

# Mechanical Engineer

## Summary:

Researches, plans, designs and develops mechanical and electro-mechanical products and systems, applying knowledge of engineering principles and manufacturing processes.

## Principal Accountabilities:

1. Designs products or systems such as robots, machines, instruments, controls, mechanical, thermal, hydraulic, pneumatic or heat transfer systems.
2. Researches and analyzes data such as customer design proposals, specifications and manuals to determine feasibility and cost of design or application.
3. Analyzes product or application and performs design calculations based on engineering principles.
4. Assists in defining market needs and developing product specifications.
5. Applies engineering principles and known manufacturing processes to achieve overall product and system cost targets; establishes and monitors development schedules and project costs.
6. Applies concurrent engineering principles to design and development process. Develops test plans and coordinates test activities during development phase.
7. May act as lead engineer and/or project director, coordinating activities between other engineering disciplines, including electrical, software, test, design/drafting and technical publications.
8. May direct and coordinate activities involved in the procurement, fabrication, operation, application, installation and repair of mechanical or electro-mechanical products and systems.
9. May plan and direct engineering and manufacturing personnel in fabrication of test control apparatus and equipment, development of methods, procedures, tools and gauges for set-up and testing of products and systems.
10. May direct, coordinate, and support fabrication and installation activities to ensure that products and systems conform to engineering design and customer specifications.
11. Assists technical publications in the development of customer documentation.
12. May participate in and evaluate field installations and recommend design modifications to eliminate machine or system malfunctions.
13. May assist customers in developing process parameters for new technologies in product applications.
14. Evaluates machines or products on manufacturing floor for system related problems and recommends corrective action.
15. May support product team activity.
16. Performs other job-related duties as required.

**Minimum Requirements:**

BS in Mechanical Engineering OR a BT and two years of experience OR a relevant Associate's Degree and 5-7 years of mechanical design experience OR a Professional Engineer (PE) license.

**Physical Demands:**

- Requires the ability to use a computer on a frequent basis.
- Position requires the ability to understand and interpret detailed documents and drawings.
- Requires the ability to communicate clearly in giving presentations.
- Must be able to communicate clearly with fellow workers.
- The ability to travel to customer sites or technical conferences may occasionally be required.