Comprehensive Solution Provider

...for Ultra-Precision Motion Systems

ABTech has developed a rare combination of in-house engineering and manufacturing capabilities specifically focused on air bearing technologies. Combined with a sincere willingness to modify existing designs or to custom engineer totally new designs makes ABTech a leader in solving ultra-precision motion problems. Here's what we have to offer:

- **Mechanical Engineering**: specifically focused on motion systems (single and multi-axis modules or complete systems). Adept at matching application specific needs to an engineered solution through determination of individual axis and overall system accuracy, load capacity, stiffness, torque, inertia and vibration requirements.

- **Electrical Engineering**: motion control architecture design and component selection, motion profile analysis, motor sizing, servo tuning and matching motor type to application requirements (rotary AC & DC servo direct drives, linear motors, lead screws, ball screws, gear drives). Continuously evaluating commercially available motion control components to ensure we are up-to-date with the most advanced yet cost effective components.

- **Software Engineering**: custom application design, process development, CNC G-code programming expertise and developing application specific front-end user interfaces.

- **Machining and Fabrication**: precision manufacturing with strong emphasis on tight tolerance machining, grinding, and lapping.

- **Assembly and Certification**: sub-micron alignment, individual axis performance testing and system certification

ABTech employs sound engineering practices and a project management style for scope and schedule integrity. Excellent customer communication skills with design reviews and progress reports along with full service capabilities means ABTech will respond quickly and effectively to your unique prototype or O.E.M. critical motion requirement.

"The delivery went very smoothly and the machine is really an amazing piece of engineering craft. I hate to see your guys go. They were really great and patient with us."

- Marcela Stern - Research Scientist at Columbia University’s Nevis Labs commenting on ABTech during the development of the optics module assembly machines for NASA’s NuSTAR Telescope project