

## FEATURES

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Booth 1002

February 27-28, 2007

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February 27-March 1, 2007

<http://www.medtecshow.com>

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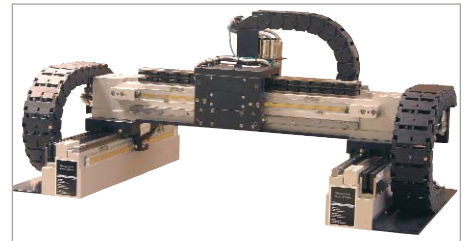
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## Linear Motor Gantries For Every Application

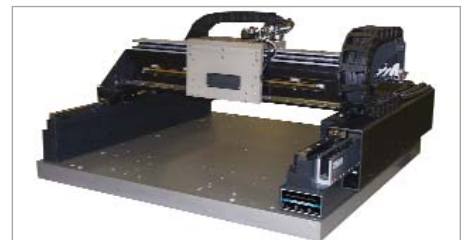
Aerotech gantry systems utilize our own brushless linear servomotors to meet the needs of a variety of gantry customers for applications including high-speed pick-and-place, automated assembly, vision inspection, dispensing stations, and high-accuracy inspection. These industrial robots are available in models from low-cost modular linear actuators assembled in a gantry configuration with matching motion controllers and drives, to sophisticated gantry models with the largest travel, highest speed, and highest acceleration available. Aerotech has over 35 years of experience in brushless linear motor design, motion controllers, and drives that permit us to offer a complete gantry solution that perfectly fits your gantry application.

Aerotech's BLMC series brushless linear servomotors drive the AGS1000 to speeds of 2 m/s and accelerations of 2 g. Resolution options range from 10 nm to 1.0  $\mu$ m.



AGS1000

Aerotech's BLM series brushless linear servomotors drive the AGS10000 to speeds of 3 m/s and accelerations of 3 g. Both single and dual forcer designs are available. Resolution options range from 5 nm to 1.0  $\mu$ m. AGS10000 systems can be found in production plants around the world.



AGS10000

The AGS20000 series was designed to be the most powerful and accurate Cartesian gantry in the world. Dual Aerotech BLMH series high-power linear motors were coupled with dual lower-axis linear encoders, resulting in speeds of 3 m/s, accelerations of 5 g, and resolution to 5 nm.



AGS20000

The ABG10000 air-bearing gantry puts Aerotech's core technologies and extensive manufacturing capability to work for you. Aerotech's BLM series brushless linear servomotors drive the ABG10000 to speeds of 1 m/s and accelerations of 0.5 g. The ABG10000 uses an air-bearing design and incorporates an active preload on both vertical and horizontal surfaces. This design features large air-bearing surfaces that distribute the load over a large surface area, providing outstanding stiffness and excellent dynamic performance.



ABG10000

# AEROTECH *In Motion*

Dedicated to the Science of Motion

February 22, 2007

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Aerotech's experience manufacturing precision positioning and control systems can be leveraged by acquiring a highly integrated electromechanical subsystem. Typical options include Z-theta mechanisms, risers to accommodate automated parts handling equipment, and machine bases to accommodate the entire electronics subsystem.



An example of the AGS10000 gantry with machine base, complete integrated electronics subsystem including Aerotech manufactured motion controller and drives, and Z-axis stage.

[CLICK HERE](#) to discuss your gantry application with an Aerotech Application Engineer. [CLICK HERE](#) to view a description, specifications, CADs, and ordering information on the complete line of Aerotech gantries.



Aerotech manufactures a range of *amplifiers and motion controllers* for complete control system solutions.

## Latest Software Releases

This section lists the latest revisions of Aerotech software, providing a handy method of checking to see that your Aerotech software, and hence your Aerotech system, is working at peak efficiency. All Aerotech software is available for instant download from our website — just click the software title! An entry in **red** means the software has been updated since our last newsletter.

Software	Version	Description
<a href="#">A3200 Digital Automation Platform</a>	Version 2.17	Nmotion® SMC Libraries and Utilities, Ncontrol® Software Developers Kit, Nview® HMI, Windows Help Files
<a href="#">U600 HMI</a>	Version 6.00.136	Windows® HMI
<a href="#">U600 SDK</a>	Version 6.00.136	U600 Software Developers Kit
<a href="#">U600 LIB</a>	Version 6.00.136	Windows® Help File, U600 Libraries and Utilities
<a href="#">U500 PC-Bus-Based Controller</a>	Version 5.22	Windows® HMI and Windows® Help File
<a href="#">U511 Stand-Alone Controller</a>	Version 5.22	Interface Software and Windows® Help File
<a href="#">Soloist Single Axis Controller</a>	Version 2.04	Interface Software and Windows® Help File

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## 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.

## Articles

### Two-Photon Polymerization: A New Approach to Micromachining

Femtosecond lasers enable microfabrication with resolution beyond the diffraction limit. Read the full article [HERE](#).

### Tackling the Automation Challenge

Automation in the medical device industry continues to grow at a very healthy pace. This article discusses the reasons for this growth, the areas in which this growth is taking place, as well as Aerotech's contribution to this trend. Read the full article [HERE](#).

### 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. Read the full article [HERE](#).

### Linear Motors Application Guide

A tutorial guide to the history, design, and application of linear motors. Get the PDF [HERE](#).

### Air Bearings Aid Assembly of Flat Panel Displays

Many manufacturing processes for flat panel displays (FPDs) require precision motion control for feature generation and inspection. Aerostatic bearings are an excellent choice for many of these processes. Read the full article [HERE](#).

### Kinematics and Precision Stages Drive Laser Welding

Real-time kinematics coupled with direct-drive positioning systems provide the highest performance solution for laser seam-welding applications. Read the full article [HERE](#).

### 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. Read the full article [HERE](#).

## Search the Aerotech Article Archive

## Standards Organizations

### 1394 Trade Association

<http://www.1394ta.org>

### ISA, the International Society for Measurement and Control

<http://www.isa.org>

### IEC

<http://www.iec.ch>

### ISO

<http://www.iso.org>