The mine effectively fights helicopters that come within a range of up to 150 m at a speed up to 300 km/h. The mine is remotely armed and disarmed, therefore, it may be used many times. It can be partially buried which facilitates camouflage and significantly reduces the dispersion area. A smart targeting and command centre detects the target and decides on firing the projectiles.

It is equipped only with passive sensors; thus, it is undetectable from the helicopter. The helicopter destroying elements are two explosively formed projectiles (EFP).

**TECHNICAL PARAMETERS**

- **Range:** from 10 m to 150 m,
- **Maximum speed of the target:** 300 km/h,
- **Projectile calibre (EFP):** 100 mm,
- **Number of EFP projectiles:** 2 pcs,
- **EFP velocity:** 2600 m/s,
- **Armour piercing:** from 35 mm to 60 mm,
- **Number of passive sensors:** 5 pcs,
- **Mine operating time:** 35 days,
- **Weight:** 22 kg,
- **Target acoustic detection:** 800 m ± 1000 m,
- **Target recognition:** ≤ 500 m,
- **Angle of rotation in azimuth:** 360 deg,
- **Resolution of angle of rotation:** 1 deg,
- **Temperature range:** from -40 °C to +70 °C.

**AWARDS**

- Award of the Polish Ministry of Science and Higher Education for high technology military product.

**RESEARCH AND DEVELOPMENT CONDUCTED UNDER THE SPECIFIC TARGETED PROJECT NO. 4867 PARTLY FUNDED BY THE MINISTRY OF SCIENCE AND INFORMATION SOCIETY TECHNOLOGIES**

**PROJECT CONTRACTOR:**

- WOJSKOWE ZAKŁADY UZBROJENIA S.A., WOJSKOWA AKADEMIA TECHNICZNA.
- INSTYTUT OPTOELEKTRONIKI, WOJSKOWY INSTYTUT TECHNICZNY UZBROJENIA.
ANTI-HELICOPTER MINE

MINE COMPONENTS

- Helicopter detection system microphones
- Mobile casing
- Casing elevator
- Infrared sensor detecting the helicopter
- Infrared sensor detecting flares
- Electronic units
- Battery
- Remote control system antenna
- Explosively Formed Projectile (EFP) Unit
- Engine
- Rotating platform unit

THE MINE IS REMOTELY ARMED AND DISARMED BY AN OPTICAL SIGNAL (OPTICAL RECEIVER IS PLACED IN THE UPPER PART OF THE MICROPHONE ON THE MINE CASING)
ANTI-AIRCRAFT MINE WITH THE UPPER CASING OPENED. INSIDE THE MINE THERE ARE TWO EFP PROJECTILES AND A SET OF OPTICAL BORESIGHTS

When the acoustic sensors detect a helicopter, the casing is lifted. The lifting activates the fuse. The projectiles are launched when the target is acquired by the infrared sensor and comes within the mine range. The mine is provided with the flare detector and is resistant to this type of disturbances.

MODEL EMPLACEMENT OF 10 MINES TO PROTECT AN AREA OF 80 HA

Effective destruction range of the mine

Smart remote-controlled mines