

HITACHI HIGH TECHNOLOGIES AMERICA, INC.

JOB DESCRIPTION

POSITION TITLE: **Process Engineer I**
DEPARTMENT NAME: SED
REPORTING TO TITLE: Demo Lab Manager
FLSA STATUS (E or N) E
EEO CATEGORY: Professional
JOB STATUS: Full-time

GENERAL DESCRIPTION

The position of Process Engineer I for the Semiconductor Equipment Division in Dallas, Texas will support the activities of the Dallas Demonstration Lab. The employee must be willing to initially travel to Japan for an extended training assignment. This is a developmental position. Engineer is spending approximately 75% of their time in training, under close supervision while typically receiving detailed instructions on all jobs. Acquires job skills and learns company policies and procedures to perform routine tasks, process development skills and hardware proficiency. Continued training will be given to develop specific skills, knowledge and service techniques. The engineer is interfacing with customers and developing relationships with co-workers and managers.

PRIMARY RESPONSIBILITIES

- Day-to-Day responsibilities include: completing assigned tasks in a timely fashion, learning routine development tasks and tool operation, and acquiring specific process development knowledge and skills.
- Hands-on dry etch process development including performing customer demonstrations and R&D for new dry etch technology trends, with the objective of meeting customer requirements for current and future technology processes.
- Operate Hitachi Etch System after being trained.
- After training, must be able to operate all associated semiconductor metrology equipment including scanning electron microscopy, focused ion beam milling, and thin film metrology techniques.
- Working under supervision, must be able to independently complete routine process development tasks after receiving detailed instructions.
- Utilize analytical tools & techniques to solve process development issues.
- Analysis of data, design and execution of experiments including DOE.
- Generate internal and external documentation for products, presentations, and technical reports, and generate process engineering specifications.
- Interface with customers regarding demonstration results, new product evaluations, training of process and/or equipment, and troubleshooting of process issues.
- Interface with Hitachi Corporate R&D headquarters in Japan.

EDUCATION, LICENSES, AND/OR CERTIFICATION REQUIREMENTS
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- BS Degree in Chemical Engineering, Materials Science, Electrical Engineering, related field, or equivalent experience.

EXPERIENCE AND TRAVEL REQUIREMENTS

- 0-3 years Plasma Etch Process Experience or semiconductor processing preferred.

SKILLS AND ABILITIES REQUIREMENTS

- Must be willing to travel to Japan for extended training assignment.
- Periodic overseas business trips may be required throughout the year.
- Candidate must have good verbal and written communication, analytical, and trouble shooting skills and must work well in a team environment.
- Strong general technical knowledge of semiconductor wafer processing.
- Fundamental understanding of and experience with Dry Etch / RIE.
- Self-motivated and show abilities to adapt to changes in a fast moving environment.
- Demonstrate project planning, execution, and leadership skills with on-time delivery of milestones.
- Strong engineering analytical/problem solving skills. Understanding of Scientific Method and experience using it.
- In depth knowledge of Design of Experiments (DOE).
- Ability to work in teams in leadership and subordinate roles.
- Must be able to work in a clean room environment for extended hours.
- Oversee some of the logistics of the demo lab like: tacky mats, LN2 fill, clean room garments pick up and drop off, miscellaneous supply needs, and occasional delivery or pickup of demo lab parts or wafers.
- Research, create and submit purchase orders for materials and services
- Strong computer skills including Microsoft Office software competency.

The above job description has been designed to indicate the general nature and level of work performed by employees with this classification. It is not designed to contain or be interpreted as a comprehensive inventory of all duties, responsibilities and qualifications required of employees assigned to this job.

