



Hi there talented Mechatronics, Robotics and Computer Science Engineers! We are Magneto, a pioneering startup dedicated to advancing the field of sustainable magnetocaloric heating and cooling. Our team currently consists of approximately 14 highly skilled individuals, and we're eagerly searching for an Engineer to join our ranks.

About Magneto:

In Magneto, we believe that we don't have to sacrifice our planet for our comfort or vice versa. Current heating and cooling systems are some of the biggest producers of greenhouse gas emissions. Our solution based on state-of-the-art magnetocaloric technology offers an alternative to producers of appliances for cooling and heating. An alternative with zero greenhouse gas emissions saves their clients around 30% of power consumption and has a lower cost of ownership. Using cutting-edge additive manufacturing technology, we produce 3D-printed magnetocaloric materials, revolutionising the cooling and heating industry and enabling highly efficient, gas-free and sustainable refrigeration, air conditioning and household heating.

As a spin-off deep tech company from TU Delft we connect the latest technology breakthroughs with the most reliable industrial processes, which leads to a game-changing technology targeting the \$19b market of vapour compressors. Together with the EIC Accelerator Project of the European Innovation Council and our venture capital backers, we are sprinting toward our demonstration and Pilot-plant project for supermarkets in the Netherlands in the next two years.

We are in the exciting phase of a fast-growing start-up and are looking for an ambitious and innovative Engineer. The selected candidate will be a core member of the Product development & Production team, work among a group of multidisciplinary (and fun!) colleagues and develop Magneto but also herself/himself. Join Magneto, and we build revolutionizing cooling and heating technology together for a sustainable future!

What you'll do:

Innovative Design: You will be at the forefront of our prototyping efforts, using your creative abilities to conceive cutting-edge solutions for our magnetocaloric heating and cooling systems.

- **Prototyping Excellence:** Transform your design concepts into tangible prototypes that will inspire amazement. Your programming and hands-on skills will be pivotal in bringing our visions to life.
- **Collaboration:** Join forces with our team of engineers, scientists, and problem solvers to brainstorm, iterate, and drive our projects forward. Collaboration is key to our success, and your insights will be highly valued.
- **Continuous Process Improvement:** Off-the-shelve equipment such as 3D-printers and furnaces don't meet our requirements. We constantly seek improvements and don't accept a tool for what it is. Therefore, you'll find yourself spending more time on engineering the equipment that we use, than the products that we sell.

- **Examples of projects:** We are creating a production process for the Magnetocaloric Material that consists of 3 main steps: 3D-printing (Bound Metal Deposition), sintering, and analysis. For the 3D-printers, we are making a setup with a camera, that analyzes each printed layer, and using python, provides feedback to the printer for the next layer. Another challenging project will be a magnetocaloric material (MC) test device: A machine that can alter the temperature of several MC blocks, apply a magnetic field, and measure the temperature response using infrared. Together with Mechanical Engineers focusing on the hardware, you will create the software. Last example will be automated handling, sorting, dimension measurement and marking of the MC blocks, using robotics.

What you'll bring:

Passion for Design: Your love for design is evident in your work. You are someone who finds joy in sketching engineering diagrams and is genuinely excited about using design to enhance functionality.

- **Hands-On Spirit:** You're not afraid to roll up your sleeves and get your hands dirty (sometimes quite literally). You love tinkering, fixing, and making things work.
- **Engineering Proficiency:** You possess a graduate (WO) or undergraduate (HBO) degree in Mechanical, Electrical, Mechatronics or a related engineering field. You also have practical experience with CAD software, rapid prototyping, and testing.
- **Digital Skills:** You love programming, such as Python, Matlab or C++. If you have experience with programming to control hardware, with knowledge about different communication protocols, it would definitely be a plus.
- **Team Collaboration:** Your natural ability to collaborate and communicate effectively makes you a valuable asset to our dynamic team. We value diversity of thought and encourage open dialogue. Proficiency in English is a must, Dutch would definitely be appreciated.
- **Curiosity:** You are driven by curiosity and an innate desire to understand and solve complex problems. You continually seek opportunities for learning and growth.
- **Pragmatism:** Simple solutions to (seemingly) complex problems. If it works, it works, right? Why would I waste my time on writing a vacancy, when ChatGPT can write a draft for me?
- **Adaptability & Flexibility:** Startups can be a bit of a rollercoaster. You need to thrive in an ever-changing, fast-paced environment and be ready to pivot when necessary.

What we offer:

Innovation Hub: Join us in exploring groundbreaking technology that has the potential to reshape our world. Magneto is an innovation playground for engineers like you.

- **Significant Impact:** As a part of our startup, your contributions will be immediately noticeable. Your ideas and efforts will play a critical role in shaping our future, and hopefully even the future of our planet.
- **Personal Growth:** In our small team you'll get responsibilities rather sooner than later, with the chance to grow along with the company.
- **Flexibility:** We prioritize work-life balance and provide a flexible work environment, recognizing that your best work often emerges when you're comfortable and at ease.
- **Conformal Compensation:** We believe your primary motivation should be intrinsic, but you shouldn't have to sacrifice on your groceries.

Interested?

If you are eager to embark on a journey into the captivating realm of magnetocaloric heating and cooling with Magneto, kindly forward your resume and a brief introduction to [\[jilles@magneto.systems\]](mailto:jilles@magneto.systems). We eagerly await your application and the opportunity to explore the future of engineering together.

Join us in charting the course toward a more comfortable, sustainable world of heating and cooling!