

Magnax – Mechanical Simulations Engineer

Magnax is looking for a **Mechanical Simulation Engineer** to join our growing team. In this role, you will be responsible for the structural and mechanical simulation of our axial flux motors and their components. Your work will help improve the strength, stiffness, durability, vibration behavior, and overall performance of our products through advanced simulation and analytical modelling.

You will collaborate closely with design, testing, prototyping, and other engineering teams to support the development of next-generation electric motors.

Experience with thermal simulations is considered a strong plus.

This is what you'll do:

- Strengthen the Simulation Team by improving our structural and mechanical simulation capabilities.
- Perform structural FEA simulations to evaluate strength, stiffness, fatigue, vibration, and thermo-mechanical behavior of motor components.
- Develop analytical models to complement simulation results and support design decisions.
- Design tests and prototypes required to validate analyses and correlate simulation results with experimental data.
- Work closely with design, test and prototyping engineers to improve product performance, durability and reliability.
- Perform root cause analyses of product and process issues and provide simulation-driven recommendations for design improvements.
- Contribute to the continuous improvement of simulation methodologies, tools and workflows.

Who we are looking for?

- Master's degree in Mechanical Engineering, Electro-Mechanical Engineering, Aerospace Engineering, or equivalent through experience.
- Strong understanding of mechanics, structural analysis, material behaviour, and Finite Element Analysis (FEA).
- Good understanding of multidisciplinary engineering domains, including mechanics, NVH, electromagnetics, and electrical systems.
- At least three years of hands-on experience with structural FEA.
- Proficiency with Ansys software and Python is preferred.
- Experience with fatigue analysis, vibration analysis, thermal simulations, or lumped-parameter modelling is a strong plus.
- Basic understanding of thermodynamics and heat transfer is an advantage.
- Strong analytical and problem-solving skills.
- Strong English communication skills, both written and verbal.

- Good collaboration skills and the ability to work effectively across multidisciplinary teams.

What can we offer?

Sure, every company talks about perks. But here's why you'll look forward to getting up in the morning:

- **Make an impact:** Your work won't just sit on a server collecting digital dust. You'll see your ideas come to life in the real world.
- **Life at Magnax ≠ boring:** Whether brainstorming over Belgian beers, making last-minute design tweaks, or Friday wrap lunches where creativity and tortillas collide—we keep things fresh.
- **Flexibility that works for you:** We know work-life balance is key. That's why we offer flexible hours to fit your lifestyle, and one day of remote work a week when it fits your role. Because we know great ideas don't always come from the same desk.
- **Kortrijk, our hidden gem:** We might be a little biased, but Kortrijk's got everything—creative energy, amazing food, and just enough peace to let your next big idea come to life.

Our philosophy?

At Magnax, mistakes aren't failures—they're launch pads. We build, we test, we laugh, and then we try again. It's engineering with heart.

Your future is here

Join us, and your ideas will be challenged, while your skills will grow. Whether you're reshaping our R&D dream team or solving the next big manufacturing challenge, you'll be part of something big.

<https://www.traxial.com/careers>