



Position Title: Intermediate Mechanical Designer
Department: Mechanical Design

MAJOR DUTIES:

Perform various aspects of mechanical design, as instructed by senior mechanical designers, according to department standards.

SPECIFIC RESPONSIBILITIES:

- 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 & 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.
- Formalize and update drawing documentation.
- Review drawings for accuracy, material selection, proper machining techniques, finish, hardness, etc.

QUALIFICATIONS:

Education:

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

Experience:

Minimum 3 years of experience, at an intermediate 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.