

Company Description

We're on a mission to become the most impactful carbon technology company of this decade. Carbon Upcycling's patented technology reduces the carbon emissions of cement and concrete while improving the strength and durability. Our technology enables lower carbon, higher resilience concrete for the adaptable infrastructure we need in the 21st century.

Since 2014, Carbon Upcycling has scaled its ability to convert CO₂ emissions into value-add end materials over a million times and has since been confirmed as one of the top CO₂ utilization companies in the world as a winner of the X-Factor Award in the Carbon XPRIZE. We've also been named as a Solar Impulse Efficient Solution label recipient, a funding recipient of Fundación Repsol Entrepreneurs Fund, and a winner of the 2019 76West Clean Technology Competition.

At Carbon Upcycling, we're using the waste of today to build a better tomorrow. We have a vision of creating a world where carbon is a sustainable resource to shape the future of humanity. We are a team that values and embraces diversity in people and thoughts.

Learn more about our company, our low-carbon cement alternative, and our low-carbon plastics alternative [on our website](#).

Culture

We have an incredible opportunity to make an impact on this earth. With a focus on innovation, we have been pushing the boundaries in some of the largest industries in the world. Carbon Upcycling team members lean into their curiosity and resourcefulness, move quickly, and are proactive problem solvers. We have fostered an ambitious team that has been able to scale our technology by over one million times in production capacity in the past five years. Through a company culture that is trusting and transparent, we have built a team of positive thinkers that are committed to achieving evidence-based impact. Applicants who are looking for a culture that is focused on continuous learning and new challenges will fit in well. We believe in diversity and inclusion. We believe in integrity. We believe in innovation. We believe in curiosity. We believe in accelerating change as a team of doers. Join us.

Job Title: Senior Process Engineer

Job Type: Full-time permanent

Department: Engineering

Location: Calgary

Role Overview: Designing, developing, and implementing new processes, and process improvements to facilitate new project development and optimize existing operations; reports to the Engineering Manager

Responsibilities

- Develop and implement process improvement initiatives to optimize plant operations and maximize efficiency
- Develop, maintain, and authenticate process calculations, PFD & P&ID drawings, process descriptions, control narratives, standard operating procedures, and other process documentation, to ensure accuracy, safety and successful plant operation
- Contribute extensively to the design of new processes and new production plants, including equipment type selection, gas flows, and material flows
- Conduct and authenticate process simulations using HYSYS software to design new process plants, evaluate process performance, troubleshoot problems, and develop solutions
- Lead HazOp studies to identify potential hazards and develop mitigation strategies to ensure safe operations during the design stage
- Work with production personnel to identify and address process bottlenecks, propose debottlenecking opportunities, and improve product quality
- Analyze process data from existing operations to ensure plant parameters & operation within acceptable/safe ranges and verify equipment efficiency & constraints
- Provide technical support to operations personnel to ensure smooth plant operations and assist with troubleshooting
- Collaborate with cross-functional teams to implement new projects and process changes & improvements
- Monitor and analyze process data to identify trends and opportunities for improvement
- Ensure compliance with regulatory requirements and industry best practices

Qualifications

- Registered P Eng in Alberta (required), and other Canadian jurisdictions (preferred)
- Extensive experience of process design, monitoring/optimization techniques, control systems, and data analysis tools in mineral processing or cement industry
- Familiarity with process & gas flow softwares: HYSYS, Aspen, PI Processbook
- Process Engineering background with 10+ years of experience in an industrial/cement/mineral processing setting
- Strong analytical skills and attention to detail
- Ability to work in a fast-paced environment and handle multiple projects simultaneously
- Knowledge of regulatory requirements and industry standards
- Key non-technical attributes we look for include self-awareness, ability to prioritize and hands on aptitude. High performance in dynamically changing environments, and a willingness to take calculated risks, own up to mistakes, and rebound from setbacks
- Able to dive into technically challenging disciplines with an aptitude to learn quickly. Willingness to learn company systems and new technologies is essential

Willingness to travel: up to 25% of the time

Language: English

Compensation

- Salary competitive
- Benefits include extended health benefits, paid parental leave, bereavement time, paid vacation and sick leave, health and life insurance, stock options
- Extensive training and development opportunities

The right candidate for this role might not have every qualification listed in this job description. The right candidate might have skills that we haven't considered. If you think you'd make a great candidate for this position, please send us your resume and let us know why. We look forward to hearing from you!

Application Instructions

To apply, please send a cover letter and resume to careers@carbonupcycling.com and include the job title in the subject line.