

Job Description
Applications Engineer II

Full-Time, Salaried / Exempt
Location – Swansey, NH

Job Summary

The Applications Engineer (Level II) develops machine tool processes in collaboration with the Applications Team, while assisting sales functions by providing applications support through fabrication of customer-requested samples to specification in a timely-manner. This position will require training of customers with customized agendas based on the customer application. This position will play a major role in supporting the daily requirements in the operation and maintenance of ultra-precision machine tools as well as manufacturing and metrology development in fabrication of optical components. This position will also support engineering in 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 critical requirement. Some domestic and international travel may be required.

Core Responsibilities / Duties

- Ultra-precision diamond turning / grinding on a wide variety of customer specific, application driven, components.
- Maintain expertise in at least 2 core manufacturing processes (turning, synchronized slide servo, fast tool servo, grinding, glass molding, drum lathe operation, jig grinding, milling, on-machine metrology).
- Establish relevant manufacturing processes.
- Provide customer support and training relating to ultra-precision optical manufacturing equipment.
- Support the technical aspects of the equipment/process quotation for the sales department.
- Understand the operations, manufacturing, and variations of Ultra-precision CNC machining / grinding equipment and software.
- Reads and interprets blueprints, planning sheets, sketches, and related technical data to determine operating procedures, have knowledge of the manufacturing sequences and machining methods, and able to prove out part programs.
- Communicate effectively with current and potential customers on equipment and software questions, usage, and processes.
- Design, build, and assemble appropriate fixtures, programs, and processes necessary to demonstrate the manufacture of optical quality parts meeting customer specific applications.
- Document troubleshooting procedures to provide detailed reporting of process solutions.
- Operation of various optical metrology equipment (interferometers, SWLI, auto-collimators, microscopes, etc.) for qualification of machined parts. Uses Geometric Dimensioning and Tolerancing (GD&T) to ensure fit form and function.

- Travel to customer facilities (domestic and international) to train customers in operation of the equipment and provide applications / process support. Occasional travel to conferences for presentation of newly developed processes.

Required Education and Experience

- Associates degree (A.A.) or equivalent from two-year College or technical school and / or five years related experience and/or training; or equivalent combination of education and experience.
- Knowledge of GD&T, American Society of Mechanical Engineers, American National Standards Institute, and other appropriate standards for dimensioning and tolerancing.
- Knowledge of computer-aided drafting techniques, CAD modeling and design, and high-level three- dimensional parametric CAD systems.
- Knowledge of mathematical formulas and computations (i.e. 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.
- Experience with CAM software.
- Experience programming CNC machine tools.

Preferred Education and Experience

- Experience diamond turning or grinding optics.
- Communications training for presentations.
- General knowledge of optics and related formulas.
- Bachelor's Degree (B.S.) or Masters' Degree (M.S.) from a university or technical school and/or ten years related experience and/or training; or equivalent combination of education and experience.