

JOB TITLE & DESCRIPTION
MECHANICAL & TEST ENGINEER

prepared by:
M. Grzechowiak 7/16/2010

1. Position Objective:

- a. Function independently dealing with all aspects of the project and product from start of quote to finishing the release of drawings & documentation to production after design engineering development and verification. Develop design concept and details based on design calculation and analysis. Knowledge of LVDT Operation a plus, but not necessary. Good communication and reporting skills required. CAD, spreadsheet, and word-processing skills required. Must have "Hands-On" attitude and skills to participate in construction and test of both experimental and shippable units. Exhibit conduct that is professional, courteous, and disciplined in all situations. Knowledge of computer systems and networking would be a plus.

2. Major Responsibilities:

- a. Design Development
 - i. To conceptualize the design of the product based on the specified requirements.
- b. Scheduling, Planning, & Tracking
 - i. To develop/prepare the project plan and schedule so that the various elements of the design effort are understood and accounted for.
- c. Reporting:
 - i. Progress Reports shall be made on a periodic basis.
- d. Production Transfer
- e. Miscellaneous Activities, as required.

3. Performance Standards:

- a. Design Development
 - i. To conceptualize and develop the design of the product based on the specified requirements provided by sales and/or the customer.
 - ii. Provide electronic (CAD) and paper drawings and documentation to accurately convey the design and/or assembly requirements to other personnel and departments.
 - iii. To conduct internal design reviews and project status meetings.
 - iv. To set-up and maintain a "Design Project Binder" to satisfy the ISO standards for tracking Input documents, output documents, and correspondence as a history supporting the project activities
 - v. To participate, as necessary, in the actual construction and testing of the prototype units to both to insure product is constructed and performs to the requirements specified.
 - vi. Research sources of supply for needed items.
 - vii. Provide verbal & written instruction to others who may assist in the design process, testing, or prototype build.
- b. Scheduling
 - i. Develop project plan and Develop formal Gantt chart project schedule.
 - ii. Track / Maintain Project schedule to insure on time completion or early notice of delay.
 - iii. To coordinate with other people, other departments, outside vendors, and customers to facilitate the performance of needed tasks to complete the project successfully.
- c. Reporting
 - i. Progress of the "Design Development" and monitoring of the "Schedule" shall be made on a periodic basis to Macro Sensor management via written reports, project meetings, and e-mail.
 - ii. Direct customer reporting and interface may be required.
- d. Production Transfer
 - i. Coordinate transfer of completed design from engineering to production.
- e. Miscellaneous Activities
 - i. Assist production in resolution of in-process problems that are affecting the completion of shippable product.
 - ii. Assist production, as needed, for quick delivery situations.
 - iii. Assist sales with technical questions from customers
 - iv. Performance of any other work related activities, as may be needed.