

WE'RE HIRING MECHANICAL SIMULATION ENGINEER



ABOUT THE COMPANY

Naxatra Labs Pvt. Ltd. is a deep-tech hardware startup building high-efficiency motors and controllers for electric vehicles, power tools, drones, and agri-tech applications. Located in Ahmedabad, we specialize in both R&D and manufacturing of advanced drivetrain systems. We are a fast-growing team working on cutting-edge technology with real-world impact, aiming to reduce energy consumption, drive sustainability, and enable global hardware innovation from India.

ROLE SUMMARY

The Mechanical Simulation Engineer will be responsible for performing advanced simulations and analytical studies to optimize motor design, thermal performance, structural integrity, and reliability. The role will support product development by integrating simulation-driven insights into practical, manufacturable designs.

LOCATION: Ahmedabad

RESPONSIBILITIES

- Perform structural, thermal, and multiphysics simulations for electric motors and related mechanical components.
- Conduct thermal analysis using thermodynamics principles to optimize heat dissipation and cooling strategies.
- Execute CFD simulations for airflow, cooling channels, and thermal management validation.
- Analyze vibration, acoustic, and structural behavior with focus on NVH (Noise, Vibration & Harshness) performance.
- Support design teams with simulation-based recommendations to improve durability and efficiency.
- Integrate DFM (Design for Manufacturing) principles into simulation feedback to ensure production feasibility.
- Participate in FMEA activities to identify mechanical risk factors and mitigate failure modes.
- Validate simulation results with experimental data and testing outcomes.
- Collaborate with Testing & Validation and Production teams for design optimization.

- Support new product development initiatives with predictive modeling and performance analysis.
- Prepare detailed simulation reports and technical documentation for internal review.



QUALIFICATION

Bachelor's or Master's degree in Mechanical / Mechatronics Engineering.

3–6 years of hands-on product design experience.

Freshers with strong design fundamentals and hands-on project experience are also encouraged to apply.

EXPERIENCE

- Strong understanding of thermodynamics and heat transfer.
- Working knowledge of CFD tools (ANSYS/Fluent/COMSOL or equivalent).
- Exposure to NVH analysis and structural simulation tools.
- Familiarity with FMEA and DFM principles.
- Strong analytical and problem-solving skills.

DURATION: Full time

COMPENSATION

For Experienced Candidates:

- The three months will be considered as a probation period.
- After the successful completion of the probation period, the employee will be offered an annual CTC in the range of **INR 10 LPA to 15 LPA.**

For Freshers

- Appointment will be subject to a 6-month probation period.
- CTC will range between **INR 5 LPA to 7 LPA**, depending on skills and performance during evaluation.

Join us in electrifying the future of transportation and energy!

APPLY NOW

Send your CV and cover letter to careers@naxatralabs.com.

We look forward to hearing from you!

(Subject: <Name> Production Manager Application)