**Product Engineer**

**Job Description**

Status: Full-Time, Salary Exempt

Schedule: Monday – Friday, 45-50 hours on average

Supervisor: Engineering Manager

**Summary**:

Duperon Corporation (DC) manufactures patented screening, compacting and dewatering equipment that is customized (made to order) for each project. The Product Engineer will be accountable for a specific product line or group of products from product definition, product costing, manufacturing support, on site testing, production streamlining / trouble shooting, product changes and improvements through the life of the system as well as after sale support (will include some travel). To be successful, you will need to learn our industry to be able to deliver a solution for our customer or resolve any issues that may arise in the field from an existing product. This position requires someone who enjoys working in a multi-task type environment; analysis, problem-solving, production streamlining, cost savings, etc. Product engineers are hands on and get their hands dirty, create workable solutions, and contribute their engineering skills and knowledge to both products and processes. You will manage to the company standard of “you’ll like working with us”.

**Essential Functions:**

1. Creating, reviewing, detailing, and generating specifications for Duperon Corporation products, projects, and processes in DC standard engineering protocols.
2. Creating, documenting, and maintaining design logs, specifications, product line / application charts, calculations and assessments of mechanical components, and engineering requirements for design standards.
3. Perform analysis and calculations on mechanical equipment, complete research, test, and produce drawings, specifications, manuals, instructions, etc. as needed for our new and existing products.
4. Ongoing product development/value engineering: generating cost savings and product improvements, and utilizing customer, field, and manufacturing issues to evaluate problematic designs and resolve these issues.
5. Must understand the wastewater treatment process for our products spaces and design to the product requirements set forth.
6. New product launch: Develop application parameters, value engineering targets, etc. for new products, such that it can be documented for sales and production of the product.
7. Demonstrate high level of proficiency for mechanical engineering (particularly for mechanical detailing applications), calculations, technical reports/charts, and reporting.
8. Assist in the implementation of new products and process technology.
9. Ability to learn and travel sites for new product development, testing of products, as well as after sales service and start-ups as needed.
10. Development and maintenance of quality control procedures as related to ISO 900-2015, engineering, product design, manufacturing, welding, and structural processes.
11. Have strong computer, writing and verbal skills, with the ability to communicate professionally with internal and external engineers, operators, and site owners.
12. Must work well with others as a team to collaborate as part of the group to help solve problems as they come up (may not always be with your product lines).
13. Must have valid driver’s license and maintain a good driving record for transportation to on-site work.

**Education**:

a. College Education Required: BS ME with ABET accreditation or engineering degree with the required experience and skills.

**Experience:**

a. REQUIRED: Minimum 3 years of experience in Mechanical Engineering

b. REQUIRED: Must be proficient with 3D modeling program (SolidWorks) experience strongly preferred) as well as MS Office programs such as Word, Outlook, and Excel.

c. REQUIRED: Understanding of mechanical blueprints, machine design and mechanical concepts. Proven experience in resolving mechanical engineering production issues for equipment.

d. REQUIRED: First-hand experience in designing machines; at minimum, mechanical components. Prefer experience in designing entire systems.

e. REQUIRED: Proven analysis experience solving design issues and/or issues at a customer’s site. Able to be decisive in the moment, as needed to keep the project moving forward.

f. REQUIRED: Proven experience employing advanced problem-solving techniques, (Six Sigma etc.),

g. REQUIRED: Experience in design improvements to reduce cost of existing product lines.

h. STRONGLY PREFERRED: Designing machines that meet estimated flows, load and structural requirements; computing size, shape, strength, and type of mechanical components, or performing in depth analysis of plans prepared by other engineers.

i. STRONGLY PREFERRED: experience in working with fluid dynamics.

j. PREFERRED: Experience with FEA Analysis.

k. PREFERRED: Experience designing and manufacturing with Stainless steel, duplex steels, UHMW, etc.

l. PREFERRED: Experience in generating the required product and process documentation.

m. PREFERRED: Selection of motors and gearboxes, with some knowledge of controls and electrical components.

n. PREFERRED: Welding and fabricating experience.

o. PREFERRED: Small business experience.

**Skills:**

a. Able to generate mechanical drawings to industry standards.

b. Meticulous attention to detail, as well as the ability to multi-task well and complete projects on time, within budget, to the customer’s satisfaction.

c. Must have excellent customer service and people skills; should be able to represent the company’s image (consistent with the business motto of “you’ll like working with us”).

d. Must be self-initiating, independent, and able to organize time and diverse responsibilities, while being able to take ownership of the project to keep it on track.

e. Must have good problem-solving skills, assuring root cause analysis is completed.

f. Must be able to work as part of a team.

**Working Conditions:**

1. Our company is located in Saginaw, Michigan.
2. Drug-free, non-smoking environment.
3. Must have a high level of personal integrity, ownership, and pride; must see something possible for oneself as an individual within the company vision.
4. This position is required to perform the majority of their work in the office, unless working at a customer site. After training is complete, we do provide a hybrid schedule option.
5. Duperon Corporation is an excellent business opportunity for an individual who is dedicated and looking to establish a career. There is potential for a person who wishes to grow with the business. These opportunities can be realized if the ability and desire to drive one’s personal development is present to meet the corporate strategic objectives.
6. Duperon Corporation is a dynamically-paced company with a fast-growth strategy – which often means that protocols and processes that were appropriate a year ago are no longer valid. Applicants should examine their personal style and preferences to determine if this would be a suitable environment.
7. Office environment requires the ability to sit and work on a computer for long periods of time, talk on the phone, video conference calls etc.
8. This position requires on-site work as well as the ability to work in our assembly facility. Physical requirements to work on machines may include lifting of 50 lbs. or more, as well as stooping, kneeling, or bending for extended periods of time. Climbing on the machine is required at times.
9. Travel and working in the conditions of a wastewater treatment plant will be part of this role as issues arise. Travel may be required up to 50%, (Typical travel under 25%)
10. Site visits may require the ability to climb stairs and walking long distances (more than 100 yards) over steep or uneven terrain, and in varying weather conditions. Sites vary in conditions; any obstacles presented by the site must be overcome as we do not manage site conditions.
11. At this time, Duperon does not require Covid vaccinations. If, however our customers require it, we reserve the right to require it to meet the requirements of our customers.
12. Must be appropriately and professionally attired to business standards and practice good hygiene.