

## **Fast Ag Solutions, LLC Job Posting**

JOB TITLE: Mechanical Designer

**DEPARTMENT:** Engineering

**REPORTS TO:** Engineering Manager

FLSA STATUS: Non-Exempt PREPARED DATE: January 28, 2021

At Fast Ag Solutions we manufacture agricultural sprayers and fertilizer applicators serving the North American, Eastern European, and Australian markets. We are a smaller, agile, and energetic company with a modern facility located in Windom, Minnesota. We take pride in providing products to our customers that help them optimize their crop inputs while paying purposeful attention to all aspects of their environmental, human, and business responsibilities. We are growing, with great potential to grow even more.

We have an exciting opportunity for a Mechanical Designer to further their career in our Engineering group. We are looking for a minimum of 3 – 5 years of experience in the Mechanical Designer field. SolidWorks experience is preferred. A farm background and/or experience in sprayer and applicator design are definite pluses.

## PRIMARY RESPONSIBILITIES

- Provide input to design decisions
- Develop new designs to meet customer requirements
- Maintain product integrity through ECOs
- Provide production floor support in real time
- Hands-on support for engineering testing, prototyping, and production validation
- Answering Service-related questions, as well as occasional hands-on Service support
- Develop and maintain engineering documentation

Upon direction from Engineer(s), may lead and direct work of others, prepares clear, complete and accurate detail drawings of parts, weldments, and assemblies. Designing of parts, weldments and assemblies from rough or detailed sketches is performed routinely. Performing calculations such as torque, hydraulic pressure and bolt clamp load are also performed routinely.

## **ESSENTIAL DUTIES AND OTHER RESPONSIBILITIES** include the following. Other duties may be assigned.

- Use SolidWorks 2D and 3D as well as Microsoft Office (Word, Excel and PowerPoint)
- Working closely with the Engineer, setup and successfully run FEA simulations as well as perform an initial analysis of the simulation validity
- Creates drawings according to current internal, national, international and industry drafting standards
- Verify accuracy of drawings; checking dimensions, materials, relationship between parts, and tolerances
- Utilizes knowledge of fabrication machines, engineering principles, mathematics, materials, and other physical sciences to create designs and drawings
- Design parts or assemblies based on sketches, discussions, or prior designs
- Communicate with other departments to validate design and/or drawings
- Solve practical problems and deal with a variety of variables in situations where only limited standardization exists
- Communicate effectively, make presentations, write routine reports, outline instructions, and correspondence
- Create charts and spreadsheets to report statistical data
- Troubleshoot and validate manufactured product on the production floor
- Support and Apply ISO requirements as appropriate
- Communicate with vendors and customers as needed
- Lead other designers in current projects
- Assist with training of new designers

**SUPERVISORY:** This job has no supervisory responsibilities.

**QUALIFICATIONS:** To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. CAD software experience of 3+ years is necessary. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

**EDUCATION AND/OR EXPERIENCE:** Associate's degree (A.A.) or equivalent from two-year college or technical school; and/or training; or equivalent combination of education and experience.

**LANGUAGE SKILLS:** Ability to read and interpret documents such as safety rules, operating and maintenance instructions, and procedure manuals. Ability to write routine reports and correspondence. Ability to speak effectively before groups of customers or employees of the organization.

**MATHEMATICAL SKILLS:** Ability to compute angles, weights, surface areas, dimensions, radii, clearances, tolerances, leverages, and hole locations. Ability to calculate figures and amounts such as discounts, interest, commissions, proportions, percentages, area, circumference, and volume. Ability to apply concepts of basic algebra and geometry.

**REASONING ABILITY:** Ability to apply common sense understanding to carry out instructions furnished in written, oral, or diagram form. Ability to deal with problems involving several variables in situations where only limited standardization exists.

**PHYSICAL DEMANDS:** The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to sit; use hands to finger, handle, or feel and reach with hands and arms. The employee is frequently required to stand; walk and talk or hear. The employee is occasionally required to climb or balance and stoop, kneel, crouch, or crawl. The employee must frequently lift and/or move up to ten pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, depth perception and ability to adjust focus.

**WORK ENVIRONMENT:** The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is frequently exposed to moving mechanical parts. The employee is occasionally exposed to wet and/or humid conditions; extreme cold; extreme heat and risk of electrical shock. The noise level in the work environment is usually moderate.

## **APPLICATION PROCESS:**

Download and complete job application found at <a href="https://www.fastagsolutions.com/careers">www.fastagsolutions.com/careers</a> and email to <a href="https://www.fastagsolutions.com">HR@fastagsolutions.com</a> as well as <a href="mailto:jprohaska@fastagsolutions.com">jprohaska@fastagsolutions.com</a>.

Fast Ag Solutions, LLC is an equal opportunity employer. All qualified applicants will receive consideration for employment without regard to race, religion, color, national origin, sex, age, status as a protected veteran, among other things, or status as a qualified individual with disability.

\*Each employee should be aware that changes in this job description could occur at any time. Also, this job description is not to be considered or construed to be a contract of employment.

APPROVAL DATE		
Employee Signature	Date	
Supervisor Signature	 Date	