



## **Senior Automation Mechanical Design Engineer**

Farris Automation is a supplier of custom automated assembly equipment for the automotive, heavy industrial, and general manufacturing industries. We offer complete turnkey systems from concept to installation. Farris Automation employs engineers, machinists and assemblers in Mukwonago, WI. See our website at [www.farrisautomation.com](http://www.farrisautomation.com) for more details.

We are searching for engineers that can create new designs from a white sheet of paper. Every machine we make is unique. Your ideas will be combined with the customers' requirements and approved by your manager.

Mechanical design of automated equipment that requires the knowledge of cylinders, machining components, linkages, motors, HP, torque, pneumatics, and basic electrical controls.

### **Requirements**

- Independent and self-motivated worker
- 10 years of mechanical automation design  
5 years of experience on the job
- 5 years of SolidWorks or Creo
- Machine frame design and welding principles
- Hands on trouble shooting and assembly of machines
- Working with and directing Drafters or Assembly technicians

### **Ideal Candidate will have 3 or more of these skills**

- Knowledge of pneumatic circuits, Hydraulics, motor sizing, FEA and component sizing principles
- Motion using servo motors, linear drives and ball screws. Correctly applying their mechanical and electrical interfaces.
- FEA analysis using CAD and knowing how to interpret and improve the results.
- Ability to specify and pick out purchased components and vendors without education or guidance.
- Robotics (any brand) – sizing's, benefits and limitations for applications.

## **Standard work week**

### Machine Design

- Final design of machines from a napkin sketch / concept
- Working directly with customers and their criteria while designing within the specifications and budget.
- Picking out purchased components and ensuring they are properly sized for the applications
- Checking detail and assembly drawings.
- Machine improvements / ECNs
- Modifying existing machines under development and test
- Replacing long lead time items with an alternative that can meet the deadline.
- Trouble shoot/ improve existing machines as they are debugged

The job will be non-repetitive in nature with 5-8 machines designed per year. The estimated job categories are:

- 70% CAD design
- 10% Drafting
- 10% Hands on assembly and building
- 10% Misc.

Education: Associate or bachelor's degree in mechanical engineering

### Benefits:

- 3 weeks of vacation, + holidays, + Flex Hours, comp time
- Job training in new technologies for current applications
- 401k, Health insurance, Life Insurance, Dental and Vision
- Flexible work hours to fit family needs
- Positive work environment in a small company (20-30 employees)
- Being part of a growing company & industry