



Engineering Technician

Reports To: Engineering Supervisor	Division: Corporate
FLSA Classification: Non-exempt/ Hourly	Department: Product Engineering

Job Description: Technician

Technicians work on modifying and/or extending standard products using their understanding of technology, materials, and manufacturing methods to improve the design and usability of our products. Their work may involve designing, modeling, testing, and producing prototypes and production units. They may also be responsible for using the ECO (Engineering Change Order) process when applicable.

Functional Area: Modified Standards

Responsible for modifying and/or extending existing components, subassemblies, and system designs. Ensures a high quality standard for products with respect to materials, design, analysis, manufacturing, and maintenance of modified or line extensions systems. Work closely with Production departments to provide product engineering support. Responsible for developing and maintaining standard practices & procedures, and “best practice” within the department. Ensure standard practices, procedures, and best practices are shared and followed.

Responsibilities	Associate Technician	Senior	Lead
Receives close supervision on all aspects of assignments	X	X	
Seek clarity/understanding from Cust. Care when uncertainty	X	X	X
Applies knowledge of engineering principles to design products	X	X	X
Create SolidWorks designs/models and Fab./Assy dwg.'s	X	X	X
Manage/organize all drawings in EPDM	X	X	X
Understand Sales Order scope/requirements		X	X
Identify potential issues & review/checking dwg/BOM for errors		X	X
Ensure final designs comply with UL/NSF regulations		X	X
Updating folders/files as revisions are made		X	X
Performs Epicor BOM work using prescribed techniques/procedures		X	X
Judgment to determine options for nonroutine assignments		X	X
Product knowledge to work on all type orders dept. processes		X	X
Works on small projects		X	X
CI / investigations into root cause & corrective action		X	X
Assign/coordinate/mentor tasks with engineering technicians			X
Assists in department scheduling			X
Represent department in meetings			X
Strong adherence to Duke Values			X

Essential Knowledge, Skills and Abilities

	Associate	Technician	Senior	Lead
E F Interpret documents provided by stakeholders		X	X	X

	Process ECO			X	X
	Inventory Support (departmental processes, Material planning, Costing, etc.)	X		X	X
	Design Analysis (reviewing modified design form, fit, & function)	X		X	X
	Structural design (Able to assist other techs in how new items should be made to function as requested)				X
CAD Design	Basic Drafting (Completeness and Accuracy Verification, Compliance with Duke Standards, etc.)	X	X	X	X
	Solidworks Drawings (Dimensioning, View Creations, etc.)	X	X	X	X
	Solidworks Parts & Sheet Metal (Model optimization, appropriate use of configurations, etc.)		X	X	X
	Solidworks Assemblies (Bottom-up assembly, design intent, interference detection, etc.)		X	X	X
	EPDM (Check In, Check Out, Search, Transition, etc.)		X	X	X
	Solid works Modeling (Assist in establishing rules and guidelines on how we model as a group)				
ERP Integration	Epicor Part Maintenance (record setup without templates)		X	X	X
	Epicor Assembly Maintenance (Bill of material setup)		X	X	X
	Epicor Manufacturing Methods (Bill of operations setup)		X	X	X
	Epicor Data Entry (MOM, Work Orders, etc.)		X	X	X
	Epicor Trackers (Job, Part, Order, PO)		X	X	X
	Epicor Workbenches (Costing, Engineering)		X	X	X
	Epicor Reporting (MOM, Costing, Inventory, Where-used)		X	X	X
	Epicor Investigation (inventories, root cause, corr. action)			X	X

Education / Experience **

	Degree (min)	Experience (min)
Technician	0 yr.	0 yr.
Senior Technician	2 yr. (preferred)	3+ yr. (or more without degree)
Lead Technician	4 yr. (preferred)	8+ yr. (or more without degree)

** Relevant education, relevant experience, and performance will be considered together.

Required Abilities:

1. **Mathematical Reasoning** — The ability to choose the right mathematical methods or formulas to solve a problem.
2. **Deductive Reasoning** — The ability to apply general rules to specific problems to produce answers that make sense.
3. **Near Vision** — The ability to see details at close range (within a few feet of the observer).
4. **Oral Comprehension** — The ability to listen to and understand information and ideas presented through spoken words and sentences.
5. **Visualization** — The ability to imagine how something will look after it is moved around or when its parts are moved or rearranged.
6. **Written Expression** — The ability to communicate information and ideas in writing so others will understand.

7. Information Ordering — The ability to arrange things or actions in a certain order or pattern according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures, mathematical operations).
8. Oral Expression — The ability to communicate information and ideas in speaking so others will understand.
9. Originality — The ability to come up with unusual or clever ideas about a given topic or situation, or to develop creative ways to solve a problem.
10. Speech Clarity — The ability to speak clearly so others can understand you.
11. Leadership Qualities - The ability to motivate, delegate, positive, responsible, team builder, decisiveness.

Physical Job Requirements:

1. Speaking to employees and customers.
2. Listening to employees and customers.
3. Sitting for extended periods of time.
4. Standing for continuous periods of time without being able to leave the work area.
5. Lifting (raising or lowering objects).
6. Pulling and/or pushing (exerting up to 10 pounds on a regular basis so that the object is moved to or away from the employee).
7. Carrying objects (in arms or on shoulders).
8. Grasping (applying pressure to objects).
9. Reaching (extending hands and arms in any direction).
10. Stooping and crouching (bending downward and forward).
11. Feeling (perceiving attributes of objects such as size, shape, temperature, or texture).

Mental and Visual Job Requirements:

1. Clarity of vision at 20 inches or less.
2. Clarity of vision at 20 feet or more.
3. Ability to bring objects into sharp focus.
4. Ability to identify and distinguish colors.
5. Ability to judge distance and space relationships.
6. Ability to learn and comprehend instructions and orientation to the job.
7. Ability to concentrate attention on task at hand for extended periods of time.

Workplace Environmental Conditions:

1. Typical office environment and development lab environment.
2. Occasionally subject to sufficient noise causing worker to shout in order to be heard above ambient noise level.
3. Occasional exposure to oscillating movements (vibrations) of the extremities or whole body.
4. Occasional exposure to hazardous conditions: proximity to moving mechanical parts, electrical current, working on scaffolding and high places, explosives, exposure to high heat or exposure to chemicals.

Employee Signature and Date:	
Employee Printed Name:	
Supervisor Signature and Date:	