

Mechanical engineer

Job description

As a mechanical engineer at AquaBattery, you will work with a team of scientists, engineers, and developers on developing a battery that works based on water and salt.

You will work together with a multidisciplinary team of engineers and researchers to design, assemble, and test our innovative membrane stacks and the auxiliary equipment that turn these stacks into a functioning product. Your skills are suited for a broad set of tasks, which will include structural analysis, CAD design. You collaborate with colleagues and manufacturing partners to build, test, and commission the machines you design with the team.

Together with AquaBattery researchers and engineers, you will work out our technical challenges and integrate them into our final product.

What you'll be doing

- Design and structural analysis of our innovative membrane stacks. (e.g., compression of materials, interaction between layers)
- Prototyping, building, testing, and evaluating novel stack designs, and implement improvements.
- Design, fabrication, and assembly of auxiliary equipment required to operate the membrane stacks
- Integral design of the AquaBattery system (Installation design, piping, instrumentation, safety)
- Collaborating with the team and external partners on cost-effective design
- Hydraulic and hydro-electric design to minimize pumping and internal electrical losses

Function requirements:

We expect from you:

- HBO/WO degree in mechanical engineering, materials science, applied physics, civil engineering, integrated product design or similar.
- An affinity with many different disciplines such as mechanical-, materials-, process-, (electro)chemical-, electrical-, and software engineering
- Good structural analysis skills, both in analytical- and finite element methods
- Good 2D and 3D CAD skills (Fusion 360, SolidWorks, Inventor, AutoCAD or similar)
- Experience in manufacturing of parts and prototyping
- (Near-) fluent in English, both spoken and written
- You work independently and dare to take responsibility
- You work accurately, safely, and carefully. You are critical of your own and your colleagues' work.

The following is considered a plus:

- >2 years of industry experience
- Experience with safety of installations and/or certification
- Proficient in Dutch, both spoken and written
- Experience in making and using P&ID designs
- Experience in/affinity with mechatronics engineering
- Experience in/affinity with process engineering

What you can expect

- Be part of a fast-growing organization, with the mission to accelerate the transition of energy to renewables.
- Highly enthusiastic and motivated colleagues, looking to make a green, clean, real-world impact.
- Have variety in your daily activities through active knowledge sharing, presentations, and collaboration.
- Work-life balance
- Open environment to express your opinion and share new ideas
- Work in an English environment with colleagues of different nationalities

About our company

AquaBattery is a deep-tech company based in the Netherlands working to revolutionize green energy storage. Our mission is to cut energy bills and catalyze the development and uptake of renewable energy technologies across the EU and beyond. We recognize that renewable energy is only part of the solution, and only through pairing it with cheap and scalable energy storage solutions can truly make an impact. AquaBattery was founded in Leiden in 2014 to commercialize the world's cleanest energy storage solution. We have won a host of prestigious international awards, such as Herman Wijffels Innovation Award (2016), Accenture Innovation Award - Circular Economy (2017) and the Postcode Lottery Green Challenge (2018). Our team is composed of leading experts in water membrane technologies and the energy storage industry, combined with the leadership of visionary founders. We are supported by a network of exceptional partners, such as Climate-KIC, TU Delft, The Green Village Delft, and technical experts at Imperial College London, REDStack, and Wetsus. We have also secured industrial partners such as Compass and TBI that are able to support with electronics and installation of systems. Our technology has been successfully demonstrated through a number of prominent installations in the Netherlands and in Italy and has reached TRL 6, we are now expanding our company.

Location / Hours

Leiderdorp / Full-time: 40 hours per week

Contact details / website

info@aquabattery.nl / www.aquabattery.nl/

Please note that acquisition as a result of this vacancy is not appreciated.