

<b>Job Title</b>	Mechanical Engineering Manager	<b>Date</b>	8/9/2024
<b>Department</b>	Engineering	<b>Manages Employees</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Reports To</b>	Director of Engineering	<b>FLSA Status (to be completed by HR)</b>	<input checked="" type="checkbox"/> Exempt <input type="checkbox"/> Non-Exempt
<b>Revision</b>	B		

**Summary (Main Purpose)**

Responsible for department planning, organizing, and developing standard operating procedures and other control documents, supervising and guiding staff methods, approaches, and techniques for conceptual and interpretive drafting of design-build or plan/spec projects, conferring with interdepartmental personnel concerning technical support issues, production scheduling and coordination with external consultants to resolve design issues, researching, developing, and preparing design documents as well as reviewing completed work to determine adequacy and accuracy of drawings and design.

**Job Duties and Responsibilities (Essential Functions)**

- Effectively lead, manage, and mentor the Mechanical Engineering staff with an emphasis on employee growth, project success, and overall performance.
- Set clear goals and objectives, assess progress, and instill a performance-oriented culture with a focus on accountability. Deploy a strategy that builds, retains, and engages all employees through inclusion and teamwork.
- Coordinate with various disciplines within the organization (architectural, mechanical, process, structural, etc.) to collaborate, optimize, and improve work and staff sharing by participating in multi-discipline strategy sessions.
- Assist all levels of Management in articulating discipline capability requirements in support of strategic and business objectives.
- Identify, mentor, and coach the development of inexperienced staff and elevate the overall technical and professional expertise of the team.
- Oversee the design and optimization of mechanical components for low and medium voltage switchgear, ATS's, circuit breakers, protective relays, and control systems.
- Create, manage and improve PDM and SolidWorks tools in compliance with applicable standards.
- Perform system calculations for mechanical elements as they relate to electrical power systems.
- Collaborate with assistant project managers, engineers, and technicians to meet project deliverables, contract requirements, schedule and budget expectations.
- Review technical vendor submittals for installation requirements.
- Ensure compliance with all safety and quality requirements.
- Support compliance of Quality Assurance requirements according to ISO 9001:2015, customer, national, and international standards.
- Support the development and maintenance of project schedules and manpower requirements.
- Review development plans for adherence to engineering standards and best practices.
- Create and maintain department documentation such as work instructions, guides, and new employee onboarding plans.
- Support production work activities such as assembly, QA, test, and troubleshooting.

**Required Skills and Experience** (*Minimum requirements in terms of educational background, work experience, licenses/certifications or other knowledge, skills, and abilities*).

- Design knowledge and experience of switchgear, switchboards, panelboards in accordance with customer's functional requirements.
- Support product assembly, test and QA.
- Provide project coordination and management for customer orders.
- Support sales quoting process.
- Proven history of managing technical staff with evidence of their successful teamwork and professional development progress.
- Establish and maintain internal, customer, and supplier relationships.
- Working knowledge of UL, NEC and other applicable codes and standards related to the industry and products.

**Additional Skills and Experience** (*Preferred or helpful*)

- BS in relevant engineering discipline. Master's degree preferred.
- 5+ years of engineering experience.
- 2+ years of staff management experience.
- Must be well versed in engineering disciplines. Seismic analysis experience is a plus.
- Must be self-motivated, have good interpersonal skills, capable of analyzing and solving complex problems through innovative thought and experience.
- Ability to design and implement in own area of expertise.
- Demonstrated effective supervisory and leadership skills.

*This description covers the primary purpose and principal duties of the job. It is not designed to be a complete list of all the duties and responsibilities required of this position. Duties, responsibilities, and activities may change at any time with or without notice.*

## Demands and Conditions Analysis: Mechanical Engineering Manager

### Working Conditions

The **essential functions** of this job involve the following working conditions.

(Place an "x" in the appropriate box.)

- C = Continuously** 75%-100% of time
- F = Frequently** 50%-74% of time
- O = Occasionally** 10%-49% of time
- R = Rarely** 1%-9% of time
- N = Never** 0% of time

	C	F	O	R	N		C	F	O	R	N
<b>Environmental</b>						<b>Physical Factors</b>					
Works alone			X			Sitting			X		
Works with others			X			Standing	X				
Customer contact					X	Walking		X			
Shift Work	X					Bending/stooping		X			
Extended Day			X			Squatting/Kneeling		X			
Keeping work pace/deadlines	X					Crouching/Crawling			X		
Performing repetitive tasks	X					Twisting at waist		X			
Noise (decibels) 91					X	Reaching above shoulders			X		
Vibration			X			Reaching below knees				X	
Abrupt temperature changes					X	Lift/carry up to 40 lbs.		X			
Heat (above 85 F)			X			Push/pull to 100 (force)			X		
Cold (below 65 F)					X	Climbing ladders			X		
Wetness					X	Climbing stairs					X
Dampness					X	Sweeping/mopping				X	
Dryness					X	Operating foot controls					X
Odors & dusts				X		<b>Manual Tasks</b>					
Work with solvents					X	Grasping with one hand	X				
Work acids, bases					X	Grasping with both hands	X				
Work with oils					X	Manipulating with one hand	X				
Work with toxins					X	Manipulating with two hands		X			
Poor ventilation					X	Handwritten communication				X	
Fumes					X	Using keyboard				X	
Mechanical hazards			X			Using hand tools	X				
Electrical hazards					X	Twisting/wringing			X		
<b>Sensory Tasks</b>						Scrubbing/washing/polishing				X	
Seeing close (reading)	X					Scraping				X	
Seeing far (observation)			X			<b>Equipment Operation</b>					
Peripheral vision			X			Driving car / light truck					X
Seeing colors			X			Driving heavy truck / van					X
Verbal communication	X					Operating forklifts, stackers					X
Hearing speech		X				Operating hoist equipment			X		
Hearing mechanical sounds			X			Operating shop machinery			X		
Sensing odors					X	Operating power tools	X				

Sensing by touch				X	Operating torch					X
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