

Job Description

Title: Electronic Assembler / EMT UT

Date: August 2024

Department: Manufacturing

FLSA Status: Non-Exempt

Reports To: Production Cell Supervisor

Scope

Under general to minimal supervision, perform a variety of power supply assembly tasks in accordance with workmanship standards. This role covers a large breadth and depth of electronic assembly tasks, processes, soldering, machine operation, material uses, operating equipment, and hand tools. Employees in this role must be able to learn and grow within the manufacturing team. The Electronic Assembler will be tasked to work on products that support production goals on a variety of products and processes. Depending on the employee's ability, more complex processes and machines duties may be assigned. The Electronic Assembler level must be able to perform the duties as described below.

Essential Duties and Responsibilities, including but, are not limited to the following:

- Perform Work as Directed by Assembly Documentation – Must be able to read, interpret and follow Assembly drawings, Assembly Instructions, Manufacturing Work Order Travelers and Manufacturing Operation Instructions. Be able to recognize deficiencies in assembly documentation and recommend changes.
- Maintain Assembly Documentation – Correctly fill in records of conformance, daily logs, equipment use and maintenance logs as trained.
- Maintain Current Solder Skills Training – Maintain IPC J-STD-001 certification and apply solder skills to all levels of product assembly in conformance with Rantec and industry quality standards.
- Hand Assembly – Load hardware and components onto PWBs, hardware installation into metal parts, route wires on products, installation of sub-assemblies into final assemblies, hand solder, and touch-up PWBs in conformance with Rantec and industry quality standards.
- Identify and Determine Value of Components – Understand component color codes, ability to identify components, read and determine values.
- Use Torque Tools in Assembly – Use torque tools properly, recognize and adjust for proper torque value.
- Perform Rework – Perform in process and test rework at pre-encapsulation level as instructed.
- Component Cleaning Process – Operate a variety of cleaning equipment including vapor degreaser, aqueous board washer, jet clean, deionized water washer and Omega meter test equipment.
- Employee Training – Support the company Training Plan by assisting in the training of other assemblers in improving their assembly skills.
- Maintain Assembly Work Areas – Maintain assembly equipment, assembly area cleanliness and orderly appearance. Recognize equipment needs and inform supervision and engineering support of needs.
- Comply with Safety Procedures – Observe safe practices and support their implementation. Comply with requirements for the safe use, storage and disposal of hazardous materials.
- Ability to work flexible hours and/or different shifts, as required.
- Ability to work in a safe professional manner adhering to all regulatory requirements including OSHA, EPA, State and Federal Regulations.
- As the Company's success relies on the productivity of our team and adherence to customer product schedules, an essential function of this position is the ability to arrive to work on-time, and work each day, as scheduled.
- Perform other duties as assigned.

Potential Advanced Duties and Responsibilities, including but, are not limited to the following:

The following duties correspond to Skill Level 2-5 within manufacturing:

- Support Flow Line / Cell Lead Skills (Only When Trained) - Monitor the assembly workflow for product lines or teams. Act as a senior peer to direct tasks within a small cell. Participate in the planning and scheduling of assembly activities. Assist supervision in assigning tasks according to the recognized capabilities of assemblers.
- Advance Technical Soldering Skills (Only When Trained) – Demonstrate advance technical soldering skills on complex products which include complex components on surface mount, magnetics, thermal-planes and through-hole applications. Strong skills that may be used on hot air soldering, machine soldering, and thermal profile soldering. Employee must be able to apply their soldering knowledge to different products which have constantly changing soldering situations. Employee demonstrates repeatability and precision of soldering skills.
- Advance Product Assembly Skills (Only When Trained) – Must be able to quickly and correctly preform unique assembly or soldering tasks on product that may be new product. Must be able to quickly and correctly assemble, solder, or modify (rework) new product designs on request. Must be able to validate workmanship quality issues during a process or production sequence. Able to support Engineering with new design and prototype fabrication, and work from engineering notes and preliminary drawings (Q-revs). Able to support NPI production in an efficient way.
- Selective Solder Operation (Only When Trained) – Possess excellent attention to detail and the aptitude to learn and use the selective solder software GUI. Perform daily maintenance on pot, pump, nozzles, spray fluxer. Maintain a clean machine overall. Requires mechanical aptitude to disassemble, clean, and reassemble the solder pot, pump, and flow system. Read program notes and verify correct machine setup and operation (tool offsets, pot temperature, nozzle size, preheat status, wave height, product configuration, nitrogen flow, fluxer function) prior to running product. Identify process problems and work with Process Engineering to troubleshoot and improve. Identify soldering defects and rework by hand as applicable.
- Wave Solder Operation (Only When Trained) - Operate wave solder machine, test and adjust foam fluxer, adjust operation according to parameter sheets. Perform cleaning, lubrication and general preventive maintenance.
- Magnetic Bobbin Winder & Inductor Winder (Only When Trained) – Must be able to follow instructions to operate T2 bobbin winder, Meter HV bobbin winder, and inductors winder.
- Encapsulation Process (Only When Trained) – Perform assembly encapsulation using silicone, epoxy and urethane encapsulants. Mix materials, encapsulate assemblies and cure as directed. Utilize equipment such as scales, electric and air powered mixers, vacuum chambers, dispensers and curing ovens. Follow process instructions precisely as documented and communicate issues to Manufacturing Engineers. Must be able to perform tasks at a high level of precision, productivity, and independence. Must be able to recognize deficiencies of the process on the product or within the documentation.
 - Plan Process Activities for Encapsulation Area – Monitor and prioritize process area workloads to maintain efficient utilization of process equipment. Assist in process scheduling and arranging downtime for equipment maintenance.
- Conformal Coating Process (Only When Trained) – Prepare PWB for conformal coating, mask components, mix coatings and test viscosity, spray or dip apply coatings and verify thickness. Demask components and perform touch-up. Use of a supplied-air respirator is required for spray coating application. Must be able to perform tasks at a high level of precision, productivity and independence. Must be able to recognize deficiencies of the process on the product or within the documentation.

- Feeder Setup and Programming (Only When Trained) - Put reel-mounted parts into feeders, program feeders for part pickup. Correctly locating feeder onto pick and place carts or machine tabletops. Setup Panasonic feeders for the differences in size (12/16, 24/32).
- Operation of Pick and Place System (Only When Trained) - Initiate automatic operation of an existing program, pick and place components on PCBs, inspect to confirm proper loading.
- Basic Pick and Place Troubleshooting (Only When Trained) - Recognize discrepancies in data and work output, stop production if needed and notify appropriate support.
- Panasonic Software and Hardware tools (Only When Trained) – Able to use computer software on machine in run modes or setup modes to perform tasks. Demonstrate Panasonic Software knowledge using Material Control, PanaCIM, and P-10 scanner.
- Operate Manual and Automatic Stencil Printers (SPG) (Only When Trained) – Setup, use, cleaning and adjustment.
- Operate Solder Paste Inspection (SPI) (Only When Trained) - setup, use, and monitor.
- Operate Solder Deposit Machine (Only When Trained) – setup, use, and monitor.
- Reflow Oven Operation (Only When Trained) - Select from operating menu, monitor operation, oven profile verification. Setup and adjust PWB conveyors and buffers quickly and efficiently.
- Pre-Reflow AOI (Only When Trained) –setup, run, and able to defect defects prior to reflow process.
- Perform other duties as assigned.

Qualification Requirements:

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

This position requires access to our export-controlled commodities, technical data, technology and services. These items are restricted under the International Traffic in Arms Regulations (ITAR) to U.S. Citizens, Lawful Permanent Residents of the U.S. and properly licensed foreign persons. Therefore, employment is contingent on compliance with ITAR regulations and successfully obtaining and maintaining the necessary export authorization license from the U.S. Department of Commerce's Bureau of Industry and Security, U.S. Department of State's Office of Defense Trade Controls, or other applicable government agency.

Education and Experience

- High School diploma or GED
- 3 years experience preferred in electronics manufacturing
- Follow detailed assembly drawings, bill of materials (BOMs) and assembly instructions
- Computer skills to support timekeeping and accessing data in MRP/ERP system
- Computer skills for machine operation and production execution
- Computer skills to navigate and extract information from MRP/ERP to view BOMs, Prints, Assembly Instructions
- Able to maintain productivity in standard hours
- Manual dexterity to effectively use hand tools while performing assembly tasks
- Mechanical ability to operate assembly equipment
- Strong work ethic and organizational skills to meet demands of fast-paced work environment under production schedules

Physical Requirements

The physical demands described here are representative of those to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- Work within a factory environment, including moderate noise and chemical odors
- Moving between sitting, standing and walking

- Consistently lifting and handling up to 10 pounds and periodically lifting up to 25 pounds.
- Specific vision abilities required by this job close vision, distance vision, peripheral vision, depth perception and the ability to focus, with correction, if needed, to perform hand soldering and wiring of assemblies.

Rantec is proud to be an Equal Opportunity Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age, or status as a protected veteran. Rantec will consider reasonable accommodation to its policies for employees and applicants due to sincerely held religious belief.