



LANCE COUNTER-UAV

ENHANCING RHEINMETALL'S 30 MM LANCE TURRET WITH STATE-OF-THE-ART COUNTER-UAV TECHNOLOGY

Attack UAVs, loitering munition and reconnaissance UAVs in combination with indirect fires are lethal threats for all ground forces on today's battlefields.

Mechanised forces of the future will be deployed jointly with dedicated air defence capabilities. However, these air defence capabilities will never be able to cover all areas of the battlefield. So a significant threat by UAVs and loitering munition will remain and demand an advanced self defence capability for all ground forces.

For this purpose the LANCE Counter-UAV Concept has been specifically designed. With minor adaptations to hardware and software, the existing LANCE turret can be enabled to provide sophisticated self defence capabilities against aerial threats, while remaining in its primary role as an infantry fighting vehicle.

To achieve full Counter-UAV capability, the following adaptations to the LANCE turret are required:

- Integration of a Radar System
- Integration of a new Laser Range Finder optimised for Counter-UAV capabilities
- Adaptation of the existing Fire Control to a 3D Fire Control System



Rheinmetall offers two variants of Radar Systems that can be integrated into all versions of our SEOSS portfolio. The SEOSS can also be combined with a MG6 (M134D) machine gun to provide additional fire power against ground and air targets. According to the operational requirements several options are available:

- RCWS 320 with MG6 and Radar System EchoShield from Echodyne
- RCWS 320 with MG6 and Rheinmetall Radar System CMR 100
- SEOSS 300 with Rheinmetall Radar System CMR 100

The radar operates automatically as per crew setting. Additional workload is reduced to an absolute minimum so that the crew can focus on its main combat role.

The Counter-UAV mode of the LANCE will provide a high degree of automation enabling fast response to aerial threats, a high first hit probability and it will be easy to operate.



The LANCE turret is equipped with the 30 mm MK30-2/ABM cannon which delivers maximum effectiveness against land, air and sea targets up to a range of 3,000 meters. The MK30-2/ABM features a dual feeding ammunition system and supports air burst ammunition which enables it to engage small and fast moving air targets.

Rheinmetall offers a wide variety of ammunition for the MK30-2/ABM. For Counter-UAV purposes the KETF (Kinetic Energy Time Fused) 30 x 173 mm PMC308 is our recommended solution. It is based on the NATO qualified AHEAD technology and provides 162 cylindrical tungsten alloy sub-projectiles, which are released by a small ejection charge just ahead of the target.

