



Internship CFD Simulation for Generator Circuit Breakers (f/m/d)

At Hitachi Energy our purpose is advancing a sustainable energy future for all. We bring power to our homes, schools, hospitals and factories. Join us and work with fantastic people, while learning and developing yourself on projects that have a real impact to our communities and society. Bring your passion, bring your energy, and be part of a global team that appreciates a simple truth: Diversity + Collaboration = Great Innovation

Objective of the internship is to carry out thermal-fluid-dynamic simulations to evaluate the performances of a GCB during operation under steady state and transient electrical loads. Additionally, 1D simulation is applied to speed up the simulation process for parameter studies. The simulations will be carried out with the software An-sys Maxwell, Fluent and Dymola.

The candidate will receive dedicated assistance and support from the Hitachi Energy engineers and scientists. Optional is the planning/design of validation experimental tests in collaboration with the Hitachi Energy Technology Center Team and Hitachi Energy Corporate Research Center.

The internship duration is for a minimum of 6-months, preferably 12-months.

Our flexible work practices help you optimize personal and business performance while creating an environment where all employees can develop their skills and grow.

Your responsibilities

Literature search on recent work regarding GCBs

Thermo-fluid-dynamic simulation to assess performances of a GCB by means of the software Ansys Maxwell and Fluent

Improvement of 1D simulation software

Data post-processing, analysis and evaluation of the results

Propose improvements to the simulated case in collaboration with the Hitachi Energy team

Your background

Bachelor or Master in Mechanical Engineering or a related field

Background in fluid-dynamics and thermal management

CAD knowledge (Creo is a plus)

CFD background (ANSYS FLUENT is a plus)
Meshing knowledge (ICEM, GAMBIT)
Proficiency in programming (Python is a plus)
Fluency in written and spoken English, German is a plus
Ability to work in a team, as well as willingness to handle responsibilities independently

More about us

Hitachi Energy is a global technology leader that is advancing a sustainable energy future for all. We serve customers in the utility, industry and infrastructure sectors with innovative solutions and services across the value chain. Together with customers and partners, we pioneer technologies and enable the digital transformation required to accelerate the energy transition towards a carbon-neutral future. We are advancing the world's energy system to become more sustainable, flexible and secure whilst balancing social, environmental and economic value. Hitachi Energy has a proven track record and unparalleled installed base in more than 140 countries. Headquartered in Switzerland, we employ around 38,000 people in 90 countries and generate business volumes of approximately \$10 billion USD. www.hitachienergy.com

Interested in joining our team? If so, we look forward to receiving your full application (motivation letter, CV, references) only via our online careers tool.

Hitachi Energy Switzerland Ltd.
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Talent Acquisition

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