



Zoomlion Heavy Industry N.A., Inc.

Designer

Department: Engineering

FLSA Status: Exempt

Grade/Level:

Job Type: Regular

Work Schedule:

Weekdays Monday through Friday.

Job Status: Full Time

Reports To: Engineering Manager - Structural Systems

Amount of Travel Required: up to 15%

Positions Supervised: None

POSITION SUMMARY

Plan, develop and revise models, and specifications for agricultural and construction heavy equipment products by using CAD software. Supports the build, test and evaluation of components and prototypes, ensuring that all design goals and requirements are met. Other responsibilities may include reproducing and archiving designs.

ESSENTIAL FUNCTIONS

Reasonable Accommodations Statement

To accomplish this job successfully, an individual must be able to perform, with or without reasonable accommodation, each essential function satisfactorily. Reasonable accommodations may be made to help enable qualified individuals with disabilities to perform the essential functions.

Essential Functions Statement(s)

- Using CAD Design and top-down design principles, creates and re-enforces best practices and procedures.
- Assist in defining and determining feasibility of design concepts with project engineers, transferring ideas and concepts into workable units.
- Exercises creative thinking in design work, utilizing knowledge and different approaches and design practices and current manufacturing methods and procedures.
- Analyzes job assignments and determines needs in terms of time, design, cost and other resources required for the completion of assignments to meet project due dates.
- Makes necessary design calculations using established engineering practices to properly configure structural and functional components for function and durability.
- Aids in selection, recommendation and usage of materials and components to determine piece part specifications insuring proper fit of all components in project prototype/product.
- Produces individual piece part sketches, models and drawings for all parts required, ensuring that all design work meets pertinent industry standards, particularly safety and quality.
- Analyzes prototype, field, lab, manufacturing or quality reports recommending changes, redesign or replacement to solve problems, before production build cycle begins.

- Assists manufacturing and suppliers with development of patterns/tooling and related equipment needed for producing new products.
- Support investigations, tests and layouts as required for any reported current production design problems to achieve desired improvements.
- Consistently seeks to improve design capabilities through study, reading, observation and evaluation.
- Communicates effectively with R & D and manufacturing staff during prototype and pilot builds, and continues to maintain a collaborative team relationship.

POSITION QUALIFICATIONS

Competency Statement(s)

- Accountability - Ability to accept responsibility and account for his/her actions.
- Accuracy - Ability to perform work accurately and thoroughly.
- Communication, Oral - Ability to communicate effectively with others using the spoken word.
- Communication, Written - Ability to communicate in writing clearly and concisely.
- Detail Oriented - Ability to pay attention to the minute details of a project or task.
- Initiative - Ability to make decisions or take actions to solve a problem or reach a goal.
- Innovative - Ability to look beyond the standard solutions.
- Presentation Skills - Ability to effectively present information publicly.
- Goal Oriented - Ability to focus on a goal and obtain a pre-determined result.
- Organized - Possessing the trait of being organized or following a systematic method of performing a task.
- Technical Aptitude - Ability to comprehend complex technical topics and specialized information.
- Self Motivated - Ability to be internally inspired to perform a task to the best of ones ability using his or her own drive or initiative.

SKILLS & ABILITIES

Education: Associate's Degree (two year college or technical school) Required, Field of Study: Drafting, Design or Mechanical Engineering Technology

Experience: 3 plus years of experience in Assembly/Machine Design
Experience preparing and maintaining detailed design drawings, specifications, BOMS.
Agricultural experience a plus.

Computer Skills: Microsoft Office Suite including Outlook, Word, Excel;
3D CAD modeling required, PROE/Creo, NX, PDM experience required.
3D modeling experience of piping and harness, a plus.

Certifications & Licenses:

Other Requirements: Basic knowledge in GD&T and top-down and bottom-up design principles a must.
Familiar with Industrial Engineering Standards, such as ASME, SAE, ASTM, etc.

AS3D CAD experience required.
Sheetmetal, piping and surfacing a plus.

PHYSICAL DEMANDS

N (Not Applicable) Activity is not applicable to this position.
O (Occasionally) Position requires this activity up to 33% of the time (0 - 2.5+ hrs/day)
F (Frequently) Position requires this activity from 33% - 66% of the time (2.5 - 5.5+ hrs/day)
C (Constantly) Position requires this activity more than 66% of the time (5.5+ hrs/day)

Physical Demands		Lift/Carry	
Stand	O	10 lbs or less	O
Walk	O	11-20 lbs	O
Sit	F	21-50 lbs	O
Manually Manipulate	O	51-100 lbs	N
Reach Outward	O	Over 100 lbs	N
Reach Above Shoulder	O		
Climb	O	Push/Pull	
Crawl	N	12 lbs or less	O
Squat or Kneel	N	13-25 lbs	O
Bend	O	26-40 lbs	N
Grasp	O	41-100 lbs	N
Speak	F		

Other Physical Requirements

WORK ENVIRONMENT

Office environment in a controlled atmosphere building.

Prepared by: Deb Lauenstein Date: 8/23/2017
Approval: Jack Wang Date: 8/28/2017

The company has reviewed this job description to ensure that essential functions and basic duties have been included. It is intended to provide guidelines for job expectations and the employee's ability to perform the position described. It is not intended to be construed as an exhaustive list of all functions, responsibilities, skills and abilities. Additional functions and requirements may be assigned by supervisors as deemed appropriate. This document does not represent a contract of employment, and the company reserves the right to change this job description and/or assign tasks for the employee to perform, as the company may deem appropriate.