

# **JST MANUFACTURING JOB DESCRIPTION**

**Job Title:** Electrical Control Engineer (EE)

**Department:** Engineering

**Immediate Supervisor:** Engineering Manager

**FLSA Status:** Non-Exempt, Full Time

**Location:** Meridian, Idaho (Non-Remote)

## **COMPANY SUMMARY**

JST Manufacturing is the expert in wet bench design and manufacturer and go-to international wet process and precision cleaning technology solutions manufacturer in the semiconductor, biomedical, food processing, and other clean industries. Our customers regard us as the company that can solve their difficult manufacturing process problems. Utilizing an onsite electrical and mechanical engineering staff, and a full plastic and metal fabrication facility, JST Manufacturing can provide both design and fabrication solutions for all of your wet processing processes. With teamwork, integrity, good judgment, innovation, and respect, we are committed to improving our customer's cleaning and handling challenges with quality, cost-efficient, and safe solutions.

## **BENEFITS AVAILABLE**

- Competitive Pay Based on Experience
- Year End Performance Bonuses
- Medical / Dental / Vision
- 401(k) + up to 3% Matching
- Life Insurance
- Paid Time Off
- Holiday Pay
- Referral Program
- Tuition Reimbursement
- Available Overtime
- Flexible Work Schedule
- Relocation Assistance

## **JOB SUMMARY**

Prepares electrical power and controls designs for custom precision cleaning and wet processing tools for worldwide applications. Design packages include electrical power schematics, P&IDs, electrical control schematics, pneumatic control schematics, bill of materials, PLC Input/Output Lists, and process plumbing schematics. Assists project quoting and estimating with design concepts and component lists for accurate total design and manufacturing cost estimates.

## **DUTIES & RESPONSIBILITIES**

1. Reviews and assesses project sales specifications with consideration for system safety, functionality and manufacturing feasibility in order to prepare preliminary design approval packages including engineering specifications that are presented to the customer for design approval.
2. Responsible for design and manufacturing documentation completion including electrical and controls schematic and wiring diagrams, P&ID drawings, PLC hardware I/O lists, and plumbing schematics for systems as detailed in the written engineering specifications.
3. Completes engineering tasks on time to meet system manufacturing timelines and dates for on time project completion.
4. Works cooperatively with all project team members in coordinating designs for accurate and efficient manufacturing. Communicates design constraints and works within the team to achieve effective solutions.
5. Provides timely feedback on request for information and questions from manufacturing personnel. Identifies and resolves manufacturing discrepancies and follows up with necessary revisions to manufacturing documentation to ensure complete issue resolution.
6. Interact with ERP software system for project BOM creation utilizing standard inventory materials and products. Work with outside suppliers and vendors to specify non-standard products and materials for correct procurement by the purchasing group.
7. Provide hands on support for engineering designs in a manufacturing environment, including troubleshooting of new electrical components and equipment.
8. Prepare operations and maintenance manuals for manufactured equipment.
9. Assist in continuous process improvements with a willingness to contribute positively to discussions.
10. Responsible for other duties and task as assigned and, in some circumstances, may be completely unrelated to this position

## **JOB REQUIREMENTS**

- Associates in Electrical Engineering (or like degree) or applicable experience required. Bachelor's Degree in Electrical Engineering Preferred.
- Experience with 2-D CAD software (AutoCad, DraftSight) required.
- Ability to read and understand electrical schematics and wiring diagrams from a variety of sources and manufacturers.
- Awareness of low voltage power systems and National Electric Code requirements. Knowledge of hazardous area requirements a plus.
- Proficient in control circuit wiring and relay contact logic.
- Familiar with PLC hardware including digital and analog input and output components. Experience with Allen-Bradley is a plus.
- Understanding of basic Ethernet networking principals, practices and hardware.

- Familiarity of process variables such as temperature, pressure, flow, level, position, etc and the instrumentation and final control elements associated with each in both analog and digital variations.
- Ability to effectively present and clearly express written and verbal information to individuals and/or groups required.
- Ability to work and contribute within a project team.
- Capable of working independently to drive engineering projects to completion.
- Ability to learn quickly and adapt to new practices and procedures.

*Important Notes:*

- JST is an AA/EOE employer.
- Applicants must be authorized to work for ANY employer in the U.S. We are unable to sponsor or take over sponsorship of an employment Visa at this time.

## SHORT “POST-ABLE” VERSION

Are you an engineer with a heart for designing electrical systems?

JST's Electrical Controls Engineers are the individuals responsible for preparing/designing electrical power and controls for the variety of tools JST manufactures for the semiconductor industry. These engineers collaborate with our mechanical and software engineers to provide efficient and cost-effective manufacturing design packages that keep serviceability in mind.

Individuals who have designed electrical systems for larger, complex, integrated systems will flourish in this department. You'll know you'll be successful at JST in the Electrical Controls Engineering department if you:

- **PRIORITY RESPONSIBILITIES:**
  - Design packages that include electrical power schematics, P&IDs, electrical control schematics, pneumatic control schematics, bill of materials, PLC Input/Output Lists, and process plumbing schematics.
  - Assists project quoting and estimating with design concepts and component lists for accurate total design and manufacturing cost estimates.
- **SKILLS:** Read/understand and design understand electrical schematics and wiring diagrams
  - Awareness of low voltage power systems and National Electric Code requirements. Knowledge of hazardous area requirements a plus
  - Proficient in control circuit wiring and relay contact logic
  - Familiar with PLC hardware including digital and analog input and output
  - Experience with Allen-Bradley is a plus
  - Familiarity of process variables (temperature, pressure, flow, level, position, etc) and the instrumentation and final control elements associated with each in both analog and digital variations
- **EDUCATION:** Associates in Electrical Engineering (or like degree) or applicable experience required. Bachelor's Degree in Electrical Engineering Preferred.
- **SOFTWARE:** Experience with 2-D CAD software (AutoCad, DraftSight) required.

By joining the JST Manufacturing, Inc. team you join a team of experts in wet bench design and manufacturing. From start to finish, we can engineer & design, then manufacture & install the right solution for any cleanroom need around the world.

**LOCATION:** Meridian, ID (Not Remote)

## HR/RECRUITER NOTES:

**Salary Range:** \$60,000-\$90,000 Annually or BOE

**JST Job Code:** EE

**FEAA Job Code:** PRF

**SOC Code:** 17-2071

**Census Code:** 1410

SolidWorks		House of Robots Diversified Fluid Solutions Micron SEL NxEdge Western Mechanical
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## RECRUITER NOTES:

- AutoCAD or 2D Modeling Software proficiency – General awareness and experience with at least AutoCAD or Draft-Sight (or similar) 2D modeling software.
- Electrical Controls Design Experience – This experience needs to be focused on sensors or other control “hardware” design (Not a programming or coding position)
- Experience – open to new Electrical Engineers, experience preferred but not required.
- Keywords:
- P&ID (Process and Instrumentation Drawings) NOT PID (Proportional Integrated Derivative) Controller experience.