the specific needs of both governmental and private defense sector actors.



Headquartered in OSTİM, the largest industrial zone in Ankara and the broader Middle East, Ateşçi benefits from close proximity to strategic stakeholders and raw material suppliers, allowing greater flexibility in procurement, production, and project coordination. Additionally, the company operates a 10,000 m2 facility near the airport, serving as both a pre-shipment acceptance center and a fully equipped showroom, enhancing international logistics and enabling in-depth inspection and testing before delivery.

Ateşçi's strength lies in being more than a machinery manufacturer.

It is a complete solution provider that offers architectural layout planning, automation integration, line



commissioning, installation, operator training, and comprehensive after-sales support. Ateşçi's support extends beyond on-site assistance, continuing throughout the client's operational process with the provision of comprehensive technical documentation, including training materials, maintenance guidelines, and essential know-how. The company is also dedicated to closely following the latest advancements in the industry, continuously enhancing its machinery to incorporate cutting-edge technologies while enabling its clients to keep pace with these developments. To ensure the highest standards and full compliance, all machinery is engineered and manufactured in-house, in accordance with NATO and other international regulations—guaranteeing precision, durability, and operational safety.

Monitoring systems positions Ateşçi as a future-ready partner for clients seeking innovation and sustainability. By combining technical expertise



ateşçi

Visit ATEŞÇİ in
N2-225

Supported by a fully equipped quality control laboratory in building, Ateşçi conducts rigorous inspections in various aspects. Including mechanical gauging, optical inspection, and visual inspection integrated to the production lines ensures not only technical excellence but also long-term customer satisfaction. Ongoing investment in R&D, ERP-integrated automation, and remote monitoring systems positions Ateşçi as a future-ready partner for clients seeking innovation and sustainability.

By combining technical expertise with customer-oriented service, Ateşçi continues to play a decisive role in advancing ammunition manufacturing across the globe.



We continue to invest in R&D, automation, and digital integration—including ERP-compatible systems and remote monitoring—ensuring our partners benefit from cutting-edge technologies and future-ready infrastructure. Thus, we do not leave our partners alone; not only in machine design and production but thanks to



our integrated ERP system and remote support systems, we also support after sales.

Ateşçi's participation in reputable international exhibitions milestone in our journey to strengthen global partnerships and expand our international presence with valuable partners. Since its foundation, Ateşçi has consistently invested in its own development, embracing innovation, quality, and technological advancement as the pillars of its growth. What began as a local initiative has evolved into a globally recognised provider of turnkey ammunition production systems. This progress is the result of a relentless commitment to engineering excellence, continuous improvement, and customer-focused solutions.

As Ateşçi moves forward, it remains dedicated to strengthening its technical expertise, expanding its global presence, and developing systems that meet the highest standards of the international defence industry — today and into the future.



SDT



SDT operates as a defence sector company that develops domestic products and capabilities in R&D-based fields. Since its establishment in 2005, it has produced and put into use various defence electronics and software products. In accordance with its areas of expertise, SDT indigenously produces, electronic warfare signal processing and analysis systems, image processing and analysis software, satellite ground stations, satellite signal/data processing and analysis systems, associated electronic and avionics systems of aerial platforms and weapon systems, electronic units for land platforms, RF Jammer systems, weapon guidance electronics and simulation/information systems.



ACMI: SDT ACMI (Air Combat Maneuvering Instrumentation) system is a simulation system that allows Air Force pilots to train live on both tactical maneuvering and weapons engagements. SDT ACMI System is mounted on Eastern and Western airborne platforms as an external pod form





and provides efficient training capability to pilots for A/A, A/G missiles and air defense systems. SDT ACMI System is being used by Turkish Air Force and allied countries effectively in the scope of national and international training exercises.

System has mission planning, live monitoring, and post mission analysis capabilities and enables fighter pilot training under real flight conditions and in a multi-participant threat and target environment. Autonomous attitude and position generation, simultaneous simulation of multiple missiles, real time hit/miss estimation according to real flight



conditions, long range and high throughput data link are main features of the SDT ACMI system. Expandable and programmable (SDR) data link with ad-hoc feature allows training environment for up to 150 aircrafts or other platforms at the same time and promises a Live-Virtual-Constructive (LVC) training infrastructure.



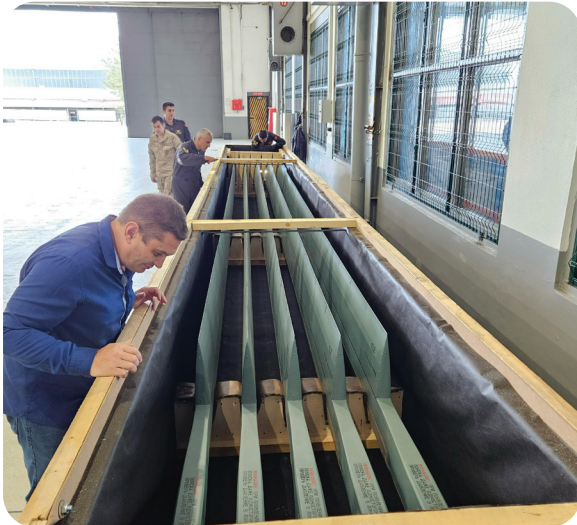
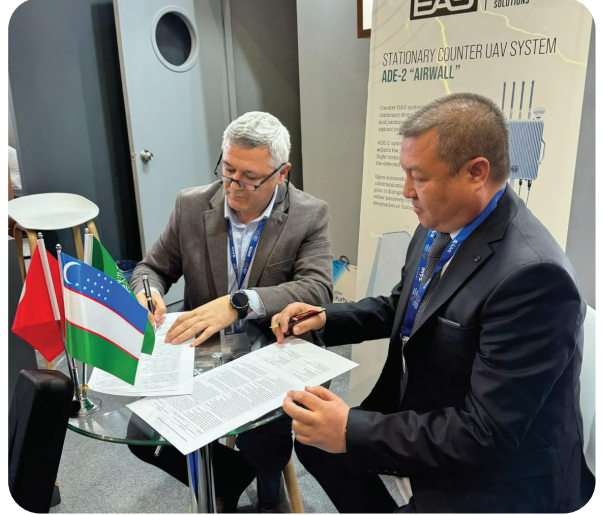
GÜRBÜZ



Founded in 2019, GÜRBÜZ Trade stands out as a reliable and dynamic company in Türkiye's defense and aerospace industries. We have reached a solid position in the sector with the superior services and quality products we offer in local and international markets and have assumed critical roles in the supply chain.

Strategic collaborations such as the *Turkish Armed Forces*, *Gendarmerie General Command*, *Coast Guard Command*, *Police Organization* and *Turkish Aeronautical Association* reinforce GÜRBÜZ Trade's effectiveness in the sector day by day. GÜRBÜZ Trade has NATO and National Facility Security Certificates and is an approved supplier of military factories.

To enhance our international competence, through a collaboration with a Pakistan-based Aviation MRO company, we have obtained MRO (Maintenance, Repair, and Overhaul) authorization in Türkiye and Azerbaijan for post-warranty maintenance, repair, and spare parts supply of Super Mushshak aircraft. Accordingly, we have expanded our technical expertise.





Gürbüz Trade, which closely follows the innovations in the defense and aerospace sector, takes strategic steps for the future by analyzing the dynamics in the market.

By participating in prestigious defense fairs around the world, it increases its influence in both the local and global arena by taking part in international tenders and projects.

As Gürbüz Trade, we continue our success in the defense and aerospace sector, and we continue our investments in the field of textiles without slowing down.

In particular, we attach great importance to our R&D studies for the development of critical products such as ballistic protective equipment and bomb disposal suits. With these innovative

solutions, we are strengthening our position as a reliable supplier in both local and international markets.

Gürbüz Trade is taking firm steps towards becoming a rising brand in the international arena with its dynamic strategies and value-added products in the global aviation and defense industry.

Gürbüz Trade is taking firm steps towards becoming a rising brand in the international arena with its dynamic strategies and value-added products in the global aviation and defense industry.

In the rapidly developing aviation field, we are eager to strengthen our relations and establish collaborations with European Union countries, Canada, US and the United Kingdom.



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UNIQUE PERFORMANCE FOR HEAVY RECOVERY OPERATIONS



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DEFENSEHERE MAGAZINE

DEFENSEHERE BECOMES THE MOST WIDELY DISTRIBUTED DEFENSE MAGAZINE IN THE WORLD

Distributed at defense industry fairs in 15 different countries in 2024, DefenseHere Magazine has become the most widely distributed publication among defense industry magazines worldwide.

Set to be distributed in more than 20 countries in 2025, DefenseHere Magazine will continue to serve as a vital bridge for defense industry companies to expand their business and exports.



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ABOUT US

Vipulse is a leading high-tech manufacturing company specializing in electronic assembly and cabling solutions for the automotive, defense, and medical industries.

With our strategic investment in Hungary, we have expanded our global footprint with a state-of-the-art production facility covering 4,000 m².

Our operations are driven by a commitment to precision, quality, and innovation, and we adhere to the highest international industry standards.

At Vipulse, we are dedicated to advancing technology and strengthening industrial ecosystems through sustainable, high-value manufacturing.

VISION

To become a global benchmark in high-tech manufacturing by shaping the future of the automotive, defense, and medical sectors through innovation, operational excellence, and strategic partnerships.

MISSION

To deliver world-class electronic assembly and cabling solutions by combining advanced technology, precision engineering, and uncompromising quality standards, while empowering industries and contributing to global innovation and sustainable development.

CORE VALUES

Innovation: We lead through continuous technological advancement.

Precision: We deliver excellence in every component and process.

Integrity: We operate with transparency, trust, and accountability.

Sustainability: We are committed to responsible manufacturing practices.

Excellence: We uphold the highest quality standards in all our operations.

Collaboration: We build strong relationships with partners, employees, and communities.

CRITICAL SUCCESS FACTORS

Establishing and maintaining world-class manufacturing standards certified by AS9100, ISO 13485, ISO 9001, and IATF 16949.

Building a highly skilled workforce with advanced training programs.

Ensuring operational reliability through advanced production technologies such as selective soldering and conformal coating.

Strengthening local supply chain integration and contributing to the regional economy.

Continuously investing in innovative production processes and sustainable growth strategies.

OBJECTIVES & GOALS

Expand our presence in strategic global markets by delivering high-value-added production.

Support the automotive, defense, and medical industries with reliable, cutting-edge manufacturing solutions.

Foster long-term cooperation between Hungary and Vipulse through local integration and talent development.

Drive innovation, efficiency, and sustainability across all business operations.

Achieve continuous improvement in quality, environmental responsibility, and customer satisfaction.

**Where
Technology
Meets
the Pulse**



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ADVERTORIAL

Vipulse: Shaping the Future Pulse of High-Tech Manufacturing

Q1: Vipulse is making headlines with its latest investment in Hungary. Could you tell us more about this strategic move?

A:

Absolutely. As Vipulse, we are proud to announce our expansion into Hungary with a brand-new, state-of-the-art electronic assembly and cabling production facility covering 4,000 square meters.

This strategic investment marks a pivotal moment for us as we strengthen our global manufacturing capabilities to serve the automotive, defense, and medical industries even more effectively.

Hungary's dynamic industrial ecosystem and strong technical workforce made it the perfect choice for our vision of sustainable, innovation-driven growth.

Q2: What industries will this new facility primarily serve?

A:

Our new facility is built to meet the highest international standards and will primarily support the automotive, defense, and medical sectors.

These industries demand not only precision and reliability but also continuous innovation—qualities that are at the heart of Vipulse's operations.

Through this investment, we aim to deliver superior solutions that will empower critical industries across Europe and beyond.

Q3: What distinguishes Vipulse's new facility from others in the region?

A:

We have integrated advanced technologies such as fully automated SMT lines, selective soldering, and conformal coating processes to ensure maximum reliability and quality.

In addition, our facility is certified to comply with rigorous standards including AS9100 (Aerospace & Defense), ISO 13485 (Medical Devices), ISO 9001, and IATF 16949 (Automotive).

Beyond technology, we are investing in talent—planning to build a specialized workforce of approximately 500 employees trained to international standards, creating significant local employment and expertise.

Q4: How does this investment align with Vipulse's overall mission and vision?

A:

At Vipulse, our mission is to deliver world-class electronic assembly and cabling solutions by combining advanced technology, precision engineering, and uncompromising quality.

Our vision is to be a global benchmark in high-tech manufacturing.

The Hungary investment perfectly aligns with this trajectory—enhancing our global footprint, driving

innovation, and reinforcing our commitment to building sustainable, high-value ecosystems wherever we operate.

Q5: What are Vipulse's long-term goals with this expansion?

A:

Our primary goal is to continue empowering the industries we serve by providing cutting-edge, reliable solutions.

We also aim to foster deep, long-term cooperation between Hungary and Vipulse by integrating into the local supply chain, investing in talent development, and contributing to the regional economy.

Ultimately, we aspire to set new standards of excellence in the manufacturing sector, creating a lasting impact both locally and globally.

Q6: If you were to summarize Vipulse's spirit in one sentence, what would it be?

A:

Vipulse is the energy behind tomorrow's industries—driving precision, innovation, and sustainable progress across the world.

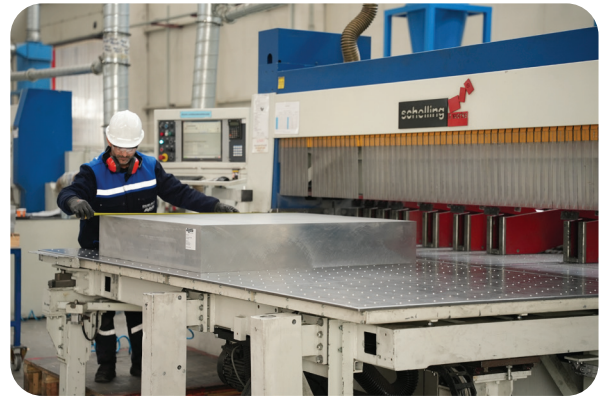
AVAS METAL



Avas Metal was founded in 2017 with the primary goal of addressing the raw material needs of the Turkish industry, particularly in the supply of alloy aluminum plates, sheets, rods, and especially seamless pipes — products that have often faced supply challenges within our country. Over the past 7 years, we have successfully met the diverse needs of industrial sectors across Türkiye, while also extending our services internationally to Europe and the Balkans.

Our Reach and Markets

We proudly serve numerous industrial sectors throughout Türkiye that require special alloy aluminum. Additionally, we have expanded our operations by exporting to many European and Balkan countries, including Belgium, Spain, Germany, Switzerland, Slovakia, Portugal, Serbia, Italy, the United Kingdom, and Bulgaria.





Commitment to Defense Industry

Avas Metal is honored to contribute to Türkiye's defense industry. With our 15,000 square meter manufacturing facility and approximately 4,000 tons of alloy aluminum stock, we focus on producing materials that meet the high standards of defense and aviation sectors. Our precision CNC sizing machines, supported by highly trained personnel, ensure the highest quality products for our clients.

We are proud to hold the AS9120 Aviation Certificate, a testament to our commitment to quality and precision in the aviation industry.



Partnership with Ankara Bronz

Avas Metal is also associated with Ankara Bronz, our parent company, which has been supplying alloyed copper, engineering plastics, and bronze in all alloys to



industrialists across various sectors, including defense.

Established in 1974, Ankara Bronz is one of the top 3 most comprehensive bronze foundries in Türkiye, with decades of experience serving the industrial sector.



Our Commitment

At Avas Metal, we strive to contribute to the advancement of the industries we serve by providing high-quality raw materials that meet the most demanding standards. Our dedicated team and state-of-the-art equipment ensure that we are always ready to meet the evolving needs of our customers.



Company Profile

AViES aims to design and produce international technological products needed by the civil and defense industry with its unique business model.

While AViES responds to localization expectations in line with the country's needs in the field of aviation, space and defense electronics, it aims to apply its agile and cost-effective product design process in the global market.





Aerospace, electronic and electromechanical product design for Land, Aerial, Naval and Space platforms in compliance with ARP-4754/ARP-4761, EASA/FAA, DO-160, MIL-STD-810, MIL-STD-461, DO-254, IPC etc:

Slip Ring

- Pancake Type
- Drum Type
- Slip ring with RF Rotary Joint, Fiber Optic Rotary Joint (FORJ)

Switching and Data Storage Units

- Video Management and Switching
- Ethernet Switching
- Recording Devices

Computer Units

- Mission and Flight Control Computer
- Weapon and Fire Control Computer

Control Panels and Display Systems

- Display Systems
- Hand Control Unit
- NVIS Compatible Panels

Electro-Optical Thermal Imaging Modules

- Thermal Camera Module
- DAY-TV Module
- SWIR Module

Other Competencies

- Encoder Design and Production
- Motorized Pantilt System Design and Production
- Hardware Design and Production
- Printed Circuit Board / Cabling Design and Production
- System Engineering
- Test System Design and Production



We continue to respond to the demands of the defence, aviation and space industries in the civil and military fields with our management staff who are experts in their fields and have more than totally 80 years of experience in the sector and with our dynamic design team.

As AVIES, since the day we were founded, we have been designing and producing electronic systems with our staff to develop our existing products and complete the R&D studies of our new products.



Founded in 2019 at Ankara Ostim Technopark, STG Engineering (Strategic Technologies Development and Production Inc.) stands out as a trusted provider of reliable engineering solutions in the defense and aerospace sectors.

Since its establishment, STG has pursued the mission of strengthening Türkiye's indigenous capabilities, delivering uninterrupted reliability, superior performance, and sustainable technology even under the most challenging operational conditions.

At the core of STG's strength lies a culture of advanced R&D, high-level engineering expertise, and a production approach aligned with international standards.

Operating within a broad engineering ecosystem that spans from electronic and mechanical design to integrated system solutions,

more than 400 specialists transform ideas into mission-ready technologies.





Visit STG in
N8-180

In its 15,000 m² state-of-the-art facility, STG combines cutting-edge technology with engineering discipline, applying precision, reliability, and innovation at every stage.

The company's in-house environmental test laboratory, accredited under TS EN ISO/IEC 17025 has proven its credibility not only at the national level but also internationally.

With testing capabilities across 38 sub-parameters in mechanical, climatic, and abrasion resistance categories, STG ensures its products achieve the highest standards of accuracy, consistency, and durability.

This structure represents the tangible embodiment of STG's principle of *"trust in engineering"* in every system and component it develops every design, every production process, and every test reflects STG's commitment to national defense, respect for engineering discipline, and vision of innovation.

Today and in the future, STG Engineering will continue to be the most reliable partner for critical missions. Looking ahead, STG aims to strengthen its global position through export-driven growth, investment in next-generation defense technologies, and international partnerships.



By offering its innovative solutions not only to Türkiye but also to allied and partner nations.

STG is steadily advancing toward becoming a globally recognized strategic technology provider built on engineering excellence.





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SUPPORTER OF ALL DEVELOPING SECTORS



40,000 m²
MANUFACTURING
AREA



MORE THAN
40 YEARS OF
EXPERIENCE



EXPORT TO
MORE THAN
100 COUNTRIES



ELMALI
SHEET METAL WORKING MACHINES
SAC İŞLEME MAKİNALARI



SGS

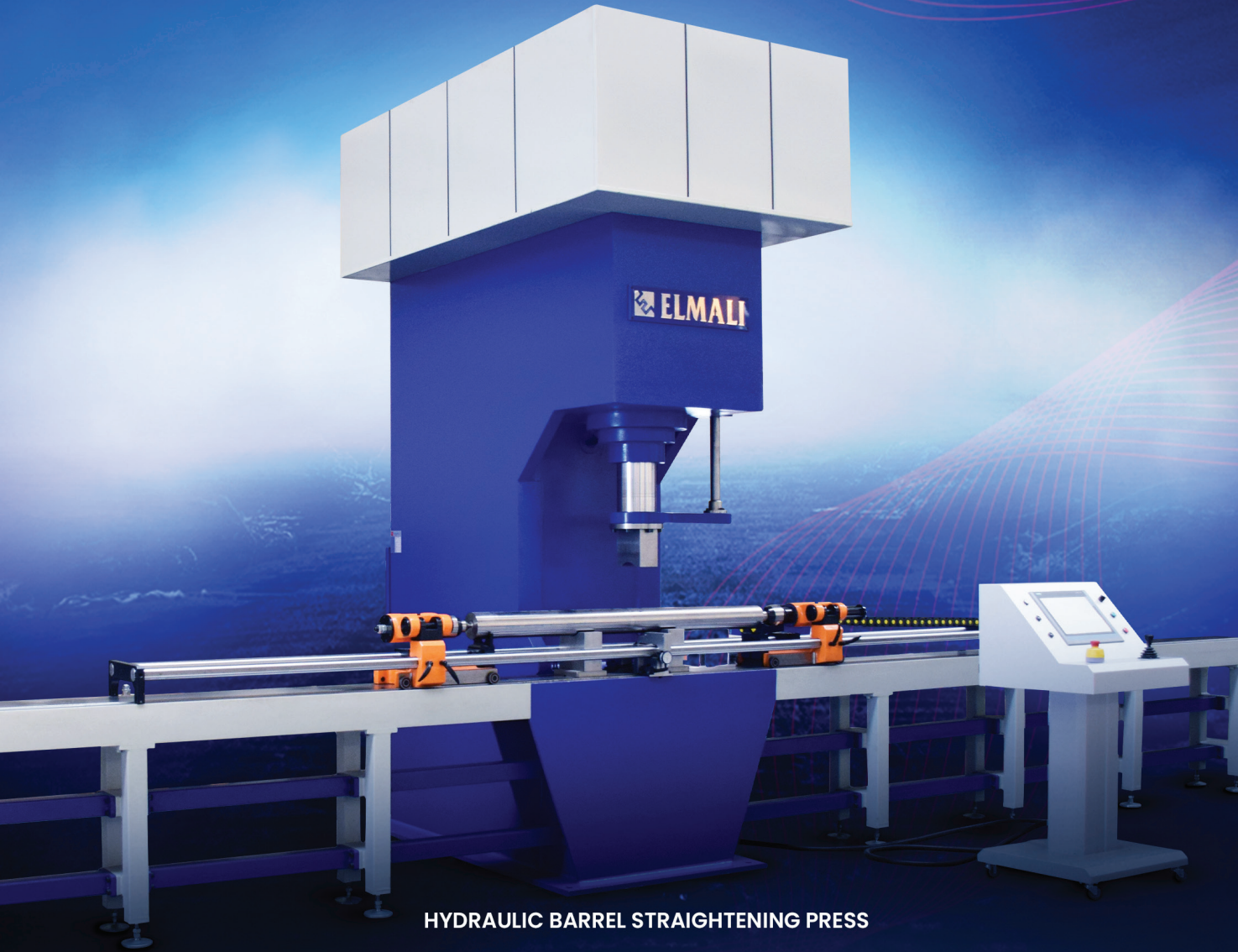




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**MACHINES FOR METAL FABRICATION;
FROM SCREWS TO SEA VESSELS,
FROM BULLETS TO ROCKETS.**

MACHINES FOR COMPOSITE MATERIALS



HYDRAULIC BARREL STRAIGHTENING PRESS

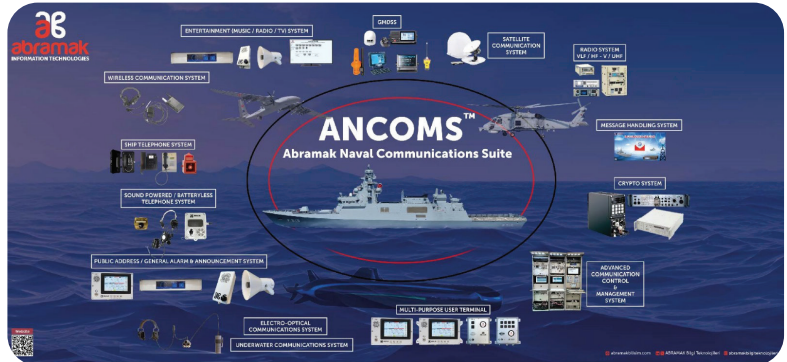
ELMALI
SHEET METAL WORKING MACHINES
SAC İŞLEME MAKİNALARI

ABRAMAK



ABRAMAK Information Technologies, located at Teknopark Istanbul-Turkiye, is an innovative company with its core competency in Integrated Communication Systems (ICS).

As its main role being Communications Systems Integrator, ABRAMAK provides modern technology, tailor made, turnkey integrated solutions for naval/maritime domain, as well as other defense users.



Abramak Naval Communication Suite (**ANCOMS™**), is a state-of-the-art IP based, fully integrated communications solution designed and built for the mission-critical, demanding requirements of naval domain. Our solutions are in service of nine navies worldwide.

ANCOMS™, provides ultimate convenience for the user for wired/ wireless, voice/data, secure/non-secure communications tasks, by establishing seamless integration of all available internal and external communications assets.

ANCOMS™' modular and scalable architecture is suitable for both new build and re-fit projects from submarines to surface vessels of any size. Redundancy in hardware and software ensures efficient, uninterrupted, radio communications for ship-to-ship, ship-to-air, ship-to-shore for joint operations. Built to military standards, ANCOMS™ fits well to highly demanding operational environments. Some benefits of ANCOMS™ can be listed as follows:

- Radio Communications for Ship-to-ship, ship-to-air, ship-to-shore for **joint operations**,
- Data communications over radio network, WAN and LAN,
- Redundant architecture for survivability and availability, no single point of failure,
- Low-cost integration of diverse systems,
- **Interoperability** with different communications systems,
- Efficient communication planning, management and control,
- Quick operational configuration with pre-defined scenarios for each mission,
- Management of multiple, secured voice sessions.

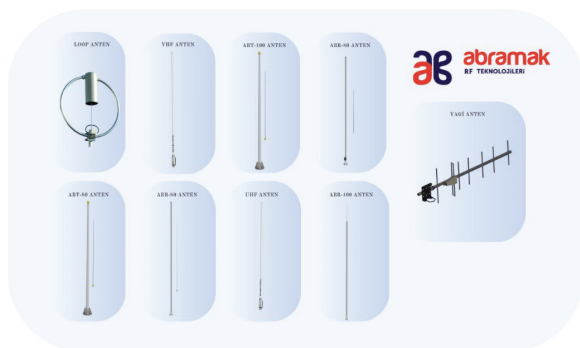
ANCOMS™
Abramak Naval Communications Suite

- IP based, cutting-edge VoIP and RoIP communications,
- Fully integrated internal and external communications,
- Converges all communication equipment into a single operator terminal,
- Redundant, modular, highly scalable design.



ANCOMSTM accommodates switching, resource allocation, management and control of the fully integrated suite. Multi purpose user terminal stations (UTS), converges all onboard communication equipment into a single device. Some of the functionalities of UTS can be listed as follows:

- Point-to-point and conference calls,
- Full access to all available onboard communication equipment,
- **Remotely controlling of radio equipment,**
- Touch screen and programmable push button models,
- Handsfree usage by built-in microphone and loudspeaker,
- **Dual network connection with PoE**, no need for a separate power cable.



Usage of the VoIP (Voice over IP) and RoIP (Radio over IP) enables efficient, reliable and cost-effective solutions with built-in capability for future upgrades.

ANCOMS™ integrates virtually all available internal and external (radios, SatCom, Underwater telephony, Electro-optical comms) communication assets, regardless of their make & models.

But we also offer our own products such as: PAGA/Ship Entertainment System, Wireless Interior Communication System (WifCom), Ship Telephone system, SPT System, Message Handling System (MHS) etc.



Unmatched benefit of this WifCom system is for Damage Control & Fire Fighting activities of Ship's Repair Party. WifCom system can deliver not only voice but also data such as photos and videos throughout the ship. WifCom system can be implemented for new shipbuilding as well as re-fit for the existing platforms.

Our **MHS** solution is compliant with NATO requirements and also compatible with SAMMS and Postman III solutions existing in the market.

We recently added our in-house design **antennas** to our product portfolio. We offer a wide range of **HF/VHF/UHF antennas for land and naval applications.**

Advanced Message Processing System (S-AMPS)

The screenshot displays the ACCMS (Advanced Communication Control Management System) web application. At the top left is the Alcatel-Lucent logo. The main header features the title "ACCMS" in large blue letters, followed by the subtitle "ADVANCED COMMUNICATION CONTROL MANAGEMENT SYSTEM". Below this is a navigation menu with options like Home, Messages, Reports, Settings, and Help. The central area shows a "Message Handling System" configuration page. This includes sections for "S'MMS Address for This Station" (listing various addresses), "SMTP User for M'P System" (set to root@accms.com), "SMTP Details" (server: smtp.gmail.com, port: 587), and "M'P Session Parameters for M'P System" (including session name, ID, and timeout settings). A table below lists message records with columns for Row ID, Station Name, Message Type, Status, Date/Time, and Action. The bottom section contains tabs for "New M'P Entry", "M'P Record History Records", "M'P Recordings (by domain)", "New M'P Entry", "M'P Search Query", and "M'P Search Results".

KuanTek LWIR Camera Core



SYSTEM OVERVIEW		VIDEO FORMAT OPTIONS (Interface Board Dependent)
Sensor Type	ATTO1280 / PICO640	Option 1: Ethernet, MIPI, USB3.0
Pixel Size	12 μm / 17 μm	Option 2: Analog Video, HDMI, MIPI, USB3.0
Spectral Response	LWIR	Option 3: SDI, MIPI, USB3.0
PHYSICAL ATTRIBUTES		RESOLUTION
Size / Weight	44x44x46mm / 60g	1280x1024p 25Hz up to 60Hz for ATTO1280
Mounting Interface	2x DF40C-80DP	640x480p 25Hz up to 60Hz for PICO640
POWER		
Input Voltage	5 VDC +/- %1	
Power Dissipation	<4W @60 Hz , <3W @25 Hz	
Time to Image	<5 seconds	
ENVIRONMENTAL		
Operating Temperature Range	-40 °C up to 65 °C	
Storage Temperature Range	-50 °C up to 85 °C	
Vibration	4.3 g 3 axes, 8 hours each	
Shock / Temperature Shock	200g shock pulse w/ 11 msec sawtooth	
OPERATION & CONTROL		
Image Control	Frame Averaging and Skip, TPNUC, BPR, DN, DDE,ACE, x0.5-x8 Continuous Digital Zoom, Frame Flip, Color Map, Symbology	
Camera Control	Autonomous, Manual via GUI or Serial Interface	
Accessories	Video & Communication Expansion Board	
TPNUC : Smart Non-Uniformity Correction BPR : Bad Pixel and Replacement DN : Denoising		



Kuantek provides high-performance camera modules for defense, security, and industrial applications through its advanced solutions in long-wave infrared (LWIR) imaging systems. The camera modules developed by the company stand out with their high resolution, advanced image processing algorithms, and broad environmental durability.

LWIR Camera Modules

Kuantek's LWIR camera solutions are offered in two resolution options:

- 640x480 pixels
- 1280x1024 pixels

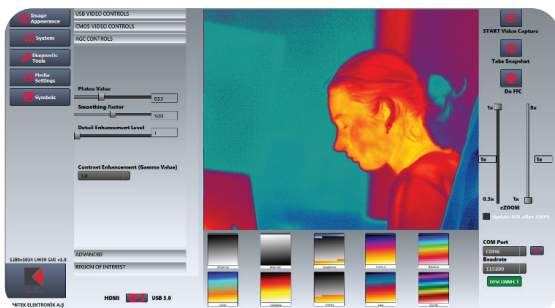
These modules are designed to operate reliably and stably under harsh environmental conditions ranging from -40°C to +65°C. Their suitability for both industrial and military use enhances overall system reliability.

Image Processing Features

Thanks to advanced digital image processing algorithms integrated into the camera modules, high quality and noise-free images can be obtained even in low-contrast scenes.

Key features include:

- TP-NUC (Two-Point Non-Uniformity Correction): Corrects sensor-based thermal inconsistencies to deliver uniform imaging.
- BPR (Bad Pixel Replacement): Detects and corrects defective pixels caused during production or developed over time.
- DDE (Digital Detail Enhancement): Enhances the level of detail in images.
- ACE (Adaptive Contrast Enhancement): Dynamically improves contrast based on scene content.
- Denoising: Reduces spatial noise that may occur during prolonged operation.



These algorithms make thermal images more comprehensible and easier to analyze.

Video Interface Modules

The camera systems support multiple video output interfaces for seamless integration across different application environments:

- Ethernet
- HDMI
- SDI
- Analog
- MIPI
- USB

This flexibility allows the systems to be easily integrated into both fixed and mobile platforms, supporting a wide range of use cases.

PTZ and Gimbal Camera Systems

Kuantek's PTZ (Pan-Tilt-Zoom) and gimbal electro-optical systems integrate LWIR/SWIR/MWIR thermal cameras with daytime vision cameras to enable multi-sensor fusion. The system can determine and overlay the target's real-time position on the image using auxiliary components such as GPS, compass, and laser rangefinder.

Advanced features include:

- Human and vehicle detection
- Target classification and tracking
- Thermal and optical image fusion
- Remotely controllable pan-tilt and optical zoom mechanism

These systems are used in scenarios such as military surveillance, border security, search and rescue, strategic facility monitoring, and integration with unmanned aerial, ground, and naval vehicles.

Application Areas

Kuantek's electro-optical solutions are widely used in the following areas:

- Military and security surveillance
- Integration with UAVs and ground vehicles
- Border security and critical infrastructure protection
- Industrial thermal monitoring and maintenance systems
- Embedded image processing and intelligent analytics platforms

DEFENSEHERE INTERVIEWS

EDGE expands in Latin America with investments and joint programs

EDGE



Iveco Defence Vehicles in Focus: Expanding Lineup and Global Reach

IDV



Red Cat brings tough and smarter drones to the battlefield

RED CAT



BAE Systems' CV90120: High Firepower, Less Weight

BAE SYSTEMS



Gladiator 13 by Thales offers realistic simulation for armed forces

THALES



Boeing Defense displayed its products at Egypt International Airshow

BOEING



Lockheed Martin signs three new agreements at IDET 2025

LOCKHEED MARTIN



Viper Shield: L3Harris' digital armor for the F-16

L3HARRIS™



Airbus H145 and Flexrotor address multi-mission operational demands

AIRBUS



Sikorsky's Black Hawk Still Sets the Standard After 40 Years

SIKORSKY
A LOCKHEED MARTIN COMPANY



DEFENSEHERE INTERVIEWS

Inside John Cockerill's 3105 Turret and FNSS partnership



Word Defense Show 2024: Naval Group's vision for Saudi Defense



What is Embraer Defense and Security doing in 2023?



Patria's SONAC ACS and 120 mm mortar at EURONAVAL



ASW Frigates and Beyond – Damen at Euronaval 2024



Autonomous Ocean Core: Saab's cutting-edge maritime control system



KAI proposes FA-50 as future asset for Iraq



Navantia eyes long term presence in Türkiye



What makes NASAMS unique? Kongsberg VP explains



KONGSBERG



LIG at IDEX 2025: L-SAM, M-SAM2 and growing influence in the region



DEFENSEHERE INTERVIEWS

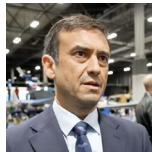
Mitsubishi Electric showcased satellite innovations at ADAS 2024



Leonardo presents its Virtual and Extended Reality Simulator



Airbus official highlights mutual benefits of Türkiye-Eurofighter cooperation



Bombardier explores partnerships for Middle East expansion



Bombardier



MBDA supports Saudi Vision 2030 at WDS 2024



Hanwha Aerospace's vision for 6th-gen jet engines



Hanwha



Proven tech: UK's IrvinGQ offers solutions in aerial delivery



KNDS CAESAR self-propelled howitzer the best solution worldwide for artillery?



Hensoldt "committed to support Saudi Vision 2030"



Hyundai eyes Middle East market for shipbuilding

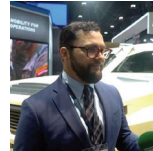


DEFENSEHERE INTERVIEWS

AeroVironment introduces JUMP 20-X and P550 at IDEX 2025



GM Defense showcases “Next Gen” tactical vehicle at IDEX 2025



Bharat Electronics Showcases Advanced Defense Solutions at AAD Expo South Africa



SIG SAUER reveals US Army’s next-gen firearms at IDEX 2025



Shahpar III and beyond: Pakistan’s GIDS expands global reach



Combat vehicles get smarter with Indra’s “Maestre” mission system



General Atomics restarts production of the upgraded Do228



Rosoboronexport unveils their combat scout-attack helicopter KA-52E



Diehl Defence advances Counter-UAS capabilities with CICADA



BrahMos Aerospace presented upcoming technologies



UNITED KINGDOM'S BRIEF DEFENSE LANDSCAPE

In 2025, the UK's military is shifting to a "warfighting" posture with a focus on high-intensity conflict. This modernization effort, backed by an increased budget, is outlined in the 2025 Strategic Defence Review.

The British Army is restructuring into self-sufficient Brigade Combat Teams equipped with Challenger 3 tanks, Ajax armored vehicles, and Boxer infantry vehicles. The Army is also investing in long-range precision fires, advanced air defenses, and enhanced cyber and electronic warfare capabilities.

The Royal Navy is developing a "New Hybrid Navy" around its two Queen Elizabeth-class aircraft carriers. This future fleet will include Dreadnought and SSN-AUKUS submarines, next-generation surface warships, and autonomous vessels. The Royal Air Force is focused on next-generation air power, centered on its F-35 and upgraded Typhoon fleets.

Its long-term vision includes a mix of crewed and uncrewed platforms, with new systems being developed through the Global Combat Air Programme (GCAP), a collaboration with Japan and Italy.

While the UK's military has ambitious modernization plans, it faces several challenges. The government must balance its increased defense spending against economic and geopolitical pressures.

The military also has a recognized gap in technology and personnel, and its doctrine and training are still transitioning from counterterrorism to high-intensity warfare. To support its military and economic goals, the UK is strengthening its defense industrial base.

This includes a £6 billion investment in munitions, the creation of new factories, and a focus on developing sovereign capabilities like continuous submarine production.

To drive this effort and boost exports, the government has established a new National Armaments Director and a new Defence Exports Office. A £400 million fund is also being used to support a new UK Defence Innovation organization.

DSEI UK

The 2025 Defence and Security Equipment International (DSEI) exhibition in London is a major event for the UK's defense sector. The biennial event's theme is "Preparing the Future Force" which aligns with the UK's goal of creating a high-tech, integrated, and resilient military by 2030.

The exhibition highlights the UK's focus on innovation, digital transformation, and advanced capabilities like cyber, space, and autonomous systems. It serves as a platform to showcase the UK's defense industry and promote exports, with key figures from the government, military, and various British defense companies in attendance.

DSEI UK 2025 will feature live demonstrations and thematic zones that highlight emerging defense technologies. The Future Combat Air System (FCAS) will be a key focus, showcasing the UK's next-generation fighter jet program. The Multi-Domain Integration (MDI) Hub will demonstrate how different military branches can work together across land, sea, air, cyber, and space.

The event will also host seminars and speeches on critical topics like sustainable defense and the ethical use of artificial intelligence in warfare. These sessions aim to establish DSEI as a forum for strategic thought leadership, not just a trade show.