



## Mechanical Engineer Intern

Reports To: Engineering Manager

Revision Date: 05/21/2021

Status: Hourly

Department: Mechanical Engineering

### Position Overview:

The Mechanical Engineer Intern works with Engineering group to assist the customers and our sales team to create new products or to design improvements to add to existing products.

### Skills:

- Design custom equipment for a variety of industries like automotive, construction, food, and energy.
- Majority of the average workday is spent operating Autodesk Inventor 3D CAD software designing and detailing.
- Occasionally complete hand calculations, spreadsheet driven calculations, and/or Autodesk Inventor FEA software calculations.
- Meet with customers and sales personnel to discuss equipment requirements, design considerations, and design improvements.
- Occasionally troubleshoot equipment and come up with design solutions or improvements.
- Review and check other engineer's designs, drawings, and/or calculations.

### Skills & Job Functions:

- Comfortable completing beam calculations.
- Familiar with structural shapes. Able to identify and comfortable selecting which to use.
- Familiar with steel, aluminum, and stainless-steel properties.
- Familiar with steel fabrication and the capabilities of the tools used (welders, saws, press brakes, laser cutting, plasma cutting, and oxyacetylene torch cutting).
- Familiar with steel machining and the capabilities of the machines used (lathes, mills, CNC's, drill presses, and surface grinders).
- Familiar with sheet metal part design, sheet metal cutting, and sheet metal forming.
- Familiar with basic computer programs (word, excel, outlook)
- Has a basic understanding of how both a hydraulic and a pneumatic system operates.
- Has a basic understanding of how an electromechanical system operates (electric motors, servos, gearboxes, chains, belts, linear actuators, linear bearings, sensors)
- Ability to effectively add dimensions and tolerances to drawings when detailing prints.
- Ability to accurately measure parts and equipment using both a tape measure and calipers.
- Experience operating Autodesk AutoCAD 2D preferred.
- Experience with geometric dimensioning and tolerancing (GD&T) preferred.
- Ability to draw up hand sketches showing parts and equipment preferred.

### Compensation:

- This is a part-time internship opportunity.

Education/Experience:

- In process or receipt of Associate of Engineering, Mechanical (Required minimum)
- In process or receipt of Working engineer: 3 years (Preferred)

Employee Name : \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_