

Process engineer

Job description

As a process 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 be responsible for addressing process design and operation related subjects. As member Product Development team, you will form the bridge between our team and R&D, translating stack test parameters to the system design. This involves the preparation of process flow diagrams, design, and selection of components, such as piping, valves and pumps, and mass and heat balance of the system. You ensure material compatibility and find solutions to optimize system energy losses and system safety.

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

- Heat and mass balance calculations
- Hydraulic calculation and pump sizing
- Develop PFD, P&ID, CAD piping layout, and equipment and line/valve list
- Optimize system to minimize hydraulic losses and improve overall energy efficiency
- Lead process safety and HAZOP reviews
- Interact with suppliers and development partners
- Collaborate with R&D team take design inputs and implement at system scale

Function requirements

We expect from you:

- Bachelors or Masters in Process, Chemical, or Mechanical Engineering
- >2 years of industry experience
- Experienced in generating process design documents: PFD, P&ID, equipment list, line/valve list
- Experience in 3D modelling of process design
- Familiarity with regulations compliance
- Ability to interact efficiently with suppliers and development partners
- (Near-) Fluent in English, both spoken and written
- An entrepreneurial mindset

The following is considered a plus:

- Experience in electrochemistry
- Experience with integration of electronics in a process
- Proficient in Dutch, both spoken and written

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.