



Solutions for Military & Defense

Mission-Ready
Motion Systems



Precision That Performs Under Pressure

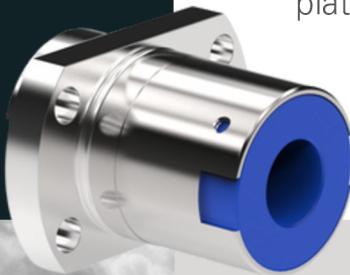
From advanced targeting systems to autonomous vehicles, Helix Linear Technologies delivers motion control solutions engineered to meet the rigorous demands of military and defense operations.



Designed for mission-critical performance, our components offer the precision, durability, and reliability required in the harshest environments - from desert heat to arctic cold, from airborne systems to ground-based robotics.

Whether integrated into optical platforms, control actuation systems, or unmanned systems, Helix products are built to perform with unwavering consistency when lives and missions depend on it.

Proven Performance in Defense Systems



Military systems demand consistent, precise motion under extreme conditions. Helix Linear Technologies provides rugged motion control components designed for high reliability, repeatability, and environmental resistance.

Our solutions are trusted in a wide range of defense applications, from land-based platforms to airborne and naval systems.

Applications:

- Control actuation systems (CAS)
- Optical and targeting platforms
- Radar and antenna positioning
- Unmanned ground and aerial vehicles (UGVs/UAVs)
- Missile and munitions handling
- Tactical robotics and sensor arrays

Core Products:

- Custom Ball Screws
- Lead Screws & Anti-Backlash Nuts
- Electromechanical Actuators
- Stepper Motor Actuators
- Precision Miniature Motion Systems

Built to Withstand the Battlefield

Helix Linear components are engineered to meet the environmental and operational demands of military platforms.

Whether operating in sand, saltwater, or sub-zero climates, our systems are constructed from durable materials and designed with sealed configurations to ensure performance in mission-critical scenarios.

Performance Features:

- Corrosion-resistant stainless steel and coated alloys
- Low-temperature and high-temperature operation
- IP-rated sealing for dust and moisture protection
- High-load and high-cycle durability
- Low-backlash and vibration-resistant designs



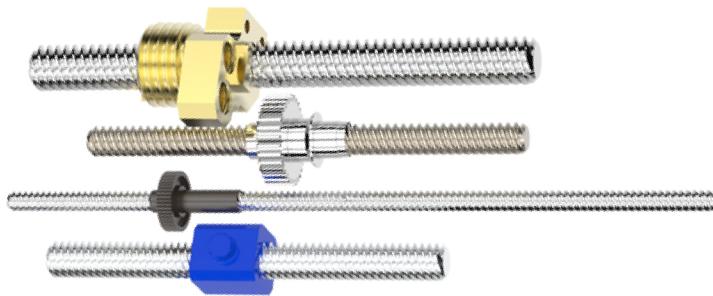
Precision Engineering with Defense in Mind

Helix Linear is AS9100:2016 certified and equipped to meet the traceability, quality, and documentation requirements of defense contracts.

We partner with OEMs and defense contractors to design, prototype, and manufacture customized motion components aligned with ITAR standards.

Key Capabilities:

- Collaborative design engineering
- Finite element and tolerance analysis
- Lifecycle and environmental testing
- Onsite metallurgical lab for material validation



Certifications & Standards:

- AS9100:2016 certified
- RoHS-compliant materials
- REACH-compatible grease and coatings
- ITAR Registered



Defending with Precision. Delivering with Confidence.

Since 2011, Helix Linear Technologies has supported U.S. defense contractors and system integrators with advanced linear motion products. Whether for modernization programs or next-generation platforms, we stand ready to engineer motion systems that meet the call of duty, wherever it leads.



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