

Composite Technician Braider: Composite Tech Braider III

Bonds a variety of dissimilar materials (composite, metal, or laminate) assemblies, parts, skins, components, equipment or structures into semi-finished or finished products. Lays out articles and cuts parts or materials to size. Applies liquid or solid bonding agents. Operates autoclave, hydraulic presses and ovens to complete bonding cycle. Controls conditions of heat, pressure and timing by setting and operating various controls according to the specifications for the materials and the bonding agent being used. Sands, burrs, smoothes over areas and applies sealing resins to cut or exposed edges. Monitors and verifies quality of finished product. Completes repairs on composite, metal or laminate bonded products using inspection and rework instructions. Verifies quality of finished product.

Knowledge

Considerable knowledge of the job. Complete acquaintance with, and understanding of, the general and detailed aspects of the job and their practical applications to problems and situations ordinarily encountered.

Supervision Received

Limited supervision. No instructions needed on routine work and general instructions given on new lines of work or special assignments.

Consequence of Errors

Errors may be difficult to detect and would normally result in loss of customer business, material, or equipment to resolve.

Contacts

Contacts are frequent with individuals representing other departments, and/or representing outside organizations. Contacts involve obtaining or providing information or data on matters of moderate importance to the function of the department or which may be of sensitive nature.

Work Products (Examples may include but are not limited to)

Use of ERP/MRP System software, including input of daily time sheets and good computer skills. Work from written work orders, verbal instructions from supervision and/or blue prints/drawings, while keeping all signoffs and inspection buyoffs current. Complete fabric lay-ups utilizing a variety of materials in order to manufacture parts per plans, orders and prints. Use measuring instrument and tools per manufacturing plans and processes. Winding of fiber spools and textile equipment used on braiding equipment. Use high pressure Resin Transfer Molding (RTM) pumps, equipment, pneumatic tools, etc. Properly use the release agents and tool preparation materials. Identify different process materials, such as fiberglass yarns, graphite yarns, pre-pregs, resins, and adhesives as part of production processes. Maintain material logs on time-sensitive materials accurately. Cutting and kitting materials by hand and/or by automated cutting table. Set up tools and complete pre-form lay-ups and RTM operations per instructions. Vacuum bag detailed shapes & sizes and troubleshoot causes of vacuum loss to maintain bag integrity. Properly connect all vacuum source/transducer hoses and thermocouples in the autoclave and/or oven and program these operations using different software systems and controls. Load ovens and/or autoclaves with the use of forklifts, cranes and/or handling carts. De-molding, labeling and handling of cured parts in preparation for next level process. Maintain a clean work area per daily, monthly and yearly clean-up schedules.

Minimum Education and Experience

High school diploma or GED equivalent. Must be dependable and punctual. Must be able to read and use scales, calipers, micrometers, etc. Shift work and travel is required. This position may require the person to apply and pass the required criteria to obtain a Secret Level clearance.