Position Purpose

- The Product Engineer performs a variety of engineering duties including (but not limited to): The redesign of existing products for special conditions and applications as requested by customer. The review of drawings and support of product manufacturing and installation. To assist in product development and product modifications.

Essential Duties & Responsibilities

- Review customer specifications, correspondence, drawings, sketches, other documents and communications to identify applicable product designs.
- Verify that the sales and customer service department's identification of a customer's requirements regarding size, loading, lifting, locking, and other product requirements are correct.
- Determine feasibility of manufacture and modifications necessary of an existing product to accommodate customer's requirements.
- Perform engineering calculations necessary to ensure proper structural and operational design of the product.
- Identify the components required to construct the unit to meet customer's specifications.
- Provide verbal or written instructions with drawings if necessary, to properly quote the product.
- Assist the customer or BILCO sales/customer service staff with questions related to installation and/or problem solving.
- Collect information pertaining to customer questions, analyze situation and provide a practical, cost effective solution to properly resolve the situation.
- Participate as a team member on product development and modification projects.
- Assist engineering staff in conducting testing of prototypes or new product designs to meet customer specifications.
- Perform other related duties as assigned or warranted by circumstances.

Knowledge / Skills / Abilities

- Highly driven, self-motivated, and able to work under pressure with minimal supervision.
- Energetic and friendly with excellent verbal and written communication skills.
- Strong computer aided design knowledge: SolidWorks and AutoCAD
- Computer skills: Microsoft Excel, Microsoft Word, Microsoft Outlook
- Sound problem solving ability and engineering fundamentals.
- Knowledge of manufacturing processes: structural fabrication (welding, forming, machining etc.)
- Ability to interact effectively with others, both within & outside the department and particularly within a team setting.
- Ability to provide technical information requested by reps or sales department personnel accurately and in a timely manner, either verbally or in writing.
- Ability to effectively resolve shop construction questions providing guidance to resolve the problem in such a manner to prevent similar future questions.

Qualifications / Prior Experience

- Degree of BSME or BSCE
Two to four years of experience in the design of structural components and basic mechanical assemblies.

Two to four years experience in producing structural calculations and stress analysis.

Work Environment / Other Requirements

- Ability to sit at a desk with a computer for eight hours at a time, with appropriate breaks at approximately two-hour intervals.
- Ability to bend to floor level and reach 4 feet high, to retrieve and file various materials.
- Ability to move around office level to access files and obtain information from other departments.