

Prototyping engineer

Job description

As a prototyping 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 to set-up and utilize an effective methodology where new ideas for prototypes, testing equipment, and lab setups can be designed, produced, assembled, and tested in a rapid iterative manner.

You will design, build and integrate equipment such as the membrane stack prototypes themselves, auxiliary equipment (piping, pumps, valves, sensors). You will assist in the layout design and assembly of our pilot project(s) and the development of a repeatable and efficient method to produce and assemble the membrane stacks. You will also assist in the design of test setups to validate the theoretical work of our researchers and engineers at lab, prototype, and product scale. Your colleagues will know you as the person that can turn ideas into physical objects. 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

- Designing, building, and assisting in the development of new, innovative membrane stack designs.
- Designing and building equipment needed to produce, assemble, and test the stacks
- Collaborating with the engineering team to make prototypes and tests of designs
- Collaborating with the R&D team to design and make experimental setups
- Strength calculations and/or simulations (e.g., frames to hold the stacks and equipment during operation and transport)
- 3D CAD design (pilot installation layout(s) and experimental setups among others)
- Setting up workflows for in-house (rapid) prototyping and developing best practices with the machines involved

Function requirements

We expect from you:

- Excellent hands-on prototyping and building skills. You are a true "maker" with a wide array of techniques at your disposal.
- Experience with workshop management, setting up and maintenance of machine tools, and the acquisition of machine tools.
- Good design skills (Fusion360, Solidworks, Inventor, Rhinoceros or similar)
- Collaboration skills in design and manufacturing
- A HBO degree in a relevant field (mechanical engineering, mechatronics, industrial design engineering), an MBO degree as (research) instrument maker, or similar.
- Experience in manufacturing parts yourself, as well as collaborating with external production partners
- Proficient in English and Dutch, 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
- Skills in welding.
- Skills in soldering/electronics
- Skills in using and programming microcontrollers/PLCs
- Experience making research equipment
- Experience making chemical equipment
- Experience with safety of installations
- Experience with industry norms

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.