



Job Description

Title:	Design Engineer 1
Department:	Corporate Engineering – OEM Product Development Group
Reports to:	Global Engineering Manager
Date:	January 2022
Location:	Portland, Oregon, USA
Created by:	Global Engineering Manager
Approved by:	Vice President - Engineering

Summary:

The Design Engineer 1 is responsible for developing solutions which provide superior value to Cascade's global customers. The Design Engineer 1 position is the entry level design role capable of learning Cascade's systems, applying design skills to adapt product to customer's needs, and creating engineering documents to support production. This position is responsible for global design support of sideshifter and fork positioner products.

Job Responsibilities:

- Perform engineering design and calculations for Cascade products.
- Update and manage design tools, design data, CAD Models, and Drawings.
- Provide engineering support worldwide for global and regional custom products.
- Work on major global design changes with product management.
- Continually improve design tools and methods to increase design accuracy.
- Work independently to develop product solutions from defined parameters and scope.
- Work with various departmental teams to ensure product design meets requirements relative to manufacturability, serviceability, and customer needs.
- Develop design tools which improve efficiencies and quality of product designs.
- Other related duties may be assigned.

Qualifications:

- Bachelor's Degree in Mechanical Engineering.
- 0-3 years Mechanical Design Experience.
- Demonstrated experience using 3D Solid Modeling
- Familiarity or training in Finite Element Analysis
- Knowledge and experience with hydraulic circuit design and troubleshooting a plus.
- Knowledge or familiarity of forklift trucks, mobile hydraulics, or lift truck systems.
- Demonstrated understanding of customer and market requirements, and a passion for customer satisfaction.
- Demonstrated ability to transfer requirements to design solutions which meet customer requirements.
- Able to work effectively in a team environment, independently, and remotely.
- Excellent interpersonal, written, and oral communication skills.
- Outstanding organizational and analytical skills.
- Strong problem solving skills required.
- Knowledge of manufacturing processes including welding, machining, and assembly.
- Ability to travel on occasion to customer job sites and Cascade locations.

JOB SCOPE

This is a professional engineering position requiring a formal degree. The role has no direct reports but interfaces with Cascade employees and customers to understand customer needs, anticipate design possibilities, and understand constraints. The engineer uses experience and knowledge to work with others to create and/or modify designs to meet customer needs.

INTERPERSONAL CONTACTS

The position interacts daily with Cascade employees located in Cascade’s global operations. Primary contacts are within engineering, product management, marketing, service, sales and manufacturing. The engineer may work before or after regularly scheduled hours in order to meet/communicate with global peers.

WORKING CONDITIONS

The working conditions, physical demands, and environmental characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Work is performed primarily in an office environment that is climate controlled. This position may be eligible for a hybrid work arrangement where the job functions may be performed remotely for some percentage of time; the ability to be on-site is a requirement. The hybrid work environment will be available after the employee demonstrates the capability to manage tasks and time commitments. Periodic work outside the office and shop areas that may or may not have climate controls will be required. This is a full-time position. Days and hours worked will mirror the business operations which typically runs Monday -Friday. May work more than eight consecutive hours at a time or more than 40 hours in a seven-day work period depending on work demands. Occasional evening and weekend work will be necessary. Travel may be required to other global locations, company events, professional development courses, and industry conferences. Must possess a valid motor vehicle operator’s license, have access to reliable transportation and must be able to travel via most efficient mode for work related travel i.e., airplane. Work may require international travel which requires the ability to attain necessary travel documents (i.e., passport).

The individual may encounter pressure in meeting customer needs, balancing competing deadlines and resource constraints. Situations must be handled in a manner that meets customer needs and does not negatively impact customer satisfaction. Customers are both internal and external.

PHYSICAL DEMANDS

While performing the duties of this job, the employee is frequently required to sit and is occasionally required to stand; walk. Must be able to use hands to manipulate keyboards and reach with hands and arms in the course of picking up and moving materials. The employee must frequently lift and/or move up to 10 pounds and occasionally lift and/or move up to 25 pounds. Specific vision abilities required by this job include close vision, distance vision, and color vision.

Physical Demands	Amount of Time			
Activity	None	Under 1/3	1/3 to 2/3	Over 2/3
Standing			X	

Walking			X	
Sitting				X
Using hands or fingers to handle/feel objects			X	
Reaching with hands / arms			X	
Climbing or balancing		X		
Stoop, kneel, crouch, or crawl		X		
Talking or hearing				X
Lifting Requirements	Amount of Time			
Physical Demand	None	Under 1/3	1/3 to 2/3	Over 2/3
Up to ten pounds				X
Up to 25 pounds		X		
Up to 50 pounds	X			
Up to 100 pounds	X			
More than 100 pounds	X			

Vision Requirements		
	Yes	No
Close	X	
Distance	X	
Color Vision		X
Peripheral		X
Depth & Perception		X
Ability to Adjust Focus	X	

WORK ENVIRONMENT

Most work performed is in an office environment with climate and noise controls. Some exposure to heat, noise, dust, fumes when working in field or shop environments may occur.

Work Environment	Amount of Time			
	None	Under 1/3	1/3 to 2/3	Over 2/3
Environmental Condition				
Wet or humid conditions (non-weather)	X			
Work near moving mechanical parts	X			
Work in high, precarious places	X			
Fumes or airborne particles	X			
Toxic or caustic chemicals	X			
Outdoor weather conditions		X		
Extreme cold (non-weather)	X			
Extreme heat (non-weather)	X			
Risk of electrical shock	X			
Work with explosives	X			
Risk of radiation	X			
Vibration	X			

This description describes only the general nature and level of work encompassed by this job. This description is not a comprehensive listing of all responsibilities, duties, and skills of employees at this level. Cascade is an Equal Opportunity Employer.