



Scant

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



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



<https://krantasgroup.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 themself.
- ✓ Support the customer during the production & integration phases.
- ✓ IP Rights belongs to the Customer.

ENHANCED-PRODUCTS

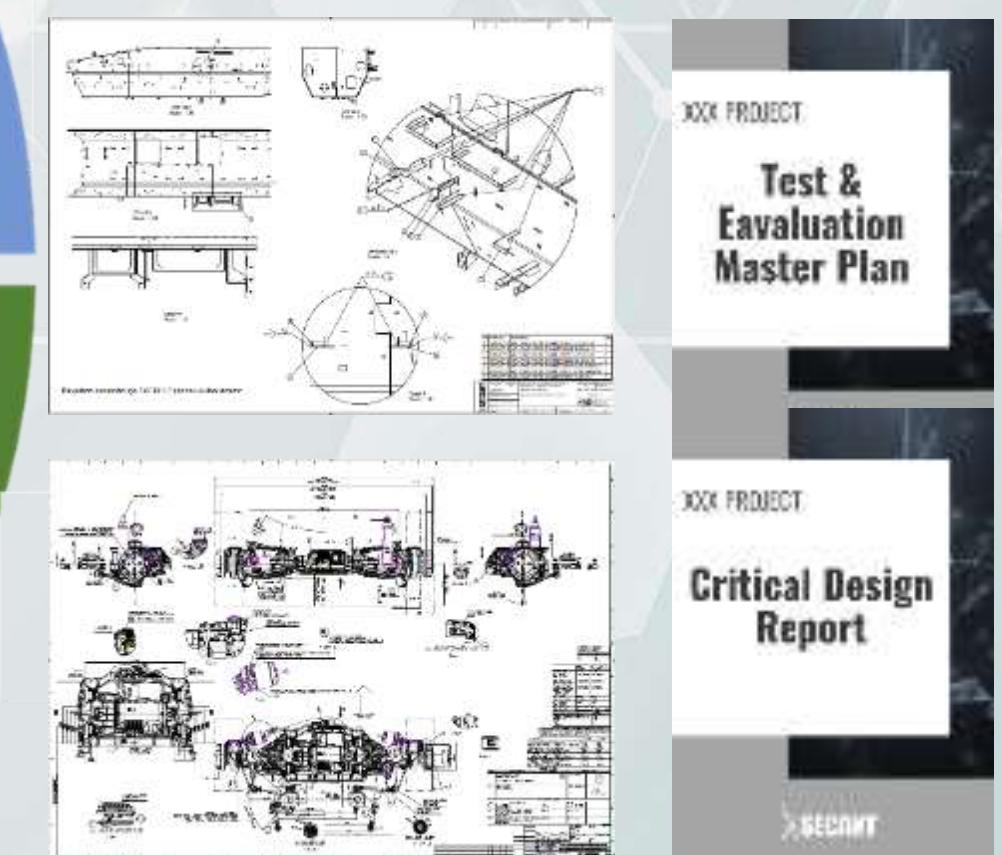
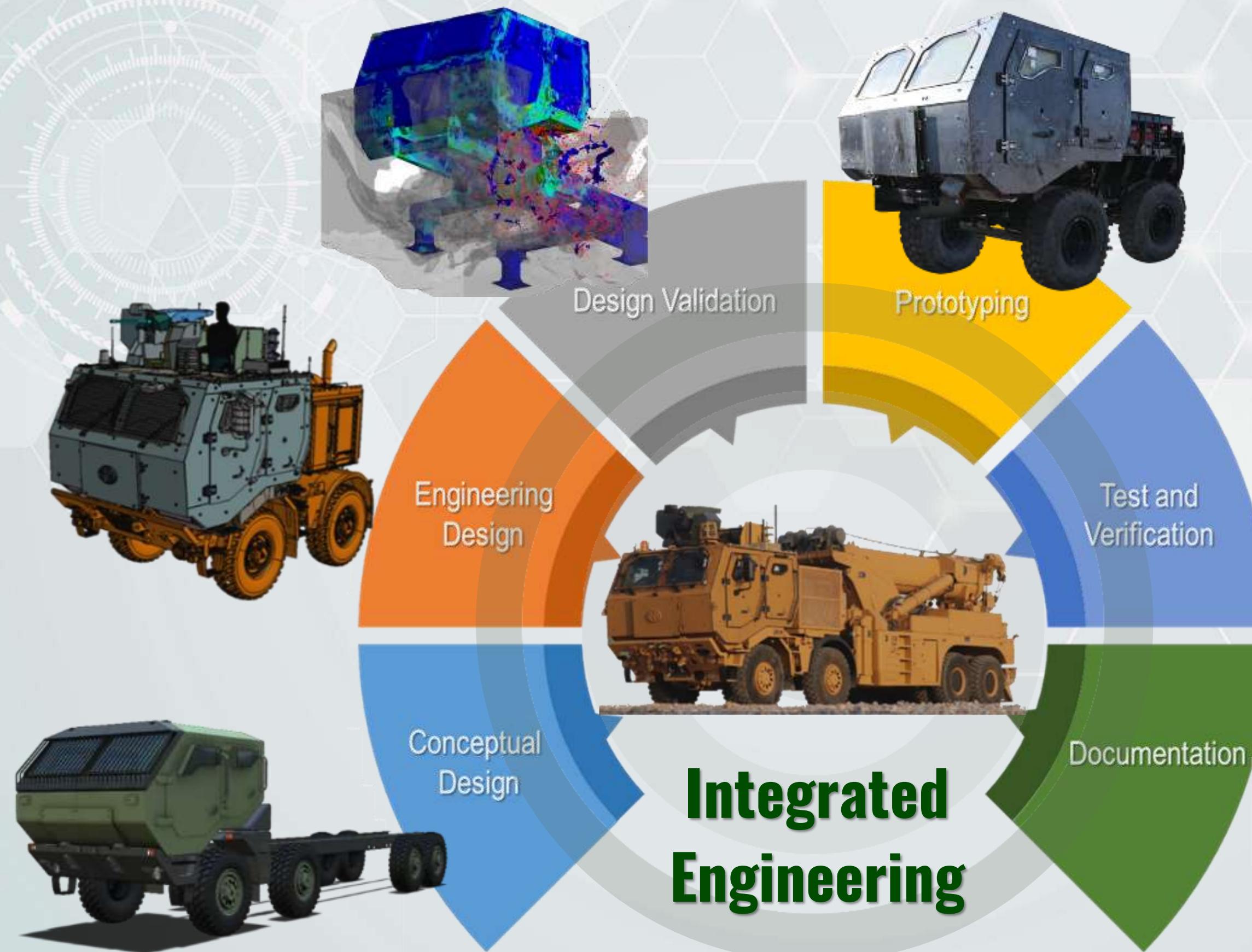


PATENTED
PRODUCT



- ✓ 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



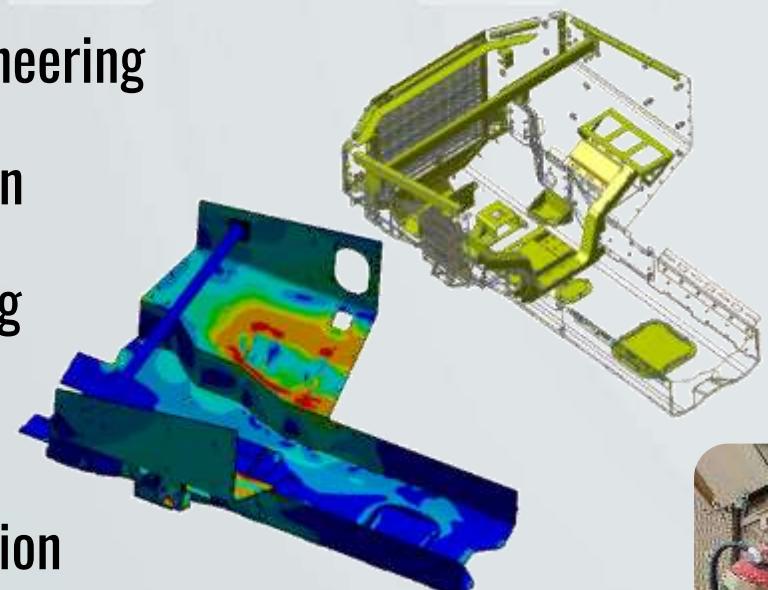
«KIRPI-II» 4x4 MRAP



BMC

As a *sub-contractor*, re-designing engine bay structure including with Ballistic Grill in Survivability and Test & Verification Engineering *consultancy* during design, 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



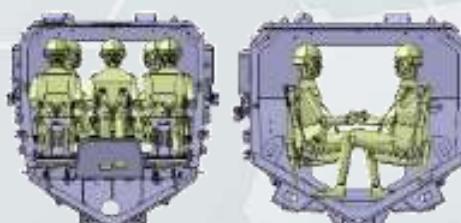
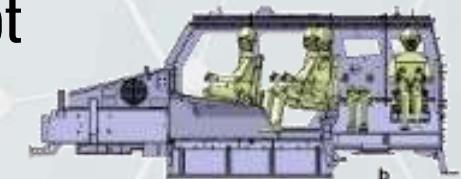
«AMAZON» 4x4 APC



BMC

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



KEY PROJECTS



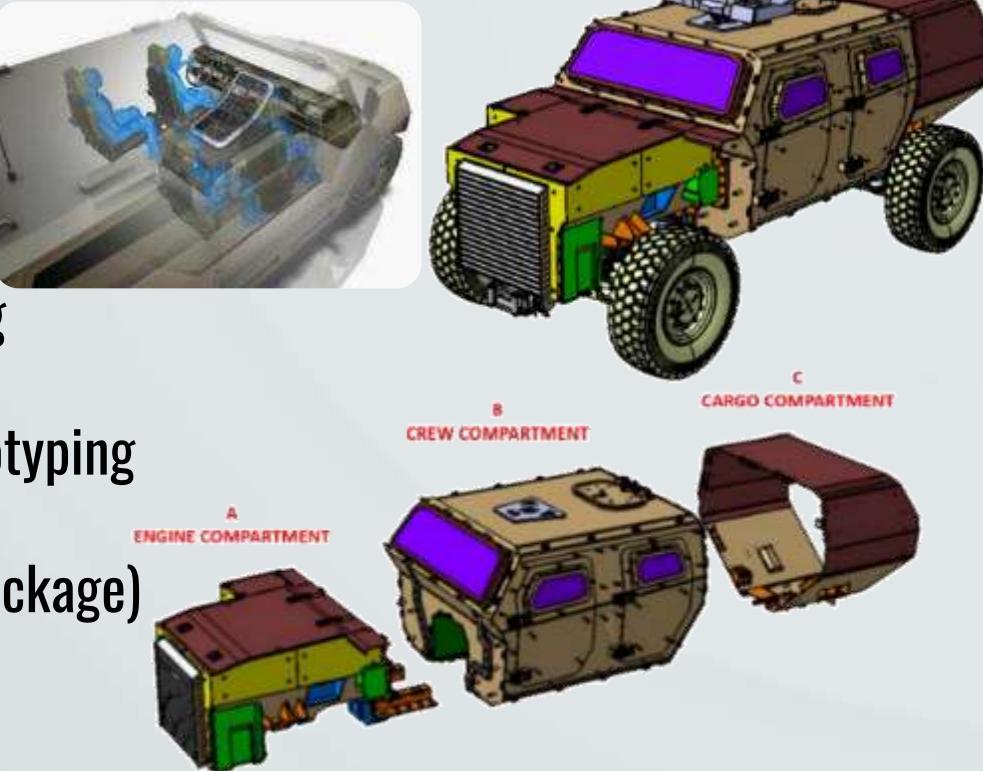
«SAHIN» 4x4 APC



BMC

As a sub-contractor; designing of ballistic & mine protected 4x4 military vehicle in accordance with project requirements. Key deliverables:

- ✓ Survivability Engineering
- ✓ Conceptual & Industrial Design
- ✓ Automotive & Defence Engineering
- ✓ Engineering Design & Digital Prototyping
- ✓ Documentation (Technical Data Package)



«TULGA» ARMOURED PICK-UP



BMC

Engineering consultancy during design and development phases of the project.

Key deliverables:

- ✓ Survivability Engineering
- ✓ Conceptual & Industrial Design
- ✓ Automotive & Defence Engineering
- ✓ Ballistic Protection Concept
- ✓ Vehicle Body Structure Design



«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:*

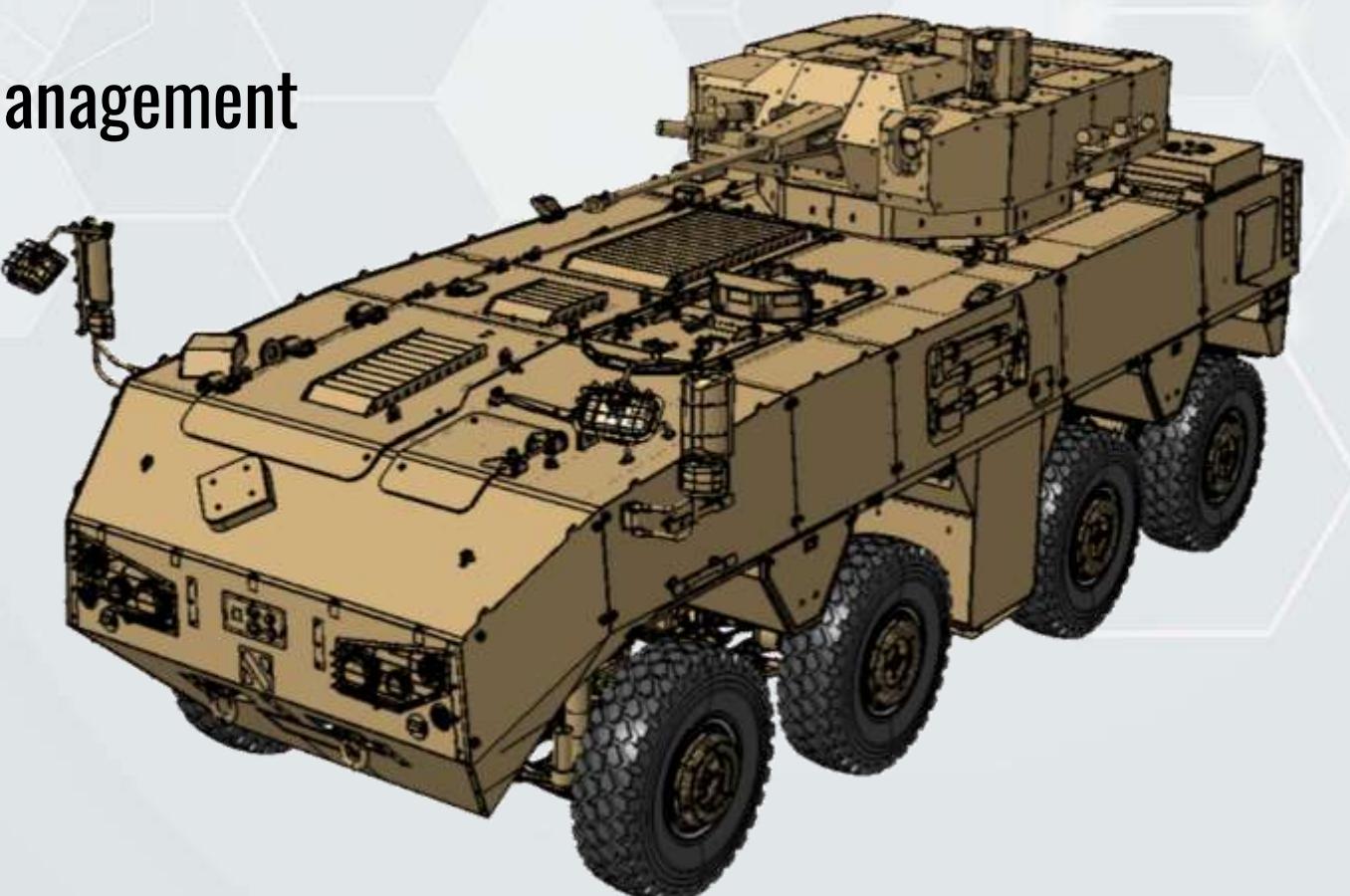
- ✓ System Engineering & Project Management
- ✓ Survivability Engineering
- ✓ Conceptual & Industrial Design
- ✓ Engineering Design
- ✓ Design Validation & Prototyping
- ✓ Test and Verification Consultancy
- ✓ Documentation (Technical Data Package) and
- ✓ Manufacturing of Spall Liner, Mine Lock, Heavy-Duty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

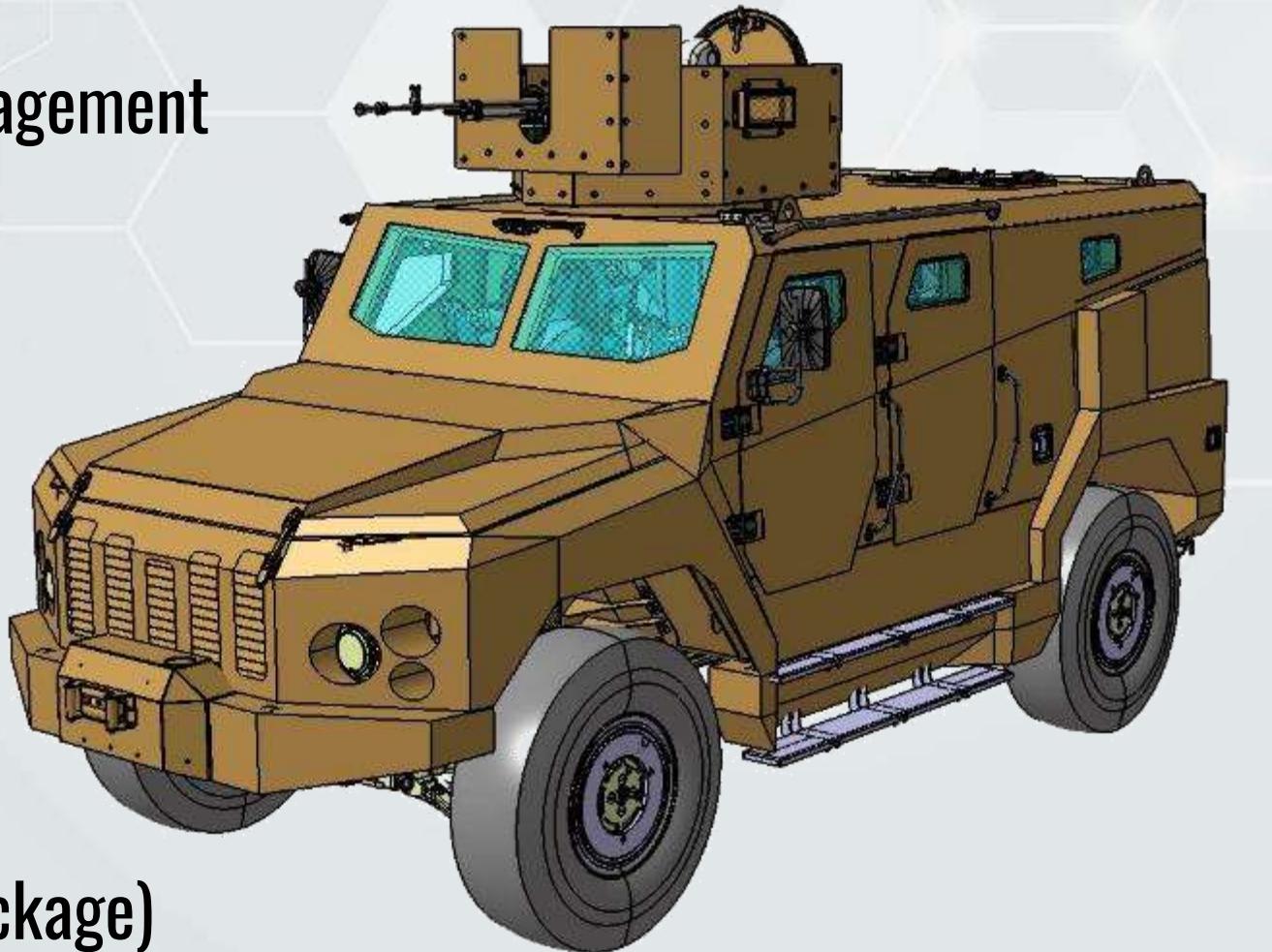
- ✓ System Engineering & Project Management
- ✓ Survivability Engineering
- ✓ Conceptual & Industrial Design
- ✓ Engineering Design
- ✓ Design Validation & Prototyping
- ✓ Documentation (Technical Data Package) and
- ✓ Manufacturing of Mine Lock, Heavy-Duty Hinges & Weapon Holder



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

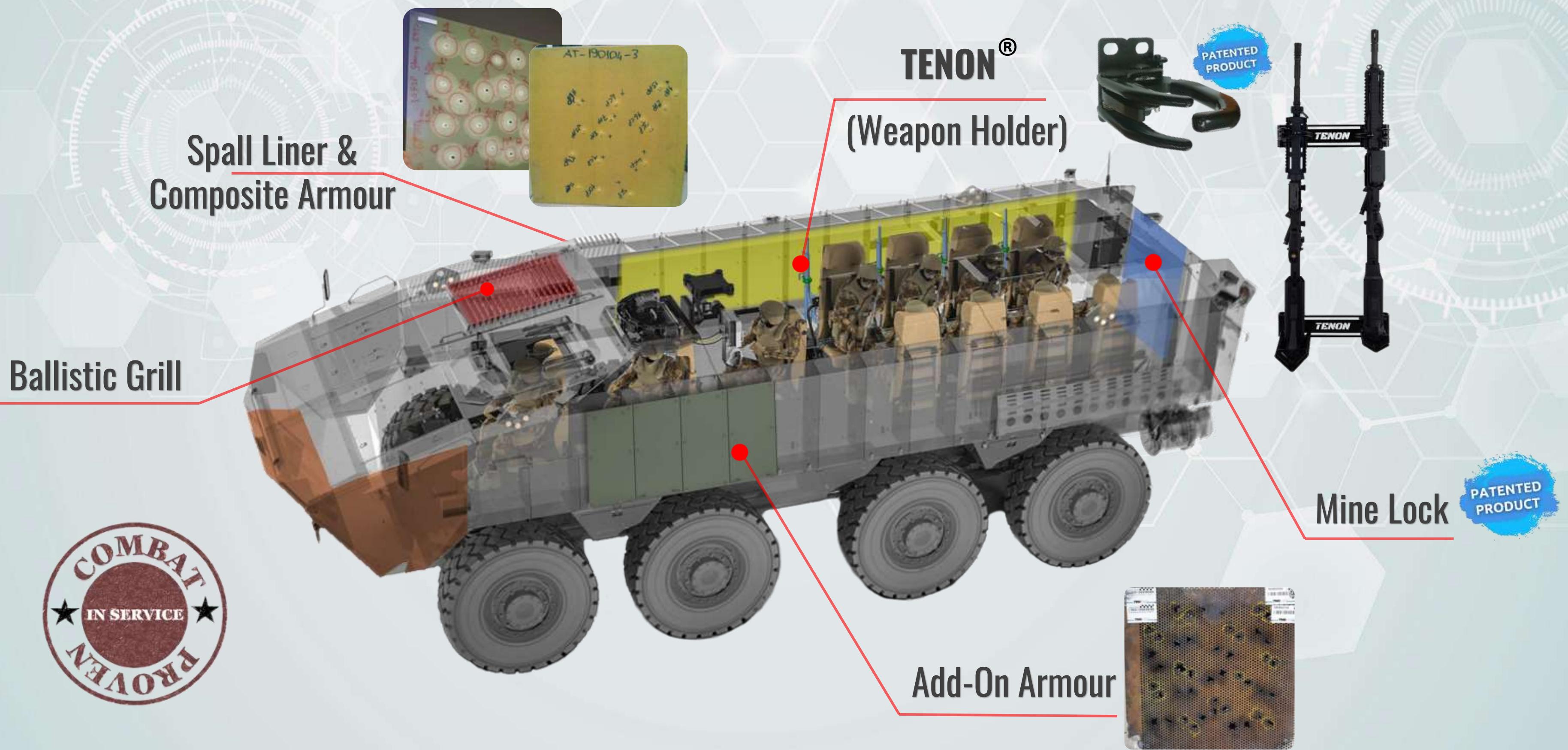
As a *main engineering contractor*, design, prototyping, and qualification of 4x4 APC vehicle in accordance with customer's technical & tactical requirements. *Key deliverables:*

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



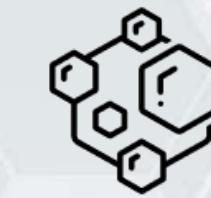
ENHANCED-PRODUCTS

SECANT



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



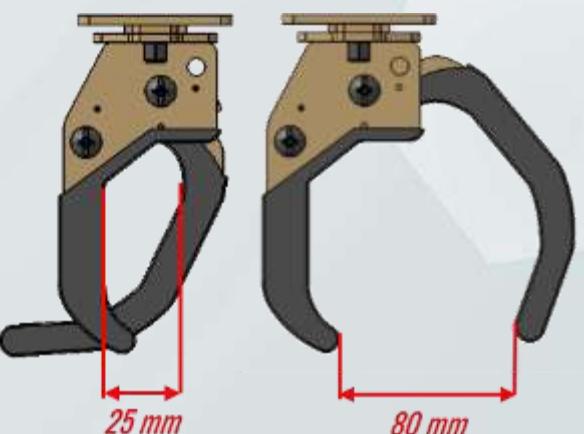
Resistance to Blast and Shock Effects



Can be Configured for Different Assembly Requirements



In Service



TENON®

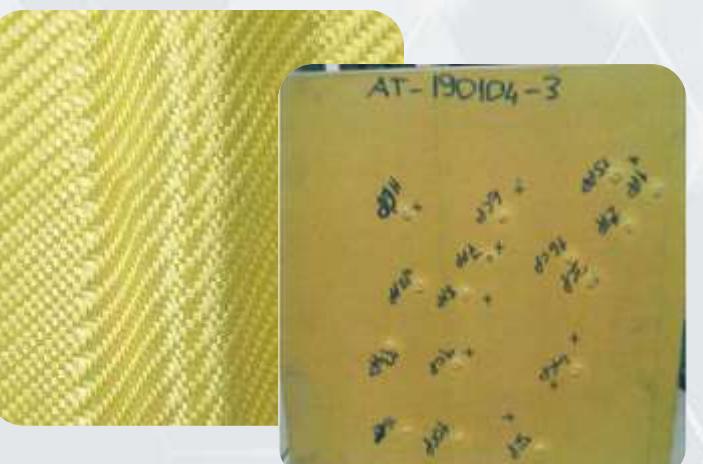


Spall Liner & Composite Armour

- ◆ 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

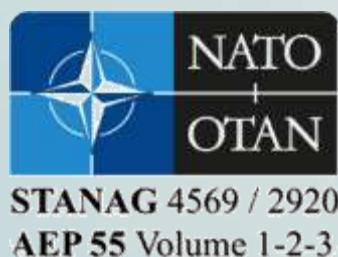


ENHANCED-PRODUCTS



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*



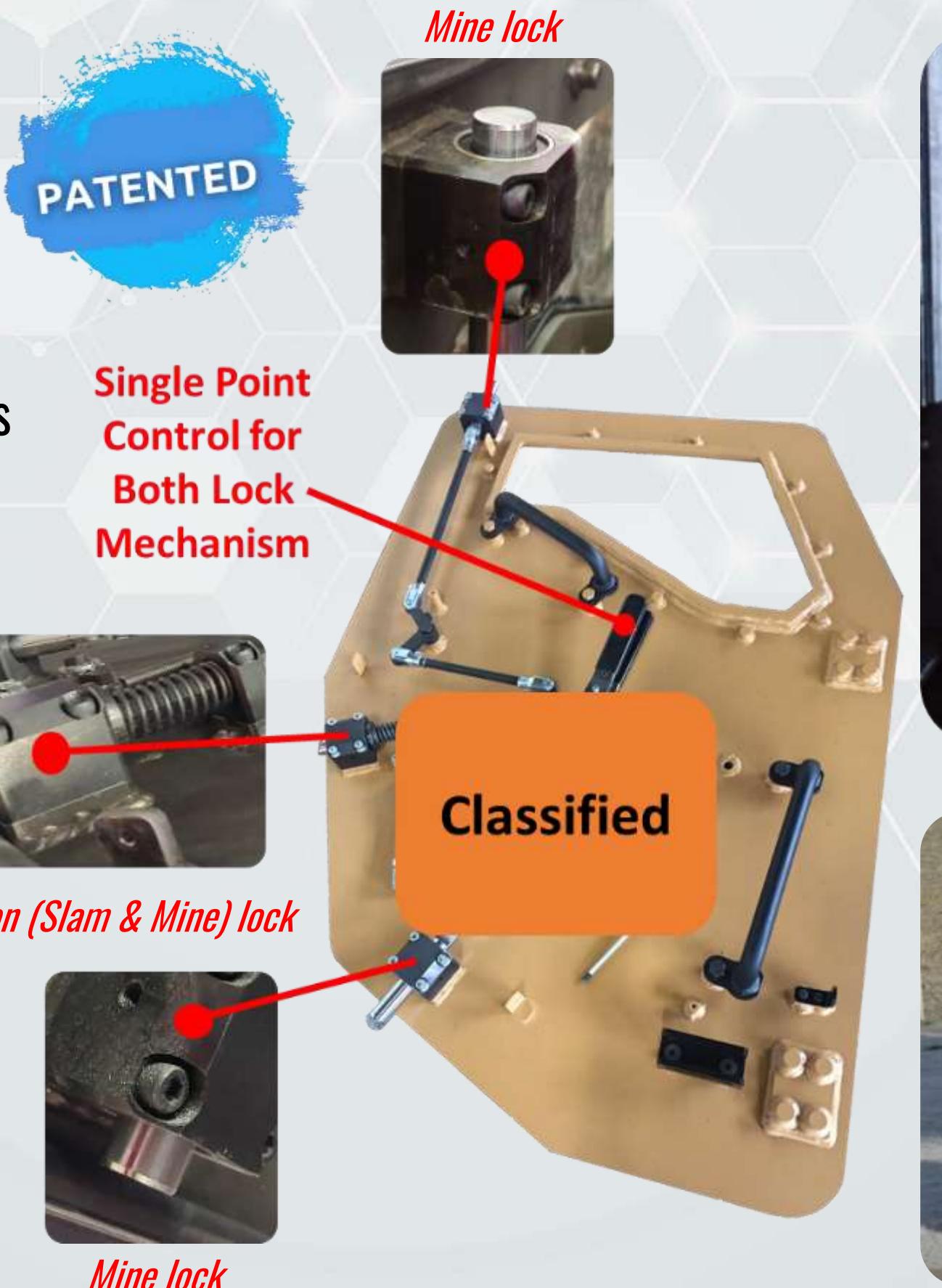
*Metallic, Composite or
Hybrid according to
Requirements*



Combat Proven in Service

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



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 customised 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)

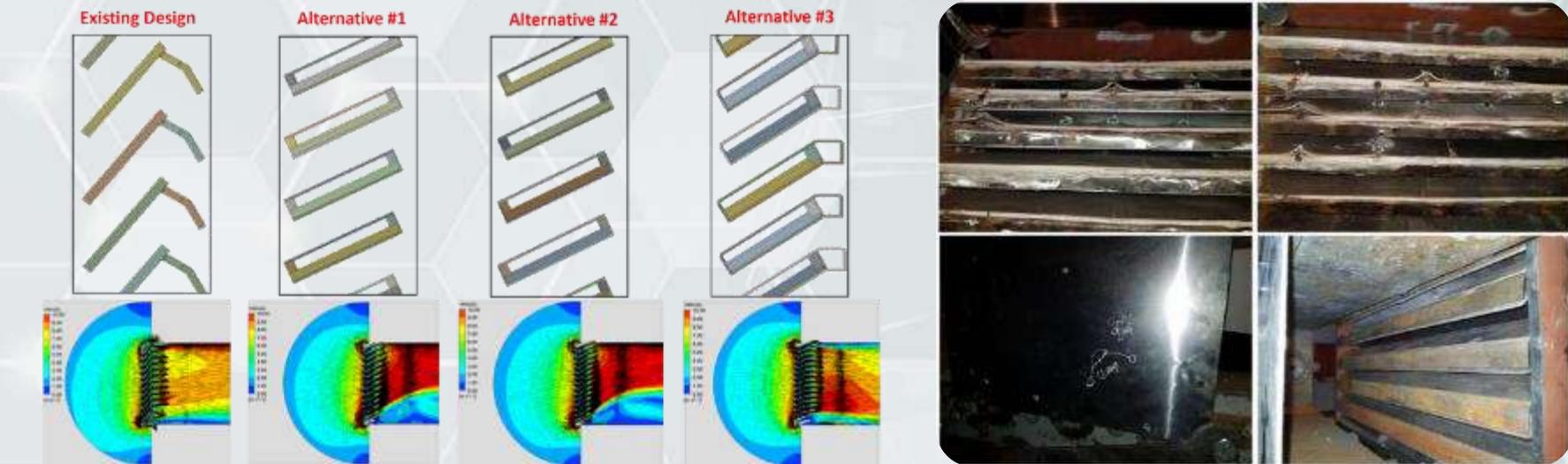
- ◆ Excellent ballistic protection & multi-hit performance
- ◆ Diverse alternatives for different ballistic & technical requirements

(AEP, STANAG, MIL-STD, ITOP, SAE...etc)

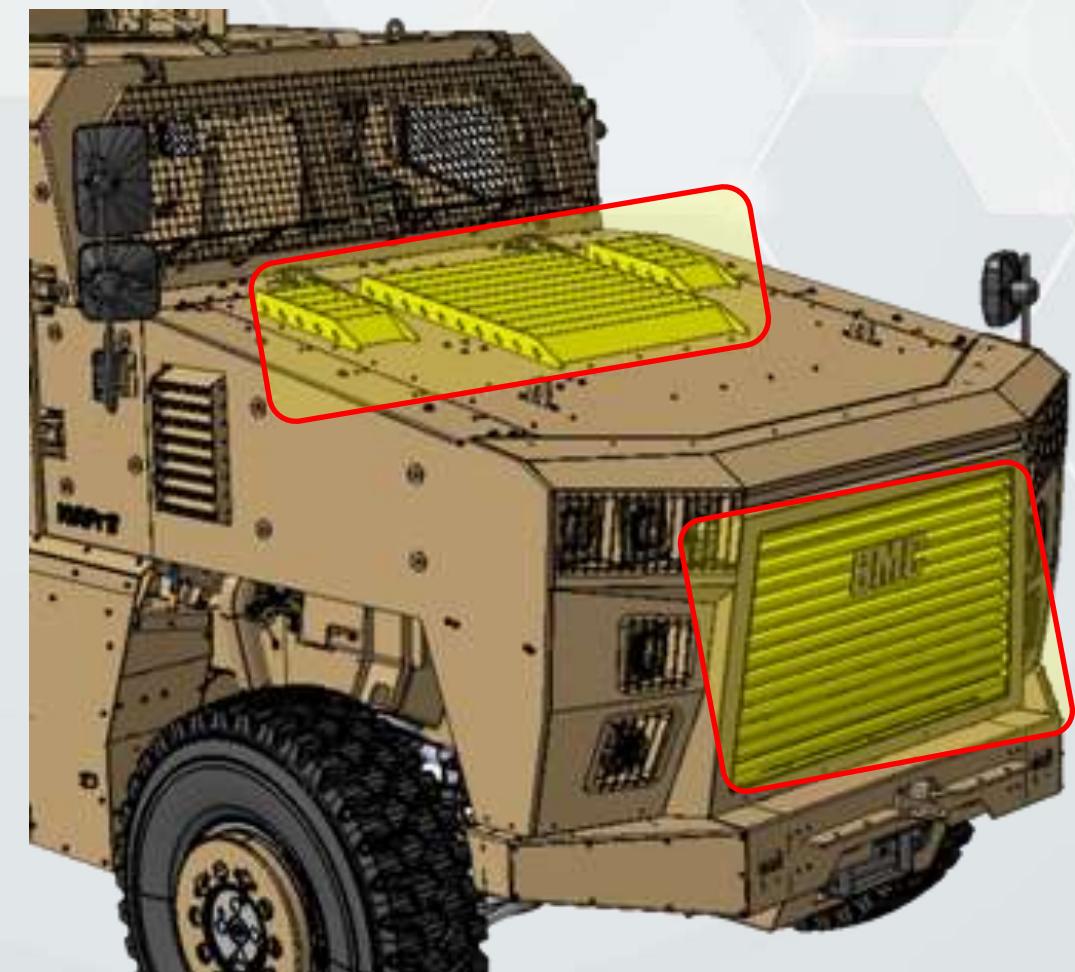
- ◆ Enhanced air flow & pressure drop properties
- ◆ Resistance to harsh environmental conditions
- ◆ Low & high temperature durability



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



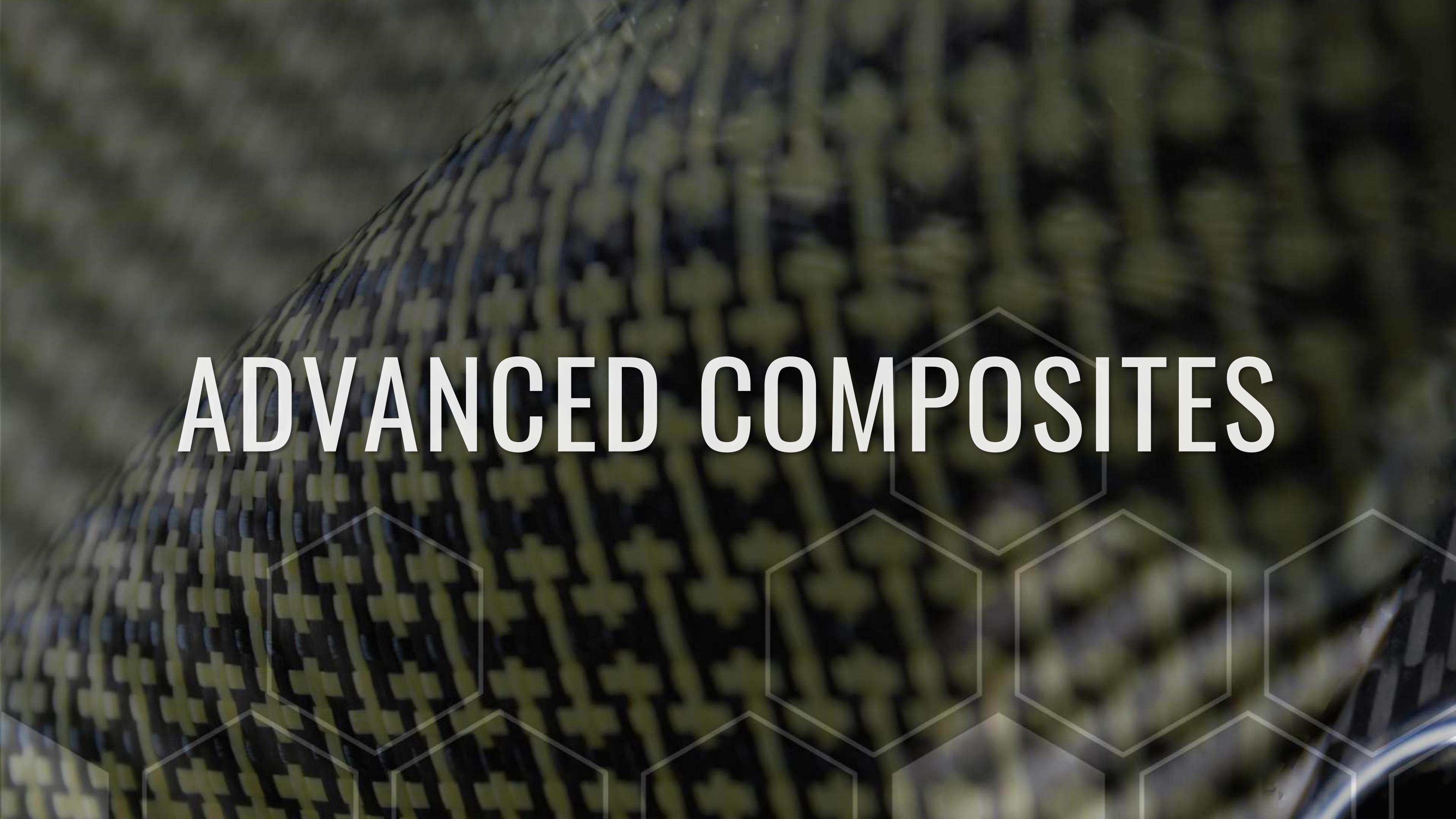
Harmony & optimization of air flow, pressure drop and ballistic protection



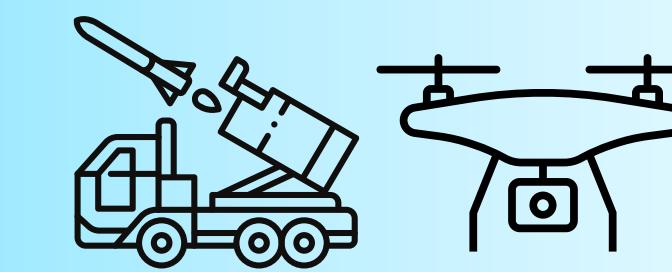
In service



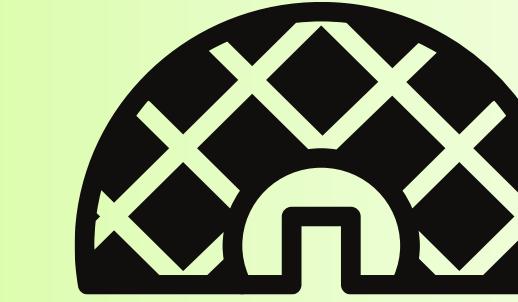
ADVANCED COMPOSITES



WHAT WE PROVIDE



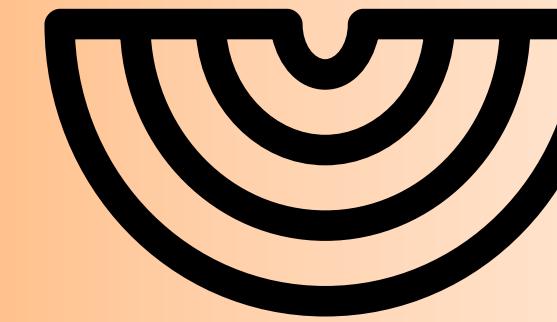
UAV & Missile & Torpedo
Containers



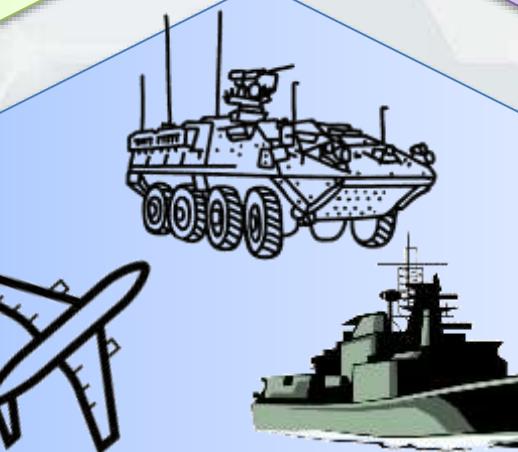
Radome
Structures



Reflector
Structures

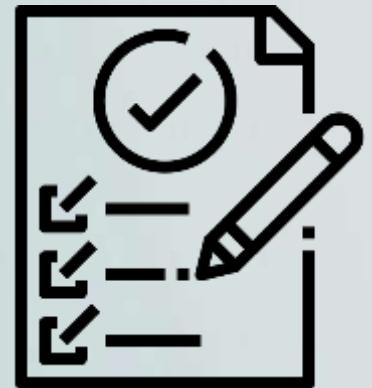
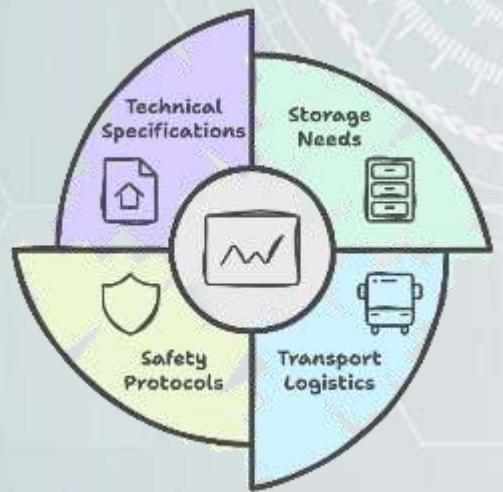


Sonar-Dome
&
Acoustic Head

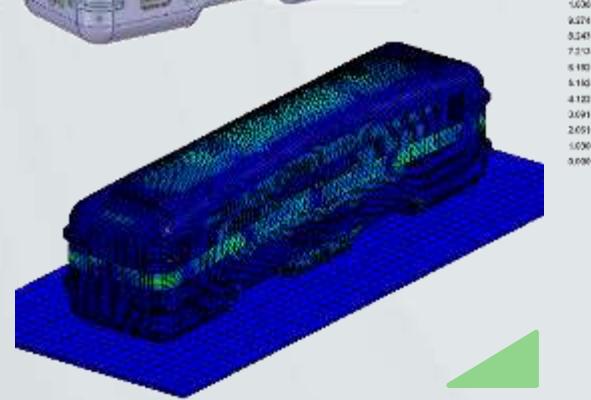
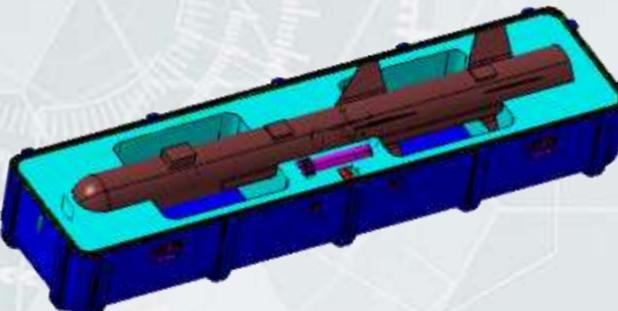


Tailored Solutions for Air,
Land & Naval Platforms

HOW WE PROVIDE



REQUIREMENTS



DESIGN &
DEVELOPMENT



MOULD &
TOOLING



PROTOTYPING



TEST &
VALIDATION



SERIAL
PRODUCTION

INFRASTRUCTURE

SECANT



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

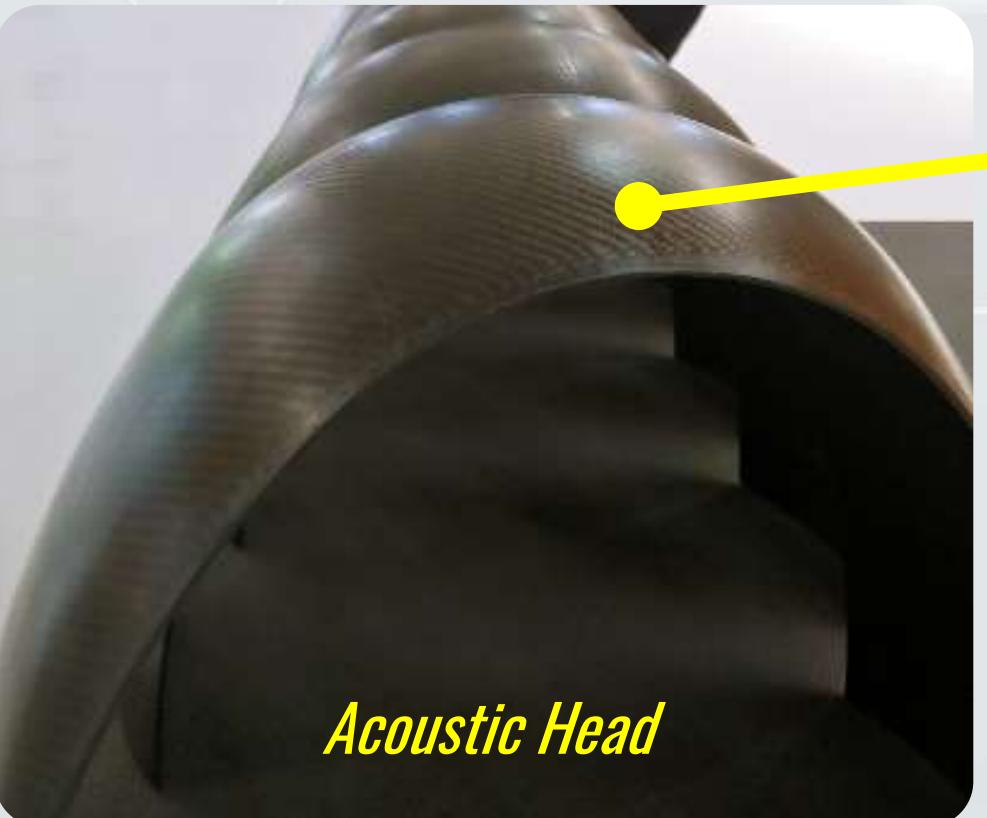


METEKSAN
SAVUNMA

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

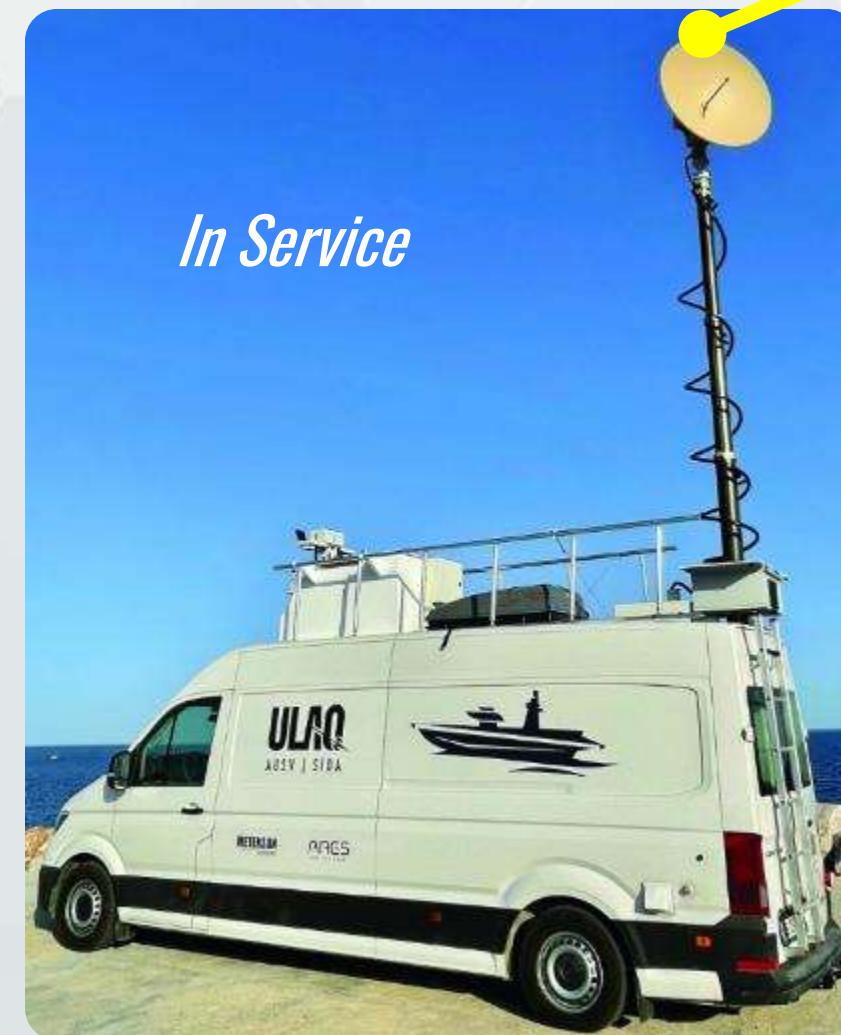
METEKSAN
SAVUNMA

 **roketsan**

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



SONAR DOME

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

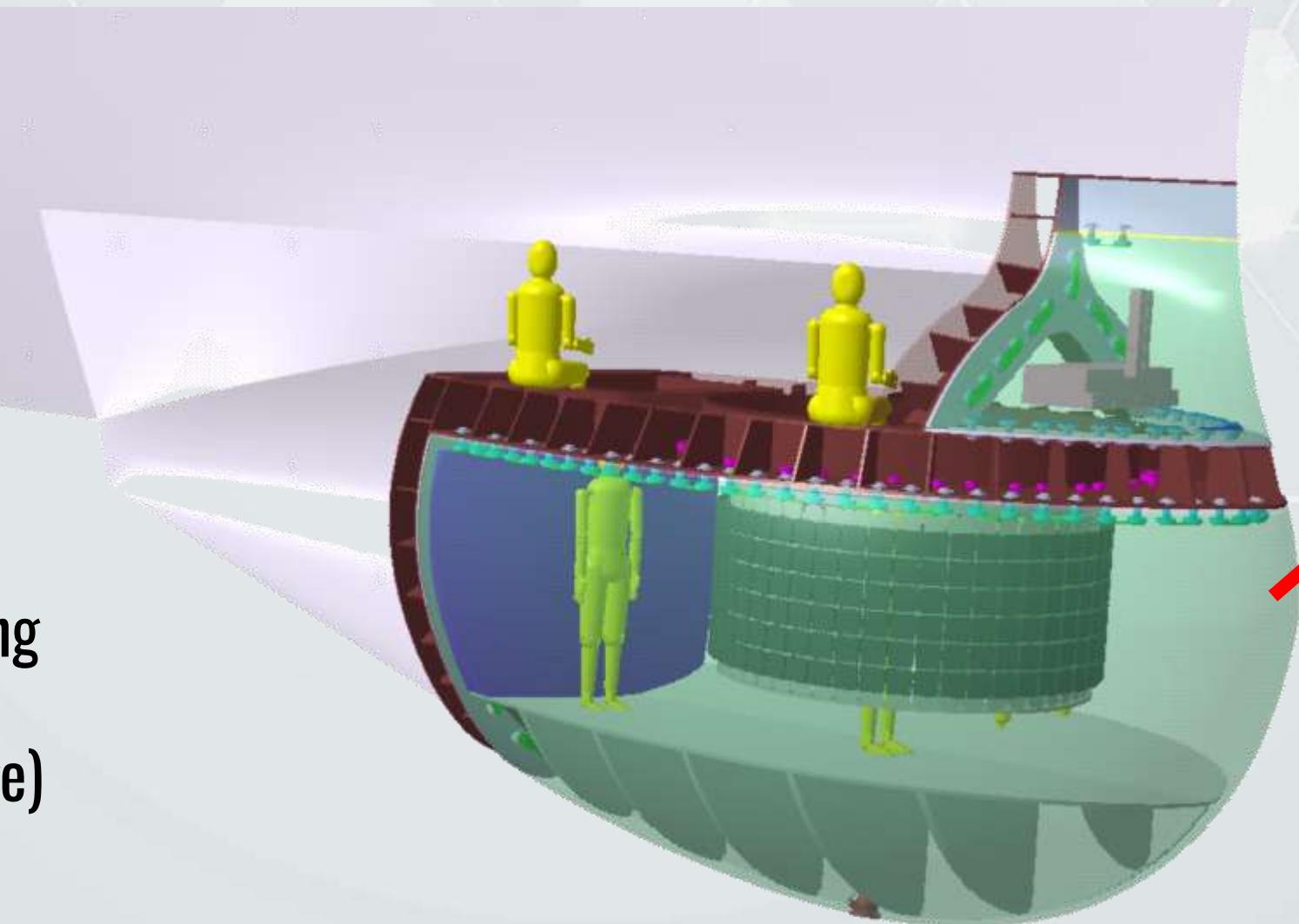
- ✓ Advanced Composite Engineering
- ✓ Engineering Design
- ✓ Design Validation
- ✓ Test and Verification
- ✓ Documentation (Technical Data Package)
- ✓ Manufacturing & Integration
- ✓ Sustainability & Traceability

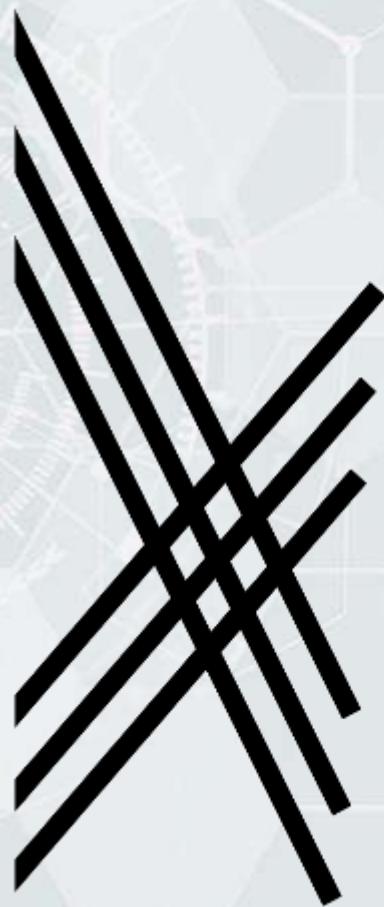


BOW SONAR DOME

As a *sub-contractor*; design and development advanced composite sonar dome structure for TF-2000 FRIGATE. Key deliverables:

- ✓ Advanced Composite Engineering
- ✓ Engineering Design
- ✓ Digital Prototyping
- ✓ Design Validation
- ✓ Transportation & Integration Engineering
- ✓ Documentation (Technical Data Package)





SECANT

www.secantglobal.com

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