

Weld Lab Technician

AWL Automation is a leader in advanced automated machinery, delivering innovative and precision-driven solutions to customers across a wide range of industries. Our success is built on technical excellence, quality, and continuous improvement. As we expand our manufacturing and quality capabilities, we are seeking a **Weld Lab Technician** to support weld quality assurance and process optimization within our operations.

What Will Be Your Role?

As a Weld Lab Technician, you will play a critical role in ensuring weld quality, consistency, and compliance with customer and contractual requirements. You will be responsible for setting up, programming, and operating weld quality analysis equipment, preparing and evaluating weld samples, and optimizing welding parameters across multiple welding platforms. Reporting to the Manufacturing Manager, you will work closely with engineers, production teams, and project stakeholders to analyze weld performance, implement improvements, and generate detailed weld quality reports. This role combines hands-on lab work, technical analysis, and cross-functional collaboration, with opportunities for both domestic and international travel.

What Do We Expect From You?

Core Responsibilities

- Analyze welding processes to improve efficiency, quality, and cost-effectiveness.
- Set up, install, and maintain welding and mechanical components, including weld liners, hoods, gas lines, and gas bottles.
- Develop initial offline weld parameters based on material composition, thickness, and joint type, and load parameters into weld power sources.
- Set up, calibrate, program, and operate weld quality analysis systems.
- Perform visual inspections and non-destructive testing methods.
- Prepare weld samples through cutting, grinding, polishing, and etching.
- Operate weld analysis equipment (including Struers systems) to generate automated measurements and detailed weld quality reports in accordance with customer reporting standards.
- Interpret weld quality data and adjust welding parameters to ensure compliance with contractual requirements.
- Conduct destructive testing for resistance and spot welding processes.
- Maintain accurate records of procedures, inspections, test results, and project documentation.
- Manage welding gas inventory, ensuring correct gas mixtures, proper handling, and compliant storage.
- Track lab materials and consumables to ensure uninterrupted daily lab operations.
- Ensure timely completion of weld analysis reports and weld parameter changes.
- Follow all safety requirements and perform additional duties as assigned by management.

Knowledge & Skills

- Bachelor's degree in Welding Engineering, Materials Science, or a related field (or equivalent relevant experience).
- Minimum 3 years of experience in welding engineering, weld lab testing, or equipment setup.
- Proficiency in weld cross-section analysis and quality reporting.
- Strong understanding of metallographic preparation techniques.
- Knowledge of weld parameter setup for Fronius, Lincoln, Miller, and SKS welding power sources.
- Solid understanding of welding processes and how parameter changes affect weld geometry.
- Familiarity with MIG, spot, and laser welding techniques.
- Basic understanding of weld joint terminology and GD&T principles.
- Experience performing system calibration and verification using referenced standards.
- Ability to interpret dimensional and analytical data accurately.
- Skilled in identifying root causes of weld deviations and recommending corrective actions.

- Experience using precision measurement tools such as Vernier gauges, calipers, and feeler gauges.
- Strong analytical, organizational, and problem-solving skills.
- Excellent documentation practices to support traceability and compliance.
- Proficiency in Microsoft Office applications (Outlook, Excel, Word).
- Welding certifications such as CWI (Certified Welding Inspector) or CWE (Certified Welding Engineer) are a plus.
- Proficiency in English with the ability to clearly communicate technical results to diverse teams.

Work Environment

- Combination of office, laboratory, factory, automobile, and public transportation environments.
- Hands-on lab and production floor exposure.

Travel Requirement

- Minimum **20% travel**, domestic and international.
- Valid passport required or ability to obtain one promptly.

What Can You Expect From Us?

At **AWL Automation**, we foster a culture of quality, innovation, and collaboration. Our employees are encouraged to contribute ideas, refine processes, and grow their technical expertise. We offer:

- A technically challenging, hands-on work environment
- Opportunities for professional growth and specialized training
- Supportive leadership and cross-functional teamwork
- Exposure to advanced welding technologies and automated manufacturing systems
- Competitive compensation and benefits

Apply Today!

If you are passionate about welding technology, quality assurance, and continuous improvement—and want to contribute to world-class automated manufacturing—we'd love to hear from you.

Join AWL Automation and help ensure precision, performance, and excellence in every weld.