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Aerotech's Overview Video Highlights Corporate Milestones

The [Aerotech Overview video](#) highlights Aerotech's capabilities in the precision motion control industry. This four-minute Flash video features information about the markets and industries we serve, and the components and systems we manufacture for those markets. We invite you to take a few minutes to discover why Aerotech is *Dedicated to the Science of Motion*. You can watch the video [here](#).



ICALEO 2009: Hermetic Seam Welding Demonstration

Please Join Aerotech November 2-5, 2009 at the 28th International Congress on Applications of Lasers & Electro-Optics (ICALEO) at the Walt Disney World Resort in Orlando, Florida.

Aerotech will demonstrate [HermeSys™](#), a holistic design that optimizes all aspects of the cardiac pacemaker hermetic seam welding process. A [video demonstration](#) of this product is now available online. The two-minute video highlights the specialized mechanics that are used to accurately position the cardiac pacemaker during the laser welding process.

[Register here](#) for ICALEO 2009, or please [contact an Application Engineer](#) to discuss your motion control application.



Motion Control and Positioning Library

This resource provides a short summary and a link to articles, tutorials, white papers, and other materials that discuss problems and solutions involving motion control and positioning equipment and systems.

[Explore Aerotech's Online Library of Product Catalogs and Brochures](#)

Browse our motion solutions for applications in aerospace, semiconductor, medical device fabrication, laser processing, micromachining, electronic manufacturing, test and inspection, data storage, and more. Request a hard copy of any brochure or catalog, or download a PDF today.

[Laser Processing in Stent Production](#)

The diameter of a human hair is approximately 100 microns, while the entire wall thickness of the material in a stent is 25% the thickness of a human hair. By reviewing these numbers, it is easy to understand the difficulties of ensuring quality stent manufacturing. But what is the best method of production to meet these tight tolerances?

[The Need for Speed](#)

Packaging OEMs look to advanced software solutions and linear servos to boost system performance.

[Machine Vision Speeds PCB Solder-Joint Inspection](#)

The system combines servo motion, continuity testing, and solder-joint inspection in one unit for processing of automotive connectors.

[Resolution Resolved](#)

System or stage resolution is often spelled out for motion controls as well as in vendor catalogs and Web site specifications. However, many misinterpret what the term truly means.

[Linear Motor Basics](#)

A steady increase in practical industrial applications has secured a place for linear motors. Here's an overview of the various types of linear motors and what differentiates them from their rotary counterparts.

[How to Select and Install Air Bearing Stages](#)

Air bearing stages are noted for their smooth, frictionless motion. A few tips and techniques will ensure you benefit from their advantages.

[Micropositioning Meets Mechatronics](#)

Compared to traditional methods, the mechatronic design approach is more of a holistic approach to product design, where the tradeoffs between different functional components (software, hardware, user interface, etc.) are carefully considered for their impact on overall performance.

[Motion Control Requirements for Hermetic Seam Welding](#)

A discussion of the motion control platform in regard to [hermetic seam welding](#) of sophisticated electronic devices implanted in the human body.

[Digitizing a Century of Astronomical Images](#)

Aerotech's ABL9000 air-bearing stage is put to use to efficiently digitize more than 500,000 photonegatives.

[Two-Photon Polymerization: A New Approach to Micromachining](#)

Femtosecond lasers enable microfabrication with resolution beyond the diffraction limit.

[Precise Triggering of External Events Based on Axis Position](#)

An axis-based trigger in the controller can significantly improve part quality, reduce cycle time, and eliminate processing problems. This article discusses Aerotech's unique PSO (Position Synchronized Output) option, and how any application that requires precise data acquisition or process action linked to axis position can benefit from it.

[Applications Dictate Gimbal Selection](#)

The choice between direct-drive and gear-driven gimbals and optical mounts presents an opportunity for a comparison of the pros and cons for each.

[Linear Motors Application Guide](#)

A tutorial guide to the history, design, and application of linear motors.

Latest Software Releases (Red indicates a new release)

A3200 Digital Automation Platform	Version 2.54.005
Ensemble Multi-Axis Controller	Version 2.54.005
Soloist Single-Axis Controller	Version 2.54.005

Aerotech Quick Links

[Knowledge Base - FAQs](#)

[CAD Downloads from 3D PartStream
Employment](#)

[Engineering Reference
Software & Manuals](#)

[Tradeshows
Motor Sizer](#)