Rheinmetall supplies South African National Defence Force with new 40mm medium-velocity ammunition

Rheinmetall is supplying the South African military with new 40mm medium-velocity ammunition, underscoring its role as the world’s leading one-stop-shop for 40mm ammunition systems. In October 2020 Rheinmetall Denel Munition officially completed Project Kamogelo on behalf of the South African Department of Defence, Armscor and the South African Army. What makes Project Kamogelo so special is not only the introduction of a new 40mm medium-velocity (MV) weapon system: it also marks the first successful Expedited Armament Acquisition Process (EAAP) project in response to an urgent operational requirement of the South African Army.

The South African Army initiated the project in 2016 with the aim of fielding a new grenade launcher and family of 40mm ammunition. Armscor, the nation’s arms procurement agency, approved the procurement plan in February 2018, subsequently overseeing testing and evaluation of the Milkor Y4 multi-shot weapon. This involved firing Rheinmetall Denel Munition’s less-lethal, low-velocity and medium-velocity ammunition. Particular emphasis was placed on speed and accuracy.

The South African Army procured more than 20,000 rounds of medium-velocity ammunition, including high explosive ammunition, high explosive dual-purpose ammunition, practice ammunition, practice tracer ammunition, red phosphorous smoke rounds and orange target marker ammunition.

Rheinmetall Denel Munition’s medium-velocity ammunition has a maximum range of 800 metres, exceeding conventional extended range low-velocity (LV) variants by up to 375 metres while delivering unparalleled accuracy. The company’s ammunition suite currently encompasses nine different MV variants, six of which formed part of this procurement package.

“This day marks ... an important milestone in the history of the Department of Defence, in particular the South African Army, as we witness the handing and taking over ceremony of the 40mm medium-velocity grenade launcher,” said Rear Admiral A.A.A. Morris, Chief Director Defence Acquisition Management, Material Division.

“We’re proud to be able to offer our new medium-velocity 40mm family to our home market, the SANDF. With this solution we offer the soldier a unique product solution: a quick-firing multiple grenade launcher with a standoff range in excess of 800 metres”, said Jan-Patrick Helmsen, CEO of Rheinmetall Denel Munition.
Rheinmetall – the leading one-stop-shop for 40mm systems

In the infantry toolbox, the versatile 40mm ammunition pallet closes the gap between hand grenade and mortar. It therefore serves as a veritable combat multiplier for infantry and other dismounted troops. Rheinmetall is one of the world’s leading suppliers of ammunition, weapon systems and fire control systems and therefore serves as a one-stop-shop for 40mm systems.

Widely used today, Rheinmetall’s 40mm x 46 low-velocity ammunition (LV, velocity: 78 m/s) is available in many different versions, including HE/fragmentation, shaped charge with fragmentation jacket (HEDP/high explosive dual purpose) as well a number of other service and practice rounds, together with non-lethal payloads such as kinetic impact munitions or irritant. The range of ammunition is constantly being expanded and new capabilities added.

With Rheinmetall Denel Munitions’s handover, Rheinmetall has taken the first step as the leading maker of new 40mm medium-velocity (MV, ca. 100 m/s) ammunition. The company is currently expanding its MV product. It now includes the new generation of 40mm MV ammunition, which has a maximum effective range of 800 metres, doubling the gunners’s operational reach and providing a flatter trajectory for those crucial close-in, accurately placed shots MV ammunition is. Currently undergoing NATO qualification, Rheinmetall’s 40mm MV ammunition family will soon be available in service and practice versions. It can be used with the multi-shot grenade launchers Milkor US M32A1 and AV 140. Furthermore, Rheinmetall’s 40mm Magazine-Fed Grenade Launcher (MFGL) is currently under development.

The Group’s 40mm x 53 high-velocity (HV) ammunition reaches a velocity of 240 m/s and has a maximum effective range of 2,200 metres. Here, too, the Group supplies a wide assortment of different cartridges, including newly developed HE and HEDP airburst ammunition programmed by an infrared programming unit. The airburst function also makes this type of ammunition suitable for engaging small unmanned aerial systems. Among other things, it is earmarked for the Bundeswehr’s Qualified Air Defence project.

Rheinmetall’s family of fire control systems enhances combat effectiveness enormously. It provides users with a broad range of enhanced capabilities, increasing the effectiveness of the gunner while maximizing the potential of the host weapon system and the accompanying munitions. The family consists of various fire control solutions, providing increased accuracy and performance: Vingmate FCS 4500 for high-velocity automatic grenade launchers and heavy machine guns, MR-500 and MR-800 for low- and medium-velocity 40mm grenade launchers and Vingmate SL 1000 for shoulder-launched weapons.