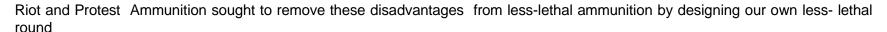


RIOT AND PROTESTACCU-AMMO

The importance and need for a modern technical solution of crowd dispersal has been long-standing.

The major disadvantages of other rubber bullets are their high energy and inaccuracy.





Complies with the South African Constitutional right to bodily integrity, freedom and security of the person (sec 12)

Complies with King IV Social and Ethics Committee requirements for best practice in corporate governance in social & environmental health & safety

Complies with the Voluntary Principles on Security and Human Rights

Complies with the NATO standards for non-lethal or kinetic energy weapons (2009) to: "temporarily incapacitate a person without causing permanent damage."

Complies with the United Nations Human Rights Guide on Less-Lethal Weapons in Law Enforcement (2020):

- Uses "targeted interventions" to "minimize the risk of endangering uninvolved persons"
- · Identifies "violent individuals and isolates them from the other participants" when dispersing an assembly
- Employs "only less-lethal weapons that can be individually aimed"
- Meets international standards of accuracy: "Certain projectiles are highly inaccurate [rubber bullets]. To meet international standards, impact projectiles should be capable of striking an individual to within a 10-centimetre diameter of the targeted point when fired from the designated range."

RIOT AND PROTESTACCU-AMMO

Projectile mass: 8.42 grams (130 grain)

Diameter: 18mm standard 12 gauge and can be fired from a 12 gauge shotgun.

Speed: The projectile is launched at 135.6m/s (445 fps).

Energy: The ammunition produces 77.5 Joules at the muzzle. This is below the 80 Joules threshold as determined by the

Jon Henderson research.

Accuracy: The purpose of the fin design is to ensure that the user has reliable and consistently accurate ammunition. It is accurate to 40 meters (44 yards) and effective out to 100 meters (110 yards).

The added advantage is that law enforcement units greatly reduce law suits resulting from injuries to innocent and/or peaceful protesters and bystanders

Minimum distance to prevent serious injury: The ammunition was extensively tested on a ballistics dummy as well as pig carcasses. It was determined that the ammunition should not be used at a distance of less than 10 meters (11 yards) as there is a 20% probability of skin penetration.

Hardness of projectile: Projectile is manufactured by means of injection molding to a hardness of 80 Shore. The propellant remains moderately stable between -15 and +40 degrees Celsius.

Velocity differences of 15.25 m/s (50 fps) were recorded at the 2 extreme temperatures.

Hardness changed to 85 shore at -15 C and 73 shore at +40 degrees Celsius

