



**Zoomlion Heavy Industry N.A., Inc.**

## **Engineer 1 – Engine/Powertrain**

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**Department:** Engineering

**FLSA Status:** Exempt

**Grade/Level:**

**Job Type:** Regular

**Work Schedule:**

Weekdays Monday through Friday. Hours flexible to meet project needs.

**Job Status:** Full Time

**Reports To:** Engineering Manager - Power Systems

**Amount of Travel Required:** up to 10%

**Positions Supervised:** None

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### **POSITION SUMMARY**

The Engineer 1- Engine/Powertrain position is a non-supervisory engineering technical role. Overall job requirements are to provide engineering design, testing, analysis, solve complex problems, and provide technical insights in powertrain technology areas. Also, support the Engineering Manager - Power Systems goals and participate on cross-functional project teams.

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### **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)**

- Support Engineering Manager- Power Systems and the Power Systems Engineering group
- Simultaneously support multiple projects in different phases of development within a cross functional environment
- Participate in the design and development of engine installations, cooling systems, aftertreatment devices in applications of agriculture, construction, and other off-highway equipment industry.
- Communicate with suppliers to validate product design and performance specifications, resolve technical issues
- Participate in Quality Driven initiatives such as APQP, 6- sigma, and DFMEA
- Prepare layouts, drawings, specifications, and bills of material
- Create and maintain project documentation for analysis, research, and historical records
- Perform engineering analysis to support the selection of parts, components, and materials that meet requirements
- Participate in cross functional design reviews to ensure requirements are being effectively addressed.
- Author technical proposals, quotations, reports, and presentations for specifications, test procedures, design standard, etc.
- Participate in prototype builds, design validation, and field testing both domestically and abroad

## **POSITION QUALIFICATIONS**

### **Competency Statement(s)**

- Communication, Oral - Ability to communicate effectively with others using the spoken word.
- Communication, Written - Ability to communicate in writing clearly and concisely.
- Goal Oriented - Ability to focus on a goal and obtain a pre-determined result.
- Accountability - Ability to accept responsibility and account for his/her actions.
- Creative - Ability to think in such a way as to produce a new concept or idea.
- Interpersonal - Ability to get along well with a variety of personalities and individuals.
- Detail Oriented - Ability to pay attention to the minute details of a project or task.
- Analytical Skills - Ability to use thinking and reasoning to solve a problem.
- Problem Solving - Ability to find a solution for, or to deal proactively with, work-related problems.
- Judgment - The ability to formulate a sound decision using the available information.
- Ethical - Ability to demonstrate conduct conforming to a set of values and accepted standards.
- Technical Aptitude - Ability to comprehend complex technical topics and specialized information.
- Initiative - Ability to make decisions or take actions to solve a problem or reach a goal.
- Innovative - Ability to look beyond the standard solutions.

## **SKILLS & ABILITIES**

**Education:** Bachelor's Degree (four-year college or technical school) Required, Field of Study: Mechanical, Industrial, Ag Engineering or related study

**Experience:**

- Preferred 1+ years of experience in design &/or manufacturing of engines, cooling systems, after-treatment systems, driveline systems, such as transmissions, drive shafts, differentials, and the final drive of off-highway vehicles (including agriculture, construction, mining machinery)
- Possess a strong mechanical knowledge of off-highway vehicles (including agriculture, construction, mining machinery), trucks, mobile equipment, and related machinery
- Excellent time management and organizational skills
- Excellent communication, interpersonal, and negotiating skills.
- Team player- ability to work with many design teams concurrently and globally

**Computer Skills:** CAD software (CREO, Pro-E, AutoCAD, NX) is required  
Microsoft Office Suite (Outlook, Word, Excel, PowerPoint, Visio, Project) is required. MATLAB/Simulink/Simscape (preferred)

**Other Requirements:** Ability to learn new technologies and systems through proof of concepts and prototyping  
Able and willing to travel outside the US as required  
Ability to understand the technical and practical aspects of the product and to explain them in a clear, understandable manner to various audiences

## PHYSICAL DEMANDS

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

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

## WORK ENVIRONMENT

Office environment in a controlled atmosphere building.

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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.