VOLKAN 221/155

PANTER HOWITZER FIRE CONTROL SYSTEM

#LandandWeaponSystems



T-155 Panter Howitzer, one of the most important weapon systems of the Turkish Armed Forces, enhances the firepower of Turkish Artillery significantly. VOLKAN 221/155 Panter Fire Control System (FCS) integrated to the T-155 Panter Howitzer, enables rapid deployment, relocation, computerized fire preparation and management, integration with fire support systems along with fire control and direction. It covers full fire mission execution starting from fire command ending wih the ammunition leaving the barrel.







In addition to full fire command and control capabilities, VOLKAN 221/155 FCS comprises a semi automated projectile loading system along with a servo-driven gun laying system allowing the fast and secure execution of intense fire missions.

VOLKAN 221/155 Fire Control System, designed and implemented by ASELSAN, encompasses state of the art units in accordance with the field experience of Turkish Armed Forces.

System Units

- Ballistic Computer (Commander & Gunner Display Unit)
- Inertial Navigation System
- Muzzle Velocity Radar
- Automatic Gun Aiming System
- Semi Automatic Projectile Loading System
- Commander and Gunner Display Units
- Intercommunication System
- Power Distribution Unit
- Hydro-Pneumatic Counterbalance Accumulator

Skills

- Digital communication with AFSAS and possibility of integration with other fire support systems
- Operation in different unit organizations (e.g. battery based, platoon based and single gun single battery) as required by the tactical environment
- Gun Commander's Display Unit provides mission oriented, menu driven colored graphical user interface
- Digital battlefield information display via digital map
- Receiving and displaying fire request, fire orders, commands, formatted and free text messages sent by the Artillery Fire Direction Center and other fire support units
- Rapid deployment and relocation of the weapon system, by means of Inertial Navigation System and GPS
- Processing various types of fire missions; e.g. Multiple Round Simultaneous Impact (MRSI), Fire For Effect, Direct Fire and Registration Fire
- Computation of fire commands precisely
- Utilization of meteorological data received from Artillery Meteorology System via radio
- Utilization of muzzle velocity data received from the on-board Muzzle Velocity Radar
- Calculation of the projectile trajectory and checking for crest clearance using Digital Terrain Elevation Data (DTED)
- Rapid & accurate ballistic calculation using NATO Armament Ballistic Kernel (NABK)
- Automatic laying and relaying the gun at high speed and precision
- Digital interoperability with other C4I Systems within the force



Ammunition Loading Control Unit (ALCU)



Power Distrubution Unit (PDU)



Inertial Navigation System (INS)



Servo Motors



Hydro-Pneumatic Counterbalance Accumulator



Howitzer Control Unit (HCU)



Commander & Gunner Display Unit



Muzzle Velocity Radar (MVR)



Servo Driver Unit



Intercommunication System

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specifications are subject to change without any notice. \mid All tolerances are within $\pm 10\%$