

## Job Summary:

We are seeking an experienced **Senior Transmission Engineer** with **8+ years** of expertise in designing and developing advanced transmission systems for tractors and off-highway vehicles. The ideal candidate will lead transmission development projects, optimize performance through analysis and simulation, and ensure seamless integration with driveline systems. This role requires strong collaboration with cross-functional teams, suppliers, and manufacturing units to deliver high-quality, efficient, and reliable transmission solutions.

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## Key Responsibilities:

### 1. Transmission System Design & Development:

- Lead the design and development of **manual, automatic, and hydrostatic transmission systems**.
- Select and validate **gear ratios, bearings, shafts, and clutch components** for optimal performance.
- Ensure smooth **integration with engine and driveline systems**, enhancing overall vehicle efficiency.

### 2. Advanced Analysis & Simulation:

- Conduct **gear and load calculations** to optimize power transmission efficiency.
- Perform **FEA (Finite Element Analysis), durability simulations**, and thermal analysis for reliability assessment.
- Optimize transmission components to improve **efficiency, reliability, and cost-effectiveness**.

### 3. Prototyping & Testing:

- Lead prototype development, working closely with cross-functional teams.
- Oversee **performance, durability, and noise-vibration-harshness (NVH) testing**.
- Troubleshoot and resolve **complex technical challenges** during development and validation phases.

### 4. Supplier & Manufacturing Support:

- Collaborate with **suppliers** to develop and validate transmission components.
- Ensure manufacturability, assembly feasibility, and cost optimization.
- Support **production teams** in resolving **quality and performance-related issues**.

### 5. Technical Documentation & Compliance:

- Prepare and review **detailed engineering drawings, BOMs, and technical reports**.
- Document **design changes, test results, and continuous improvements**.
- Ensure compliance with **industry standards and regulatory requirements**.

- Stay updated with **advancements in transmission technology** and industry best practices.
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#### **Required Skills & Qualifications:**

- **B.E./B.Tech/M.E./M.Tech in Mechanical Engineering, Automotive Engineering,** or a related field.
  - **8+ years** of experience in **tractor/off-highway vehicle transmission design and development.**
  - Strong expertise in **gear design, lubrication principles, and material selection.**
  - Proficiency in **CAD software (Creo, CATIA, or SolidWorks)** for transmission modeling.
  - Advanced knowledge of **FEA tools (ANSYS, Abaqus)** and **transmission simulation software.**
  - Hands-on experience in **transmission assembly, testing, and validation.**
  - Deep understanding of **manufacturing processes (casting, forging, machining)** related to transmission systems.
  - Strong **problem-solving, analytical skills,** and ability to work in a cross-functional team.
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#### **Preferred Qualifications:**

- Experience in **hydraulic powertrain and CVT (Continuously Variable Transmission) systems.**
  - Knowledge of **agricultural machinery applications and field requirements.**
  - Exposure to **Six Sigma, DFMEA, and root cause analysis methodologies.**
  - Experience in leading **transmission innovation projects and technology roadmaps.**
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