



Position Title: Senior Mechanical Designer
Department: Mechanical Design

MAJOR DUTIES:

Plan, organize and direct through mechanical designers, all aspects of mechanical designs from concept to completion for specific projects.

SPECIFIC RESPONSIBILITIES:

- Assist in developing design and department standards.
- Assist implementing or achieving corporate objectives (i.e. new developments, policies, etc.).
- Supervise the mechanical design effort on various projects delegating tasks to a team of people.
- Organize documentation, including quotes, drawing registers, correspondence, requisitions, drawings, schedules, etc. on projects you are supervising.
- Review electrical requirements with respect to input and output devices with electrical designers.
- Review machine operations and machine sequences with programmers.
- Assist the fabricators, machinists, toolmaker and electricians in the debug, integration resolving problems and completion of systems.
- Perform engineering calculations with respect to strength of materials, speeds, horsepower, temperature, pressure, force, etc. as related to machine and tool designs.
- Analyze engineering drawings, and specifications to determine shape, dimensions, hardness etc. in the development of equipment, processes and products.
- Create working drawings, detail drawings and bills of materials for equipment, sub-assemblies or product, using Solid Works.
- Determine tools, fixtures and equipment to be used in fabrication and assembly of mechanical components and complete assemblies.
- Examine project instructions and drawings to determine test specifications, procedures, objectives, test equipment and problems involved in designing, changing or re-arranging materials.
- Review drawings for accuracy, material selection, proper machining techniques, finish, hardness, etc.
- Liaison with vendors and customers for technical information and specifications.

QUALIFICATIONS:

Education:

A post secondary school diploma or degree in mechanical design, mechanical engineering or equivalent.

Experience:

Minimum 10 years of experience, at a senior engineering level, in a custom machine building environment. Fully proficient with SolidWorks software to design tooling from sketches or verbal concepts. A thorough knowledge of the use of pneumatics, hydraulics, and electrical devices.