

The KF51 Panther: The Revolutionary Tank for the Italian Army

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The KF51 Panther, produced by Rheinmetall in Joint Venture with Leonardo, represents a revolution in the concept of the main battle tank (MBT), designed without the limitations of past technology. Thanks to the integration of the latest innovations, the KF51 Panther offers an unprecedented level of lethality, advanced protection, and complete digitalization for next-generation operational capabilities. This new tank will likely equip the 32nd Tank Regiment and the 132nd Tank Regiment of the Ariete Brigade and the 4th Tank Regiment of the Garibaldi Brigade.

Unmatched Lethality

The KF51 Panther is equipped with the Future Gun System (FGS), a 130 mm cannon with an automatic loading system, which guarantees a range 50% greater than traditional 120 mm cannons. The tank also features a 12.7 mm coaxial machine gun and the possibility to integrate

remote-controlled weapons (RCWS) for close defense and against drones. Additionally, the HERO 120 system allows attacks on targets beyond the line of sight, significantly increasing offensive capabilities.

Advanced Protection

The KF51 Panther is the first MBT to implement an integrated survival concept, combining on and off-platform sensors with active, reactive, and passive protections. Key features include:

- **Reactive and passive protection** with sensor-based systems.
- **Active protection** against large-caliber projectiles and anti-tank missiles (ATGM).
- **ROSY smoke screen system**, creating a protective curtain.
- **Protection system against top attacks (TAPS)**, to counter aerial threats.
- **Mine protection** and preventive threat detection.
- **Rheinmetall drones** integrated for reconnaissance and tactical support.

Total Digitalization

The KF51 Panther is the first MBT designed around a digital architecture compliant with the NGVA standard. This allows seamless integration of decision-support systems based on artificial intelligence and advanced automation. Thanks to the connection between targeting sights and the fire control computer, the KF51 Panther supports "hunter-killer" and "killer-killer" operations for rapid and precise target engagement.

Superior Mobility

With a combat weight of less than 59 tons, the KF51 Panther offers superior mobility compared to current systems. Its range exceeds 500 km, and the design is optimized to fit strategic transport profiles, meeting tactical and strategic mobility requirements.

A Software-Defined Tank

The KF51 Panther is not just a tank, but an advanced operational node on the multidomain battlefield. Its digital architecture allows the control of aerial and ground drones, loitering munitions, and other unmanned vehicles, creating a true collaborative combat ecosystem.

Innovative Command and Control

The KF51 Panther is designed for a reduced crew of three, with the possibility to integrate additional operators for drones or support systems. The digitized command stations allow immediate role exchange among operators, ensuring maximum efficiency in battle.

The Future of Land Armament

Thanks to its unmatched lethality, advanced protection, and digital integration, the KF51 Panther positions itself as the tank of the future. Designed to face the challenges of modern battlefields, it represents a turning point in land warfare and in the cooperation between humans and machines in combat.

Source Rheinmetall

News link: https://www.rheinmetall.com/en/products/tracked-vehicles/tracked-armoured-vehicles/panther-kf51-main-battle-tank#anchor-new-mbt-concept