

## **JOB DESCRIPTION**

### **OPTICAL THIN FILMS COATING ENGINEER**

**JOB TITLE:** Optical Thin Films Coating Engineer

**DEPARTMENT:** Engineering

**ACCOUNTABILITY:** Reports to Vice President of Engineering and Research

**JOB SUMMARY:** The Optical Thin Films Coating Engineer, under the direction of the Vice President of Engineering and Research, researches, designs, and develops complex thin film coatings and its related aspects.

#### **DUTIES AND RESPONSIBILITIES:**

- **Researches, designs, and develops** complex thin films coatings, materials, coating processes, and related tooling.
- Oversees the formulation of thin film coating run instructions and procedures, and ensures implementation.
- Determines cause and corrective procedures for failed coating runs.
- Determines coating and test equipment manufacturing capability/test accuracy and recommends equipment upgrades, modifications, and/or improvements.
- Develops new coating equipment/process technology.
- Develops in-depth familiarity of all coating and metrology equipment, to include operation and related theory.
- **Develops** new processes to optimize and expand existing manufacturing capability.
- Documents production problem solutions and new production processes.
- **Writes** new equipment procedural methods in an easily understood format.
- Performs vacuum chamber troubleshooting as required.
- Ensures specific projects as assigned by management are professionally completed and delivered on time.
- Provides project leadership, work direction, and training to lower level personnel.
- Establishes standards of productivity, efficiency, and cost effectiveness.
- Keeps abreast of ongoing changes within the thin film technical field.
- Trains and educates personnel involved with job processes and maintenance procedures (machines, materials, and process techniques).
- Works with customers to resolve complex custom-designs and technical problems.
- **Leans, understands, and implements** ISO 9001:2008 to ensure compliance.
- Understands and utilizes PFG's proprietary *PFG Programs* software.
- Attends production and other meetings as required.
- Provides weekly updates to the VP of Engineering and Research on the current status of existing projects.
- Seeks assistance from the VP of Engineering and Research when issues arise to ensure they are promptly addressed.
- Performs other related duties as assigned or directed to meet the goals and objectives of the department and the organization.

#### **EDUCATIONAL AND SKILL REQUIREMENTS:**

- Bachelor of Science in Optical, Electrical, or Mechanical Engineering, or alternatively a Bachelor of Science in Physics.
- Exceed median total scores on pre-employment personality and aptitude test for Engineers.
- Ability to take direction and to work independently.
- Have a methodical and detail-oriented approach to work by organizing and prioritizing.
- Able to interpret and apply a variety of rules, regulations, policies, and procedures related to work of the company.
- Communicate effectively (both oral and written), relay instructions and information clearly, and provide feedback when appropriate to ensure instructions are understood clearly.
- Perform repetitive tasks requiring exacting and continuous mental and visual concentration in a consistent manner.
- Work well with time and production restrictions.
- Excellent interpersonal and problem solving skills.
- Preferred experience in a production environment.
- Mechanical ability.
- Ability to read and work from technical drawings and instructions.
- Knowledge of basic machinery and mechanical measuring devices.
- Ability to handle multiple tasks with multiple deadlines.

**PHYSICAL DEMANDS AND WORKING CONDITIONS:**

- The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.
- Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions of the job.
- Regularly required to stand, walk, sit; use hands to handle or feel; and talk or hear.
- Specific vision abilities required by this job include close vision, depth perception, and the ability to adjust focus.
- The employee must be able to work in low lighting conditions.
- The employee will have contact with chemicals such as acetone, polishing fluid, solvent, and alcohol.
- The employee must occasionally lift and/or move up to 60 lbs. or 100 lbs. with assistance.
- The noise level in the work environment ranges from minimal to loud.
- Maintains an office space; however primarily works in a production environment.

**EMPLOYEE SIGNATURE:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**SUPERVISOR SIGNATURE:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**HR SIGNATURE:** \_\_\_\_\_ **DATE:** \_\_\_\_\_