

25K TRANSPORTABLE TARGET LAUNCHER (25K TTL)



The Test Directorate developed two launchers capable of launching 25,000-pounds static load rockets

The U.S. Army Space and Missile Defense Command Technical Center's Test Directorate developed a configurable 25,000 poundscapacity Transportable Target Launcher (25K TTL) to support Department of Defense operational test launches of theater-class tactical ballistic missile targets.

The 25K TTL is rapidly deployable expanding the number of presently available launch sites, thereby supporting a more comprehensive selection of threat scenario geometries for TBMT testing on the national ranges.

Utilization of the 25K TTL is the most flexible and cost-effective means of presenting test scenarios in a threat representative construct due to the launcher's ability to operate at both unimproved and improved range sites. Additionally, the 25K TTL is transportable by air or over-the-road, permitting use at all ranges.

- USASMDC developed two transportable target launchers
- Rail launch platform supporting theater-class tactical ballistic missile targets
- Rapidly deployable to improved and unimproved sites
- Expands the number of presently available launch sites
- · C-5 transportable
- · Treaty compliant







The Test Directorate develops assets and executes test and evaluation programs responsive to the needs of U.S. and allied warfighters.

The 25K TTL was designed, built and tested using a modified commercial off-the-shelf semi-trailer and hydraulic crane as a portable launch platform. The 25K TTL is capable of being transported to a launch site, converted to a fixed configuration before target loading and launch, reconfigured for transport after launch, and returned to storage, or emplaced for a follow-on mission.

Technical Performance Parameters:

- Ability to launch target in accordance with test plan trajectory requirements within 0.2 degrees accuracy in azimuth and elevation.
- Less than 15 minutes required for launcher to move the assembled target from: (1) any azimuth/ elevation combination to the initial loading position and (2) rotate thru 180 degrees azimuth.
- System must quickly (less than 15 minutes) stow in the event of inclement weather, e.g. lightning.

Design Capability	
Parameter	Capability
Maximum static launch weight of rocket system	25,000 pounds
Maximum stage diam- eter	32 inches
Length of rail travel	37 feet
Maximum length of rocket system (Multiple Stage Capability)	48 feet
Maximum tip-to-tip fin diameter	60 inches
Maximum rocket thrust	73,000 pounds
Maximum boom deflection	1.5 inch
Center of gravity of the rocket for a target with maximum weight and maximum overall length	Not to exceed 25 feet from the aft-end of the rocket
Translate the integrated rocket from the initial rocket loading/integration position to any azimuth and elevation combination	Maximum of 15 minutes
Translate the integrated rocket from any azimuth and elevation combination to the initial rocket loading/assembly position	Maximum of 15 minutes
Rotate through 180 de- grees in azimuth	Maximum of 15 minutes
Command change in the azimuth and eleva- tion setting by 0.2 de- grees in both azimuth and elevation with an attached rocket	Maximum of 30 seconds

