



The Technical Lead will serve as the primary liaison between manufacturing and engineering. The core job function will be to interpret design intent and communicate it to manufacturing technicians and conduct advanced technical support for the manufacturing team in order to ensure that projects are completed on time and on budget. The technical lead will also prepare reports and offer design recommendations to Engineering based on design flaws that are discovered during the prototyping process.

- **REQUIRED:**
 - Experience taking precision electrical and mechanical measurements using multimeters, oscilloscopes, calipers, micrometers, feeler gages, dial indicators, bore gages, laser micrometers, microscopes, etc.
 - Performs routine to moderately complex electro-mechanical technical functions and activities such as design, test, checkout, fabrication, modification, troubleshooting and assembly of electronics and electro-mechanical systems, experimental design circuitry, prototype models, specialized test equipment, tools and test fixtures.
 - Proficiency with the operation and troubleshooting of mechanical, electrical and SW systems found in advanced automated manufacturing equipment, such as: robots, precision stages; vision systems; pneumatic systems; high vacuum systems; lasers, cleanroom environments; servo & stepper motor circuits; AC & DC power distribution; EMO/safety circuits; PLC controls & PCs/networking
 - Act as Engineering's representative to Manufacturing, assisting with builds, bring-up and field installation requests & issues; including interpreting engineering intent, redlines, debugging & troubleshooting, and working with suppliers.
 - Train manufacturing and customers on new system operation, maintenance & troubleshooting;
 - Work directly with customers on upgrades/modifications, testing, troubleshooting, configuration management and generally helping expedite technical requests.
 - Works from schematics, diagrams, written and verbal descriptions, layouts or plans to perform routine testing and troubleshooting.
 - Perform basic PC troubleshooting, setup and configuration. Install standard PC based software packages. Ability to navigate file systems, locate directories and files.
 - Basic network troubleshooting skills including, connecting network control devices and PCs together. Setting IP addresses, troubleshooting connections and cabling.
 - Experience setting up robot controllers, using teach pendants to verify robot IO. Ability to teach robot positions and validate teach positions are correct.
 - During tool bring up validate IO connections and IO controller configurations, such as thru beam sensors or analog input devices. Validate IO configuration for on/off sense, or motor sensor position indicators are correct, such as limit and home switches.

- Experience using PLC development tools to troubleshoot IO and locate system faults. Prefer PLC experience with Mitsubishi, Beckhoff, and Rockwell PLCs.
- Basic understand of Cognex and other vision systems and vision software tools. Ability to use PC software tools to establish connection to cameras and bring up live video for troubleshooting.
- Experience with configuration management, BOM maintenance/updates; electrical & mechanical redlines; design, build & operation of manufacturing tooling and engineering test stands.
- The ideal candidate will be able to work in close collaboration with manufacturing & operations personnel, suppliers, customers, engineering and program managers.
- Build and operate proof-of-principle test stands.
- Help plan, train and execute system-level testing in Manufacturing.
- Becomes familiar with current manufacturing and/or engineering processes and stays informed of any changes in procedures. Assists in the correction of problems.
- Compiles test procedures documentation
- May test and troubleshoot system level and component level problems in electrical and mechanical systems and sub-systems. May perform new system and NPI installations and field upgrades.
- May perform mechanical, electrical, pneumatic & vacuum and process testing on ODI platforms to Engineering and Manufacturing documentation and specifications.
- May perform rework as a result of testing. Generates Quality Notifications.
- Extensive experience operating a wide range of hand tools, including drills, ring pliers, allen wrenches, taps and dies, punches, etc.
- Experience using basic shop equipment, including grinders, drill press, band saws, arbor press
- Ability to read and interpret electrical, pneumatic, and mechanical schematics
- General understanding of material properties and coatings
- Experience with mechanical and electrical assemblies, including linear guides, bearings, electrical enclosures, electro-mechanical sensors, actuators, pneumatic cylinders and fittings
- Experience using MS Excel, Word, and PowerPoint
- Excellent verbal communication skills
- Motivated self-starter
- Ability to work under little to no supervision
- **PREFERRED, BUT NOT REQUIRED:**
 - Familiarity with GD&T, limits and fits
 - Experience with CAD software, such as Solidworks and AutoCAD
 - Ability to design alignment fixtures
 - Understanding of ISO quality, environmental, and safety standards