Tactical & Technical Data:

1. Selected ballistic classes for ballistic shields

1.A. Selected ballistic classes against pistol calibers: IIIA, TBO2CZ
1.B. Selected ballistic classes against rifle calibers

2. Light Ballistic Shields

3. Modular shields

3.A. Ultra-light Soft Handling Modular Shield type USHS, class IIIA, TBO5CZ
3.B. Ultra-light Soft Handling Modular Shield type USHS 600x600x2, class IIIA
3.C. Modular Shield type 725x400x2, class VPAM 7, TBO 5CZ

4. Medium ballistic shields

4.A. Medium Ballistic Shield MBS 1100 x 550 mm class TB05CZ
4.B. Medium-Modular Ballistic Shields type 2x725x400mm or 1x725x400+1x400x800mm and with 3W Chassis, class WPAM7/TB05CZ with wide panorama shield visor
4.C. Medium Ballistic Shields type 1600x600 3W/4W Gear Chassis, class WPAM7/TB05CZ
4.D. Prototype of Medium Modular Ballistic Shield type 2x590x900 mm 3W/4W Gear Chassis (category Gost 5A/6)

5. Heavy ballistic shields

5.A. HBS Heavy Ballistic Shield with Gear Chassis class VPAM7 + TB05CZ
5.B. Heavy ballistic shield type “ZED” class TBO 5CZ

6. Ballistic tables

6.A. Classification table according ČSN 39 5360, maximal trauma depth 25mm
6.B. Classification table according GOST R 50744-95
6.C. Classification table US standard NIJ STD 0101.04
6.D. Classification table VPAM Prufrichtlinie APR 2006
1. B. Selected ballistic classes against rifle calibers:

W.A.R. Ballistic shields category TBO 5 CZ
fulfils the ballistic certification on resistance of TBO 5 CZ class according to Standard ČSN 39 5360 which represents the following certified resistance:
1. 7.62x39 mm Mild Steel Core, bullet weight 8 g, bullet velocity 710 m/s resp. 730 m/s

W.A.R. Ballistic shields category TBO 5 CZ +BZ
Ballistic shield with marked TBO 5 CZ +BZ are reinforced to resist armor piercing calibers:
7.62 x 39, bullet type FEI BZ, weight 7.5 g, velocity 730 m/s ± 10 m/s

Additional resistance against "Dragunov" calibers:
7.62 x 54 R, bullet type FeCore, weight 11.7g velocity 802 m/s
7.62 x 54 R, bullet type FMJ, weight 11.7g velocity 820 m/s
7.62 x 54 R, bullet type FeCore, weight 9.6g velocity 869 m/s

Reinforced shield version certified against (optional):
7.62x54 R, FM/PB/FeC, B32 type, bullet weight 10.4 g, bullet velocity 860 m/s ±10 ms

W.A.R. Ballistic shields category VPAM 6
fulfils the ballistic certification on resistance of VPAM6 class according to Standard Prufrichtlinie APR 2006 which represents the following certified resistance:
7.62x39, FM/PB/FeC, bullet weight 8 g, bullet velocity 920 m/s ±10 m/s

W.A.R. Ballistic shields category VPAM 7
fulfils the ballistic certification on resistance of VPAM7 class according to Standard Prufrichtlinie APR 2006 which represents the following certified resistance:
39.62 Rem, FM/PB/SCP, bullet weight 4 g, bullet velocity 950 m/s ±10 m/s
308 Win. FM/PB/SC, bullet weight 9.55 g, bullet velocity 850 m/s ±10 m/s

W.A.R. Ballistic shields category VPAM 8
fulfils the ballistic certification on resistance of VPAM8 class according to Standard Prufrichtlinie APR 2006 which represents the following certified resistance:
7.62x39, FM/PB/HCI, BZ type, bullet weight 7.7 g, bullet velocity 740 m/s ±10 m/s

W.A.R. Ballistic shields category VPAM 10
fulfils the ballistic certification on resistance of VPAM10 class according to Standard Prufrichtlinie APR 2006 which represents the following certified resistance:
7.62x54 R, FM/PB/HCI, B32 type, bullet weight 10.4 g, bullet velocity 860 m/s ±10 ms

W.A.R. Ballistic shields category Level IV +B32
fulfils the ballistic certification according to Standard NIJ 0101.04 in ballistic class Level IV which represents the following certified resistance:
30-06 Springfield, FM/FeC type M2 AP NATO, weight 10.8g, velocity 869 m/s ± 9.1
Including resistance against:
7.62x54 R, FM/PB/HCI, B32 type, bullet weight 10.4 g, bullet velocity 860 m/s ±10 m

Ballistic material is not symmetrical composition and it is necessary to determine body side of ballistic insert. Another ballistic classes should be designed and certify according customer requirements or according ballistic tables listed below.

2. Light Ballistic shields

Designed for ballistic protection of upper body part. Thanks to its ballistic composition the shield eliminates the projection of shrapnel from the projectile when hit. Universal handle adjustable into all directions enables the operation with right and left hand. Protective rubber edge with steel brace protects against mechanical damage and during manipulation. Velcro for attachment of identifying signs. Black matt color (other colors available upon request) with standard water-proof design.

Shields are delivered with high-quality transportation bag (transportation case with Molle system with the option for wearing on the back) in order to extend their lifetime and ensure problem free transport.

Basic size for intruding through the windows and doors: 450 mm x 600 mm (width x height), other sizes available upon request.

Shields are delivered with high-quality transportation bag (transportation case with Molle system with the option for wearing on the back) in order to extend their lifetime and ensure problem free transport.

Basic size for intruding through the windows and doors: 450 mm x 600 mm (width x height), other sizes available upon request.

LBS service temperature range:
-20°C to 60 °C

Optional additional equipment:
Strong 600 lumens 4 led light with stroboscope
Polycarbonate visor or periscope

Lifetime warranty
10-years warranty period or the ballistic resistance for determined ballistic class.
Outer shell and a transport bag is provided standard warranty period for two years, representing 24 months

W.A.R. Ballistic shields category VPAM 6
fulfils the ballistic certification on resistance of VPAM6 class according to Standard Prufrichtlinie APR 2006 which represents the following certified resistance:
7.62x39, FM/PB/FeC, bullet weight 8 g, bullet velocity 920 m/s ±10 m/s

W.A.R. Ballistic shields category VPAM 7
fulfils the ballistic certification on resistance of VPAM7 class according to Standard Prufrichtlinie APR 2006 which represents the following certified resistance:
39.62 Rem, FM/PB/SCP, bullet weight 4 g, bullet velocity 950 m/s ±10 m/s
308 Win. FM/PB/SC, bullet weight 9.55 g, bullet velocity 850 m/s ±10 m/s

W.A.R. Ballistic shields category VPAM 8
fulfils the ballistic certification on resistance of VPAM8 class according to Standard Prufrichtlinie APR 2006 which represents the following certified resistance:
7.62x39, FM/PB/HCI, BZ type, bullet weight 7.7 g, bullet velocity 740 m/s ±10 m/s

W.A.R. Ballistic shields category VPAM 10
fulfils the ballistic certification on resistance of VPAM10 class according to Standard Prufrichtlinie APR 2006 which represents the following certified resistance:
7.62x54 R, FM/PB/HCI, B32 type, bullet weight 10.4 g, bullet velocity 860 m/s ±10 ms

W.A.R. Ballistic shields category Level IV +B32
fulfils the ballistic certification according to Standard NIJ 0101.04 in ballistic class Level IV which represents the following certified resistance:
30-06 Springfield, FM/FeC type M2 AP NATO, weight 10.8g, velocity 869 m/s ± 9.1
Including resistance against:
7.62x54 R, FM/PB/HCI, B32 type, bullet weight 10.4 g, bullet velocity 860 m/s ±10 m

Ballistic material is not symmetrical composition and it is necessary to determine body side of ballistic insert. Another ballistic classes should be designed and certify according customer requirements or according ballistic tables listed below.

Light ballistic shields dimension 450x600mm can be produced in the following ballistic classes:

<table>
<thead>
<tr>
<th>Ballistic Class</th>
<th>Category</th>
<th>Resistance</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>LBS Category IIIA according NIJ 0101.04</td>
<td>(ultra-light ballistic shield)</td>
<td>4.2 kg</td>
<td></td>
</tr>
<tr>
<td>LBS Category IIIA according NIJ 0101.04 according to ČSN 39 5360</td>
<td>(shield with massive construction designed for rough manipulation)</td>
<td>11.1 kg</td>
<td></td>
</tr>
<tr>
<td>LBS Category III according to NIJ 0101.04 or TBO 5 CZ according to ČSN 39 5360</td>
<td></td>
<td>7.5 kg</td>
<td></td>
</tr>
<tr>
<td>LBS Category Level IV according to NIJ 0101.04 or TBO 5 CZ according to ČSN 39 5360</td>
<td></td>
<td>8.5 kg</td>
<td></td>
</tr>
</tbody>
</table>
3. Modular shields

3.A. Ultra-light Soft Handling Modular Shield type USHS, class IIIA, TBOS CZ, Gost 5
3.B. Ultra-light Soft Handling Modular Shield type USHS 600x600x2, class IIIA
3.C. Modular Shield type 725x400x2, class VPAM 7 / TBO 5CZ

Special modular shields designed for rapid deployment. Modularity of shields enables to create a shield of required dimensions and ballistic resistance in a short while.

Handle variability enables comfortable manipulation with left and right hand. Adjustable straps enable to wear the shield on the back as well as in functional protective position. Velcro zips on surface for attachment of identifying signs. System Molle enabling to clamp various functional cases to the shield, commonly located on the outer side and all areas accessible to the user. Standard water-proof design.

Shields are delivered with high-quality transportation bag (transportation case with Molle system with the option for wearing on the back) in order to extend their lifetime and ensure problem free transport.

Certify Ballistic resistance:
- IIIA according NIJ 0101.04
- TBO 5 CZ according to ČSN 39 5360
- Level 5 according GOST R 50744-95
- VPAM 7 according Prufrichtlinie APR 2006
- Another class upon customer request

Dimensions for model USHS IIIA/TBOS CZ:
- Basic plate 390 mm x 600 mm (w x h)
- Bottom plate 390 mm x 295 mm (w x h)
- Side plate 220 mm x 390 mm (w x h)
- Other dimensions and forms available upon request of the user

Total weight of complete:
- 4.9 kg class IIIA
- 10.6 kg class TBOS CZ

Selected range size USHS class IIIA:

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimension</th>
<th>Weight (kg)</th>
<th>Protected area (cm²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module LBS USHS SAS IA 390x600</td>
<td>390 x 600 mm</td>
<td>2.8</td>
<td>2340</td>
</tr>
<tr>
<td>Module LBS USHS SAS IA 390x295</td>
<td>390 x 295 mm</td>
<td>1.05</td>
<td>1150</td>
</tr>
<tr>
<td>Module LBS USHS SAS IA 390x220</td>
<td>390 x 220 mm</td>
<td>0.85</td>
<td>818</td>
</tr>
<tr>
<td>Module LBS USHS SAS IA 600x600</td>
<td>600 x 600 mm</td>
<td>3</td>
<td>3600</td>
</tr>
<tr>
<td>Module LBS USHS SAS IA 400x725</td>
<td>400 x 725 mm</td>
<td>5.2</td>
<td>2900</td>
</tr>
</tbody>
</table>

Optional equipment:
- Heavy-Duty periscope
- Flop up periscope
- Ballistic glass visor
- Multiple camera view system
- Strong led lights with stroboscope
- Fix of flop up gear with 3 or 4 main wheels
- Supporting harness for installation on ballistic vest
- Ballistic blanket

Lifetime warranty
10-years warranty period for the ballistic resistance for determined ballistic class. Outer shell and a transport bag is provided standard warranty period for two years, representing 24 months.

USHS service temperature range:
- long-term -20°C to 60 °C
- short period -30°C to 90 °C
- relative humidity up to 95%
4. Medium ballistic shields

4.A. Medium Ballistic Shield MBS 1100 x 550 mm class TBO5CZ

Designed for ballistic protection of the whole body, excluding bottom part of legs. Shield is worn with wearing straps ensuring the transfer of the weight of the shield directly to the legs of the user. All-aluminium universal single-handed and both-handed handles enable easy manipulation with shield. Ergonomics of holding the shield is provided by complete setting of individual parts. Black matt colour in standard water-proof design. Ballistic composition of the shield eliminates the projection of shrapnel from the projectile when hit.

**Dimension:**
- Main shield: 550 x 1100 mm (width x height)
- Small shield: 500 x 200 mm

**Weight:**
- from 19 kg to 34 kg depending of used equipment and ballistic class

**Orientation:**
- ensured by an extendable periscope with basic dimension of the visor 240 x 80 mm, periscope can be tilted horizontally; mirroring parts of the periscope are treated with specialised Nano technological layers eliminating fogging

**Lights:**
- periscope is equipped with 2 x 700 lumen L lights with pre-set operation (3 x levels of intensity, 1 x stroboscope) with the option to adjust the beam direction

Prolonged variant of MBS by fixed mounting of small ballistic shield (200 x 500 mm) on bottom part of main shield:

4.B. Medium-Modular Ballistic Shields type “Cobra” 2x725x400mm or 1x725x400+1x400x800mm and with 3W Chassis, class WPAM7/TBO5CZ with wide panorama shield visor.

Modular shields designed and produced right according individual needs of special police force units. Preferred ballistic resistance class VPAM7 + TBO5CZ or VPAM7+VPAM8.

The "Cobra" shield consists of two main independent shields and 2 or 4 side parts. Individual shields can be connected in to the chassis base and create a single shield with a total height of 180 or 190 cm (with overlapping of the ballistic shields).

The chassis has system for: wheels suspension. The rear wheels are equipped with the foot brake.

<table>
<thead>
<tr>
<th>Dimensions:</th>
<th>Each main shield</th>
<th>Side shield parts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>800 mm (with wide panorama visor) 725 mm (without visor)</td>
<td></td>
</tr>
<tr>
<td>Width</td>
<td>400 mm</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dimensions:</th>
<th>Main shield part without visor (2x150x500mm) WPAM7 + TBO5CZ:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>400 mm or 650 mm or 850mm</td>
</tr>
<tr>
<td>Width</td>
<td>220 mm or 350 mm</td>
</tr>
</tbody>
</table>

| Weight      | 10.5 kg                     |

Optional additional equipment:

- Flop up periscope
- Basic wheel camera system
- Strong led lights with stroboscope
- Carrying harness
4.C. Medium ballistic shields type 1600x600
3W/4W Gear Chassis

Shields designed and produced right according individual needs of special police force units. Preferred ballistic resistance class VPAM7 + TBO5C2. Shield equipped with sprung strong chassis, designed to overcome various barriers.

Main ballistic protection:
TBO5C2 according ČSN 39 5360 & VPAM 7 according Prufichtlinie APR 2006. Another class upon customer request.

Additional, removable ballistic protection (fixed by Velcro):
IIIA according NIJ 0101.04
Additional ballistic protection can be withdrawn if necessary from the base and used as separate ballistic shields.

Orientation:
4 cameras system with 8” monitor

Transport position:
allows transporting of the separate shield plate and separate chassis

Optional equipment:
Heavy-Duty periscope or Flip up ultra-light periscope
Panorama visor
Multiple camera view system
Strong led lights with strobeoscope
Ballistic blanket

<table>
<thead>
<tr>
<th>Total height</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1400-1800 mm</td>
</tr>
<tr>
<td>Width</td>
<td>50-60 cm, preferred 60 cm</td>
</tr>
<tr>
<td>Weight of main shield plate with visor</td>
<td>max. 43.8 kg</td>
</tr>
<tr>
<td>Weight chassis with single front wheel</td>
<td>21 kg</td>
</tr>
<tr>
<td>Weight chassis with double front wheel</td>
<td>22.4 kg</td>
</tr>
</tbody>
</table>
4.D. Prototype of Medium Modular Ballistic Shield type 2x590x900 mm 3W/4W Gear Chassis (category Gost 5A/6)

The shield consists of two independent shields, each with base dimensions 590 mm x 900 mm (width x height). Individual shields can be connected to the chassis base and create a single shield with a total height of 170 cm to 190 cm (with overlapping of the ballistic shields). Height of the lower edge of the shield placed to the chassis from the ground is 50 mm. The chassis has independent wheels suspension. The rear wheels are equipped with the foot brake.

Dimensions:

<table>
<thead>
<tr>
<th>Each shield</th>
<th>Height (cm)</th>
<th>Width (cm)</th>
<th>Ballistic area (cm²)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>59</td>
<td>90</td>
<td>5 215</td>
</tr>
</tbody>
</table>

Weight:

<table>
<thead>
<tr>
<th>Each shield</th>
<th>Frame with handles (for exact num. type of handles need to be specify)</th>
<th>from 4 to 5 kg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ballistic panel category 5A &amp; 6</td>
<td>from 21 to 22 kg</td>
</tr>
<tr>
<td></td>
<td>Total weight of one shield (without periscope or window)</td>
<td>from 25 to 27 kg</td>
</tr>
</tbody>
</table>

Periscope weight: 1.8 kg
Balistic window weight (size of window 180x80 mm): 2.5 kg

Optional equipment:
- Heavy-Duty periscope
- Flop up periscope
- Basic wheel camera system
- Multiple camera view system
- Strong led lights with stroboscope
- Ballistic blanket from category IIIA
- Double front wheel system
- Carrying harness
5. Heavy ballistic shields

5.A. HBS Heavy Ballistic Shield with Gear Chassis, class VPAM7 + TBO5CZ

Class of ballistic resistance VPAM7 and TBO5CZ (other classes according to other standards available upon request)

Shield is designed for ballistic protection of the whole body. Orientation is ensured by an extendable periscope with basic dimension of the visor 240 x 80 mm, periscope can be tilted horizontally. Mirroring parts of the periscope are treated with specialized Nano technological layers eliminating fogging. Periscope is equipped with 2 x 700 lumen L lights with pre-set operation (3 x levels of intensity, 1 x stroboscope) with the option to adjust the beam direction

All-aluminum universal single-handed and both-handed handles enable easy manipulation with shield. Ergonomics of holding and driving the shield is provided by complete setting of individual parts Thanks to its ballistic composition the shield eliminates the projection of shrapnel from the projectile when hit.

Complete weight: 60kg.

Dimension:

| basic | 620 mm x 1620 mm (width x height) |
| with open kit | 60 mm x 1620 mm (width x height) |

5.B. Heavy ballistic shield type “ZED” class TBO 5CZ

Ballistic safety shield on wheel gear chassis with electric drive all 6 wheels. The shield composed from rotational ballistic shield turret and ballistic protected chassis.

<table>
<thead>
<tr>
<th>Main ballistic protection:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rotational ballistic shield turret</td>
<td>TBO5CZ according ČSN 39 5360</td>
</tr>
<tr>
<td>Classic</td>
<td>TBO5CZ according ČSN 39 5360</td>
</tr>
<tr>
<td>Additional, removable ballistic protection:</td>
<td></td>
</tr>
<tr>
<td>Rotational ballistic shield turret</td>
<td>VIh according NIJ 0101.06</td>
</tr>
<tr>
<td>Classic</td>
<td>VIh according NIJ 0101.06</td>
</tr>
<tr>
<td>Additional ballistic protection can be withdrawn if necessary from the base and used as separate ballistic shields</td>
<td></td>
</tr>
</tbody>
</table>

Orientation:

provides extensible periscope with 2x 700 lumen lighting with the possibility of using the strobe mode, an inlet section periscope mirror cut el the horizontal plane to set the “control” view just for the front wheels.
**Driver:** electric with a smooth start, set the limit speed, noise control, remote control option, LCD display, fuel replacement reserve batteries in 30s.

**Steering:** skid using hydraulic brake components provide appropriate management ergonomics.

**Chassis:** 6x6, hydraulic steering with hydraulic 6x4 rack gear tower design allows overcoming barriers to a minimum height of 40 cm and also the movement of the stairs.

**Dimensions:**
- **Total height:** 177 cm
- **Height without periscope:** 166 cm
- **Width shield tower:**
  - Closed position: 62 cm
  - Open position: 84.5 cm
- **Chassis:**
  - Width: 72.5 cm
  - Length: 100 cm
  - Wheel diameter: 32 cm
  - Wheel width: 8.5 cm

**Transport position:** allows transporting of the shield load compartment for cars type Mercedes Vito (Vito), Volkswagen Transporter (Caravelle) using aluminum loading ramps that are part of the equipment shield.

[Image of the equipment]
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