

ELECTRICAL LAB TECHNICIAN

DIVISION:	Aluminum/Foundry	JOB CODE:	3039
LOCATION:	Aurora	JOB FUNCTION:	Engineering
DEPARTMENT:	Engineering	FLSA STATUS:	Nonexempt
REPORTS To:	Engineering Mgr.	EFFECTIVE DATE:	01/26/26

JOB SUMMARY

Build and test electrical systems to specifications based upon schematics, including point-to-point wiring. Perform quality control procedures and processes to ensure part(s) meet defined quality criteria and tolerances along with laboratory equipment inspections, calibrations, and maintenance/repair, and implement development and testing activities related to metal quality and pumping systems. Create laboratory procedures, maintain inspection results, and assist with the development of drawing/design support and engineering documentation control including change requests, work instructions, and Bill of Materials.

QUALIFICATIONS

Education/Experience

Associate's degree in Engineering or related technical field, plus two (2) years of electromechanical experience in an industrial laboratory environment; or equivalent combination of education and experience preferred.

Prior experience with SolidWorks CAD/PDM software, preferred.

Knowledge/Skills/Abilities

Electrical/Technical Skills. Ability to read and understand wiring schematics, blueprints, sketches, written specifications, and drawings to determine design factors such as size, shape, position, tolerances, orientation, and dimensions. Advanced understanding of electricity and electrical circuits, electrical schematics, safety potential, grounding, and electrical control systems. Ability to use a variety of hand and machine operated tools with precision and dexterity.

Core People Skills. Ability to positively interact and work collaboratively with a diverse group of people at all levels of the organization. Genuine with high ethical standards, values, personal integrity, and honesty. Ability to apply a large measure of common sense to a variety of situations.

Communication Skills. Ability to speak clearly and persuasively in positive or negative situations, listen and obtain clarification and respond well to questions. Proficiency in writing clearly and concisely and editing work for spelling and grammar. Ability to vary writing style to meet business needs. Ability to consult cross-functionally, explain technical details, and remain team-oriented and flexible in approach.

Computer/Applications Skills. Proficient computer skills and ability to use a variety of software applications including Microsoft Outlook, Word, Excel, PowerPoint, Visio and 3D Design.

Core Business Skills. Ability to exercise sound judgement and discretion in handling of proprietary and confidential information. Ability to work independently, without significant direction and to use resources effectively to "figure it out". Strong critical thinking skills, judgment and keen attention to detail and accuracy. Exceptional prioritization, time management and organizational skills. Ability to write routine reports and correspondence. Continuous improvement mindset and approach to work.

Professional Investment. Demonstrated commitment to own personal professional development and learning.

Travel. Ability to travel by land and air, domestically and internationally, up to 15%. Ability to maintain motor vehicle driving record in good standing, as defined by Pyrotek's driving record requirements.

ESSENTIAL FUNCTIONS/RESPONSIBILITIES

1. Perform laboratory equipment inspections, calibrations, maintenance, and repair related to metal quality and pumping systems, by:
 - a) Utilizing micrometers, calipers, and other precision instruments to measure parts for conformity with specifications.
 - b) Disassembling instruments and equipment using hand tools, and thoroughly inspecting components for defects.
 - c) Aligning, balancing and/or replacing component parts and circuitry.
 - d) Reassembling and recalibrating instruments and equipment.
 - e) Applying formulas to solve problems in measurements and calibrations, and analyzing, prioritizing, and implementing development and testing activities.
 - f) Providing guidance and assistance to engineers in formulating tests and evaluation plans and procedures.
2. Read and interpret drawings, blueprints, electrical schematics, wiring diagrams and bills of material, and apply written and verbal instructions to build electrical assemblies and systems on capital equipment builds, to include:
 - a) Determining the optimal method and sequence of assembly operations.
 - b) Completing point-to-point wiring and installing a wide variety of electronic and electro-mechanical components.
 - c) Performing necessary hand operations such as deburring, drilling, grinding and sawing, and cutting bending, threading, and fabricating piping.
 - d) Installing, testing, and troubleshooting electrical components and completed assemblies and systems.
 - e) Installing gas system components.
3. Create laboratory standard operating procedures (SOPs), work instructions, maintenance logs, and calibration records, and appropriately maintain documentation for repaired and/or calibrated equipment.
4. Test and inspect machines and/or equipment in the manufacturing environment to observe design proposals versus performance results, and obtain data used for development, standardization, and quality.
5. Troubleshoot process/product problems as they arise and elevate critical concerns in a timely manner to the management team.
6. Collaborate with cross-functional teams (Engineering, Sales, Manufacturing, etc.) and assist as needed with:
 - a) Creating sketches in support of the Sales quoting and Engineering process.
 - b) Providing technical expertise and/or support related to laboratory equipment functions and maintenance.
 - c) Aiding in the research and development of new product lines.
 - d) Investigating and resolving customer complaints.
 - e) Helping with product development and providing basic design support.
 - f) Providing updates on calibration and/or repair statuses, and maintaining up-to-date product tracking.
7. Assist Engineers with drawing/design support and engineering documentation control, including change requests, work instructions, and Bill of Materials.
8. Work with engineers to analyze workflow efficiency and manufacturing variances (e.g., cycle times, labor costs, material allocation, and manufacturing feasibility).
9. Periodically visit customer locations to evaluate and troubleshoot laboratory equipment and systems.



10. As directed, assist with, and perform activities related to the design of metal pumping systems and operations of degassing and pump business product lines.
11. Promote positive Team Member and customer relations by supporting Pyrotek's commitment to a working environment of tolerance, acceptance and civility. Respond appropriately to inquiries, concerns, and complaints by being professional, courteous and respectful at all times.
12. Maintain regular, consistent, reliable, punctual, and predictable attendance, as required to achieve internal and external customer satisfaction.
13. Actively and positively participate in problem resolution, demonstrating constructive communication, timely response, and effective resolution skills. Work effectively within team environments both within your department and across the organization.
14. Cooperate and comply fully with all Pyrotek policies and procedures. Actively support and follow the Pyrotek Safety Program.
15. Actively support compliance with all relevant ISO management system standards by establishing controls to ensure environmental requirements are addressed in the design and development process for the product or service, considering each life cycle state and the hierarchy of controls. Ensure outsourced processes' and providers' environmental aspects are controlled or influenced.
16. Participate in company/department meetings, training activities, continuing education programs and other associated activities.
17. Consistently promote and communicate Pyrotek's core values through work performance and excellent customer service.
18. Perform other tasks as assigned.

PHYSICAL/SENSORY REQUIREMENTS

The following physical activities described here are representative of those required by a Team Member to perform the essential functions of this position. Reasonable accommodation, if feasible, will be made to enable individuals with disabilities to perform the functions of position.

While performing the duties of this job, the Team Member is regularly required to talk, hear, and see. Specific vision abilities required by this job include close vision, distance vision, peripheral vision, depth perception and ability to adjust focus. Must be able to sit and/or stand for long periods-of-time, bend and reach, use stairs, lift up to 25 pounds occasionally and communicate effectively in English by phone, in person and in writing. Effectively use a personal computer, office equipment and phone.

WORKING ENVIRONMENT

While performing the essential responsibilities of this position, Team Member will work in a laboratory environment, with occasional work in a manufacturing environment and frequent exposure to loud noise, moving mechanical parts, and fumes or airborne particles. Periodic exposure to outdoor environment through open doors. PPE (Personal Protective Equipment) such as approved footwear, respirators, safety glasses/goggles, required.

Team Member's Signature

Date