

Position: NDT Specialist

Department: Manufacturing Engineering

Reporting To: Engineering Manager, Materials Testing

Job Location:

LIFT ALMMII Headquarters

1400 Rosa Parks Blvd

Detroit, MI 48216

Scope of Work & Purpose:

We are seeking a hands-on Non-Destructive Testing (NDT) Specialist to support the development of advanced metals manufacturing. This role involves active engagement on the production floor as well as with the laboratory and digital engineering teams. The successful candidate will demonstrate strong technical knowledge of ultrasonic testing as well as other NDT methods. Experience developing NDT inspection standards is a plus as this role will be involved in development and validation of test methods. This position requires a deep understanding of NDT principles, a proactive approach to solving production challenges, and a strong commitment to safety in a high-hazard environment. The NDT Specialist will be a member of the LIFT Manufacturing Engineering team in a hands-on environment to support delivery against key technical programs and objectives, leveraging a variety of traditional and advanced manufacturing tools and technologies.

KEY RESPONSIBILITIES & DUTIES

- **Testing and Development:**
 - Perform ultrasonic testing of welds and base materials in accordance with applicable standards.
 - Support experiment design, data collection, and evaluation of inspection techniques.
 - Evaluate, compare, and provide technical recommendations for equipment selection and purchasing decisions.
 - Work closely with engineers, Level III personnel, and project teams to refine inspection techniques and equipment usage.
 - Participate in procedure qualification, technique validation, and performance demonstration activities.
- **Maintenance:**
 - Maintain all equipment including keeping all equipment up to date on calibrations.
 - Track and lead routine and preventative maintenance activities to ensure safety, quality, and reduce downtime.
- **Safety, 5S, and Compliance:**
 - Adhere to safety protocols to minimize risks associated with a manufacturing environment.
 - Follow procedures for sorting, set in order, shine, standardize, and sustain to ensure a safe and organized work environment.
 - Participate in regular safety inspections and audits to identify potential hazards and ensure adherence to safety regulations.

- **Working Conditions:**
 - Combination of lab, shop, and office environments.
 - May require occasional (<10%) travel to test sites, vendors, or partner facilities.
 - Use of PPE and work around welding/fabrication or test equipment as needed.

PREFERRED QUALIFICATIONS AND COMPETENCIES:

- **Certification:**
 - ASNT Level II in Ultrasonic Testing (UT) (required).
 - ASNT Level III in UT (preferred).
 - Additional ASNT Level II certifications (MT, PT, RT, VT, ET) (preferred).
- **Experience:**
 - 5 years of NDT experience, with significant UT weld inspection (required).
 - Involvement in R&D or procedure development (preferred).
 - Experience with advanced UT techniques (PAUT, TOFD, Automated Scanning) (preferred).
- **Education:**
 - High school diploma or equivalent (required).
 - Technical/vocational training in NDT, welding, materials, or related field (preferred).
- **Knowledge & Skills:**
 - Solid understanding of UT principles (setup, calibration, scanning, sizing, defect characterization).
 - Ability to read and interpret engineering drawings, weld symbols, and procedures.
 - Familiarity with common industry codes/standards (e.g., ASME, AWS, API, MIL, NAVSEA, etc.).
 - Strong documentation and basic computer skills (e.g., MS Office, equipment software).
 - Ability to compare technical specifications and evaluate equipment performance in a structured way.
- **Personal Attributes**
 - Detail-oriented with a strong focus on data and equipment reliability.
 - Analytical mindset and interest in technology evaluation and continuous improvement.
 - Strong communication skills for working with engineers, vendors, and internal stakeholders.
 - Able to work independently and manage multiple tasks and priorities.

About LIFT:

LIFT, operated by the American Lightweight Materials Manufacturing Innovation Institute (ALMMII), is a nonprofit, public-private partnership, national advanced manufacturing innovation institute. As the national advanced materials manufacturing innovation institute, LIFT is an accelerator convening and connecting government, industry and academia in the fields of advanced materials, manufacturing processes, systems engineering and talent development to enhance America's manufacturing competitiveness, national economy and national security.