

<b>Position</b>	<b>EV Lead</b>
<b>Company</b>	<b>VST Tillers Tractors Limited</b>
<b>Location</b>	<b>Hosur, Bangalore</b>
<b>Reporting Relationship</b>	<b>General Manager R &amp; D Head</b>
<b>Website</b>	<a href="https://www.vsttractors.com/">https://www.vsttractors.com/</a>
<b>To apply share cv to</b>	praveenkumar.s@vsttractors.com

### **VST Tillers Tractors Ltd (VTTL) - A Leading Force in Indian Agriculture**

VST Tillers Tractors Ltd (VTTL) is a household name in Indian agriculture, a legacy brand established in 1967 and part of the well-respected VST Group, founded in 1911. As a publicly traded company, VTTL is committed to transparency and accountability.

#### **Market Leadership and Innovation:**

VTTL holds a dominant position in the power tiller segment and enjoys a strong presence in the 4WD compact tractor market, boasting a 75% market share for power tillers in India. Driven by a passion for innovation, VTTL consistently develops and manufactures high-quality agricultural equipment designed for Indian farms. Their machines, built with robust materials and advanced engineering, ensure reliability, minimal maintenance, and consistent performance across diverse agricultural landscapes.

#### **Extensive Product Portfolio:**

VTTL offers a comprehensive range of agricultural equipment catering to the needs of small and medium-scale farmers. Their product line includes tractors, power tillers, diesel engines, and other essential farm implements. Their offerings cover a power range of 2 HP to 50 HP, catering to various farming applications. Notably, VTTL is a pioneer in the 4WD compact tractor segment, offering manoeuvrability and power for demanding tasks.

#### **Strong Nationwide Presence:**

VTTL has a robust national presence with three manufacturing units strategically located across India. They have established a vast network of over 1,200+ dealers, 6,200+ retailers, and 85 spare parts distributors to ensure easy access to their products and services for farmers throughout the country.

#### **Global Recognition:**

VTTL's success extends beyond Indian borders. They have established a strong international presence, exporting their equipment to over 40 countries across Europe (EU - 17 countries, brand name VST FieldTrac), Africa (19 countries), Latin America (4 countries), and Asia (3 countries). This global reach signifies the trust and value their products hold in the international agricultural market.

#### **Core Values:**

VTTL operates with a set of core values that guide their business practices and interactions:

- **Customer Centricity:** Making every interaction with farmers valuable and meaningful.
- **Integrity:** Upholding ethical conduct in all business dealings.
- **Synergy:** Building a collaborative environment for collective success.
- **Speed:** Embracing agility and responsiveness to market demands.
- **Stretch:** Continuously striving for improvement and exceeding expectations.

- **Go Green:** Promoting sustainable practices and environmental responsibility within the agricultural sector.

VTTL's commitment to quality, innovation, and farmer-centricity has solidified their position as a leading force in Indian agriculture. Their dedication to ethical practices and environmental responsibility further strengthens their reputation as a responsible and sustainable company.

## **Job Description – Electrical Vehicle System Engineer**

### **Key Responsibilities:**

1. Define the **electrical architecture** for EV systems, including system functions and wiring harness design.
2. Manage **electrical vehicle integration systems** such as battery, motor, MCU, DC-DC converter, and display.
3. Select **battery capacity** as per application requirements — including SOC, SOH, maximum/continuous discharge current, peak power, thermal characteristics, C-rating, contactor/BMS selection, temperature analysis, and packaging.
4. Select **motor and MCU** based on application requirements such as maximum/continuous current, torque, RPM, thermal analysis, and power correction under various load conditions.
5. Handle **VCU configuration** to ensure communication among systems, and establish logic and algorithms with millisecond precision for optimal performance.
6. Select other **EV components** such as DC-DC converters and 12V batteries.
7. Develop and maintain the **Design Verification Plan (DVP)** for all EV systems within the project.
8. Coordinate with **EV component suppliers**, ensuring effective communication and technical alignment.
9. Lead **concept selection and design** for EV system integration using DFMEA, DFS, DFM, and related design tools.
10. Responsible for **engineering change management** and release documentation.
11. Define **power distribution** and **functional safety requirements** for the project.
12. Perform **design analyses** to support safety and reliability in system development.
13. Manage **prototype development**, including supplier interactions for special material selection in EV packs.
14. Collaborate with **R&D teams** for new product development (NPD) activities.
15. Evaluate **system-level requirements, interfaces, and application parameters**, translating them into performance and functional/non-functional specifications for subsystems.
16. Conduct **system analysis** for performance, response rate, efficiency, testing, and design validation.
17. Analyze **interfaces between system and vehicle-level inputs/outputs**, including functional behavior and error reactions.
18. Translate **vehicle-level requirements** into software-level functional requirements.
19. Participate actively in **technical discussions and requirement reviews** with customers and internal stakeholders.
20. Support and develop **platform concepts** for EV functionalities.
21. **Troubleshoot** reported issues and ensure timely resolution.
22. Ensure **timely completion** of technical documentation and release of reports.
23. Demonstrate strong knowledge of **power flow and architecture** within electric vehicle powertrains.
24. Possess good understanding of **sensors, actuators, electric motors, batteries, and ECU architectures**.
25. Exhibit a **problem-solving mindset** and enthusiasm for EV technologies.

26. Understand **component drawings and specifications** based on 3D models.
27. Display strong **presentation, communication, and interpersonal skills** for effective coordination with management and teams.
28. Capable of managing **concept validation, field testing, lab testing, production support, and aftersales support** for EV systems.

#### **Requirements**

- **Experience:** 4–6 years in Electric Vehicle System Design and Integration
- **Qualification:** B.E./B.Tech or M.E./M.Tech in Electrical, Electronics, or Automotive Engineering
- **Technical Skills:** Strong understanding of EV powertrain systems — battery, motor, MCU, VCU, DC-DC, and wiring harness design
- **Tools & Standards:** Familiarity with DFMEA, DVP, CAN communication, diagnostic tools, and functional safety standards (ISO 26262 preferred)
- **Domain Knowledge:** Hands-on experience in prototype testing, validation, and troubleshooting of EV systems
- **Soft Skills:** Good analytical, communication, and coordination skills for cross-functional collaboration