

RHEINMETALL WHEELED SELF-PROPELLED HOWITZER EXTENDED RANGE, FULLY AUTOMATED, HIGHEST MOBILITY



# HIGHLY MOBILE INDIRECT FIRE SUPPORT FOR THE MODERN BATTLEFIELD

#### **SYSTEM OVERVIEW**

The Rheinmetall wheeled howitzer provides rapid coming into/out of action and to leave the firing position swiftly, high rate of fire, increased firing range as well as enhanced precision through the use of the of the combat proven Rheinmetall 155 mm L52 elevating mass and the use of JBMoU-compliant modular charges and projectiles.

Core element of the wheeled howitzer is the fully automatic, electrically driven Artillery Turret with a digital controlled Ammunition Handling System. The link between the Artillery Turret and the highly agile Rheinmetall HX3 10x10 tactical truck is the Artillery Turret Platform with outriggers.

The high degree of automation of the Artillery Turret allows a reduction of the crew to two persons. Received fire missions/commands are executed and monitored from the protected cabin without the crew having to leave the protection of the cabin.

As a mobility platform, the HX3 10x10 from Rheinmetall MAN Military Vehicles (RMMV) is used. It leverages the heritage of the HX2 and the world's largest military truck fleet. The HX3 combines the ability to cover long distances on its own, as well as to cope with difficult terrain in an agile manner.

The HX3 10x10 has a high logistical commonality to the HX trucks already introduced in the German Army, e.g. UTF, WLS and GTF and several other countries including NATO members.

The HX3 has a modern electronic vehicle architecture and thus has a growth potential for remote-controlled (tele-operated) or semi-autonomous operation, e.g. with a platooning capability as a first expansion stage. Due to the 5,000 kg free payload, the wheeled howitzer has additional system-inherent growth potential, which can be used as additional stowage space, e.g. for the integration of the L60 armament, for additional ammunition or an active protection system. The standardized open digital system architecture allows the integration into various command and weapon control systems.







## **GROWTH POTENTIAL RANGE**

Rheinmetall constantly invests in new and further product developments that optimise and extend the ranges of our tube artillery. A short-term increase in range can be achieved by combining the 155 mm L52A1 elevating mass (under development) with the Extended Range Charge (range-enhanced propellant charge system) from Rheinmetall.

This optimized version of the combat proven in service 155 mm L52 armament of the PzH 2000 has an increased charge chamber volume to achieve extended ranges up to 68 km. The qualification is planned for the beginning of 2024 and will be completed by the end of 2025.





In order to achieve a significant increase in the combat range to over 80 km, Rheinmetall intends to increase the calibre length and the volume of the charge chamber.

Rheinmetall has been working on this ambitious development project for several years. As a result, the first milestones have already been successfully completed, so that the design concept has been validated and blanks for tube production could be procured. The first steps of the processing have already been carried out. The first firing tests with the new weapon system are planned for 2022 and further ones for 2023 to achieve a maximum combat range.



## WHEN PERFORMANCE MATTERS...

#### **KEY CAPABILITIES**

- Swift come into/out of action and move out of firing position
- Fully automated and uncrewed Artillery Turret
- Proven and in service, electrified and automated 155/L52 elevating mass, NATO JBMoU compliant
- 40 ready-to-fire rounds in two magazines
- Arc of Fire 360°
- 8 rounds in 60 seconds, MRSI capability
- Direct firing capability via electro-optical sensors
- Load-through capability (firing from pile/stack)
- 40 km with BB, 60 km with V-LAP and Rheinmetall Extended Range Charge (range-enhanced propellant charge)
- Needed crew of 2 personnel
- Crew protected in cabin, full mission execution under protection
- Highest off-road and on-road mobility due to the fully militarised tactical HX3 truck
- Low Life Cycle Costs due to commonality with logistic HX truck fleets and low wear and tear
- Growth potential of 5,000 kg free payload
- Growth potential and range increase due to optional integration of 155 mm/L52A1 or 155 mm/L60 elevating mass for ranges over 80 km
- Standardised modern digital system architecture allows integration into command and control systems (networked battlefield)







TECHNICAL DATA	
Growth potential	Free payload 5,000 kg (e.g. additional ammunition, APS)
Artillery turret	Fully automatic, uncrewed
Main armament	155/L52, combat proven, electrified and automated, NATO JBMOU conform
	155/L52A1 (increasing range growth option) firing range up to 68 km
	155/L60 (increasing range growth option) firing range up to 80 km
Combat load	40 projectiles, 192 modular charges all ready to fire
Arc of fire	Elevation –2° to +70°/Azimuth 360°
Combat range	40 km with BB
	60 km with V-LAP and Rheinmetall extended range charge
Protection	Protected cabin level 3/3b (Ballistic & Mine) STANAG 4569
	Including CBRN protection systems and fire supression system
Secondary armament (RCWS)	Natter 7.62 mm (including 600 ready-rounds)
Smoke grenade launcher	40 mm ROSY
Vision system	360°-Situational awareness system
Crew	2 personnel
Platform/stabilization	Hydraulic 4-point support, additional storage boxes for ammunition and equipment
Deployment and displacement	<20 seconds
Homologation	Conform to German road regulations
Dimensions (L/B/H)	13.4 m/2.90 m/3.60 m
Gross vehicle weight	52,000 kg
Combat weight	47,000 kg
Speed	100 km/h
Range	700 km (road)
Engine performance	540 hp (397 kW)
Gradient side slope	60%
	30%
Trench crossing	2.25 m
Fording	1.5 m
Railway transport	G2 tunnel profile
Air transport	C-17 Globemaster, Antonow An-124 or equivalent



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