

Trauma areas in comparison



ULBRICHTS Titanium helmet
Residual energy clearly < 25 Joule

Aramid/ PE Helm
Residual energy >25 Joule

Direction of fire

- Remaining energy is absorbed by the helmet (no/slight injury to the head)
- Bullet deforms the helmet and thereby injures the head (fatal)

ULBRICHTS Titanium Helmet

The head was protected by a titanium helmet. Projectile was stopped and the residual energy was converted into the deformation of the helmet. Therefore no head injuries occur.

Aramid Helmet

Head was protected by a demining helmet made from Aramid. Despite the fact that the projectile was stopped, a fatal injury was caused by the dynamic deformation of the helmet.

Although helmets made of aramid or polyethylene (a fabric-based composite material) protect against shrapnel (e.g. as a result of grenade bombardment or explosion), they only have limited protection against bullet fire. The transmitted energy from the bullet (in red at "TR ballistic helmet"), if stopped, causes massive deformation of the helmet which is usually far (60-120J) above the survivable limit (25J).



OPTIO Titanium Helmet

All round protection for riot police

Specially designed for riot police, "OPTIO" offers full head protection, even against handgun fire. Thanks to its particularly lightweight titanium construction, the helmet combines effective ballistic protection with excellent wearing comfort.

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Product illustrations



Front view



Back view



Front view



Side view

OPTIO Product

Trauma protection

Benefits

- ✔ Helmet with titanium shell weighing only 2 kg (with impact protection visor and stab-resistant neck Protection against bullet fire and trauma effect Minimal trauma values

Protection area

- ✔ Effective protection area extends up to 15 mm from the edge.
- ✔ Maximum protection area up to 1,400 cm².
- ✔ Resistance and longevity due to titanium material

Quick size system

- ✔ Quick size system for head sizes 48 to 62 cm allows for pool solutions
- ✔ Quick and optimal size adjustment is possible by using only one hand for greater safety and comfort Inner helmet is well ventilated

Quick-change adapter allows for visors to be

Modularity

- ✔ switched out in a few simple steps, anti-fog impact protection visor or (optional) ballistic visor types available
- ✔ Neck protection protects against stabbing, incendiary devices and chemicals. Ballistic neck protection optional
- ✔ Helmet-mask combination: Mask locks allow for use with standard issue police respirators
- ✔ Helmet shell is compatible with headsets

An innovative helmet for every situation

Riot police face a variety of different deployment scenarios in their day-to-day work: In addition to peaceful football fans, festival-goers and protesters, they also encounter violent offenders. Attacks on officials are brutal Reality Growing trend There must be no limits to the helmet's effective protection against violent left-wing autonomists, neo-Nazis, Islamists or rockers. On the contrary: It must be able to keep up with the growing threat. That is why ULBRICHTS Protection has developed an innovative helmet with "OPTIO", which protects riot police during escalating violent situations, no matter what.

Effective protection against strikes, kicks and projectiles

The construction of "OPTIO" makes all the difference. While mission helmets from other manufacturers are made from mid-fabric, the "OPTIO" helmet shell is made of titanium. It is formed using a deep-drawing process on sheet titanium. This is where ULBRICHTS Protection's decades of experience in the production of ballistic protective helmets made of different metals comes into play. The Austrian leader of innovation is creating a new titanium construction with reduced wall thickness. The decisive advantage: The "OPTIO" is the first combat helmet that also protects against blows, kicks and missiles in addition to handgun shelling (VPAM 2). And all that from a helmet that only weighs 2



A new generation of helmets

Thanks to its ballistic protective effect, the new ULBRICHTS Protection helmet-mask combination differs significantly from the concepts of other manufacturers. In terms of weight, however, "OPTIO" is very comparable. Those well-known quick size systems from the helmet collections "ZENTURIO" (special units) and "HOPLIT" (patrol men) allow for optimal size adjustment that takes only a few seconds and allows for maximum

kg.

wearing comfort. Different types of visor and neck protection are modularly adaptable and also provide ballistic protection on request. In short: With ULBRICHTS Protection's "OPTIO" helmet, riot police and hund-red-strong police units receive head protection that can match their operational requirements.