

Job Description
Metrology and Applications Engineer III

Type of Job – Full Time – Exempt
Location – Swansey, New Hampshire

Job Summary

The Metrology and Applications Engineer III will oversee and maintain the proper functioning of the company's metrology assets, as well as develop machine tool processes.

The metrology responsibilities will be as the principle point of contact for key metrology resources, such as Coordinate Measurement Machines (CMM's), profilometers and interferometers that support the process development and machine qualification for the organization. Duties will include, but are not limited to, instrument programming and operation, calibration and maintenance, as well as training personnel to operate the metrology equipment.

The applications responsibilities will include assisting the Sales and Engineering groups with the fabrication of customer-requested samples (design to specification), along with customer communication and training. This will occur through specific processes and custom applications, along with new product development and testing. The successful candidate must be a team player with strong math skills, computer skills, machine tool process engineering (optics knowledge a plus) and be self-motivated with a willingness to learn. Demonstrated communication skills are a must.

Some domestic and international travel may be required.

Core Responsibilities/Duties

Metrology

- Competence in precision metrology for measuring various geometric and optical components;
- Ability to operate and program CMM's, profilometers, interferometers, roundness gauges and measurement microscopes;
- Knowledgeable of Geometric dimensioning and Tolerancing (GD&T) and ability to read part drawings;
- Ensure all gauges are properly maintained and calibrated at all times;
- Maintain control charts for all instruments to ensure gauge stability;
- Document the gauge capability for all quality critical instruments;
- Train engineers and technicians to properly operate measurement gauges.

Applications

- Perform ultra-precision diamond turning & grinding of materials for a wide variety of customer specific, application driven, components;
- Receive and maintain expertise in at least 4 core manufacturing processes;
- Provide customer support and training for company-specific ultra-precision optical manufacturing equipment;
- Support the technical input required for sales quotation process;
- Understand the operations and manufacturing of Ultra-precision CNC machining/grinding equipment and related software;

- Effective communicate with current and potential customers, vendors and employees on equipment and software questions and processes;
- Design and assemble appropriate fixtures, write programs and develop processes necessary to demonstrate the manufacture of optical-quality parts that meet customer requirement;
- Document detailed project-specific reports and process solutions;
- Performs other related duties as assigned in accordance with overall job responsibilities.

Required Education and Experience

- Bachelor's degree in Engineering or related science from an accredited university and a minimum of 5-years of work experience;
- Knowledge of GD&T and other appropriate standards for dimensioning and tolerancing;
- Knowledge of mathematical formulas and computations (e.g. algebraic, geometric, shop math);
- Writes clearly and informatively; edits work for spelling and grammar; presents numerical data effectively; Able to read and interpret written technical information;
- Knowledge of computer modeling and design; experience with high-level three-dimensional parametric systems, CNC programming or CAM software a plus.

Competencies

- Excellent interpersonal skills (written and verbal communication, ability to articulate ideas and concepts);
- Utilize strong verbal and written skills to communicate effectively with technical and non-technical partners at various levels;
- Self-motivated; ability to work independently or as part of a group;
- Excellent organizational skills with strong attention to detail;
- Maintain professionalism with all employees, visitors and/or guests.

To apply for this position, please send your resume to: careers@nanotechsys.com