Mechanical Engineer – Control Systems

JOB DESCRIPTION

As a Mechanical Engineer at Multibeam Corporation, you will work with a Senior Mechanical Control Systems Engineer and support the design and test mechanical control systems for an innovative electron-beam lithography system. This role requires industry experience or training in analysis, simulation, design, programming, integration, and test of mechanical control systems.

This position is based at our headquarters in Santa Clara, California.

Please also check our website for additional related job openings at: http://www.multibeamcorp.com/careers.htm

FUNCTIONS and RESPONSIBILITIES

- Teamwork role on projects holding to a strict and highly competitive schedule
- Design, develop and implement precision control systems for wafer motion control, temperature control, and vibration isolation/cancellation.
- Analyze, simulate, and model dynamic/kinematic properties of systems, including vibration
- Develop or improve control algorithms
- Develop programs or procedures for test and calibration
- Test and analyze performance of electro-mechanical systems
- Create and improve engineering documentation
- Provide reports and share technical information with team
- Work hands-on in the cleanroom and lab

SKILLS and EXPERIENCES

- Experience in dynamic/kinematic analysis of mechanical systems
- Knowledge of precision mechanics, motion actuators, mechatronics, and electronics
- Skilled at hands-on testing, data acquisition, and data analysis
- Strong analytical problem solving and root cause analysis skills
- Ability to work hands-on in cleanroom and lab
- Knowledge of thermal engineering and cooling solutions preferred
- Experience in programming implementation of mechanical control systems preferred
- Proficiency in Pro-E/PTC Creo is preferred
- Experience with PLCs preferred

EDUCATION and TRAINING

- B.S. in Mechanical Engineering, Mechatronics, or related field

ABOUT MULTIBEAM CORPORATION

Multibeam Corporation is a leading electron-beam technology innovator in wafer fab equipment. The company’s proprietary miniature e-beam column array is currently being used to build lithography systems for the U.S government. In addition to these systems that enable low-volume, high-mix production of microchips, the company aims to apply its e-beam platform to serve other key applications such as embedding chip-specific security information to enhance cybersecurity and enhanced precision etch/deposition. Based in Santa Clara, California, Multibeam is led by Dr. David K. Lam, the founder and first CEO of Lam Research.