

# M114 TOW Launch Rocket Motor



## Quick Action Time for User Safety

Alliant's M114 is a double base propellant, rocket launch motor used in the family of Tube-launched, Optically-tracked, Wire-guided (TOW) Missile Systems. This family includes four different versions: Basic TOW; ITOW; TOW 2A and TOW 2B. These missile systems are designed to produce low flash, low exhaust, while maintaining an extremely quick action time. To assure ultimate user safety, the launch motor burn cycle is complete prior to exiting the launch tube.

The action time (less than 0.67 msec. At  $-25^{\circ}\text{F}$ ) of M114 ensures motor operation is completed inside the launch tube, expelling the TOW missile to a safe firing distance prior to flight motor ignition. Alliant's Ordnance Business Unit has successfully demonstrated the ability to manufacture the most critical safety component of this system for nearly 30 years.

### Propellant Characteristics

- Formulation: M7, Double base solvent
- Geometry: 4, single perf sticks
- Pressure:  $< 13,000$  psi at  $125^{\circ}\text{F}$
- Action Time:  $< 67$  msec at  $-25^{\circ}\text{F}$

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