

Solutions for
3D
Printing

Motion Systems
Designed for Innovation

Precision Motion for a Layered World

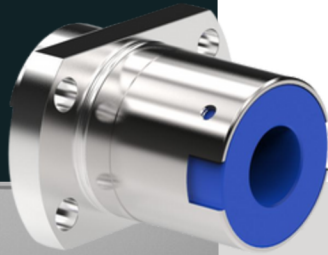
In the fast-evolving world of additive manufacturing, motion precision isn't just important. It's foundational to performance. Each layer of a 3D-printed part depends on accurate, repeatable motion to ensure dimensional integrity, surface quality, and structural reliability.



Helix Linear Technologies delivers motion control systems that meet the high demands of this industry, providing the accuracy, consistency, and repeatability needed for everything from intricate prototypes to production-grade components. Whether managing Z-axis stability, gantry alignment, or extruder head positioning, our solutions are built to keep your prints precise, layer after layer.

From Prototype to Production

Motion You Can Rely On



As 3D printing advances from rapid prototyping to full-scale production, precision motion control becomes more critical than ever.

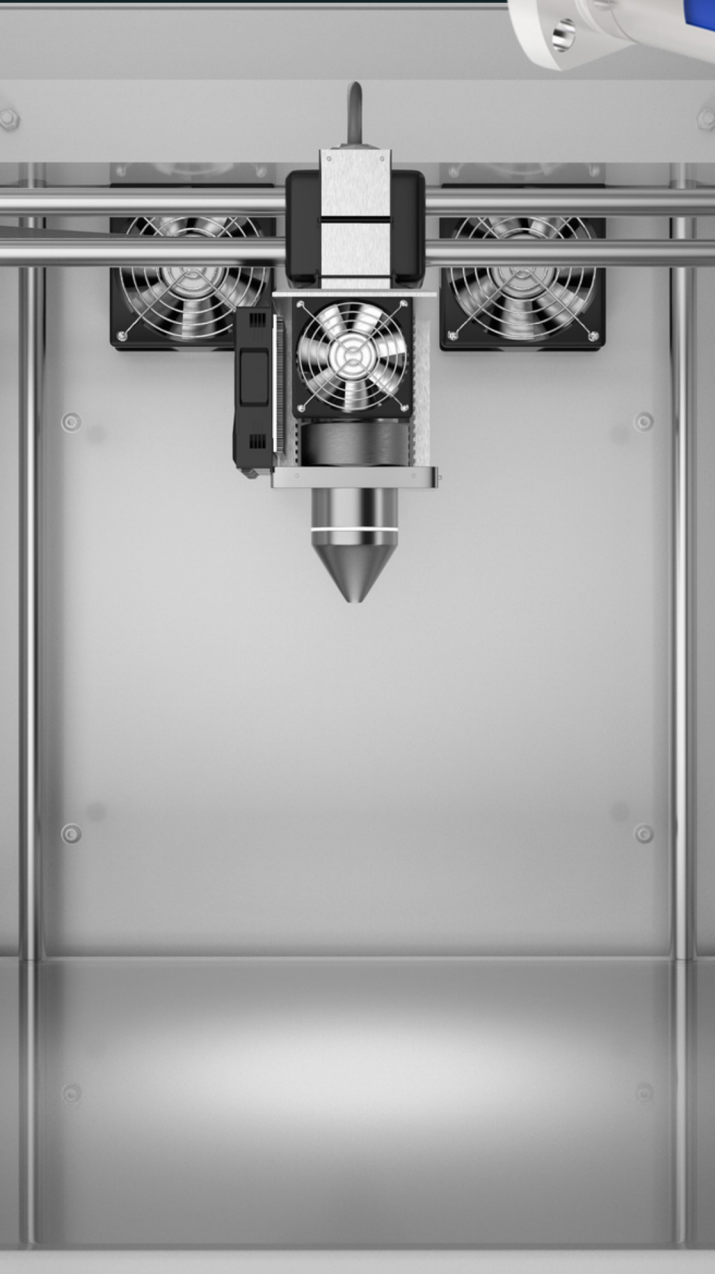
Helix Linear's products are trusted by machine builders and system integrators to enable accurate Z-axis control, smooth bed positioning, and reliable extrusion motion. Our components are engineered to deliver high-resolution positioning and repeatability with minimal maintenance.

Applications:

- Z-axis motion systems
- Gantry and bed-level movement
- Extruder head positioning
- Powder bed fusion platforms
- Resin vat lift systems

Core Products:

- Precision Lead Screws
- Custom Ball Screws
- Compact Linear Actuators
- Motorized Stepper Systems
- Anti-Backlash Nuts & Components



Built for Precision. Designed for Integration.

Helix Linear motion solutions are compact, customizable, and built to integrate seamlessly into additive manufacturing systems.

Our products support multi-axis motion, ultra-fine layer control, and smooth operation across thousands of cycles which is key for both prototyping and production-level builds.

Performance Features:

- High repeatability (± 0.0005 in)
- Minimal backlash options
- Corrosion-resistant materials
- Lightweight designs for gantry integration
- Custom mounting and drive configurations



Reliability, Customization & Collaboration

Whether you're building a desktop 3D printer or an industrial-scale additive manufacturing system, Helix works with your team to deliver purpose-built motion solutions.

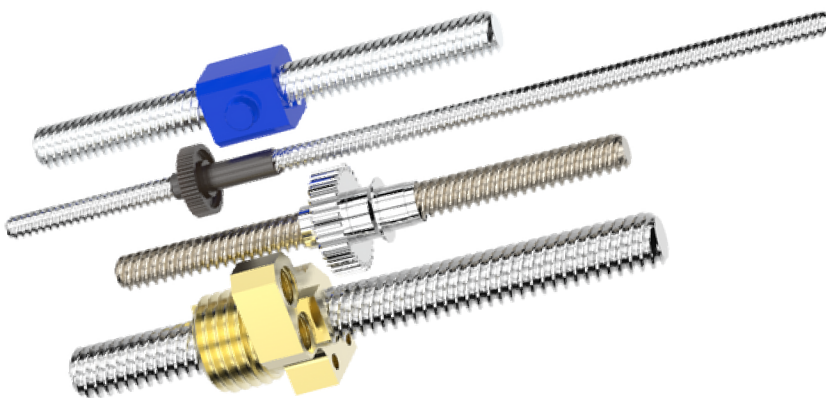
We support quick-turn prototyping, cleanroom-compatible builds, and specialized geometries that fit seamlessly into your design.

Advantages:

- Short lead times on standard products
- Custom engineering for OEMs
- In-house testing and validation
- Scalable for low- and high-volume machines

Certifications & Standards:

- AS9100:2016 certified
- RoHS-compliant materials
- REACH-compatible grease and coatings
- Traceability on critical components



Partnering in the Future of Manufacturing

Since 2011, Helix Linear Technologies has supported forward-thinking manufacturers with precision motion systems tailored to meet the evolving demands of the additive manufacturing industry. With deep expertise, custom capabilities, and a passion for innovation, we help shape the future. One layer at a time.



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