HYBRID POWER PACK BY FNSS REVEALED AT IDEF 2023

The KAPLAN HYBRID Vehicle exhibited for the first time by FNSS at IDEF 2023 International Defense Industry Fair.

FNSS made a significant breakthrough in areas such as the indigenous design and development of new generation drive systems, suspension systems, gearboxes and powertrains in line with the development and adaptation of new generation technologies for armoured combat vehicles.

HYBRID Power Group development project started in the FNSS R&D Centre in 2021. The assembly of the first prototype vehicle was completed and control software development and improvement activities continue. The critical verification tests are planned to start towards the end of 2023. With this project, FNSS aims to develop a unique hybrid power pack solution that can be integrated into tracked platforms in its product range and likely to be produced in the future, and to all tracked vehicle families in need of capability enhancement and life extension.

With the Hybrid Power Group, another important goal is to produce a reliable alternative solution for tracked vehicle transmission. Developed for tracked vehicles weighing up to 20 tons, this solution can be adapted to new tracked vehicle development programs and capability enhancement and life extension programs according to user needs. It is aimed to be resized and used for tracked vehicles of different tonnages in the very near future.

In addition, FNSS aims to create superiority in the field thanks to the new hybrid (diesel-electric) tracked vehicle propulsion system it has developed, with the features of silent drive, extended silent tracking and the ability to integrate new generation weapon systems with high energy needs. All these developments enable the vehicle to be used in combat and reconnaissance scenarios.

HYBRID Power Pack offers remarkable off-road performance for a tracked vehicle with its external transmittable power and increased fuel economy. Thanks to the electric engine that produce high torque at low revs and the new hybrid propulsion system, the vehicle has an increased acceleration response than other tracked platforms. In this way, it is aimed to provide a critical advantage on the field in order to respond quickly to the battlefield conditions.

While some of the sub-systems used in this project are designed by FNSS engineers, the development of local alternatives of some imported components, which are used in the prototype process in order to be time efficient, is continued simultaneously. One of the most important components to be produced locally is the cross-drive gearbox with a unique design of FNSS. FNSS has become one of the few companies with the technological competence to develop this type of systems.

PROTECTED MOBILITY AT YOUR SERVICE!

A GLOBALLY TRUSTED AND RESPECTED TURKISH DEFENCE COMPANY

FNSS is a globally recognized land systems company that specializes in designing and producing wheeled and tracked armoured combat vehicles as well as combat engineering vehicles, turrets and sustainability solutions. As the preferred solution provider of users in various countries, the Company has delivered thousands of armoured combat vehicles worldwide.

ADDING VALUE THROUGH INNOVATIVE SOLUTIONS

Thanks to its competent and dynamic workforce, FNSS offers innovative solutions throughout the entire product life cycle; from the design phase to the end of service life. Ever since the first roll-out in 1990, the Company has continuously improved its vehicle design and production capabilities in line with the requirements of its users. FNSS' KAPLAN class tracked armoured product family and PARS wheeled armoured vehicles are poised to shape new generation combat vehicle trends well into the 21st century.

MEETING USER EXPECTATIONS

FNSS designs and develops customized solutions to meet the requirements of each user. The key to FNSS' success in delivering tailored products within requested time frames lies in its flexible approach to project management. This is complemented by its ability to orchestrate an extensive supply chain and a wide range of global partnerships. FNSS has successfully engineered and supplied numerous products addressing unique requirements. These vehicles have been designed, manufactured and delivered to armies worldwide by FNSS' user-centric business models and tailored solutions.

BUILDING THE FUTURE WITH CONFIDENCE

FNSS products have been challenged by countless user endurance tests in the toughest conditions, and have proven themselves in combat missions. FNSS views user satisfaction as a permanent concept, and strives to ensure that its products serve beyond their life cycles by addressing any emerging needs throughout their use. FNSS also makes a difference by generating significant value for its international users through localization packages that include employing local labour, establishing domestic supply chains, and providing in-country training and technology transfer. Building upon it's over 30 years of heritage in the defence industry, FNSS continues to add value to its users by creating innovative solutions.

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