

# product catalogue 2024



## ABOUT US

Garanti Giyim Kompozit Teknolojileri Sanayi ve Ticaret A.S. has been established in 2004 in Yozgat Organized Industrial Zone in order to manufacture functional outerwear, body armor and vehicle armor systems. As of today, we operate in our modern production facilities over 30.000 sqm covered area with 350 highly experienced personnel. We have been serving number of key accounts like Undersecretary of Defense, Turkish Armed Forces and General Directorate of Security as well as a lot of domestic and international customers.



# COMPOSITE PRODUCTION

#### **COMPOSITE PRODUCTION**

- Vertical Hot Pres
- Autoclave
- Membrane Molding
- Filament Winding

#### **COMPUTER CONTROLLED AUXILIARY EQUIPMENT**

- Laser Cutting
- Water Jet Cutting
- Automatic Fabric Cutting

#### **PAINTING AND COATING LINES**

- Composite Painting
- Polyurea Coating

#### CLEAN ROOM COLD ROOM FOR PREPREG STORAGE ACCREDITED TEST FACILITIES

- Ballistic Test Lab
- Enviromental Test Lab
- Textile Test Lab

## COMPOSITE PRODUCT RANGE

## UNMANNED AIR VEHICLES AND COMPOSITE STRUCTURAL PARTS



## WAR HEAD & DROP BOMB BODIES LIGHT WEIGHTED SAFE TRANSPORT CASE COMPOSITE MAST



- Unmanned Air Vehicles, Drones, Balloons,
- Command Control Equipment
- Lauchers
- Body
- Horizantal And Vertical Stabilazer
- Wing/Blade / Rotor /Spindle / Hub / Flap
- Landing Equipment



# UD POLYETHELENE PRODUCTION

- High capacity production in fully integrated production environment
- Ballistic fabric production used for life protection
- Strongest fiber for life protection products
- Soft armor and hard armor grades of various aereal weight ranging 110 grams/m<sup>2</sup> to 160 grams/m<sup>2</sup>.
- Some of the applications

### SOFT ARMOR FOR BODY PROTECTION

- Front Protection
- Back Protection
- Shoulder Protection
- Groin Protection
- Belt Protection
- Neck Protection





### HARD ARMOR PRODUCTS

#### - BODY PROTECTION

- Chest Plate
- Back Plate
- Side Plates

#### - BALLISTIC PROTECTIVE SHIELDS

- Shields For Special Forces
- Police Shields

#### - BALLISTIC PROTECTIVE BINS AND BAGS

- Blast Protective Bins
- Bullet Proof Bags

#### - VEHICLE ARMORING

- Spall Liner
- Add-On Armor
- Optic Equipment Armor

#### - BALLISTIC PROTECTIVE HELMET

- Rifle Helmet
- Enhanced Combat Helmet
- Advanced Combat Helmet
- Mich Helmet
- Pasgt Helmet

#### - AIRPLANE & HELICOPTER ARMOR

- Floor Protection
- Armored Pilot Seat
- Side Panels
- Ballistic Protection For Critical Equipment
- Cockpit Door Protection

# CONTE

BALLISTIC PROTECTIVE HELMETS NON-BALLISTIC HELMETS 24 HELMET ACCESSORIES **ROTARY WING AIRCRAFTS CREW HELMETS** BALLISTIC PROTECTIVE PLATES BALLISTIC PROTECTIVE SHIELDS

BALLISTIC PROTECTIVE VESTS PLATE CARRIERS FUNCTIONAL **OUTERWEAR** TEST and R&D CAPABILITIES

**VEHICLE ARMOR** SOLUTIONS

EQUIPMENTS





## BALLISTIC PROTECTIVE HELMETS

We manufacture ballistic protective helmets in many different styles such as PASGT, MICH, ACH or ECH, and in 3 to 4 different sizes per style. Our helmets can be made of aramid, UHMWPE or hybrid solutions. All our helmets are manufactured according to NIJ and STANAG standards and tested in our accredited inhouse ballistic testing laboratory.

## ULTRA LIGHT BALLISTIC **PROTECTIVE HELMETS**





- NIJ Level IIIA .44 Magnum ballistic protection : Yes • V50 value for 17 gr FSP, STANAG 2920
- Blunt Impact Resistance DOT FMVSS 218
- Retention System
- Available Colors
- Outer Surface Area (± 5 cm<sup>2</sup>)
- Helmet Weight (± 50 gr)

#### Applicable Liner Systems:



\* Helmet weight includes: Painted shell with edge band, suspension & retention systems, shroud and side rails. Compatible accessories: Fabric Cover, Picatinny & Wing-loc Rail Adapters, IR Patches, Armadillo IR Strobe, IR Light, Add-on Applique for Rifle Protection, Side Armor, Ballistic Mandible, NVG Mount, Fragment Visor, 9mm Visor, Counterweight, Rail Attachment Adapters and Communications Systems and hard ballistic mandible with fragment visor.

EPP Liner System



: Min. 760 m/s : Average Acceleration (a 10 ft/s  $\leftarrow$  100G : 4 point, worm dial & nape pad : Black, Foliage Green, Tan, Military Green : 1020 - 1065 - 1155 - 1205 cm<sup>2</sup> : 1000 - 1050 - 1150 - 1200 gr\*



## BALLISTIC PROTECTIVE HELMETS



#### ACH MID-CUT MODEL **GG-BPH-ACH-MC**

 $\bullet \bullet \bullet \bullet \bullet \bullet \bullet$ 

ACH FULL-CUT MODEL ••••• GG-BPH-ACH-FC









Black





Black

: UHMWPE

: Min. 725 m/s

: Yes

: Yes

Military Green

Foliage Green

Military Green

Foliage Green



#### • Material

- NIJ Level IIIA 9 mm ballistic protection
- NIJ Level IIIA .44 Magnum ballistic protection
- V50 value for 17 gr FSP, STANAG 2920
- Blunt Impact Resistance DOT FMVSS 218
- Retention System
- Available Colors
- Outer Surface Area (± 5 cm<sup>2</sup>)
- Helmet Weight (± 50 gr)

#### Applicable Liner Systems:





\* Helmet weight includes: Painted shell with edge band, suspension & retention systems, shroud and side rails.

Compatible accessories: Fabric cover, picatinny & wing-loc rail adapters, IR patches , Armadillo IR strobe, IR light, add-on applique for rifle protection, NVG mount, fragment visor, 9mm visor, counterweight and hard ballistic mandible with fragment visor.

#### HELMET SIZE XL XXL HEAD SIZE CM 53-56 cm 57-59 cm 60-61 cm 62-65 cm

#### • Material

- NIJ Level IIIA 9 mm ballistic protection
- NIJ Level IIIA .44 Magnum ballistic protection
- V50 value for 17 gr FSP, STANAG 2920
- Blunt Impact Resistance DOT FMVSS 218
- Retention System
- Available Colors
- Outer Surface Area (± 5 cm<sup>2</sup>)
- Helmet Weight (± 50 gr)

#### Applicable Liner Systems:



Comfort Liner EPP Liner System System

7 Pad Liner System



: Average Acceleration @ 10 ft/s  $\leftarrow$  100G

: 4 point, dial adjuster / worm dial & nape pad

: Black, Foliage Green, Tan, Military Green

: 1115 - 1165 - 1260 - 1320 cm<sup>2</sup>

: 1250 - 1310 - 1350 - 1450 gr\*

Comfort Liner EPP Liner System System

7 Pad Liner System





: UHMWPE : Yes : Yes : Min. 725 m/s : Average Acceleration @ 10 ft/s  $\leftarrow$  100G : 4 point, dial adjuster / worm dial & nape pad : Black, Foliage Green, Tan, Military Green : 1185 - 1230 - 1330 - 1390 cm<sup>2</sup> : 1290 - 1350 - 1390 - 1490 gr\*

\* Helmet weight includes: Painted shell with edge band, suspension & retention systems, shroud and side rails.

Compatible accessories: Fabric cover, piccatiny & wing-loc rail adapters, IR patches , Armadillo IR strobe, IR light, add-on applique for rifle protection, NVG mount, fragment visor, 9mm visor, counterweight.



## ULTRA-LIGHT WEIGHT GEN II **BALLISTIC HELMET**



#### ACH HIGH-CUT MODEL **GG-BPH-ACH-HC**

 $\bullet \bullet \bullet \bullet \bullet \bullet$ 

ACH MID-CUT MODEL ••••• GG-UL2-ACH-HC







Black

HELMET

HEAD SIZE CM 53-56 cm

• Material





Black

: UHMWPE

: Min. 725 m/s

: Yes

: Yes

Military Green

Foliage Green

Military Green

57-59 cm

• NIJ Level IIIA 9 mm ballistic protection

• V50 value for 17 gr FSP, STANAG 2920

• Blunt Impact Resistance DOT FMVSS 218

• NIJ Level IIIA .44 Magnum ballistic protection

Foliage Green

XXL

60-61 cm 62-65 cm



#### • Material

- NIJ Level IIIA 9 mm ballistic protection
- NIJ Level IIIA .44 Magnum ballistic protection
- V50 value for 17 gr FSP, STANAG 2920
- Blunt Impact Resistance DOT FMVSS 218
- Retention System
- Available Colors
- Outer Surface Area (± 5 cm<sup>2</sup>)
- Helmet Weight (± 50 gr)

#### Applicable Liner Systems:



\* Helmet weight includes: Painted shell with edge band, suspension & retention systems, shroud and side rails. Compatible accessories: Fabric Cover, Picatinny & Wing-loc Rail Adapters, IR Patches, Armadillo IR Strobe, IR Light, Add-on Applique for Rifle Protection, Side Armor, Ballistic Mandible, NVG Mount, Fragment Visor, 9mm Visor, Counterweight, Rail Attachment Adapters and Communications Systems and hard ballistic mandible with fragment visor.

: Average Acceleration @ 10 ft/s  $\leftarrow$  100G

: Black, Foliage Green, Tan, Military Green

: 4 point, worm dial & nape pad

: 1055 - 1100 - 1185 - 1240 cm<sup>2</sup>

: 1200 - 1260 - 1300 - 1400 gr\*



Retention System

Available Colors



Comfort Liner EPP Liner System System

7 Pad Liner System









: UHMWPE : Yes : Yes : Min. 675 m/s : Average Acceleration @ 10 ft/s  $\leftarrow$  100G : 4 point, dial adjuster / worm dial & nape pad : Black, Foliage Green, Tan, Military Green : 1083 - 1130 - 1225 - 1285 cm<sup>2</sup> : 850 - 875 - 925 - 950 gr\*

\* Helmet weight includes: Painted shell with edge band, suspension & retention systems, shroud and side rails.

Compatible accessories: Fabric cover, picatinny & wing-loc rail adapters, IR patches, Armadillo IR strobe, IR light, add-on applique for rifle protection, NVG mount, fragment visor, 9mm visor, counterweight and hard ballistic mandible with fragment visor.

## ULTRA LIGHT BALLISTIC PROTECTIVE HELMETS

## **BALLISTIC PROTECTIVE HELMETS** ARAMID MATERIAL



#### ACH MID-CUT MODEL **GG-ULH-ACH-MC**

 $\bullet \bullet \bullet \bullet \bullet \bullet$ 

ACH HIGH-CUT MODEL GG-BPH-ACH-HCA . . . . . .





Black





Black

: UHMWPE

: Min. 760 m/s

: Yes

: Yes

Military Green

Foliage Green

Military Green

Foliage Green



#### Material

G

- NIJ Level IIIA 9 mm ballistic protection
- NIJ Level IIIA .44 Magnum ballistic protection
- V50 value for 17 gr FSP, STANAG 2920
- Blunt Impact Resistance DOT FMVSS 218
- Retention System
- Available Colors
- Outer Surface Area (± 5 cm<sup>2</sup>)
- Helmet Weight (± 50 gr)

#### Applicable Liner Systems:



\* Helmet weight includes: Painted shell with edge band, suspension & retention systems, shroud and side rails.

Compatible accessories: Fabric cover, picatinny & wing-loc rail adapters, IR patches , Armadillo IR strobe, IR light, add-on applique for rifle protection, NVG mount, fragment visor, 9mm visor, counterweight and hard ballistic mandible with fragment visor.









### Material

- NIJ Level IIIA 9 mm ballistic protection
- NIJ Level IIIA .44 Magnum ballistic protection : Yes
- V50 value for 17 gr FSP, STANAG 2920
- Blunt Impact Resistance DOT FMVSS 218
- Retention System
- Available Colors
- Outer Surface Area (± 5 cm<sup>2</sup>)
- Helmet Weight (± 50 gr)

#### Applicable Liner Systems:



\* Helmet weight includes: Painted shell with edge band, suspension & retention systems, shroud and side rails. Compatible accessories: Fabric Cover, Picatinny & Wing-loc Rail Adapters, IR Patches, Armadillo IR Strobe, IR Light, Add-on Applique for Rifle Protection, Side Armor, Ballistic Mandible, NVG Mount, Fragment Visor, 9mm Visor, Counterweight, Rail Attachment Adapters and Communications Systems and hard ballistic mandible with fragment visor.

EPP Liner System

System

Comfort Liner EPP Liner System

System

7 Pad Liner

: Average Acceleration @ 10 ft/s  $\leftarrow$  100G

: 4 point, dial adjuster/worm dial & nape pad

: Black, Foliage Green, Tan, Military Green

: 1045 - 1090 - 1185 - 1245 cm<sup>2</sup>

: 1050 - 1100 - 1200 - 1250 gr\*





: ARAMID : Yes : Min. 650 m/s : Average Acceleration @ 10 ft/s  $\leftarrow$  100G : 4 point, worm dial & nape pad : Black, Foliage Green, Tan, Military Green : 1055 - 1100 - 1185 - 1240 cm<sup>2</sup> : 1400 - 1500 - 1590- 1690 gr\*

## **BALLISTIC PROTECTIVE HELMETS** ARAMID MATERIAL

## **BALLISTIC PROTECTIVE HELMETS** ARAMID MATERIAL



#### ACH MID-CUT MODEL **GG-BPH-ACH-MCA**

 $\bullet \bullet \bullet \bullet \bullet \bullet$ 

ACH FULL-CUT MODEL GG-BPH-ACH-FCA . . . . . .









Black





Black

Military Green

Foliage Green

Military Green

Foliage Green

HELMET SIZE	M		XL	xx
HEAD Size CM	53-56 cm	57-59 cm	60-61 cm	62-65

#### Material

- NIJ Level IIIA 9 mm ballistic protection
- NIJ Level IIIA .44 Magnum ballistic protection : Yes
- V50 value for 17 gr FSP, STANAG 2920
- Blunt Impact Resistance DOT FMVSS 218
- Retention System
- Available Colors
- Outer Surface Area (± 5 cm<sup>2</sup>)
- Helmet Weight (± 50 gr)

#### Applicable Liner Systems:





Comfort Liner EPP Liner System System

7 Pad Liner System



#### Material

G

- NIJ Level IIIA 9 mm ballistic protection
- NIJ Level IIIA .44 Magnum ballistic protection • V50 value for 17 gr FSP, STANAG 2920
- Blunt Impact Resistance DOT FMVSS 218
- Retention System
- Available Colors
- Outer Surface Area (± 5 cm<sup>2</sup>)
- Helmet Weight (± 50 gr)

#### Applicable Liner Systems:



System



\* Helmet weight includes: Painted shell with edge band, suspension & retention systems, shroud and side rails.

Compatible accessories: Fabric cover, picatinny & wing-loc rail adapters, IR patches , Armadillo IR strobe, IR light, add-on applique for rifle protection, NVG mount, fragment visor, 9mm visor, counterweight and hard ballistic mandible with fragment visor.

: Yes : Min. 650 m/s

: ARAMID

: Yes

- : Average Acceleration @ 10 ft/s  $\leftarrow$  100G
- : 4 point, dial adjuster / worm dial & nape pad
- : Black, Foliage Green, Tan, Military Green

: 1115 - 1165 - 1260 - 1320 cm<sup>2</sup>

: 1450 - 1530 - 1600 - 1700 gr\*

Comfort Liner EPP Liner System

7 Pad Liner System





: ARAMID : Yes : Min. 650 m/s : Average Acceleration @ 10 ft/s  $\leftarrow$  100G : 4 point, dial adjuster / worm dial & nape pad : Black, Foliage Green, Tan, Military Green : 1185 - 1230 - 1330 - 1390 cm<sup>2</sup> : 1500 - 1570 - 1620 - 1750 gr\*

\* Helmet weight includes: Painted shell with edge band, suspension & retention systems, shroud and side rails.

Compatible accessories: Fabric cover, piccatiny & wing-loc rail adapters, IR patches , Armadillo IR strobe, IR light, add-on applique for rifle protection, NVG mount, fragment visor, 9mm visor, counterweight.



## **BALLISTIC PROTECTIVE RIFLE HELMET**



#### ACH MID-CUT MODEL **GG-BRH-ACH-MC**

 $\bullet \bullet \bullet \bullet \bullet \bullet \bullet$ 

ACH FULL-CUT MODEL GG-BRH-ACH-FC  $\bullet \bullet \bullet \bullet \bullet \bullet$ 









Black





Black

: UHMWPE

: 7,62x39 MSC

: Min. 1150 m/s

Military Green

Foliage Green

Military Green

Foliage Green

HELMET SIZE	M		XL	XXL
HEAD SIZE CM	53-56 cm	57-59 cm	60-61 cm	62-65 cm

#### Material

- NIJ Level III Ballistic Protection
- NIJ Level III+ Ballistic Protection
- V50 value for 17 gr FSP, STANAG 2920
- Blunt Impact Resistance DOT FMVSS 218
- Retention System
- Available Colors
- Outer Surface Area (<u>± 5 cm²</u>)
- Helmet Weight (± 50 gr)

\* Helmet weight includes: Painted shell with edge band, suspension & retention systems, shroud and side rails.

System

#### Applicable Liner Systems:







Compatible accessories: Fabric cover, picatinny & wing-loc rail adapters, IR patches , Armadillo IR strobe, IR light, NVG mount, fragment visor, 9mm visor, counterweight and hard ballistic mandible with fragment visor.

HELMET SIZE XL XXL HEAD SIZE CM 53-56 cm 57-59 cm 60-61 cm 62-65 cm

• Material	: UH
NIJ Level III Ballistic Protection	: 7,6
NIJ Level III+ Ballistic Protection	: 7,6
• V50 value for 17 gr FSP (STANAG 2920)	: Min
• Blunt Impact Resistance DOT FMVSS 218	: Ave
<ul> <li>Retention System</li> </ul>	:4 p
<ul> <li>Available Colors</li> </ul>	: Bla
<ul> <li>Outer Surface Area (± 5 cm<sup>2</sup>)</li> </ul>	: 131
• Helmet Weight (± 50 gr)	: 173

\* Helmet weight includes: Painted shell with edge band, suspension & retention systems, shroud and side rails



Comfort Liner EPP Liner System 7 Pad Liner System

: 7,62x51 NATO Ball (Vel. 730 m/s)

: 1240 - 1295 - 1400 - 1465 cm<sup>2</sup>

: 1680 - 1730 - 1830 - 1880 gr\*

: Average Acceleration @ 10 ft/s  $\leftarrow$  150G

: 4 point, dial adjuster / worm dial & nape pad

: Black, Foliage Green, Tan, Military Green





IMWPE 2x51 NATO Ball (Vel. 730 m/s) 2x39 MSC n. 1150 m/s erage Acceleration @ 10 ft/s ← 150G oint, dial adjuster/worm dial & nape pad ack, Foliage Green, Tan, Military Green <u>15 - 13</u>65 - 1475 - 1550 cm² 30 - 1780 - 1880 - 1930 gr\*



7 Pad Liner System

Compatible accessories: Fabric cover, picatinny & wing-loc rail adapters, IR patches, Armadillo IR strobe, IR light, NVG mount, fragment visor, 9mm visor, counterweight.



## BUMP HELMET

#### SPECIFICATIONS $\bullet \bullet \bullet \bullet \bullet$ GG-NBH-BH-HC





- M/L XL/
- Made of special polycarbonate material.
- Extremely light-weight product. Only 750 gr !
- EN 1385 Compliant.
- Superior protection against impacts.
- High cut design allows usage with telecom devices.
- 4 point harness with dial adjuster system and nape pad.
- Modular and special designed liner system
- Hook and loop patches for over the helmet accessories.
- Accessory carriage rails and shroud serve as a platform for T-Lights, NV goggles, cameras and beacons. • Can be used for training purposes by ballistic protective helmet users.
- Protects the operation personnel of search and rescue teams, military vehicle personnel, and people doing outdoor sports against impacts
- Colors: Olive, tan, red, orange, yellow and black.

## NON-BALLISTIC **HELMETS**

We are offering two types of non-ballistic helmets for impact protection. Those helmets can be used during tactical exercises, search and rescue operations, on boats and various usages to give end-user an extra protection against impacts.





## NON-BALLISTIC ACH HIGH-CUT HELMET WITH DRAIN HOLES



- Our ultra-light weight bump helmet Shell is made of an extremely strong resin impregnated glass fiber.
- Superior protection against impacts
- High-cut, full-cut and mid-cut options are available.
- Helmet shell can be manufactured with or without air and water drain holes
- Side rails and shroud offer a platform for NVG, T-light, cameras and similar accessories.
- Modular and specially designed shock absorption inner-liner system offers maximum protection and comfort.
- Comfort pads that are located on top of the expanded polypropylene (EPP) liners are fixed with Velcro patches and can easily be raplaced.
- 4 point harness with dial adjuster.
- There are Velcro patches located outside the shell for over the helmet accessories.
- Protects the operation personnel of search and rescue teams, military vehicle personnel, and people doing outdoor sports against impacts.
- As the accessory carriage rails and shroud are the same of those used on the ballistic protective helmets, our non-ballistic helmets can be used for training purposes for ballistic protective helmet users.

#### Material

**Performance Standard** Blunt Impact Resistance DOT FMVSS 218 Retention System Available Colors Outer Surface Area (± 5 cm<sup>2</sup>) Helmet Weight (± 50 gr) Helmet weight includes

#### : GLASS FIBER

- : EN 1385 : Average Acceleration @ 10 ft/s  $\leftarrow$  100G : 4 point, dial/adjuster/worm dial & nape pad : Black, Foliage Green, Tan, Military Green
- <u>: 1085 1130 1225 1285 cm²</u>
- : 1050 1100 1200 1250 gr\*
- : Painted shell with edge band, suspension &
- retention systems and side rails.

- Our ultra-light weight bump helmet Shell is made of an extremely strong resin impregnated glass fiber.
- Superior protection against impacts
- Helmet shell can be manufactured with or without air and water drain holes
- Side rails and shroud offer a platform for NVG, T-light, cameras and similar accessories.
- Modular and specially designed shock absorption inner-liner system offers maximum protection and comfort.
- Comfort pads that are located on top of the expanded polypropylene (EPP) liners are fixed with Velcro patches and can easily be raplaced.
- 4 point harness with dial adjuster.
- There are velcro patches located outside the shell for over the helmet accessories. • Protects the operation personnel of search and rescue teams, military vehicle personnel, and people doing outdoor sports against

- used for training purposes for ballistic protective helmet users. • Mid-cut and full-cut options are available.

#### : GLASS FIBER Material Performance Standard : EN 1385 Blunt Impact Resistance DOT FMVSS 218 : Average Acceleration @ 10 ft/s $\leftarrow$ 100G Retention System : 4 point, worm dial & nape pad Available Colors : Black, Foliage Green, Tan, Military Green : 980 - 1025 - 1185 - 1245 cm<sup>2</sup> Outer Surface Area (± 5 cm<sup>2</sup>) Helmet Weight (± 50 gr) : 930 - 1030 - 1080 - 1100 gr\* : Painted shell with edge band, suspension & Helmet weight includes retention systems and side rails.



- Hight-cut geometry has a comfortable fit and allows you to use with earphones and similar communication devices.

• As the accessory carriage rails and shroud are the same of those used on the ballistic protective helmets our non-ballistic helmets can be



## HELMET 77 ACCESSORIES

In addition to these ballistic protective helmets we have designed and produced several complementary items such as IR strobe, T-Light, add-on ballistic appliques for rifle protection, soft ballistic mandible, side armor, 9 mm & fragment visors NVG mount and counterweights. All of these are battlefield tested!

## BALLISTIC PROTECTIVE HELMETS WITH ACCESSORIES



#### Programmable IR strobe



Adjustable counterweight 70 gram x 5 steel bars Velcro attachment



Velcro loops for housing accessories



3M rail attachment

#### 3M Peltor earphones

## Appliques protection against 7,62x39 MSC





### Programmable IR strobe





Gopro Camera



Side armor 9 mm FMJ RN protection



#### Soft mandible 9 mm FMJ RN protection







Helmet is equipped with NVG bungees, side rails that are compatible with Picatinny adaptors. Accessory carrying side rails and NVG mounting slot/shroud serve as a platform for NVG, cameras and similar accessories.

All these components are lightweight and compatible with universal accessories.

## SOFT BALLISTIC MANDIBLE WITH HARD BALLISTIC FRONT PIECE





• Size	: One s
• Material	: UHM
NIJ Level IIIA 9 mm ballistic protection	: Yes (3
<ul> <li>V50 value for 17 gr FSP, STANAG 2920</li> </ul>	: Min.
Available Colors	: Black
Compatible With	: High
• Weight (± 50 gr)	: 500 g



size fits all IWPE (366 m/s) 550 m/s k, Foliage Green, Tan Cut Helmets only



## FRAGMENT VISOR

#### GG-HAC-SAR01 ● ● ● ● ● ● GG-HAC-FVS01 $\bullet \bullet \bullet \bullet \bullet \bullet$







Visor Dimensions	: 230 x 100
V50 value for 17 gr FSP, STANAG 2920	: Min. 230
• Weight (± 30 gr)	: 500 gr (Ir

- Size
- Material
- NIJ Level IIIA 9 mm ballistic protection
- V50 value for 17 gr FSP, STANAG 2920
- Available Colors
- Compatible With
- Weight (± 30 gr)

- : One size fits all
- : UHMWPE
- : Yes (366 m/s)
- : Min. 675 m/s
- : Black, Foliage Green, Tan
- : High Cut Helmets only
- : 300 gr





0 mm

m/s

Including brackets)



## ADD-ON ARMOUR APPLIQUE

#### 







- Visor Dimensions
- NIJ Level IIIA 9 mm ballistic protection
- V50 value for 17 gr FSP, STANAG 2920
- Weight (± 50 gr)

- : 260 x 150 mm
- : Yes (366 m/s)
- : Min. 600 m/s
- : 1400 gr (Including brackets)

- Ballistic Protection
- V50 value for 17 gr FSP, STANAG 2920
- Available Colors
- Outer Surface Area
- Weight

: Min : Bla : Fro : Re : Fro





- : 7,62x39 MSC (UHMWPE) : 7,62x39 AP (Ceramic) : Min. 1000 m/s : Black, Foliage Green, Tan
- : Front Piece (± 5 cm): 350 430 : Rear Piece (± 5 cm): 380 - 525
- : Front Piece (± 50 g): 435 500 : Rear Piece (± 50 g): 475 - 600



## FULL FACE BALLISTIC PROTECTION HELMET - VISOR - MANDIBLE MID-CUT HELMET

## FULL FACE BALLISTIC PROTECTION HELMET - VISOR - MANDIBLE HIGH-CUT HELMET

GG-HAC-HMC01 | GG-HAC-VSR01

GG-HAC-HHC01 | GG-HAC-VSR01 











PRODUCT

- Material
- Ballistic Protection (NIJ IIIA 9 mm)
- V50 for 17 gr FSP (STANAG 2920)
- Available Colors
- Compatible With
- Weight (± 50 gr)
- Protection Area

- M/L XL/ XXL
- VISOR PC No Min. 255 m/s
- Black, Green, Tan HC & MC Helmets 300 gr



M/L XL/

MANDIBLE UHMWPE Yes (426 m/s) Min. 650 m/s Black, Green, Tan HC & MC Helmets 500 gr 391 - 422 cm<sup>2</sup>

#### PRODUCT

- Material
- Ballistic Protection (NIJ IIIA 9 mm)
- V50 for 17 gr FSP (STANAG 2920)
- Available Colors
- Compatible With
- Weight (± 50 gr)
- Protection Area









VISOR PC No Min. 255 m/s Black, Green, Tan HC & MC Helmets 300 gr 242 - 250 cm<sup>2</sup>



MANDIBLE UHMWPE Yes (426 m/s) Min. 650 m/s Black, Green, Tan HC & MC Helmets 500 gr 391 - 422 cm<sup>2</sup>



T-LIGHT

#### GG-HAC-STR01 ● ● ● ● ● GG-HAC-LIT01 $\bullet \bullet \bullet \bullet \bullet \bullet$







• Light Models	: Low IR (Strobe)-High IR (Strobe)	<ul> <li>Led color options</li> </ul>
	Green (Steady)-Green (Steady)+Bright White (Strobe)	
• Battery	: 1xCR123	
• Operation time	: Green (Steady)+Bright White (Strobe) : $\rightarrow$ 10 hours (25°C)	
	High IR (Strobe): →24 hours (25°C)	• Battery
• Weight	: ←55 g (Without battery)	<ul> <li>Power of the Power Led</li> </ul>
• Dimensions (mm)	: W:75 / H:26 / L: 49	• Operation time (White LED)
Operating temperature	: -40°C / +70°C	<ul> <li>Operation time (Others)</li> </ul>
Water resistance	: IP68	<ul> <li>Weight (Without battery)</li> </ul>
Vibration option	: Avaible (Not avaible in the US)	
Reverse Polarity Protection	: Yes	

: Yes

• Programmable



- : White power LED
- Red
- White
- Infrared
- : 1 x AA (Alkaline or Lithium)
- : 50 lm
- $: \rightarrow$  4 hours (With Lithium battery)
- :  $\rightarrow$  24 hours (With Lithium battery)



## ADJUSTABLE COUNTER WEIGHT



• Weight

• Attachment

• Dimensions (mm)

• Weight	: 135 g
<ul> <li>Fore/Aft adjustment</li> </ul>	: 26 mm
<ul> <li>Vertical adjustment</li> </ul>	: 26 mm
• Tilt adjustment	: ± 5°
• Breakaway feature	: Yes
• Color	: Black
• Magnetic sensor	: Yes
• Foldable	

• Dove tail interface



• Customizable weight management system designed to enhance helmet's usage comfort and reduce neck strain by balancing the helmet for the devices mounted on front shroud.

- : 70 g (0.1 lbs) x 5 pcs stainless steel bars
- : L: 75 mm W: 50 mm (1.1 in x 0.7 in)
- : By Velcro







A versatile helmet system for commercial does not have an ejection seat. In addition, vision goggles. Thanks to its lightweight protection and reliability in various usages long operations.

### **GG-HAC-NVG01**

#### Lightweight but durable

Extremely lightweight construction Strong epoxy resin, aramid and carbon fibre shell Impact and puncture protection also have ballistic shell option.

#### EASY SET-UP

Quick & easy set-up of retention system and ear comms for perfect fit. Quick disconnect feature.

#### LONG-TERM COMFORT

Excellent passive sound reduction technology. Advanced ceiling flooring system preventing moisture formation.

Optional inner pads in different thicknesses for precise fit. Hygienic structure.

Helps reducing thermal heat with air ventilation channels. Optional active noise reduction.

#### APPLICATION AREAS

Air Force Commercial usage Air Ambulance Firefighter. Aerobatics demonstration. Crop disinfection & Forestry.

## **ROTARY WING AIRCRAFTS** CREW HELMETS



#### **PERSONALIZATION OPTIONS:**

- The standard helicopter helmet in different configurations meets the requirements of the user
- Fibre reinforced, carbon fibre structure with ventilation ducts in the outer shell
- 4 sizes available

• Shell Colour

- Single or double visor options (colourless, colour, yellow and laser protection).
- Optional Active Noise Reduction
- Various connection sockets, side connector, microphone, impedance options.
- Shell colour and surface treatment options
- Visor protector, reflective tape options and more

#### **OPTIONS AND ACCESSORIES:**

<ul> <li>Visor - Single / Double / Laser Protected</li> <li>Visor Protector</li> <li>Ballistic &amp; Non-ballistic option</li> </ul>			1300 gr ±50 gr (witho 1575 gr ±50 gr (with c				
<ul> <li>Passive / Active Sound Reduction</li> <li>Cable and Input Options</li> </ul>			Sound Attenuations:				
<ul> <li>Microphones</li> <li>Reflective Tape</li> <li>Accessories availa</li> </ul>	able on the marke	et	50 db at 1000 Hz 69 db at 4000 Hz 54 db at 8000 Hz				
VISOR PROTECTOR	VISOR	EARPIECE	CABLE	INPUT OPTIONS	MICROPHONE		
Medium	Colourless & Colour	Passive 150 Ohm	Spiral (1M)	UK NATO	M7/DC		
Hard (NVG)	Yellow & Colour	Passive 600 Ohm	Straight (1M)	U174	M87		
Soft		Active sound reduction		Twin Plug	Waterproof		
		Waterproof		6 Pin Lemo			
				8 Pin Lemo			





• Quick disconnect feature in order to remove communication systems rapidly in case of emergency situtation

#### Weight:

## ROTARY WING AIRCRAFTS CREW HELMETS-2

#### **GK-APH-1**

A versatile helmet system for commercial and military pilots, designed to be used for air crews of rotary wing aircrafts, which does not have an ejection seat. In addition, it has been designed to be used with night vision goggles. Thanks to its lightweight solution, it is designed to provide comfort, protection and reliability in various usages and gives utmost comfort to the used during long operations.

#### Lightweight but durable

Extremely lightweight construction Strong epoxy resin, aramid and carbon fibre shell Impact and puncture protection also have ballistic shell option.

#### EASY SET-UP

Quick & easy set-up of retention system and ear comms for perfect fit. Quick disconnect feature.

#### LONG-TERM COMFORT

Excellent passive sound reduction technology. Advanced ceiling flooring system preventing moisture formation.

Optional inner pads in different thicknesses for precise fit. Hygienic structure. Optional active noise reduction.

#### **APPLICATION AREAS**

Air Force Commercial usage Air Ambulance Firefighter. Aerobatics demonstration. Crop disinfection & Forestry.

#### **PERSONALIZATION OPTIONS:**

- The standard helicopter helmet in different configurations meets the requirements of the user
- Fibre reinforced, carbon fibre structure
- 4 sizes available
- Single or double visor options (colourless, colour, yellow and laser protection).
- Optional Active Noise Reduction
- Various connection sockets, side connector, microphone, impedance options.
- Shell colour and surface treatment options
- Visor protector, reflective tape options and more
- Quick disconnect feature in order to remove communication systems rapidly in case of emergency situtation

#### **OPTIONS AND ACCESSORIES:**

- Shell Colour
- Visor Single / Double / Laser Protected
- Visor Protector

#### Ballistic & Non-ballistic option

- Passive / Active Sound Reduction
- Cable and Input Options
- Microphones
- Reflective Tape
- Accessories available on the market



VISOR PROTECTOR	VISOR	EARPIECE	CABLE	INPUT OPTIONS	MICROPHONE
Medium	Colourless & Colour	Passive 150 Ohm	Spiral (1M)	UK NATO	M7/DC
Hard (NVG)	Yellow & Colour	Passive 600 Ohm	Straight (1M)	U174	M87
Soft		Active sound reduction		Twin Plug	Waterproof
		Waterproof		6 Pin Lemo	
				8 Pin Lemo	



## FIXED WING HELMETS

#### GK-EPH-1



A versatile helmet system for commercial and military pilots, designed to be used for air crews of fixed wing aircrafts, which have an ejection seat. In addition, it has been designed to be used with night vision goggles. Thanks to its lightweight solution, it is designed to provide comfort, protection and reliability in various usages and gives utmost comfort to the used during long operations.

#### Lightweight but durable

Extremely lightweight construction Strong epoxy resin, aramid and carbon fibre shell Impact and puncture protection also have ballistic shell option.

#### LONG-TERM COMFORT

Excellent passive sound reduction technology. Advanced ceiling flooring system preventing moisture formation.

Optional inner pads in different thicknesses for precise fit. Hygienic structure.

#### Optional active noise reduction.

#### **APPLICATION AREAS**

Air Force Fighter Jet .

#### EASY SET-UP

Quick & easy set-up of retention system and ear comms for perfect fit. Quick disconnect feature. 2 sets of headphones - with ANR capability Oxygen mask connection system for head and breathing Perfect balance for fast maneuvers Practical NVG mounting system 650 KEAS qualified safety system Wind Blast launch system qualified

#### PERSONALIZATION OPTIONS:

- Fibre reinforced, carbon fibre structure
- 4 sizes available
- Single or double visor options (colourless, colour, yellow and laser protection).
- Optional Active Noise Reduction
- Various connection sockets, side connector, microphone, impedance options.
- Shell colour and surface treatment options
- Visor protector, reflective tape options and more
- Quick disconnect feature in order to remove communication systems rapidly in case of emergency situtation

#### **OPTIONS AND ACCESSORIES:**

- Shell Colour
- Visor Single / Double / Laser Protected
- Visor Protector
- Ballistic & Non-ballistic option
- Passive / Active Sound Reduction
- Cable and Input Options
- Microphones
- Reflective Tape
- Accessories available on the market

VISOR PROTECTOR	VISOR	EARPIECE	CABLE	INPUT OPTIONS	MICROPHONE
Medium	Colourless & Colour	Passive 150 Ohm	Spiral (1M)	UK NATO	M7/DC
Hard (NVG)	Yellow & Colour	Passive 600 Ohm	Straight (1M)	U174	M87
Soft		Active sound reduction		Twin Plug	Waterproof
		Waterproof		6 Pin Lemo	
				8 Pin Lemo	



# BALLISTIC PROTECTIVE **PLATES**

Usually our tactical vests are manufactured as level IIIA and can be upgraded to level III or level IV by adding ballistic protective hard armor plates (HAP). Our HAPs are manufactured in accordance with NIJ0101.04 and NIJ0101.06 standards and tested in our accredited inhouse ballistic testing laboratory. Our HAPs can be offered as stand alone as well, which means those HAPs offer specific protection without having a soft vest behind them. Depending on customer preferences, we can manufacture orthopedic, light-weight, single, double or multi curved HAPs. All our HAPs are tested according to our quality plans before leaving the factory.



•	Dimensions	: 230 x 280 mm
•	Protection Level	: NIJ0101.06 Level IV
•	Number of Shots	: 3
•	ICW / SA	: SA
•	Weight	: 2350 ±50 gr
•	Curvature	: Double

\* ICW: In conjuction with our NIJ0101.06 level IIIA softballistic protective vest. \* SA: Stand alone.

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### ● ● ● ● ● PLATES - GRPB-1001 XL

Dimensions : 270 x 320 mm
Protection Level : NIJ0101.06 Level IV
Number of Shots : 3
ICW / SA : SA
Weight : 3150 ±50 gr
Curvature : Double



### ● ● ● ● ● PLATES - GRPB-1002 SP

•	Dimensions	: 150 x 200 mm
•	Protection Level	: NIJ0101.06 Level IV
•	Number of Shots	: 1
•	ICW / SA	: SA
•	Weight	: 1150±50 gr
•	Curvature	: Single

\* ICW: In conjuction with our NIJO101.06 level IIIA softballistic protective vest.

\* SA: Stand alone.

\* ICW: In conjuction with our NIJ0101.06 level IIIA softballistic protective vest. \* SA: Stand alone.







●●●● PLATES - GRPB-1004				●●●●● PLATES - GRPB-3003		
•	Dimensions	: 250 x 300 mm	BALLISTIC PLATE	•	Dimensions	: 220 X 270 mm
•	Protection Level	: NIJ0101.06 Level IIIA		•	Protection Level	: NIJ0101.04 Level III
•	Number of Shots	: 3		•	Number of Shots	: 6
•	ICW / SA	: SA		•	ICW / SA	: SA
•	Weight	: 525±50 gr	STRIKE FACE	•	Weight	: 750±50 gr
•	Curvature	: Single		•	Curvature	: Double

### ●●●●● PLATES - GRPB-2002

Dimensions : 250 x 300 mm
Protection Level : NIJ0101.06 Level IV
Number of Shots : 3
ICW / SA : SA
Weight : 2600±50 gr
Curvature : Double



## ●●●●● PLATES - GRPB-4004

•	Dimensions	: 250 x 300 mm
•	Protection Level	: NIJ0101.06 Level IV
•	Number of Shots	: 3
•	ICW / SA	: ICW
•	Weight	: 2400±50 gr
•	Curvature	: Double

\* ICW: In conjuction with our NIJ0101.06 level IIIA softballistic protective vest.

\* SA: Stand alone.

\* ICW: In conjuction with our NIJ0101.06 level IIIA softballistic protective vest. \* SA: Stand alone.



### BALLISTIC PLATE



## STRIKE FACE

#### BALLISTIC PLATE



## STRIKE FACE

●●●● PLATES - GRPB-4044				●●●●● PLATES - GRPB-4667		
•	Dimensions	: 250 x 300 mm	 BALLISTIC PLATE		Dimensions	: 250 x 300 mm
•	Protection Level	: NIJ0101.06 Level III++	CORANT	•	Protection Level	: NIJ0101.06 Level III+
•	Number of Shots	: 3	KOMPOZIT	•	Number of Shots	: 6
•	ICW / SA	: SA		•	ICW / SA	: SA
•	Weight	: 2100±50 gr	STRIKE FACE	•	Weight	: 950±50 gr
•	Curvature	: Single		•	Curvature	: Double

### ● ● ● ● ● PLATES - GRPB-4054

Dimensions : 250 x 300 mm
Protection Level : NIJ0101.06 Level IV
Number of Shots : 1
ICW / SA : ICW
Weight : 2400±50 gr
Curvature : Double



## ● ● ● ● ● PLATES - GRPB-5005

•	Dimensions	: 250 x 300 mm
•	Protection Level	: NIJ0101.06 Level IV
•	Number of Shots	: 1
•	ICW / SA	: SA
•	Weight	: 2600±50 gr
•	Curvature	: Double

 $\ast$  ICW: In conjuction with our NIJ0101.06 level IIIA softballistic protective vest.

\* SA: Stand alone.

\* ICW: In conjuction with our NIJ0101.06 level IIIA softballistic protective vest. \* SA: Stand alone.



### BALLISTIC PLATE



## STRIKE FACE

#### BALLISTIC PLATE



## STRIKE FACE

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••	• • PLATES	- GRPB-6006 GR		•	●●● PLATES	S - GRPB-9019
•	Dimensions	: 250 x 250 mm	GR	•	Dimensions	: 250 X 300 mm
•	Protection Level	: NIJ0101.06 Level IV	BALLISTIC PLATE	•	Protection Level	: NIJ0101.06 Level III
•	Number of Shots	: 1	GGARANTI	•	Number of Shots	: 6
•	ICW / SA	: SA	KOMPOZIT.	•	ICW / SA	: SA
•	Weight	: 2000±50 gr	STRIKE FACE	•	Weight	: 1300±50 gr
•	Curvature	: Single		•	Curvature	: Double

### ● ● ● ● ● PLATES - GRPB-7007 SP

Dimensions : 150 X 200 mm
Protection Level : NIJ0101.06 Level III
Number of Shots : 2
ICW / SA : ICW
Weight : 550±50 gr
Curvature : Single



### ●●●●● PLATES - GRPB-9020

•	Dimensions	: 250 X 300 mm
•	Protection Level	: NIJ0101.06 Level III+
•	Number of Shots	: 6
•	ICW / SA	: SA
•	Weight	: 900±50 gr
•	Curvature	: Double

\* ICW: In conjuction with our NIJ0101.06 level IIIA softballistic protective vest.

\* SA: Stand alone.

\* ICW: In conjuction with our NIJO101.06 level IIIA softballistic protective vest. \* SA: Stand alone.



## BALLISTIC PLATE



## STRIKE FACE

## BALLISTIC PLATE



## STRIKE FACE



## **BALLISTIC PROTECTIVE** SHIELD

Our company produces shields in various sizes with different protection levels in accordance with NIJ0108.01, STANAG 4563 and STANAG 2920 standards. Ballistic protective shields, which we design according to the technical demands of our customers, are preferred by the military and police organizations because the solutions we offer are light, ergonomic and functional. Like all our ballistic protective products, the shields we produce are subjected to a test protocol in our accredited ballistic test laboratory in accordance with our quality plan.

Ballistic protective shields, which are used for the purpose of responding to social events, are produced in different models and sizes such as wheeled, ballistic visor, LED light, gun rest version, neck strap.

Our ballistic protective shields have real field experience.



#### ●●●●● SHIELD



EN 1063 BR7 Protection level 18x10 cm EN 1063 BR7 wievport 93x53 cm 26 kg total weight

Polyurea coated





- 6W total Led power
- IP65 cooling alloy frameFlash and full power modes
- Safety valve for pressure & moisture
  12V 3500mAh rechargable battery pack IP68 cable socket
- 4h battery life at full power mode
- 750 gr total system weight
- Battery pack
- Control unit
- Rubber coated alloy handlebars
- PU foam support

• Protective alloy corner frames

- PU foam support
- Alloy frame supported gunport
- Usable by left and right arm
- Velcro adjustable arm straps
- Robust stand up bar



#### GRBK-216 ● ● ● ● ● ●



- EN 1063 BR7 Protection level
- 18x10 cm EN 1063 BR7 wievport
- 93x53 cm
- 26 kg total weight
- Polyurea coated



- Velcro adjustable arm Battery pack —
- Protective alloy corner frames





6W total Led power
IP65 cooling alloy frame
Flash and full power modes
Safety valve for pressure & moisture
12V 3500mAh rechargable battery pack
IP68 cable socket
4h battery life at full power mode

• 750 gr total system weight



Rubber coated alloy handlebarsAlloy frame supported gunport

• Robust stand up bar

## G BALLISTIC PROTECTIVE SHIELD VERSATILITY & MOBILITY EXTREME PROTECTION

### GRBS-316 • • • • •



- NIJ0108.01 level IV protection
- 75x200 cm x 3 detachable shield panels
- 120 kg x 3 shields, total weight 360 kg
- All joints are protected by armor steel overlaps

- example a series
   example a series
- 90 degree folded position
- Foldable top panel
- Top to bottom ballistic protection

• 24x12 cm ballistic viewport



- Replaceable ballistic panels
- Robust pushing handles



• Quickly foldable top panel on centre shield

225x200 cm when fully deployed All panels are polyurea coated

## BALLISTIC PROTECTIVE G



Standalone protection as per NIJ 0108.01 level IIIA for shield and visor Single Curved R400 (±10)



Stand alone protection as per NIJ 0108.01 level III

Dimensions : 30x50 cm

: 3 kg Weight



## VEHICLE ARMOR SOLUTIONS

#### STANAG 4569 Level 3-4-5-6 Armor Panels

It is an add-on composite armor structure It is a composite structure used for the purpose technology combined with the right ceramic surfaces. solution to meet all technical requirements.

#### **Spall Liner Solutions**

designed for air, land and sea platforms in of stopping particles or reducing the spreading accordance with Stanag 4569 standard (AEP 55 angle towards the interior of the vehicle from Vol.1). We offer solutions including high tech the hull in case of encountering an overproducts and alternative material options that matching threat over the protection level of threats in line with the vehicle type and relevant requirements. It is offered in UHMWPE, protection requirements. Lightweight structures aramid, glass fiber and as hybrid solutions. It produced with advanced composite manufacturing has paintable, adherable and non-flammable



#### LIGHT WEIGHT ARMOR PANELS ON AIRCRAFTS ● ● ● ● ● ● HELP SAVING FUEL, REDUCE OPERATING COSTS, AND INCREASE FLYING RANGE.



### **ADVANTAGES OF LIGHT WEIGHT ARMOR PANELS**

#### **ON AIR PLATFORMS:**

- MORE AGILITY
- HIGH PERFORMANCE ON HIGH ALTITUDE
- SAFE FLIGHT ON LOWER ALTITUDE
- SUPERIOR PROTECTION FOR PILOTS AND ELECTRONICAL EQUIPMENTS
- LOW VIBRATION AND NOISE LEVEL

#### **ON MARINE PLATFORMS:**

- ATTACHABLE / DETACHABLE ARMOR PANELS
- EXTREMELY LIGHT WEIGHT COMPARING TO FIBER GLASS AND CERAMIC SOLUTIONS
- IDEAL SOLUTIONS FOR PATROL AND ASSAULT BOATS
- LOW VIBRATION AND NOISE LEVEL
- ALL WEATHER COATING

#### **ON LAND PLATFORMS :**

- ABLE TO STOP MULTI SHOTS
- %90 LIGHTER THAN STEEL ARMOR SOLUTIONS
- LOW VIBRATION AND NOISE LEVEL
- EXTRA SPACE / VOLUME ON VEHICLES DUE TO THE THICKNESS OF THE PANEL





## **BALLISTIC PROTECTIVE GARMENTS AND** EQUIPMENTS



Garanti Kompozit uses high-tech materials to produce various ballistic protective composite products, performance enhancing clothing and equipment such as EOD suits, Demining suits, Bomb blankets, ballistic briefcase, Fragment and Slash protective garments for military, law enforcement, professional and civilian use.

## EOD SUIT COMPLETE WITH HELMET AND VISOR

#### ● ● ● ● ● ● GR-BAT.05

Our new type of EOD SUIT COMPLETE WITH HELMET AND VISOR, which we designed considering the heavy-duty conditions of bomb disposal technicians, is lighter, useful, easier to don and doff, modular and has a superior protection level compared to its competitors. It can be used by personnel who are 170 - 190 cm tall and weigh 65-100 Kg. The carrier suit, which is made of rip-stop woven meta-aramid fabric has high tear and abrasion strength and offers a long service life. This EOD suit is made of permanently flame-retardant materials and protects the wearer up to a certain level from over pressure, fragments and impacts that may occur because of an explosion.

#### The EOD suit consists of the following parts;

- Protective helmet and visor
- Protective jacket
- Protective pants and boot covers
- Protective groin panel
- Protective gloves and hand protection
- Protective groin and chest plates
- Adjustable spine-protective structure integrated in the trousers
- Power supply cables and control panel
- Protective face mask (balaclava)
- Protective underwear set against fragments (optional)
- Transportation bag

#### **PROTECTIVE HELMET AND VISOR:**

The protective helmet, made of high performance ballistic protective materials to be extremely light, has a ballistic protective visor that can be opened in differ ent positions.

A ventilation system is integrated into the headgear to ensure that the user is comfortable in hot environments.

Inside the helmet, there is a liner system made of flame retardant materials providing high comfort and impact resistance, offered in three different thicknesses. Likewise, the chin strap system, which is attached to the helmet at 4 points and can be adjusted according to the head circumference is also produced from materials which are flame retardant.

In order for the user to work comfortably in dark environments, there is a multi-LED lighting system on the helmet and a power supply unit for the ventilation and lighting systems.

There is also an extremely modern environmental communication system within the helmet along with a camera mounted on front side of the helmet.







Offering high ballistic protection and optical performance in accordance with the NIJ0117.00 standard, the visor is protected against scratching and fogging

The headgear and visor system assembly is designed taking into account the center of gravity of the head so that the neck and shoulder muscles of the user is not tireci.

The total weight of the helmet and visor is  $5600 \pm 400$  gr.

• Adjustable ultra high speed ventilation capability with turba mode.

• Fully integrated UV and white LEDs with adjustable intensity that can be used together or seperately.

• Fully integrated camera with 140 degree wiev angle and with a 1080P resolution. Recording on an SD card and video transmission via wifi.

• Integrated Telecom system with PTT feature and auta noise reduction at 95dB down to 35dB.

• Magnetic ehin buckle for guick release.

• Enlarged visor with demister and anti-fog liners with vent position.

## EOD SUIT COMPLETE WITH HELMET AND VISOR



#### **PROTECTIVE JACKET:**

The protective jacket, designed to provide the user with maximum comfort, protects the entire upper body. The user's collar area is also protected by a design that slopes out all around the neck area.

There are pockets on the jacket where additional hard ballistic protection panels can be placed to cover the groin and front chest area.

There are different sized pockets on the jacket to accom modate various equipment, such as radio, mobiles and backup power supply etc.

There are panic zippers on the jacket for urgent removal of the garment.

#### PROTECTIVE PANTS:

The pants are designed to be used comfortably by users of different sizes thanks to the adjustable suspension system and elastic waist bands.

There are panic zippers on the pants for urgent removal of the garment.

There is an adjustable spine protection structure integrated into the pants against possible impacts. The pants are tied to the boot covers and completely cover the foot area of the user.

#### **GROIN PROTECTOR:**

It is designed to provide protection to the user's groin area. It does not restrict the user's movements.

It can be fixed to pants with velcros.

#### **PROTECTIVE GLOVES AND HAND PROTECTION:**

It is designed to provide protection to the user's hand area. It does not restrict the use of hands. It can be easily be removed.

#### **PROTECTIVE GROIN AND CHEST PLATES:**

They are extremely lightweight composite structures with a high protection value, designed to provide additional shrapnel and pressure protection in the groin and front chest area of the user. They can be easily attached and removed from the pockets on the front of the jacket. They don't prevent the comfort of the user by sliding under each other in case of bending or crouching.

#### SPINE-PROTECTIVE BACK PANEL INTEGRATED IN THE PANTS:

It is a flexible, adjustable, anti-sweat, waterproof and lightweight protective structure with high impact absorp tion properties, designed to protect the user's back against impacts. It is integrated into the pants.

#### BACKUP POWER SUPPLY CONNECTION CABLES AND CONTROL PANEL:

There is a backup power supply unit for the systems on the helmet that require energy. It is located in a pocket on the jacket and provides energy to the system through the cables. In order to control these systems easily, the control panel can be fixed to the arms and similar parts of the gear with the help of velcros. The control panel has an illumination feature for night use. Ultralight touch pad control displays malfunction warning and battery level indicator.

## EOD SUIT COMPLETE WITH HELMET AND VISOR

#### **PROTECTIVE FACE MASK (BALACLAVA):**

It is a light and comfortable face mask made of knitted fabrics made of meta aramid fibers in order to protect the neck and face of the user from flame. 3 pieces are provided with each suit.

#### **PROTECTIVE UNDERWEAR SET (OPTIONAL):**

It is an underwear set made of knitted fabrics made of UHMWPE fiber, offered to provide additional shrapnel protection to the user. Made for upper and lower body. It provides high protection especially against extremely small fragments. Thanks to its fiber feature, it increases the comfort of the user by giving a cool feeling.

#### CARRYING BAGS:

Protective helmet and visor are provided in its own carrying bag, and the remaining clothing is provided in another carrying bag. Carrying bags are made of polyamide 6.6 fabrics with high tensile strength and high abrasion resistance.







#### BALLISTIC PERFORMANCE OF THE EOD SUIT:

• Helmet - V50 value for 17 grain FSP is min. 640 m/s • Helmet -V50 value for 44 grain FSP is min. 550 m/s • Visor - V50 value for 17 grain FSP ismin. 780 m/s • Jacket front and collar front - V50 value for 44 grain FSP ismin. 530 m/s • Plate areas on the jacket - V50 value for 44 grain FSP is min. 1100 m/s • Plate areas on the jacket - V50 value for 207 grain FSP ismin. 750 m/s • Back and sleeves - V50 value for 17 grain FSP ismin. 560 m/s • Groin - V50 value for 17 grain FSP is min. 600 m/s • Pants - V50 value for 17 grain FSP is min. 620 m/s • Hand protection - V50 value for 17 grain FSP is min. 560 m/s

#### **GEAR'S PROTECTIVE FEATURES AGAINST 10 KG C4 EXPLOSIVE:**

- The helmet can reduce the excessive pressure on the ears by at least 78% as a result of the explosion of 10 Kg C4 plastic explosive at a distance of 3 meters to the user in the open environment.
- The helmet can reduce the acceleration created by the pressure wave caused by the explosion by at least 85%.
- The front part of the jacket can reduce the overpressure by min. 85%




### EOD LIGHT WEIGHT SUIT WITH HELMET AND VISOR

#### GR-BAT.04

#### 

GR-BAT.04 model EOD suit is designed to protect users from blast fragmentation of explosives in the highest possible protection level. The suit is so light, soft, flexible, versatile, and ergonomic that it does not limit the mobility of the user.

EOD Suit is manufacured in a modular structure, so that these modular parts can be added and removed according to requirement of the user.

The Suit consists of 14 pieces of ballistic protective modular components, one ballistic protective helmet, one ballistic protective visor, a pair of ballistic protective goggles and 2 pieces of ballistic protective plates.



#### Multi-purpose usage:

The equipment is designed as set of a modular components. It does not restrict the mobility of the user as it has an extremely light solution using advanced technology materials. Adding or removing these modular compenents are so easy and quick. V50 value for 17 grain FSP is min 400 m/s (1310 ft/s) all around the suit. When the hard armor panels are added V50 value for 17 grain FSP increases up to min 1800 m/s. (6000 ft/s)

- Right and left arm protectors V50 value for 17 grain FSP is min 400 m/s (1310 ft/s)
- Right and left shoulder protectors V50 value for 17 grain FSP is min 550 m/s (1805 ft/s)
- Right and left lower leg V50 value for 17 grain FSP is min 500 m/s Foot protectors- V50 value for 17 grain FSP is min 400 m/s (1310 ft/s) • Upper leg protector - V50 value for 17 grain FSP is min 400 m/s (1310 ft/s)
- Collar and shoulder protector -V50 value for 17 grain FSP is min 550 m/s (5250 ft/s)
- Protective Short V50 value for 17 grain FSP is min 400 m/s and backside V50 value for 17 grain FSP is min 550 m/s (5250 ft/s)
- Protective Belt V50 value for 17 grain FSP is min 400 m/s (1310 ft/s)
- Protective Vest V50 value for 17 grain FSP is min 500 m/s (1640 ft/s)
- Chest area protected by additional hard armor plate- V50 value for 17 grain FSP is min 1800 m/s. (6000 ft/s)
- Groin area protected by additional hard armor plate- V50 value for 17 grain FSP is min 1600 m/s (5250 ft/s)

#### Ballistic Protective Helmet and Visor:

Ballistic protective helmet is designed to protect the head of the user against fragments of 17 grain FSP with a V50 value of min. 725 m/s (2375 ft/s). Visor provides a V50 value of min 650 m/s (2130 ft/s)against 17 grain FSP.





**Ballistic Protective Visor** 

Ballistic Protective Torso Plates Inserts Chest Plates (25x43 cm) (10x17 inches)

EOD suit is not designed for bomb disposal. It is designed to protect users from blast fragmentation of explosives in the highest possible protection level according to the technical specifications in this







Ballistic Protective Groin Plates (25x34 cm) (10x13 inches)

# G DEMINING SUIT WITH VISOR

## DEMINING SUIT WITH VISOR

#### GR-MAT.04

#### 

- The Suit consists of 8 ballistic protective **TECHNICIAL SPECIFICATIONS:** modular compenents for hands, arms, torso, groin and legs.
- Extremely light.
- Easy to don and doff.
- Different size and color options are available.
- Provides comfortable usage in hot climate.
- Easy to wash and clean the carrier suit.
- Hygienic design.

- V50 Value for 17 gr FSP STANAG 2920: min 450 m/s (1475 ft/s).
- Weight: Max. 7600 gr. (16.75 lbs.) (Excluding gloves and spike)

#### **PRODDING NEEDLE:**

- Weight: Max. 300 gr (0.7 lbs)
- Needle Length (Excluding handles): 30 (±2) cm. 12 in. (±0.8)
- Non-magnetic Titanium needle
- Comfortable handling, ergonomic design Used as I or T

#### **GLOVES FOR DEMINING PERSONNEL:**

V50 Value for 17 gr FSP STANAG 2920: min 450 m/s. (1475 ft/s).





• Made of highly durable 5mm (0.20") thick polycarbonate material that protects the whole face and neck part of the user.

- Extremely light.
- Easy to install, remove and clean.
- Comes with ergonomic and practical head frame and chin strap.
- Provides clear vision from all angles.
- Replaceable scratch shield that protects the visor.
- Comes with a fabric carrying bag.

#### **TECHNICIAL SPECIFICATIONS:**

Material	: Polycarbonate
Visor Length	: 300 mm (12")
Visor Protection Area	: 1265 cm² (196 in²)
Dimensions	: 33 x 25 cm (13.0" x 10")
Weight	: 1100 gr. (2.4 lbs.)



• Protection level: According to the STANAG 2920, V50 value is min. 250 m/s (820 ft/s) against 17 grain FSP.

# G BOMB SUPPRESION BLANKET & SAFETY CIRCLE

# PORTABLE FRAGMENT SHIELD

#### GRN-BBSC-0001

#### 

#### ● ● ● ● ● ● GRN-PFRS-0001

We offer to our valuable customers a lightweight, portable, flexible product. It is made of multiple layers of water repellency treated woven aramid fabric that is capable of ballistic protection and enveloped in a flame retardant and water repellent PA66 carrier.

Easily folded and stored in the carrying bag which has straps all around for easy transportation / quick deployment and also permits safe placing over a suspected explosive device.

The Bomb Suppression Blanket and Safety Circle eliminates direct contact with a bomb and provides a safe environment for its disposal.

#### **TECHNICAL SPECIFICATIONS**

Material: High-Strength Aramid Fabric (High Tenacity 1000D PA66 outer cover) Protection Level: V50 value tested with .22 Cal., 17 grain FSP according to STANAG 2920 - Min 500 m/s

#### BOMB BLANKET

Size: 1550 mm x 1550mm (W x L) Weight: 11 kg (± 0,5 kg)

#### SAFETY CIRCLE

Size: 1550 mm x 450mm (L x H) Weight: 4 kg (± 0,5 kg)



We offer to our valuable customers a lightweight, portable, flexible product. It is made of multiple layers of water repellency treated woven aramid fabric that is capable of ballistic protection and enveloped in a flame retardant and water repellent PA66 carrier.

Easily folded and stored in the carrying bag which has straps all around for easy transportation / quick deployment and also permits safe placing over a suspected explosive device.

#### **TECHNICAL SPECIFICATIONS**

Dimensions in open view	: 80 x 180 c
Dimensions in folded view	: 30x80 cm
Weight	: 7 kg
V50 value for 17 gr FSP STANAG 29	20 : min. 500 r
Ballistic Protective Panel	: Wowen Ar
Outer fabric	· Flame Re



OPEN VIEW





cm

m/sn ramid etardant Polyamide 6.6



## BALLISTIC BRIEFCASE

#### **GRN-BBRC-0001**

#### $\bullet \bullet \bullet \bullet \bullet \bullet \bullet$

#### ● ● ● ● ● ● ● GRN-BBRC-0002

Ultra light weight ballistic protective briefcase offers you fast deployment and easy usage with a non- threatening appearance. Three part briefcase provide carrier protection against different threat levels. Color options are available and size of briefcases can be adjustable according to the customer requirements.

#### **BALLISTIC BRIEFCASE TECHNICAL SPECIFICATIONS**

Ballistic material UHMWPE Protection level NIJ Level IIIA Size 55 cm x 40cm (closed) - 55cm x 120 cm (opened) Size 55 cm x 40cm (closed) - 55cm x 120 cm (opened) Weight 7,3 kg Briefcase cover Nylon Color Black

### **BALLISTIC BRIEFCASE TECHNICAL SPECIFICATIONS** Ballistic material UHMWPE Protection level NIJ Level IIIA

Weight 4,5 kg Briefcase cover Nylon Color Black



Ultra light weight ballistic protective briefcase offers you fast deployment and easy usage with a non- threatening appearance. Three part briefcase provide carrier protection against different threat levels. Color options are available and size of briefcases can be adjustable according to the customer requirements.

#### **BALLISTIC BRIEFCASE TECHNICAL SPECIFICATIONS**

Ballistic material UHMWPE Protection level NIJ Level III Size 55 cm x 40cm (closed) - 55cm x 120 cm (opened) Weight 13,9 kg Briefcase cover Nylon Color Black







## G FRAGMENT AND SLASH PROTECTIVE INNER AND OUTER WEAR

# BALLISTIC PROTECTIVE UNDERWEAR



• We are offering fragment and slash protective inner and outer wear products with a brand-new technology! neck area. Once small particles are penetrated into body, medical treatment can be much more complicated

number of penetrating particle and reduce penetration depth, thus make the medical treatment much easier.

• Our fragment and slash protective gear is also very useful to protect body areas such as arms and neck

• Our garments are made of UHMWPE Dyneema® knits and thanks to elastan content they are very comfortable to wear, and provide a cool feeling as well.

		1	1	,	
Fragment And Slash Protection Gear And Protection Levels	STANAG 2920 min V50 m/s 2 gr RCC	STANAG 2920 min V50 m/s 17 gr FSP	ISO 13997 Level	ISO 13997 Force N	DIN 388 Level
Under Wear Pants					
Body	260	180	A	3,4	2
Groin	290	235	В	6,4	2
Under Wear Shorts					
Body	260	180	А	3,4	2
Groin	290	235	В	6,4	2
Long Sleeves Under Wear					
Body And Sleeves	260	180	A	3,4	2
Collar	290	235	В	6,4	2
Combat Shirt					
Body	260	180	A	3,4	2
Collar	370	320	С	10,8	3-4
Sleeves	300	310	В	10,5	3-4
Neck Protection					
Body	290	235	В	6,4	2
Collar	380	315	D	15,6	4

#### ● ● ● ● ● ● ● GG-BU-0001

- Comfortable and tight-fitting design, mid-thigh length ballistic underwear gives protection against fragments.
- Sewn protective material/ reinforcement fabric on the outside of underwear.
- Flame retardant and quick drying features.

#### **TECHNICAL SPECIFICATIONS**

Size	: S-M-L-XL-
Main Material Composition	: 95% polyes
Protective Material	: UHMWPE
Protective Material Weight	: 210 g/m² ±
V50 value for 2 grain RCC, STANAG 2920	: Min. 300 m
Protection area	: Front, back





XXL ster - 5% Elasthane knits  $10 \text{ g/m}^2$ /s and crotch







# BALLISTIC PROTECTIVE

We are designing our ballistic protective vests according to customer specifications. Before testing laboratory according to specific threats listed in the international standard's protection levels and document the results. All our light, ergonomic and top quality ballistic protective vests pass through during and after production.

Our ballistic protective vests can be used together with our additional ballistic protective attachments for the body parts such as groin, shoulder, upper arm, leg, throat, waist and neck etc). Thanks to our Molle design, several magazine pouches and bags can be attached to the carrier vest, which is waterproof and highly abrassion resistant, made of polyamide 6.6 needed by the customers.



Protection level Weight without ballistic inserts Vest total weight Total Protection Area (L size) Outer fabric Accessories

: NIJ Level IIIA : 1040 grams : 3450 grams : 34,5 dm<sup>2</sup> : Polyamide 6.6 700D : Magazine pouches (5), multi-purpose bag (1), multi-purpose pouch (1), battery pouch (1), radio pouch (1), grenade pouches (2), gas canister pouches (2,) hanger strap (1), MP4 magazine pouch (4) : Front. back

Plate pouch



#### GG-PT2002 ● ● ● ● ● ●

# MILITARY TACTICAL VEST



Multi purpose bag

• Precise size adjustment from shoulders and waist





**Protection level** Weight without ballistic inserts Vest total weight Total Protection Area (L size) Outer fabric Accessories

Plate pouch

- : NIJ Level IIIA
- : 1500 grams
- : 5600 grams
- : 72,5 dm<sup>2</sup>
- : Polyamide 6.6 1000D
- : Magazine pouches (4), multi purpose bag (1), radio pouch (1), grenade pouches (2)
- : Front, back



• Shoulders protection







# • Laser cut Molle system • Groin protection











#### GG-PT1012 ● ● ● ● ● ●

# SPECIAL OPERATION FORCES TACTICAL VEST

Neck protection

Multi purpose bag



• Precise size adjustment from shoulders and waist



SM XL XXL

**Protection level** Weight without ballistic inserts Vest total weight Total Protection Area (L size) Outer fabric Accessories

Plate pouch

- : NIJ Level IIIA
- : 2400 grams
- : 5650 grams
- : 60 dm<sup>2</sup>
- : Polyamide 6.6 1000D
- : Magazine pouches (4), multi purpose bag (1), radio pouch (1), grenade pouches (2)
- : Front, back

• Grenade pouches









#### • Throat protection





• Magazine pouches

Military









GG-FV1030  $\bullet \bullet \bullet \bullet \bullet \bullet \bullet$ 

# FLOATABLE BALLISTIC VEST





• Precise size adjustment from shoulders and waist



Protection level Weight without ballistic inserts Vest total weight Total Protection Area (L size) Outer fabric Accessories Plate pouch

#### : NIJ Level IIIA

- : 2000 grams incl. Life vest: 1450 grams
- : 4600 grams
- : 43 dm<sup>2</sup>
- : Polyamide 6.6
- : Whistle, light, paint
- : Front, back





• Life vest

















Military Green

Khaki







#### Neck Protection

#### Magazine Pouch







Lightweight

Μ

Weight without ballistic inserts

Total Protection Area (L size)

Protection level

Vest total weight

Outer fabric

Plate pouch

XL

XXL

S







## PLATE CARRIER



# PLATE CARRIER

Besides our ballistic protective vests, we design and produce plate carriers which are light weight and provide maximum comfort during mobility. We offer various types of plate carriers according to our customer specifications. Our plate carriers are designed to allow the user to choose the level of protection they require for the threats in the battle field. Integrated Molle system offers additional pouches and accessories to be mounted on the carriers for several end use purposes. Plate Carriers are fully adjustable making them comfortable for any body type and have a quick release buckle system for easy removal in emergency situations.





\_ightweigh

•Laser cut molle system, with quick release feature •Front & Back comfort pads inside the carrier vest enables air circulation and provides comfort and coolness to user •Size can be adjustable from shoulders and waist

Vest total weight Outer fabric Plate pouch size Plate pouch

: 1125 grams : Polyamide 6.6 700D : max. 27 x 32 x 3 cm : Front, back



Upon Request



#### GG-PCR-0004 ● ● ● ● ● ●



Lightweight

Back plate pouch



• Laser cut molle system, quick release buckles for immediate doffing • Quick release buckle system on shoulders and waist • Size can be adjustable from shoulders and waist

Vest total weight Outer fabric Plate pouch size Plate pouch

: 1125 grams : Polyamide 6.6 700D : max. 25 x 30 x 3 cm : Front, back



• Comfort pads

• Precise size adjustment from shoulders and waist



Black





#### • Quick release buckles







annus,



Khaki



Patterns





#### GG-PCR-0003● ● ● ● ● ●

#### ● ● ● ● ● ● ● GG-PCR-0005













#### • Quick release cable





# FUNCTIONAL **OUTERWEAR**



According to customer requirements, we design and manufacture waterproof-breathable cold weather garments, flame retardant garments, sleeping bags, attack vests and back packs.





#### ● ● ● ● ● FLAME RETARDANT GARMENTS



#### ● ● ● ● ● ● SLEEPING BAGS AND BACK PACKS





Winter Coats

Wind Jackets

-12°C Sleeping Bags -20°C Sleeping Bags -40°C Sleeping Bags



# •••••• TEST and R&D CAPABLITIES

All the raw materials that will be used in textile production are tested and verified that they meet the required technical specs in our and then sent to our Yozgat production facilities. In our production facility in Yozgat, we have an accredited inhouse ballistic R&D work and quality control of the ballistic another tunnel for STANAG 4569 all levels in Yozgat. Our 17025 accredited inhouse ballistic testing laboratory and fully equipped textile testing laboratory enables us to develop light every technical requirement. We also provide test services to our external customers as well. In addition to those laboratories, we are doing environmental condition tests in our environmental conditions test laboratory.



## ACCREDITED BODY ARMOR BALLISTIC TEST LABORATORY

Our ballistic testing laboratory is accredited in NIJ0101.04, NIJ0101.06 and STANAG 2920 We are able to test by using below listed barrels.



NO	TEST NAME
	*Ballistic Protection Level Test
2	*V50 Test
3	*Ballistic Protection Level Test
4	*Ballistic Protection Level Test
5	*Ballistic Protection Level Test
6	*Ballistic Protection Level Test
7	*V50 Test
8	Impact Resistance Test
9	V50 Test
10	V50 Test

\* marked tests are in the scope of ISO/IEC 17025 accreditation.



#### Short Barrels:

9mm 40S&W .357 Magnum .357 SIG .44 Magnum

#### Long Barrels:

5,56 x 45 mm 7,62 x 39 mm 7,62 x 51 mm 7,62 x 54 mm 7,62 x 63 mm

#### FSP & RCC:

17 grain FSP For Soft Armor17 grain FSP For Hard Armor2 grain RCC4 grain RCC16 grain RCC64 grain RCC

#### TEST STANDARD

NIJ 0101.06 Excluded item 7.9 NIJ 0101.04 Excluded item 5.17 AEP/STANAG 2920 EN 1063 EN 1522 - EN 1523 NIJ 0108.01 NIJ 0106.01 Excluded item 5.3 MIL-STD-662-F EN 397 MIL-DTL-12560K MIL-DTL-46100

# ACCREDITED VEHICLE ARMOR BALLISTIC TEST LABORATORY STANAG 4569



We are able to test by using below listed barrels.

G

7.62 mm x 51 NATO ball (Stanag 4569 level 1) 5.56 mm x 45 NATO SS109 (Stanag 4569 level 1) 5.56 mm x 45 M193 (Stanag 4569 level 1) 7.62 mm x 39 API BZ (Stanag 4569 level 2) 7.62 mm x 54R B32 API (Stanag 4569 level 3) 7.62 mm x 51 AP WC core (Stanag 4569 level 3) 12,7 X 99 mm 12,7 x 107 mm 14,5 x 114 mm (Stanag 4569 level 4) 20 x 102 mm 25 x 137 mm (Stanag 4569 level 5) 30 x 173 mm (Stanag 4569 level 6) 7,62 mm FSP 12,7 mm FSP 20 mm FSP (Stanag 4569 All levels)

NO	TEST NAME	TEST STANDARD	
1	*Ballistic Protection Level Test	STANAG 4569 (AEP 55 VOL 1) LEVEL 1 / LEVEL 2 / LEVEL 3 / LEVEL 4	
* marked tests are in the scope of ISO/IEC 17025 accreditation.			

# TEXTILE TEST LABORATORY



NO	TEST NAME
1	*Thermal Resistance
2 3	*Water-vapour Resistanc
3	*Resistance to Water Penetr
4 5	*Air Permeability Assessment of Fabric Dra
<u>с</u> б	Stiffness Determination of Wover
0	Slimess Determination of Wover Slide fastener (Zipper) Tes
	Strength of puller attachm
	Strength of closed-end
	Strength of top stop
	Strength of open-end slide faste
	Min. cycles without failur
	Lateral strength of slide fast
	Lateral strength of open-end atta
0	Strength of slider locking de
<u>8</u> 9	Abrasion Resistance (Martindale met Pilling, Fuzzing or Matting Resistance (Martir
9 10	Pitting, Fuzzing of Matting Resistance (Martin Fabric Weight
11	Determination of Number of Threads F
12	Fabric Weave
13	Coated fabrics-Resistance to damage
14	Surface wetting (spray tes
15	Tear Strength
16	Tensile Strength
17	Breaking Strength and Elongation
18	Heat Resistance - Water penetration test of fabrics at +7
19	Resistance to Cold Climate - Water penetration test of fabrics waite tests of 1.500 times
20	United States and the second states of 1.500 times Water proofness test after dry cleaning w
	Water proofness test after fabric contamina Water proofness test after fabric contamina
21	gun oil, motor oil and JP-8
	Colour Fastness Test
	Colour fastness to domestic and comme
	Colour fastness to hot press
	Colour fastness to dry cleaning using perch
22	Colour fastness to perspira
- 22	Colour fastness to water
	Colour fastness to sea wat
	Colour fastness to rubbin
	Colour fastness to artificial light: Xenon ar Colour Fastness to artifical weathering: Xenor
23	Dimensional Change after washing
23	Appearance Change after washing
25	Tests For Colour Fastness Part A02-Grey Scale For
	pH Test
26 27	Density of Plastics
28	Fiber Composition
29	Quantitative composition of feather and dow

\* marked tests are in the scope of ISO/IEC 17025 accreditation.



	TEST STANDARD
	EN ISO 11092
	EN ISO 11092
n	EN ISO 811
	EN ISO 9237
	BS 5058
extiles	BS 3356
г box	EN 16732
	211 107 02
er	
nment	
e	
.e Id - Part 2)	EN ISO 12947-2 / EN 530
le method - Part 2)	EN ISO 12945-2
	EN 12127
Unit Length	EN 1049-2
Onit Length	Using magnifying glass
by flexing	EN ISO 7854
by realing	EN ISO 4920
	EN ISO 13937-2 / EN ISO 4674-1
	EN ISO 1421 / EN ISO 13934-1
f Yarns	EN ISO 2062
C / %90 humidity after a week	In-house method
at -40°C for 24 hours and after the flexing	
	In-house method
i auto gasoline	In-house method
n with diesel fuel,	
l	In-house method
ial laundering	EN ISO 105-C06
g	EN ISO 105-X11
oethylene solvent	EN ISO 105-D01
, 1	EN ISO 105-E04
	EN ISO 105-E01
	EN ISO 105-E02
	EN ISO 105-X12
ading lamp test	EN ISO 105-B02
rc fading lamp test	EN ISO 105-B04
id drying	EN ISO 5077 / EN ISO 6330
d drying	EN ISO 6330
sessing Change In Colour	EN 20105-A02
	EN ISO 3071
	TS 1310
	EN ISO 1833
(manual method)	EN 12131





NO	TEST NAME	TEST STANDARD	
1	*High Temperature Test	MIL-STD-810 G METHOD 501.5 PROCEDURE II METHOD 501.6 PROCEDURE II MIL-STD-810 H METHOD 501.7 PROCEDURE II	
2	*Low Temperature Test	MIL-STD-810 G METHOD 502.6 PROCEDURE II MIL-STD-810 H METHOD 502.7 PROCEDURE II	
3	*High Temperature Storage Test	MIL-STD 810 G METHOD 501.5 PROCEDURE I METHOD 501.6 PROCEDURE I MIL-STD-810 H METHOD 501.7 PROCEDURE I	
4	*Low Temperature Storage Test	MIL-STD-810 G METHOD 502.6 PROCEDURE I MIL-STD-810 H METHOD 502.7 PROCEDURE I	
5	*Temperature Shock Test	MIL-STD-810 G METHOD 503.5 MIL-STD-810 H METHOD 503.7	
6	*Humidity Test	MIL-STD-810 G METHOD 507.5 METHOD 507.6 MIL-STD 810 F METHOD 507.4 MIL-STD-810 H METHOD 507.6	
7	*Immersion Test	MIL-STD-810 G METHOD 512.6 PROCEDURE I	
8	*Dust Test	MIL-STD-810 G METHOD 510.5 PROCEDURE I	
9	*Sand Test	MIL-STD-810 G METHOD 510.5 PROCEDURE II	
10	*Rain Test	MIL-STD-810 G METHOD 506.5 PROCEDURE II	
11	*Vibration Test	MIL-STD-810 G METHOD 514.6 PROCEDURE I	
12	*Shock Test	MIL-STD-810 G METHOD 516.6 PROCEDURE I	
13	Low Pressure Test	MIL-STD-810 G METHOD 500.5 PROCEDURE I	
14	Shock Test (Transit Drop)	MIL-STD-810 G METHOD 516.6 PROCEDURE IV	
15	Vibration Test (Category 5 Loose Cargo)	MIL-STD-810 G METHOD 514.6 PROCEDURE II	
* marked tests are in the scope of ISO/IEC 17025 accreditation.			

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