

# **Mechanical Engineer**

#### **About Osmoses**

Osmoses Inc. is a membrane technology company revolutionizing the way industrial separations are performed today! Industrial separation processes account for 15% of the world's energy consumption and are responsible for 16% of CO2 emissions because we rely on energy-intensive technology. Changing this paradigm is one of the biggest opportunities to enable the energy transition.

Our mission is to re-design the backbone of the energy and chemical industry to make it more competitive and unlock new ways to produce and purify essential molecules. We bring together a dynamic group of scientists, engineers, business professionals, and operators from all over the world to develop and commercialize cutting-edge solutions that can reduce the impact of gas separations on the environment while increasing the economic incentive for our customers.

Join us! Together, we can create a future where cleaner, more abundant, and reliable energy is available to everyone, and more sustainable industrial processes become the norm.

#### **Position Overview**

Osmoses Inc. is looking for a Mechanical Engineer with a strong background in machining, CAD design, pressure vessels, and hands-on experience and set-up of machining tools such as CNC lathes. As a member of our Product team, you will contribute to the development of gas separation membranes from concept to commercial skidded product. The role will involve scale-up of membrane products, engineering, internal membrane testing, and planning and design work guiding the build up manufacturing facility and membrane skids as well as commercial systems. The Mechanical Engineer will collaborate with the technology, engineering, and business teams to qualify and launch prototypes and products from Osmoses

into customers' hands. The top candidate will also have the ability to communicate their technical ideas in a clear manner, both visually and verbally.

### What you'll be doing

- Utilize 2D and 3D CAD to design components and assemblies for making devices including membrane housings (pressure vessels).
- Plan, conceptualize, and create mechanical designs and drawings for fabrication equipment and new prototypes/products
- Perform a full lifecycle product development (design, develop, test prototypes, manufacture and implement)
- Design systems and components that meet functional requirements and engineering specifications
- Perform engineering calculations to support design work
- Evaluate final product's overall performance, reliability and safety
- Apply hands-on machining skills to fabricate components and prototypes.
- Apply hands-on skills to install/assemble devices, equipment and parts.
- Collaborate with multi-disciplinary engineering teams, and work with vendors and contractors
- Ensure project timeline is met and project stays within budget
- Manage, Lead or participate in special projects as needed
- Supports the investigation of customer complaints, determines confirmation and/or remediation activities
- Prepare reports, summarize data, and present results and progress within the production team and to various stakeholders outside of team
- Play a pivotal role in designing and operationalizing Osmoses manufacturing facility as well as mechanical aspects of the commercial offer including membrane housing/pressure vessel detail design.

## What we're looking for

Bachelor's degree in mechanical engineering or in a related field or equivalent

- experience
- 5+ years of experience working as a mechanical engineer
- High Level proficiency 2 and 3D CAD software such as SolidWorks, AutoCAD, or similar
- Experience in gas separations membrane development, design and manufacturing preferred
- Experience in systems design/optimization, pressure housing design, assembly and module arrangement (vertical or horizontal, multiple modules in a row etc.)
- Firm grasp of engineering concepts, and experience designing mechanical systems and products; Ability to analyze and interpret data; Understanding client mechanical requirements and specifications; mechanical retrofit considerations;
- Ability to develop and validate analytical methods
- Experience with regulatory requirements (e.g. EPA) and cGMP principles (preferred) and ISO 9001:2015 (preferred)
- Proven ability to design and conduct experimental campaigns, evaluating product performance and guiding optimization;
- Proficiency with Microsoft Office software, Google suites, AirTable and other relevant software

# Qualities we're looking for

- Accountability: methodically organized, willing to report transparently on progress, and collaboratively adjust the approach when facing bumps in the road.
- Clear communication: able to formulate and articulate data-informed ideas internally and with partners/customers, verbally and in writing, based on research and experience.
- Nimble: able to adjust as new information surfaces in a fast-paced start-up environment. Capable of diving into a new business, learning, and building expertise and credibility for the organization quickly.
- Exceptional technical and problem-solving skills and reasoning ability
- Attention to detail and accuracy; Ability to prioritize and manage multiple tasks simultaneously. Ability to work alone and collaboratively to achieve company goals.
  Must be self-motivated and a great team player

Excellent written and verbal communication skills

### What we can offer you

- Opportunity to address one of this century's most significant environmental challenges.
- Work in the heart of the most innovative square mile in the world and the most exciting hub for clean tech.
- High growth potential, joining at a critical stage a company with solid momentum backed by top venture capital firms.
- Access to competitive compensation packages.

#### **Our commitment**

You belong at Osmoses!

Osmoses is an Equal Opportunity Employer. We are committed to creating an inclusive environment for all employees. We do not discriminate based on race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age, or veteran status. All qualified applicants will receive consideration for employment without regard to these or any other characteristics protected by law.

If you're excited about making a positive impact on the environment and being part of an innovative team, we'd love to hear from you! Apply now and let's shape a greener future together!