

# SENIOR MECHANICAL DESIGN ENGINEER

# CALGARY, ALBERTA

**Swirltex Inc.** (Swirltex) is focused on the development and application of innovative technologies for treatment of difficult wastewater streams. Our expertise and solutions have demonstrated the ability to provide clean and consistent water for reuse applications. Our patented process and modular system saved energy, is economical, and provides a service to customers where they need it when they need it.

Since the beginning we have thought about innovative ways to manipulate an incoming waste stream that enhances conventional treatment. We are focused on our customers and always developing new solutions to meet their challenges. We have worked across a variety of different industrial wastewater applications, some of which include the food & beverage industry, produced water, as well as municipal wastewater.

Our vision is to change how water filtration has been done in the past to help industries and municipalities turn a waste into a resource towards a Net Zero Water future.

#### **Purpose of the Position**

At Swirltex we are always striving to do things differently! We are looking for a Senior Mechanical Design Engineer who thinks outside of the box and is looking to work with an exciting innovative wastewater treatment technology. As an energetic, highly motivated team player, the successful candidate will also have in-depth knowledge of various wastewater treatment technologies and applications.

At Swirltex, our team is the key to our success. We take pride in recruiting the best talent available for all areas of our business.

#### **Responsibilities and Accountabilities**

- Mechanical Lead for mechanical & facilities deliverables: Design Basis, Input to PFDs PIDS, Material Balance, Input to Process Narratives, Input to Line Lists, Tie-In Lists, Mechanical Equipment Lists, Instrument Datasheets
- Sizing and selection of mechanical equipment and plant optimization projects
- Experience with pipe material selection
- Preliminary design, and detailed design of wastewater treatment systems
- Experience in water treatment technology design and specification is a requirement
- Experience in materials selection for chemical and corrosive service
- Experience in rotating equipment design and selection
- Experience in design and installation of skim tanks, water filtration including membrane and regenerative media filtration and oil/water separation equipment including dissolved air floatation is a requirement
- Knowledge in chemical injection, slurry handling and sweetening technology is preferred

- Experience in hydraulic calculations for both surface and pipeline designs is an asset
- Experience in design and implementation of industrial scale water treatment is an asset
- Experience with packaged wastewater treatment plant design and configuration, skid mounted systems, modular, containerized systems
- Supports vendor selection and equipment purchasing
- QA/QC and inspection of incoming equipment and fabrication of various system
- Facility commissioning and start-up experience is an asset
- Assists in the development of standard operating procedures and best practices

## Qualifications

- Bachelor's Degree in Mechanical Engineering from accredited university
- Must be in good standing as a registered Professional Engineer (P.Eng.)
- 10+ years' experience in a technical role in the wastewater treatment industry;
- Minimum 5+ years directly involved in the design/fabrication/installation/operation of water and/or wastewater treatment systems
- Substantial experience in the following key technology areas: ultrafiltration, DAF, Settling clarifiers, biological treatment, wastewater nutrient removal (ammonia, nitrates, phosphorus), metals removal.
- Excellent customer service skills with a focus on relationship building;
- Excellent problem solving and analytical skills;
- Excellent written and oral communication skills;
- Team player with demonstrated ability to work in a collaborative environment with engineers, trades, programmers, and technical professionals;

## **Location and Travel**

- Calgary, AB
- Travel: Up to 30%;
- Must have a valid passport and driver's license;

We thank all applicants for their interest in our organization, however; only those selected for an interview will be contacted.

Please email resume and cover letter to careers@swirltex.com