



Company Presentation

COMPANY



SECANT is a defence & aerospace company that provides *systems/sub-systems, products* and *engineering services / consultancy* for air, land and naval platforms on

SURVIVABILITY SYSTEMS and ADVANCED COMPOSITES

SECANT was established in 2013 and continues its activities in Eskişehir, TÜRKİYE with «*TE-256 (NCAGE Code)*» and «*51-999-5352 (D-U-N-S[®] Number)*».



AS 9100

Quality Management System



NATO / National

Facility Security Clearance



Registered Company by Turkish
«*Ministry of Industry & Technology*»



Registered Company by Turkish
«*Presidency of Defence Industries*»



CLIENT PORTFOLIO



www.roketsan.com.tr



www.bmc.com.tr



<https://ctech.com.tr>



www.mpg.com.tr



www.mam.tubitak.gov.tr



www.meteksan.com



www.fnss.com.tr



www.stm.com.tr



www.aselsan.com.tr



www.otokar.com.tr



www.asfat.com.tr



www.anadoluisuzu.com.tr



<https://www.mke.gov.tr>



www.turkishtech.com



INTERNATIONAL ARMORED GROUP

www.interarmored.com




www.kolumanotomotiv.com



<https://krantasgroup.com>



www.ukrarmor.com



SURVIVABILITY SYSTEMS

WHAT WE PROVIDE



ENGINEERING SERVICES & TRAINING / CONSULTANCY



- ✓ Design, develop and validate the «System» on behalf of the customer.
- ✓ Deliver the Technical Data Package (TDP) to the customer.
- ✓ The customer manufactures the «System» by themselves.
- ✓ Support the customer during the production & integration phases.
- ✓ IP Rights belongs to **the Customer**.

ENHANCED-PRODUCTS

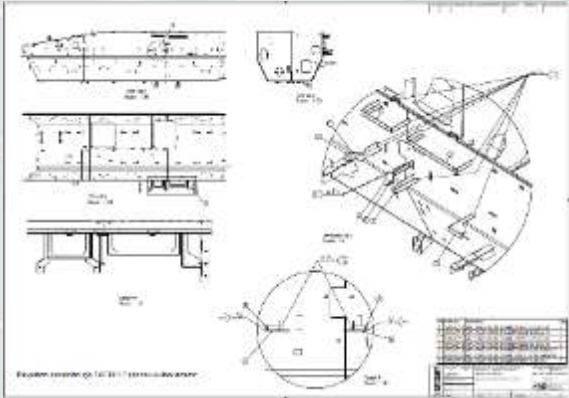
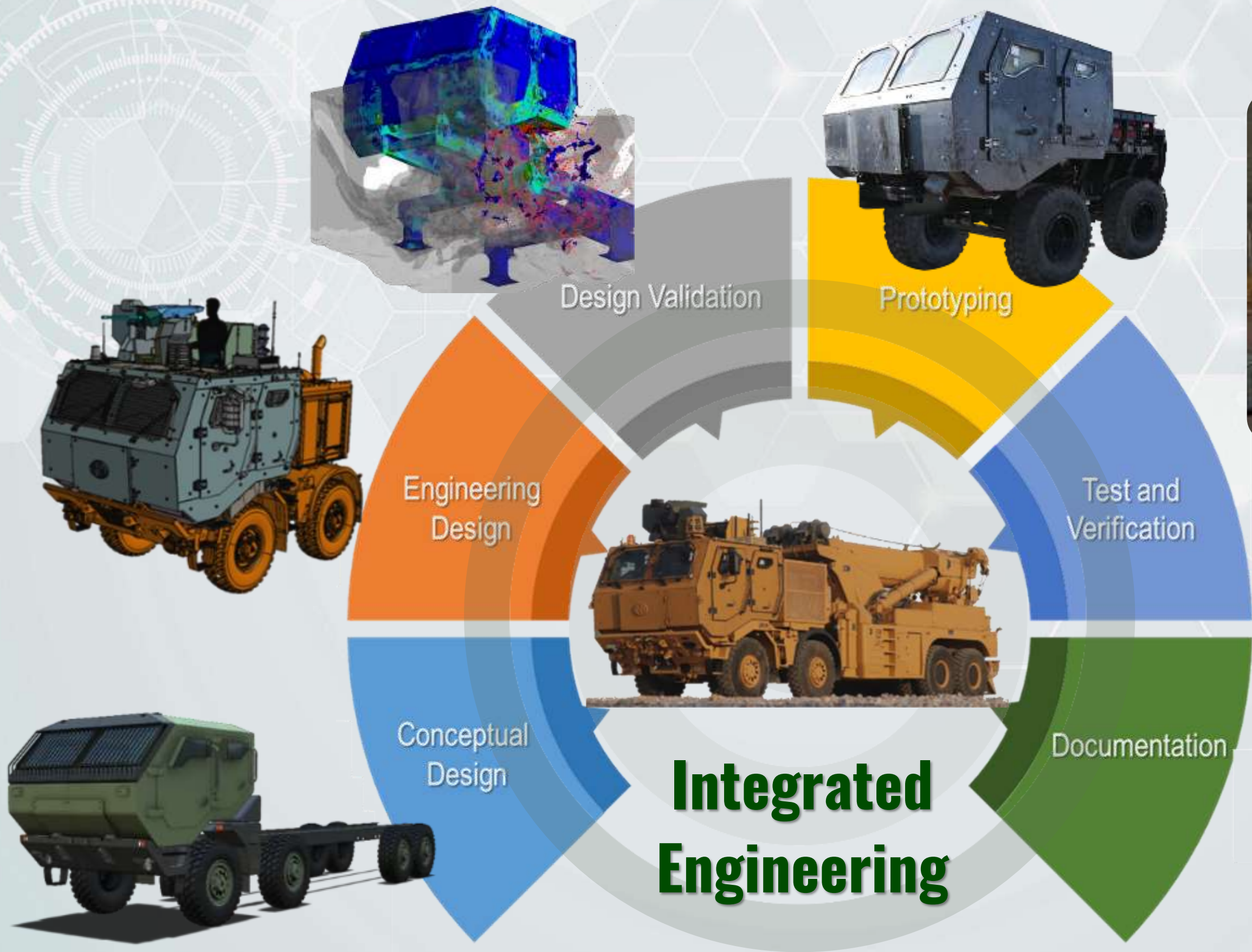


PATENTED
PRODUCT



- ✓ Designed, developed and validated for the market.
- ✓ Could be customized according to customer specific requirements.
- ✓ Produced then delivery to the customer.
- ✓ Support the customer during the integration phase.
- ✓ IP Rights belongs to **SECANT**.

ENGINEERING SERVICES



TRAINING & CONSULTANCY



SECANT offers training and consultancy services on protection technologies and survivability systems in accordance with customer needs (online, individual, on-site, or public).



Individual



On-Site



Public

- ✦ Fundamentals of Protection Technology
- ✦ Armoured Platform Design & Development
- ✦ Survivability – Ballistic & Blast Protection
- ✦ Recommended & Authorized Test Plan
- ✦ Auditing for Design, Development, Test & Validation
- ✦ Vulnerability & Ballistic Protection Analysis

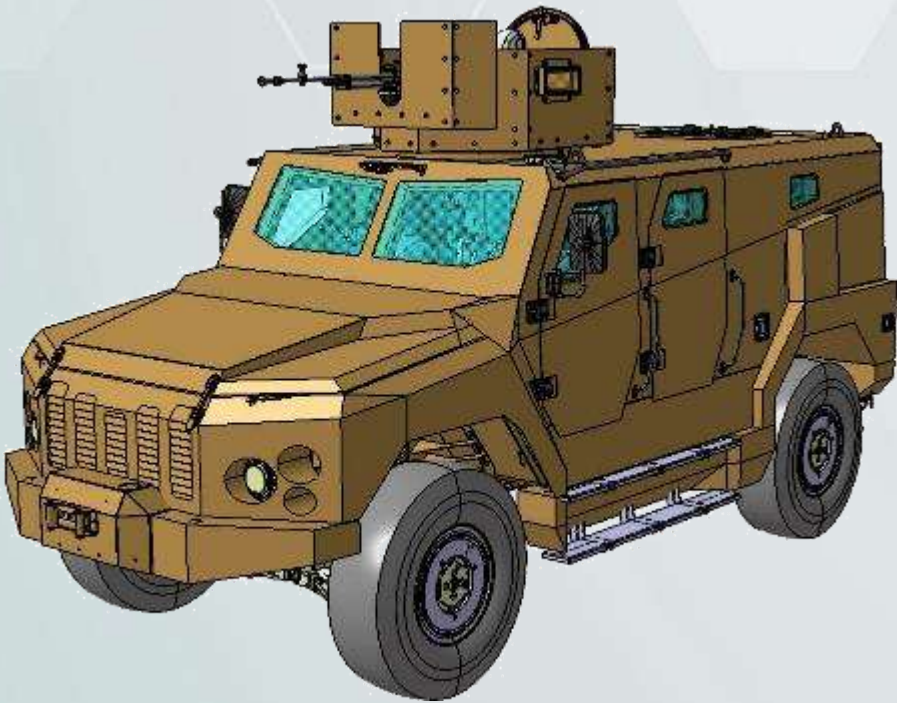


«We are sharing not only theory but also application, experiences, and lessons learned»

KEY PROJECTS



4x4 Armoured Personnel Carriers



UKRAINIAN
ARMOR

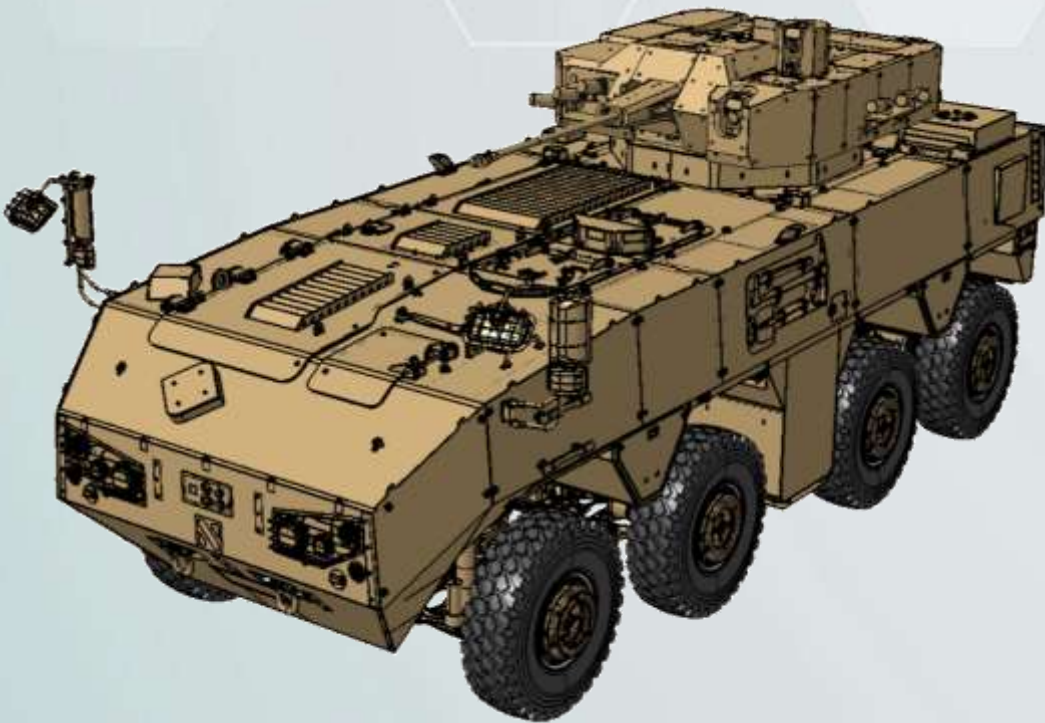
Design and
Manufacturing
Company

BMC

KEY PROJECTS



8x8 Armoured Combat & Recovery Vehicles



KEY PROJECTS



«KIRPI-II» 4x4 MRAP



As a *sub-contractor*, re-designing engine bay structure including with Ballistic Grill in compliance with upgraded mine & ballistic protection. Key deliverables:

- ✓ Survivability Engineering
- ✓ Engineering Design
- ✓ Digital Prototyping
- ✓ Design Validation
- ✓ Test and Verification
- ✓ Documentation (Technical Data Package) and
- ✓ Technology Transfer of Add-On Armour System



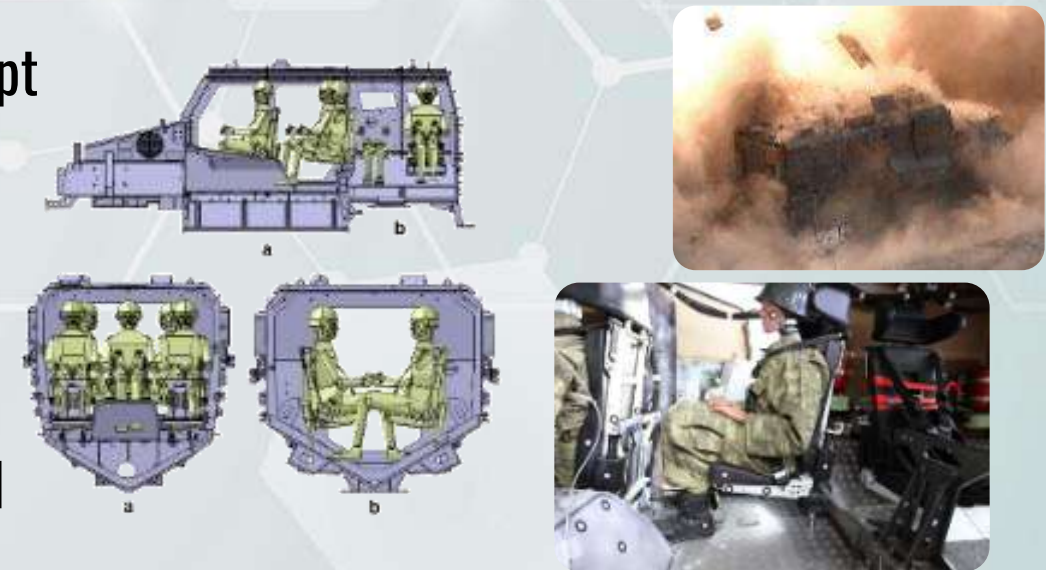
BMC

«AMAZON» 4x4 APC



Survivability and Test & Verification Engineering *consultancy* during design, development, test & verification phases of the project. Key deliverables:

- ✓ Ballistic & Mine Protection Concept
- ✓ Vehicle Body Structure Design
- ✓ Mine Blast Simulations
- ✓ Test & Evaluation Master Plan and
- ✓ Manufacturing of Spall Liner, Heavy-Duty Hinge & Weapon Holder

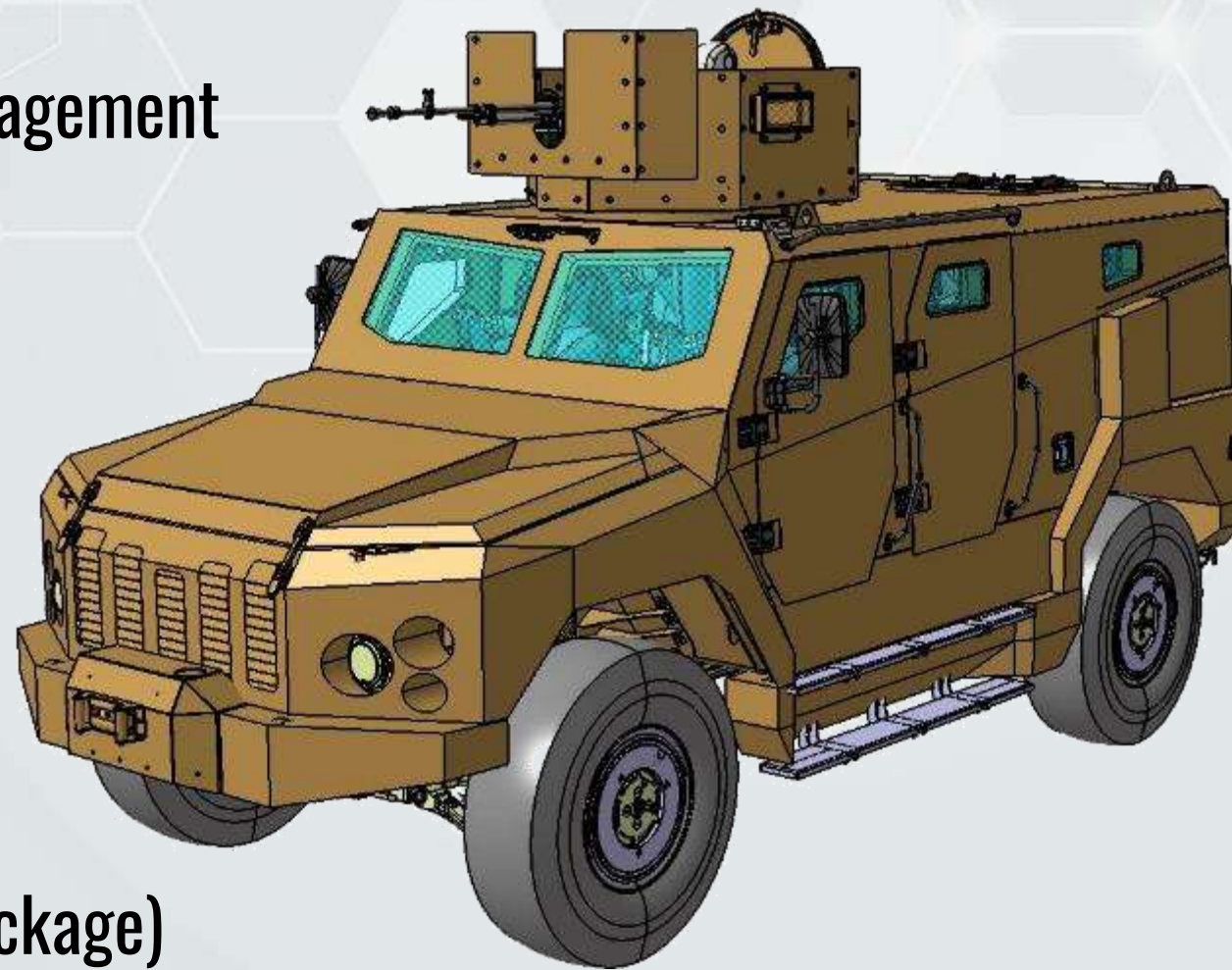


BMC

«VARTA-II» 4x4 ARMoured PERSONNEL CARRIER (APC)

As a *main engineering contractor*, design, prototyping, and qualification of 4x4 APC vehicle in accordance with customer's technical & tactical requirements. Key deliverables:

- ✓ System Engineering & Project Management
- ✓ Survivability Engineering
- ✓ Conceptual & Industrial Design
- ✓ Engineering Design
- ✓ Design Validation & Prototyping
- ✓ Documentation (Technical Data Package)
- ✓ Test and Verification Consultancy



«M4K» 8x8 ARMoured RECOVERY VEHICLE

As a *sub-contractor*, design, prototyping, and qualification of ballistic & mine protected cab structure in accordance with project requirements. Key deliverables;

- ✓ Survivability Engineering
- ✓ Conceptual & Industrial Design
- ✓ Engineering Design & Digital Prototyping
- ✓ Design Validation & Prototyping
- ✓ Test and Verification Consultancy
- ✓ Documentation (Technical Data Package) and
- ✓ Manufacturing of Add-On Armour, Spall Liner, Mine Lock, Heavy-Duty Hinges & Weapon Holder



«RILA» 8x8 ARMoured PERSONNEL CARRIER (APC)

As a *main engineering contractor*, design, prototyping, and qualification of 8x8 APC vehicle in accordance with customer's (NATO Country) technical & tactical requirements. Key deliverables:

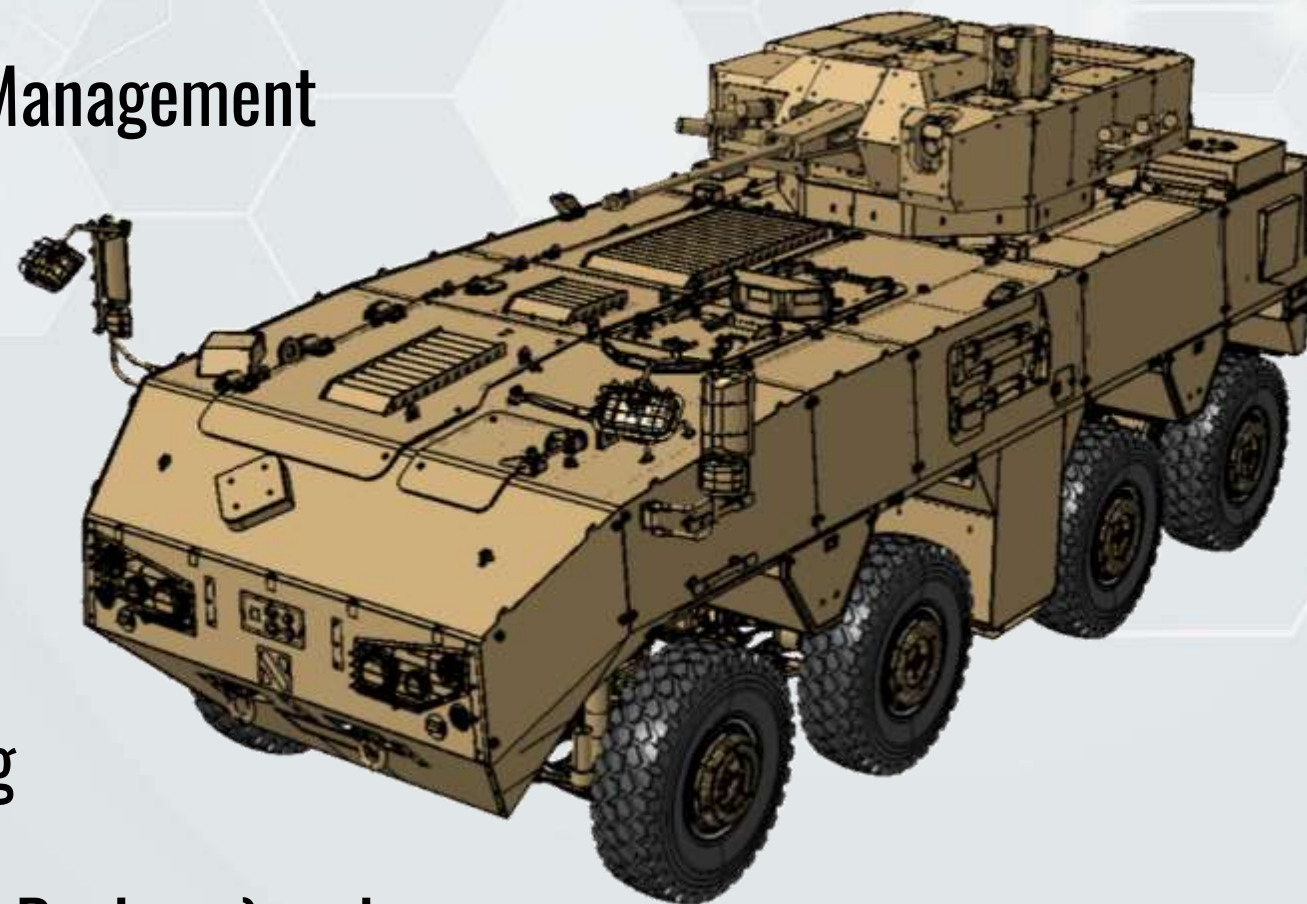
- ✓ System Engineering & Project Management
- ✓ Survivability Engineering
- ✓ Conceptual & Industrial Design
- ✓ Engineering Design
- ✓ Design Validation & Prototyping
- ✓ Test and Verification Consultancy
- ✓ Documentation (Technical Data Package) and
- ✓ Manufacturing of Spall Liner, Mine Lock, Heavy-Duty Hinges & Weapon Holder



«ARSLON» 8x8 ARMoured COMBAT VEHICLE (ACV)

As a *main engineering contractor*, design, prototyping, and qualification of 8x8 ACV vehicle in accordance with customer's technical & tactical requirements. Key deliverables;

- ✓ System Engineering & Project Management
- ✓ Survivability Engineering
- ✓ Conceptual & Industrial Design
- ✓ Engineering Design
- ✓ Design Validation & Prototyping
- ✓ Documentation (Technical Data Package) and
- ✓ Manufacturing of Mine Lock, Heavy-Duty Hinges & Weapon Holder



ENHANCED-PRODUCTS



Spall Liner & Composite Armour



TENON[®]
(Weapon Holder)



Ballistic Grill

Mine Lock

PATENTED
PRODUCT

Add-On Armour



Weapon Holder (TENON)

- ✦ Suitable for Military & Tactical Use
- ✦ Ergonomic and Easy-to-Use (One-Hand On-Off Capability)
- ✦ Compatible with Different Rifle Models
- ✦ No Need Additional Strap, Strip, Rubber Rope...etc
- ✦ Wide Grip Range (25 mm to 80 mm)
- ✦ Surface Coating for Corrosion Resistance & Plastic Coating to Prevent Scratching & Damage
- ✦ Tested & Qualified at Stanag 4569 Level 4a/4b Mine Blast & 150 Kg TNT Side Blast
- ✦ Approved by Turkish Army and Land Vehicle Manufacturers



Compatible with All
Weapon Models &
Variants



Ergonomic and
Easy-to-Use Latch
System



Resistance to
Blast and Shock
Effects



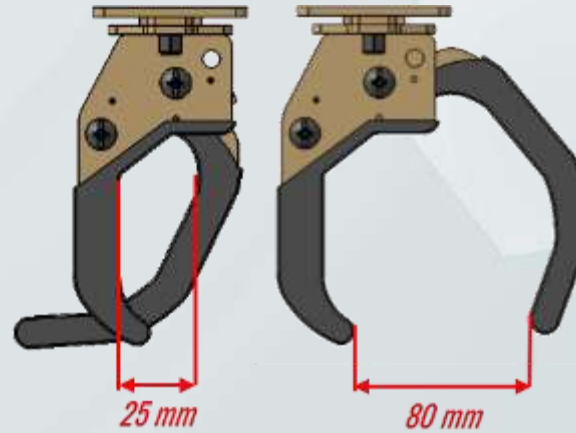
Can be Configured
for Different
Assembly
Requirements



One Solution for All Kinds of Weapon



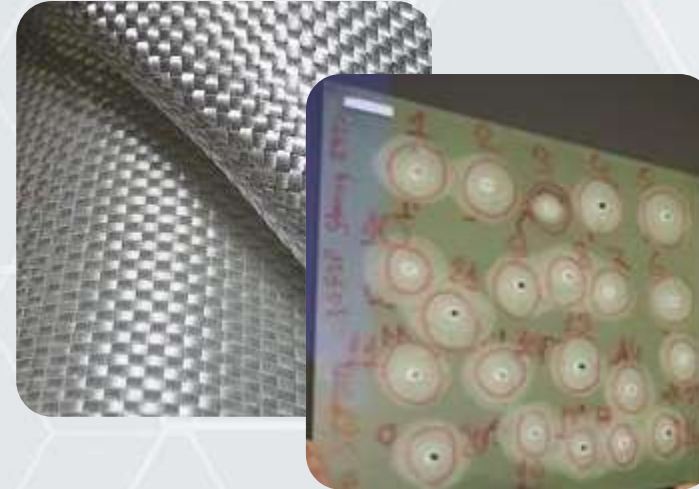
In Service



TENON®

Spall Liner & Composite Armour

- ✦ Glass-Fiber, Aramid or UHMWPE Material Alternatives
- ✦ Customization for Different Threats, Technical, Tactical & Environmental Requirements
- ✦ Drastic Reduction of Cone Angle & Number of Spall
- ✦ 3D Shaped Solutions for Complex Shapes & Zones
- ✦ Lightweight, Thermal & Corrosion-Resistant, Cut to Shape, Integrated Soft Coating & Insulation, Ready-to Install...etc Alternatives per Customer Needs
- ✦ Support to Interface Design & Integration Phases



Glass-fiber



Aramid



UHMWPE



ENHANCED-PRODUCTS



Add-On Armour

- ✦ Diverse Alternatives for Different Ballistic & Technical Requirements (STANAG, MIL-STD, VPAM...etc)
- ✦ Could be Integrated to Complex (Ballistic & IED) Threats Scenarios
- ✦ Excellent Multi-Hit & Edge-Hit Capabilities
- ✦ Resistance to Environmental Conditions and Vandalism
- ✦ Lightweight, Cost-Effective, Cut to Shape, Metallic, Free of Ceramics...etc Alternatives
- ✦ Support to Interface Design & Integration Phases

*44 Shots on Single
500x500 mm Panel for
Stanag 4569 Level 3*



*Metallic, Composite or
Hybrid according to
Requirements*



M4K (MPG)



KIRPI-II (BMC)



810/1472/1366...etc.

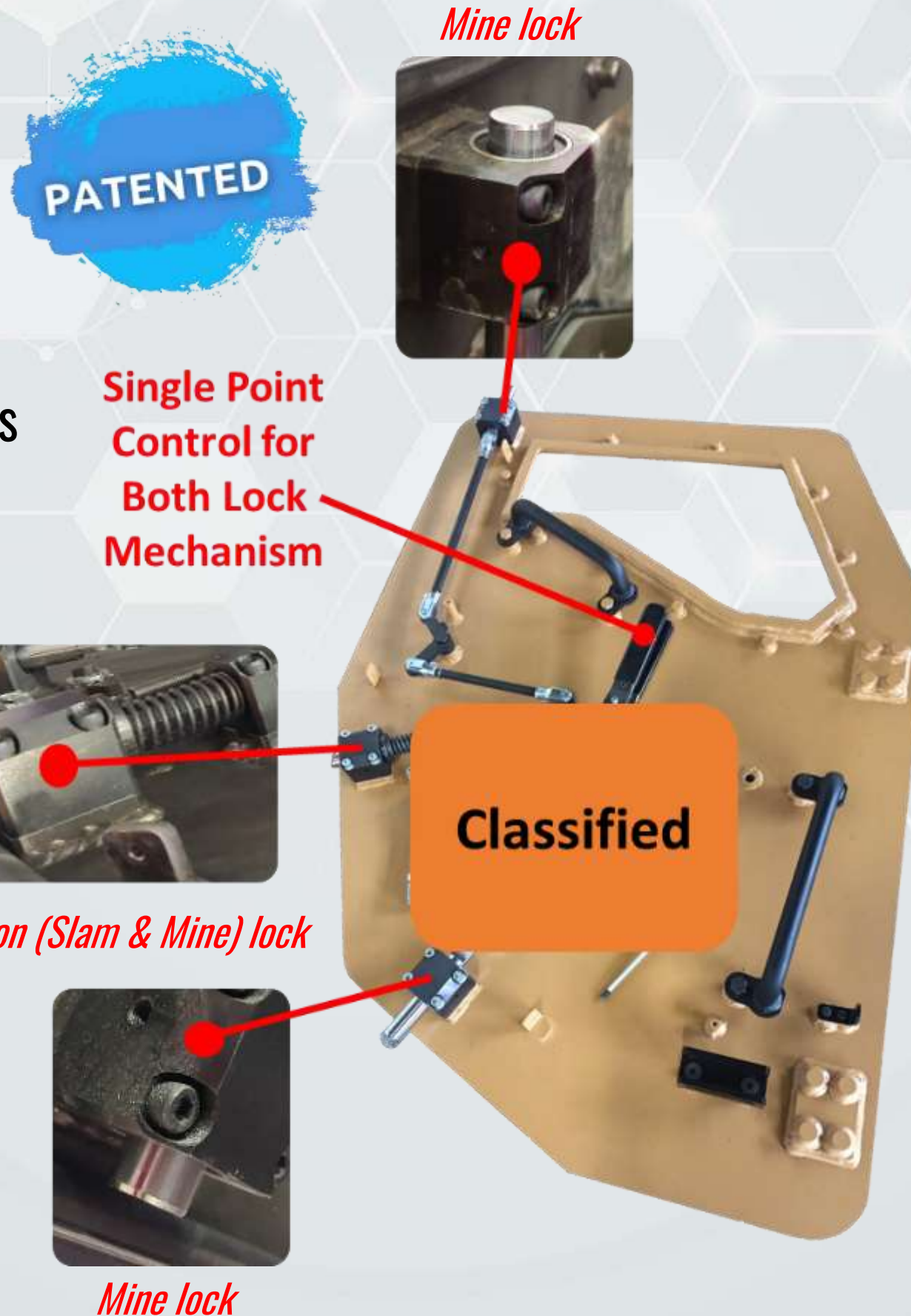
Combat Proven in Service

ENHANCED-PRODUCTS



Mine Lock

- ✦ Resistance to mine & IED effects
- ✦ Ease of use compared to traditional solutions
- ✦ Single-point control for both slam-lock & mine-lock
- ✦ Adaptable design for different vehicle geometries
- ✦ Tested & qualified at Stanag 4569 Level 4a/4b mine blast & 150 Kg TNT side blast



In service



Heavy-Duty Hinge



- ✦ Suitable for use all kinds of door and hatch structures on armoured vehicle (wheeled 4x4, 6x6, 8x8 & tracked) projects.
- ✦ Long service life with internal lubrication system.
- ✦ Excellent robustness & high strength with hot-forged manufacturing method.
- ✦ High corrosion-resistance with protective coating (1000 hours salt-spray test).
- ✦ Preventing uncontrolled movement with self-stopper design feature.
- ✦ Tested & validated with numerous mine blast, ballistic and automotive tests.
- ✦ Currently used in many military vehicles (combat proven).

Heavy-Duty Combination Lock



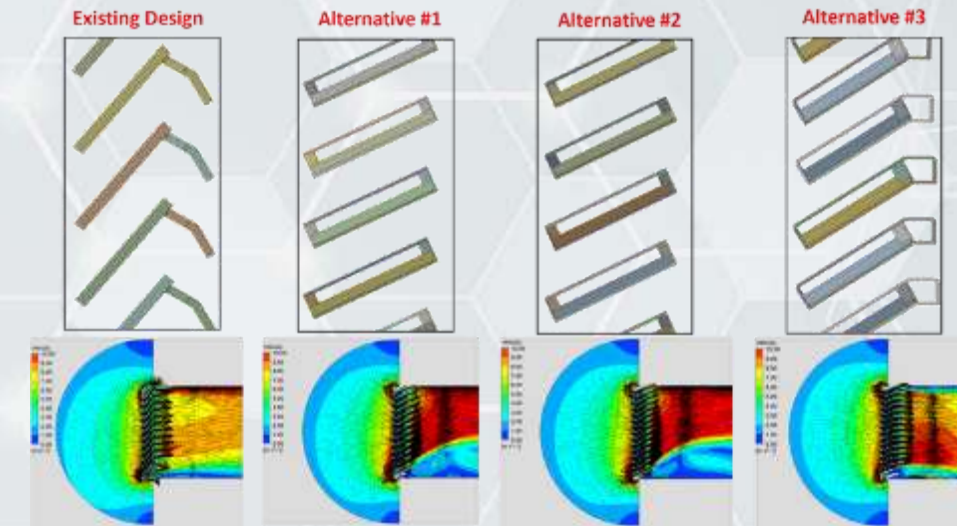
- ✦ Allows to lock the doors & hatches from the outside with vehicle-unique combination-key.
- ✦ Could be customized according to different add-on-armour (AoA) gaps.
- ✦ Suitable for use all kinds of door and hatch structures on armoured vehicle (wheeled 4x4, 6x6, 8x8 & tracked) projects.
- ✦ Long service life with internal lubrication system.
- ✦ High corrosion-resistance with protective coating (1000 hours salt-spray test).
- ✦ Tested & validated with numerous mine blast, ballistic and automotive tests.
- ✦ Currently used in many military vehicles (combat proven).

Ballistic Grill (Grating)

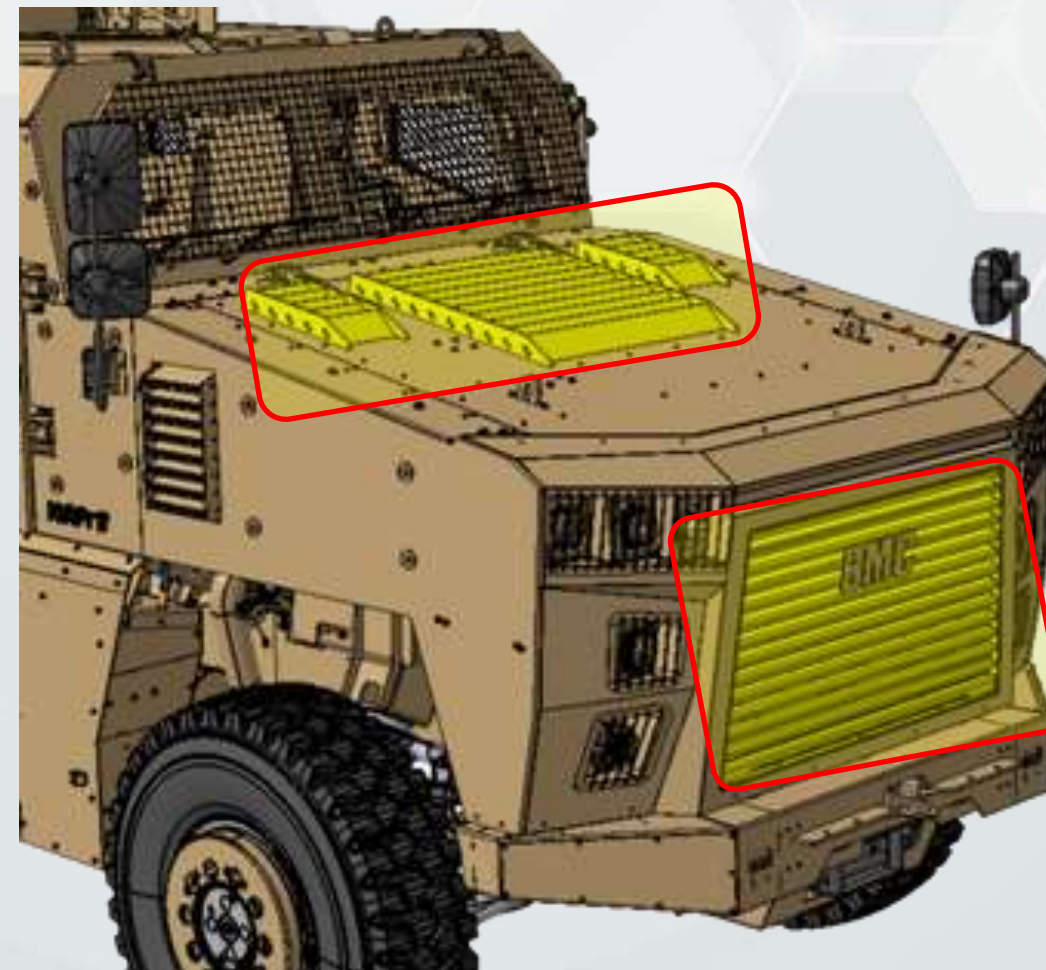
- ✦ Excellent ballistic protection & multi-hit performance
- ✦ Diverse alternatives for different ballistic & technical requirements (AEP, STANAG, MIL-STD, ITOP, SAE...etc)
- ✦ Enhanced air flow & pressure drop properties
- ✦ Resistance to harsh environmental conditions
- ✦ Low & high temperature durability



*Adaptable for all kinds
of armoured vehicles
(wheeled and tracked)
according to technical &
tactical requirements*



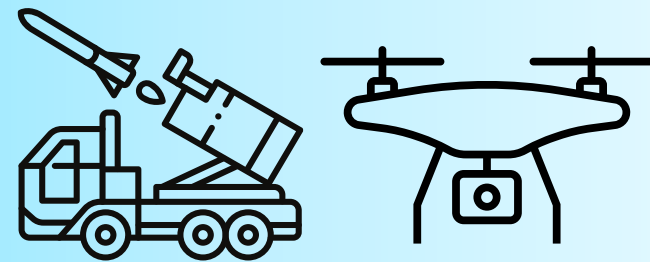
Harmony & optimization of air flow, pressure drop and ballistic protection



In service

ADVANCED COMPOSITES

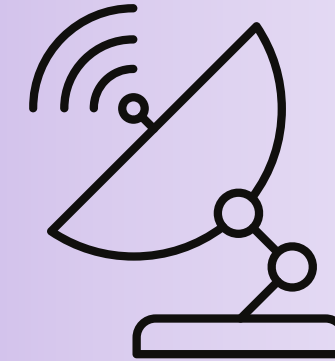
WHAT WE PROVIDE



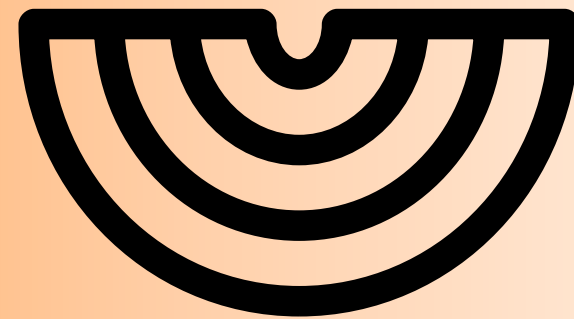
UAV & Missile & Torpedo
Containers



Radome
Structures



Reflector
Structures

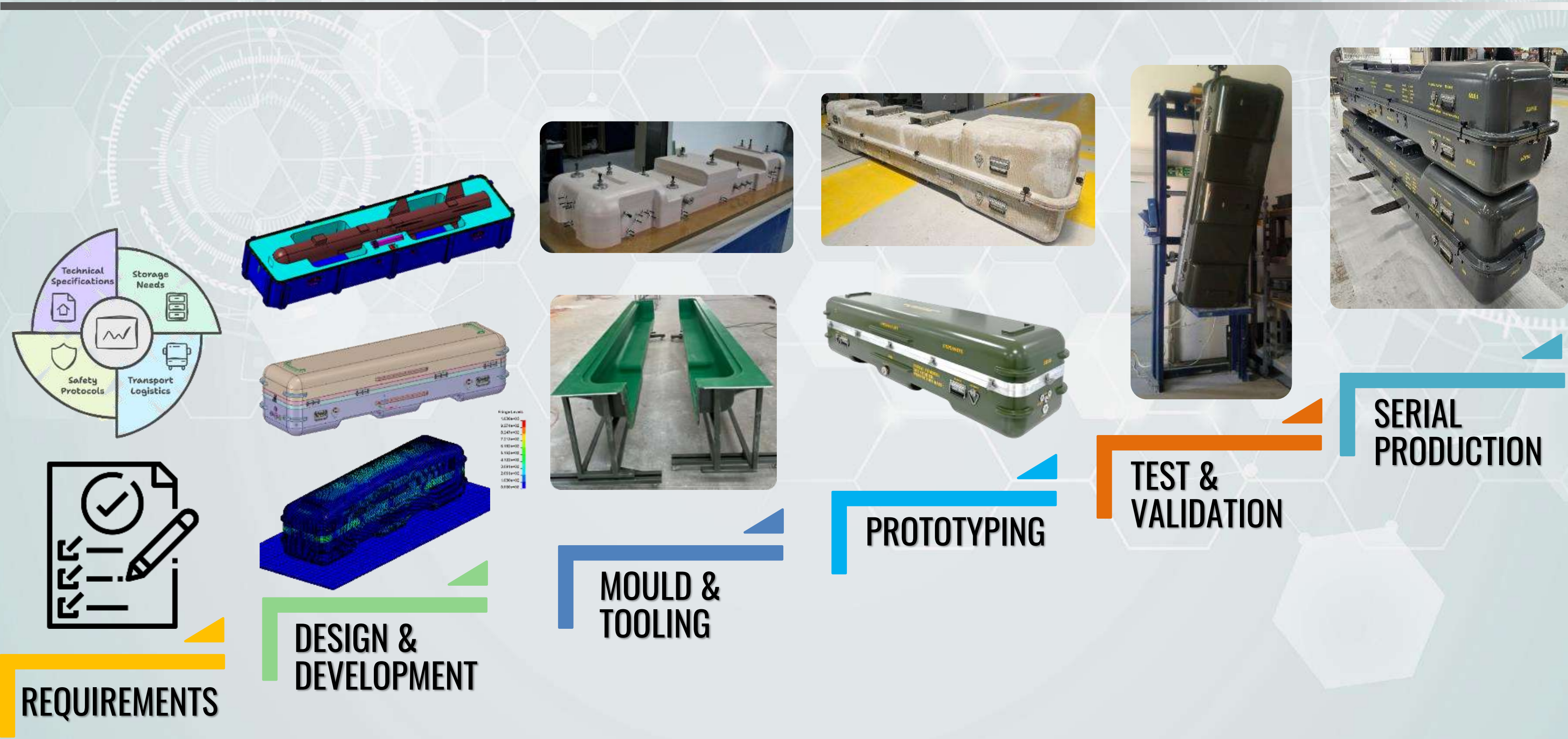


Sonar-Dome
&
Acoustic Head



Tailored Solutions for Air,
Land & Naval Platforms

HOW WE PROVIDE



INFRASTRUCTURE



Manufacturing & Assembly



Clean Room



Curing Ovens



*Resin Transfer Moulding
(RTM) System*



CNC Router



CMM & Laser Scan



Polymer Coating



KEY PROJECTS



UAV / MISSILE / TORPEDO STORAGE & SHIPPING CONTAINER

Design, development and manufacturing unique & modular advanced composite container structure for UAV's, anti-tank missiles and torpedos.



KEY PROJECTS



RADOME STRUCTURES

As a *sub-contractor*, design and manufacturing advanced composite radome structures for various defence & aerospace platforms. Key deliverables:

- ✓ Advanced Composite Engineering
- ✓ Engineering Design
- ✓ Mould Design & Manufacturing
- ✓ Documentation
- ✓ Manufacturing
- ✓ Sustainability & Traceability



REFLECTOR STRUCTURES

As a *sub-contractor*, design and manufacturing advanced composite reflector structures for various defence & aerospace projects. Key deliverables:

- ✓ Advanced Composite Engineering
- ✓ Engineering Design
- ✓ Mould Design & Manufacturing
- ✓ Documentation
- ✓ Manufacturing
- ✓ Sustainability & Traceability



KEY PROJECTS



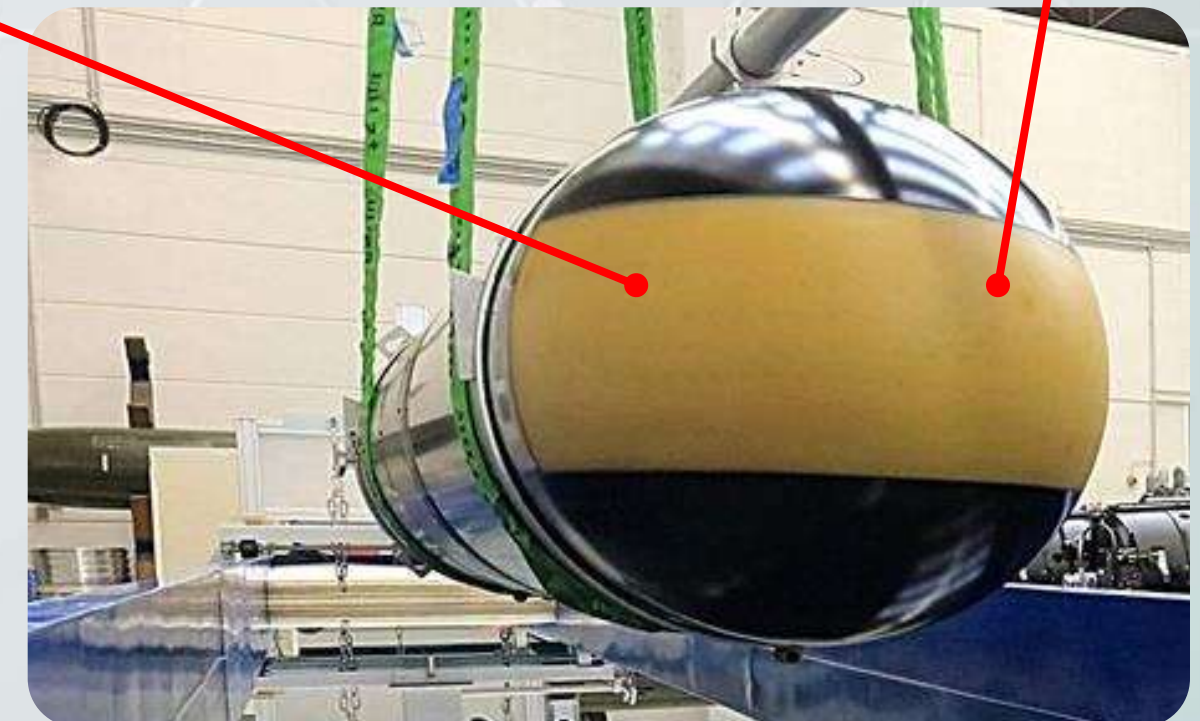
ACOUSTIC HEAD

As a *sub-contractor*, design and manufacturing advanced composite acoustic head structure for heavy torpedo «AKYA». Key deliverables;

- ✓ Advanced Composite Engineering
- ✓ Engineering Design
- ✓ Mould Design & Manufacturing
- ✓ Documentation
- ✓ Manufacturing
- ✓ Sustainability & Traceability



Acoustic Head Assembly on Torpedo



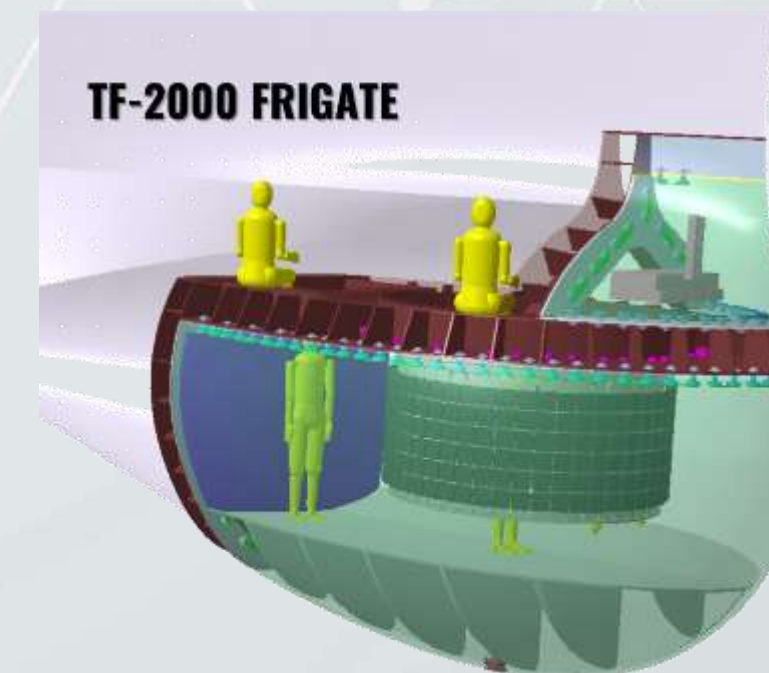
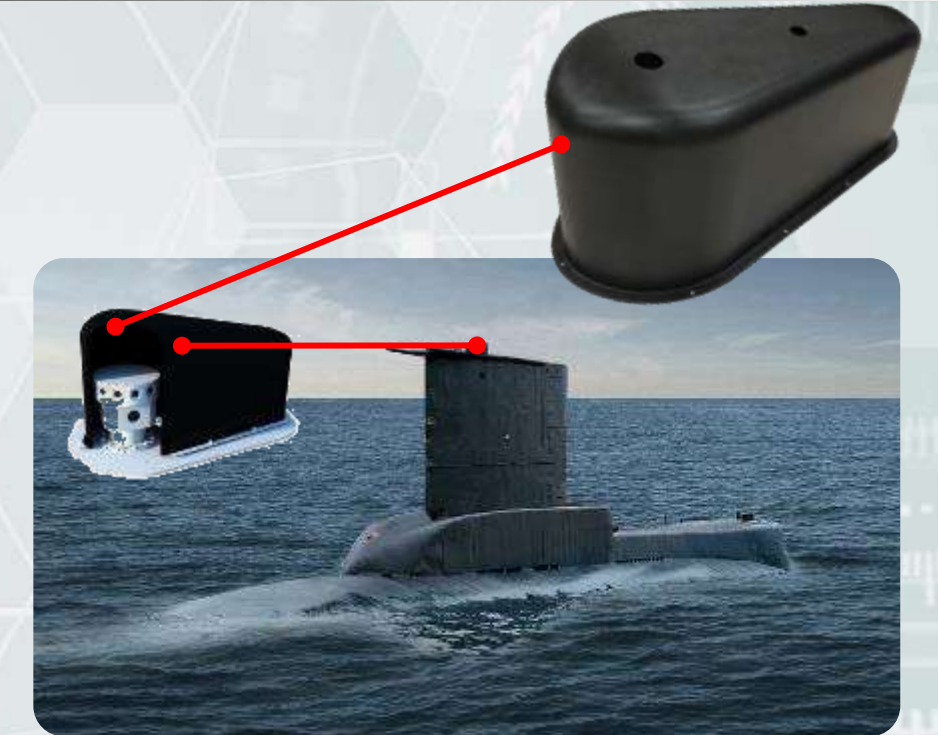
KEY PROJECTS



SONAR DOMES

As a *sub-contractor*, design and manufacturing advanced composite sonar dome structure for naval platforms. Key deliverables;

- ✓ Advanced Composite Engineering
- ✓ Engineering Design
- ✓ Design Validation
- ✓ Test and Verification
- ✓ Documentation (Technical Data Package)
- ✓ Manufacturing & Integration
- ✓ Sustainability & Traceability





www.secantglobal.com

SECANT Defence & Aerospace Inc.



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