

# Centauro Shines as Adaptable Combat Marvel

**The Centauro 8x8, a versatile Combat Vehicle born out of the Italian Army's 1985 modernisation initiative, continues to shine as a versatile and reliable asset.**

This cutting-edge system, conceived by the renowned Iveco-Oto Melara Consortium (CIO), has consistently demonstrated its effectiveness in diverse environments and operational scenarios, from Somalia and ex-Yugoslavia to Iraq.

The Centauro 8x8, designed to meet the Operational Requirements for a new concept of Combat Vehicle, stands out

for its superior strategic mobility, comparable firepower to a Main Battle Tank (MBT), excellent survivability, and increased transfer speed and autonomy.

Its latest deployments underscore its adaptability in handling a spectrum of challenges, ranging from asymmetric and hybrid warfare to high-intensity conflicts.

This reaffirms the Centauro's crucial role in safeguarding nations and contributing to global peace, cementing its position as a ready solution for modern defence needs.

## Wheeled Warrior

CIO achieved a milestone by pioneering the world's first 8x8 High Pressure Mobile Gun System, featuring key attributes such as a wheeled 8x8 design, a 105 mm L7 equivalent gun utilising NATO-standard ammunition like the Leopard 1 MBT, day/night sighting and firing capability at par with the latest generation MBTs, optimal crew protection and comfort, full Nuclear, Biological, and Chemical (NBC)-safe operation, high strategic and off-road mobility, and exceptional crew ballistic and mine protection.

The Centauro boasted firepower equivalent to that of a Main Battle Tank (MBT), with its turret armed with a formidable 105mm cannon. However, the approach to protection differed, stemming from its lower weight. The guiding philosophy behind the Centauro's design was centred on the concept of "Fire and escape."

This strategy hinged on the agile mobility provided by its wheeled configuration and outstanding speed, allowing the Centauro to swiftly engage targets and reposition, enhancing its overall tactical effectiveness on the battlefield.

CIO and the Italian Army signed a contract at the end of 2011 for the development of the successor to the Centauro. Thus, the Centauro II was introduced in 2015, designed to operate in any scenario.

## Innovative Vehicle

The Centauro II represents a completely innovative vehicle, featuring significant enhancements compared to its predecessor, the Centauro.

Notable improvements include a high-mobility design, powered by a new V8 Iveco engine generating 720CV, complemented by an upgraded gearbox and driveline to efficiently handle increased power and torque.

In terms of ballistic protection, the Centauro II surpasses previous levels, incorporating a redesigned hull chassis and turret, add-on ballistics, and technical solutions tested to the AEP 55 standard. These enhancements fortify the vehicle against threats like mines, Improvised Explosive Device (IEDs), and the latest-generation kinetic munitions.

Additionally, crew safety has been elevated through innovative measures such as partitioning stand-by ammunition and stores within the hull, alongside state-of-the-art NBC, fire-fighting, and anti-explosion systems.

The Centauro II's firepower is enhanced with a new generation 120/45mm cannon featuring automatic loading, programmable ammunition capabilities, and advanced stabilised Gunner and Panoramic Sights.

A Digital Ballistic Computer with auto-tracking augments the firepower. The system retains flexibility by allowing integration of either a 120mm or 105mm, depending on the end

## Centauro II fits innovative 120/45mm cannon

## V8 engine empowers high-mobility manoeuvrability

## Crew safety ensured with advanced NBC measures and state of the art ballistic and mine protection

user's requirements.

Finally, the Centauro II embraces high connectivity through Leonardo technologies in net-centric communications, including an innovative 4 channels Software Defined Radio, and Command & Control capabilities.

## Not a Fusion

While many competitors employ a blend of derived systems, the Centauro stands apart by not being a fusion of a stand-alone weapon system and a derived Infantry Fighting Vehicle (IFV) platform. Instead, it is a native, fully integrated system meticulously crafted for its designated role. This distinction signifies that the Centauro is not merely optimised but explicitly designed to achieve the optimal trade-off between performance (mobility and firepower) and dimensions.

The turret, equipped with new anti-mine seats, has a crew of three men – commander, gunner and loader – with the latter able to use the new automatic loading system, while being able to undertake manual loading operations, as back-up, or other emergency operations.

Centauro II is the distinctive system capable of integrating 120mm cannon, which ensures the same firepower of the modern MBT. It has been tested in various military firing grounds worldwide, including in the Middle East desert.

The vehicle, 150 units of which are now purchased by the Italian Army and selected by the Brazilian Army, represents a turnkey solution •

