



HYBRID LINEAR ACTUATORS

High Performance Stepper Motor Linear Actuators

QUALITY SYSTEM

HIGHTECH QUALITY EXPERIENCE

When you select Helix Linear Technologies as a supplier, you can be assured that your product will be designed and tested to rigorous product planning. Pre-design activity includes understanding of customer requirements applied to predictive models, engineering calculations and linear modeling through prototype development, stereo-lithography samples of form, fit, and function that verify design criteria.

VALIDATION AND VERIFICATION

Through years of rigorous development, Helix has proven its designs and manufacturing processes against the most stringent standards and specifications. Design and process verification and validation tools are employed throughout the product life cycle.

CERTIFICATIONS

Helix serves many customers in the Aerospace and Medical device markets and has complied with common Quality System Requirements.

ITAR

Helix is registered with the Department of State For International Traffic In Arms Compliance.



International Traffic in Arms
Regulations Compliant

The Department of State is responsible for the export and temporary import of defense articles and services governed by 22 U.S.C. 2778 of the Arms Export Control Act.

INSPECTION CAPABILITY

Roundness Measurement - Critical to quality, characteristics such as roundness are monitored throughout the screw manufacturing process.

Lead Accuracy Measurement - Precise lead accuracy measurement systems are utilized to validate process to conform to Helix internal specifications and customer requirements.



Contour Readers - Prior to the start of any production run, thread form geometry is precisely measured to stringent engineering specifications.

QUALITY SYSTEM (continued)

QUALITY TOOLS:

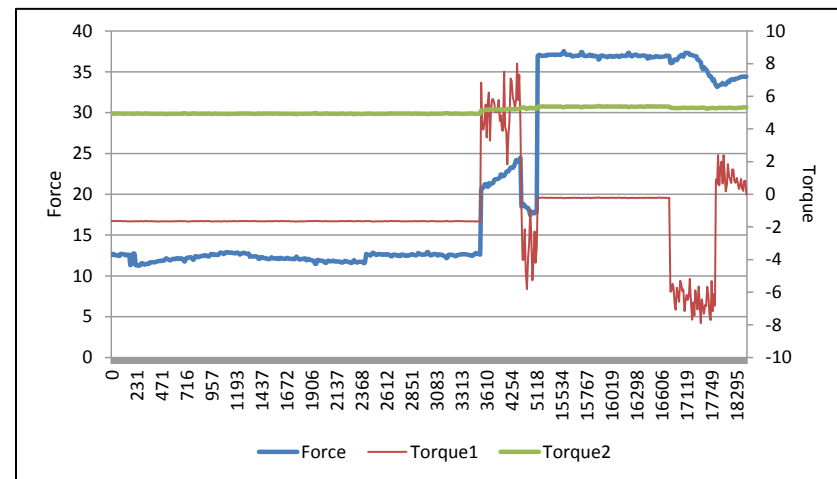
- Design for Six Sigma manufacturing
- D.O.E. (Design of Experiments)
- APQP (Advanced Product Quality Planning)
- DFMEA, PFMEA
- FEA (Finite Element Analysis)
- DVP&R (Design Verification Plan & Report)
- Reliability testing
- Process validation to 21 CFR Part 82 (Medical Device)

TESTING

Efficiency Measurement - Helix Engineering has designed test machines to measure and validate screw assembly efficiency.

Torque Measurement - Preloaded lead screw assemblies are evaluated to determine compliance with engineering specifications utilizing a dynamic torque testing machine.

FUNCTIONAL TESTING



Helix test systems and engineered testing processes perform analysis and verification of life, durability, and performance. The functional testing defines operating limits in specifications and helps set defined targets in product launch process and assurance plans.

The engineered testing provides predictive tools, generates data for prognostics, and validates performance wear models. Life tests help determine performance in multiple operating conditions as well. Helix offers proof testing for customers developing new systems and actuators to help accelerate product release dates.

HELIX QUALITY EVOLUTION

Developed Manufacturing Systems

Quality Systems and Accreditations

Supply Chain Approval Process

State of the Art Management Systems

APQP Launch Protocols

System and Process Protocols

Engineering Analysis and Predictive Tools

Reliability Engineering and Testing

Custom Engineered and Built Test Instrumentation

Design and Test for Fault Tolerance and Prognostics

Certification Testing