



sungreen H₂

REVOLUTIONISING ZERO EMISSIONS

SunGreenH2

Melbourne, Australia

Mechanical Engineer

SunGreenH2 is an award-winning venture backed green hydrogen company building a high performance electrolyser technology for low-cost green hydrogen production at scale.

We are expanding our fast growing team with a Mechanical Engineer to join our product development team in Melbourne, Australia. Key deliverables will be testing and prototype construction, testing different component assemblies while working closely with the stack design team to get new electrolyser stack designs up and running for rapid testing and prototyping. You will be tasked with the responsibility to further develop and optimize our electrolyser stack.

Responsible For

- Designing various components of the electrolyser stack
- Assembly, testing, and optimisation of electrolyser stack, **balance of plant and full system**
- Structural analysis of the electrolyser stack and possibly fluid dynamics analysis
- Rapid prototyping of new system components with seamless reporting and documentation in parallel
- Setup of measurement technology and commissioning of development test benches
- Providing support with documentation for prototyping of electrolyser stacks and system

Your Profile

- Mechanical engineer with strong focus on component design and structural analysis
- A minimum of 2 years of industry experience in mechanical design and deep understanding of assembly, sealing design, and fastening.
- In-depth understanding of devices working under pressure
- Proficient in using SolidWorks
- Confident in structural analysis
- Knowledge of measurement technology and sensors
- Excellent communication skills in English
- Detail-oriented, meticulous & well-organised
- Strong team player; self-starter with can-do attitude
- Knowledge of GD&T and Technical drawing standards

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- Knowledge of design for manufacturing processes such as machining, sheet metal cutting and folding, injection moulding etc
Knowledge of design of pressure vessels & piping and relevant standards
 - Ability to perform hands on assembly work in order to build and test prototype systems
Experience with computational modelling such as Finite Element Analysis (FEA)
Computational Fluid Dynamics (CFD)

Experience in the following aspects would be a plus:

- Prior experience of developing and assembling electrolyser or fuel cell stacks
- Ability to perform performance simulation for the development of the electrolyser stack using software packages such as ANSYS or COMSOL
- Good knowledge of CFD for multiphase modeling
Hyperplastic and viscoelastic-plastic material
- Gaskets creeps and viscous response in “pressure device” and / or in sealing modelling
- Instrumentation for testing of the electrolyser performance

Compensation

In line with experience

To Apply

If you meet the above requirements, apply with your LinkedIn profile, covering letter and CV to contact@sungreenh2.com.