

Life Saving Protection.

Ulbrichts titanium helmets for Patrolmen and Special Forces.



ULBRICHTS
PROTECTION



Protection areas compared



ULBRICHTS Zenturio C 1300



ULBRICHTS Hoplit F 1100



ULBRICHTS Hoplit J 1000



Aramid / PE ACH Full Cut



Aramid / PE ACH Full Cut



Aramid / PE ACH High Cut

- Actual ballistic protection area (head is not or only slightly injured)
- Bullet deforms the helmet and injures the head due to helmet deformation (fatal)
- Bullet penetrates the helmet and directly injures the head (fatal)

One material that provides real protection: titanium.

Real protection against projectiles is only possible when

- the bullet is stopped and
- the resulting deformation of the helmet does not cause the wearer of the helmet to be fatally injured (trauma effect)
- the helmet effectively protects the wearer area against these two threats over a large surface.

Only helmets made of titanium are currently able to stop bullets and, at the same time, prevent the helmet from killing the wearer when it is deformed by the bullet. Ballistics tests at neutral laboratories according to the official technical directive (VPAM HVN 2009 "HVN") confirm this superiority and produce the best possible results (0 – 10 Joules), which are far below the permitted value of 25 Joules which is regarded as fatal.

The infographic illustrates: Helmets made of titanium offer total protection against bullets and trauma across the entire surface of the helmet from 15 mm from the edge. Aramid/PE helmets only offer protection all around from approximately 40 mm from the edge and holes. The protective surface of titanium helmets is therefore larger than that of aramid/polyethylene helmets by at least 50 – 100 %. However, the remaining surface of aramid/PE helmets do not generally protect against trauma.

Trauma areas compared





Ulbrichts Titanium Helmet
Penetration with < 10 Joule



Aramid / PE Helmet
Penetration with > 25 Joule

 Firing direction

-  Energy is absorbed by helmet (head is not or only slightly injured)
-  Bullet penetrates the helmet and directly injures the head (fatal)

Ulbrichts Titanium Helmet

Head was protected with titanium helmet. Projectile was caught and the remaining energy converted into the deforming of the helmet. Therefore no head injury.

Aramid Helmet

Head was protected with splinter guarding helmet made from aramide. Although the projectile was caught, the dynamic deforming of the helmet caused a lethal injury.

Helmets made of aramid or polyethylene protect namely against fragments (e.g. those caused by mortar fire or explosions), but to a limited extent against bullets. The energy transmitted from the bullet (shot after "HVN") – if ever stopped – causes massive deformation of the helmet, which mostly lie far (60 – 120 J) above the survivable limit (25 J).



Back view

Ulbrichts titanium helmets

Made from titanium

- 1 Protection against full penetration and trauma effect from bullets
- 2 Maximum protection area: up to 1400cm²
- 3 Protection almost up to the rim

Modular system

- 4 Quick change adapter (optional)
- 5 Ballistic visor (optional, four variations)
- 6 Quick size system for head sizes 48 to 62 (optional)
- 7 Adaption systems and shroud (optional)
- 8 Noise protection and communication system ready (optional)

Ulbrichts Protection has for many years been a leading provider of ballistic head protection. Our success is based primarily on ongoing development, close cooperation with our customers and suppliers and our highly motivated team. We have for decades been a competent partner of special forces, police units and the military worldwide in the development and production of special helmets.

We mastered deep drawing of Titanium 20 years ago and, with our state-of-the-art Ulbrichts Titanium and hybrid Titanium helmets, we are globally at the forefront these days when it comes to ballistic head protection

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