

Job Title	Application Engineer Entry-Mid Level	Date	8/15/2024
Department	Engineering	Manages Employees	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Reports To	Senior Application Engineer	FLSA Status (to be completed by HR)	<input checked="" type="checkbox"/> Exempt <input type="checkbox"/> Non-Exempt
Revision	A		

Summary (Main Purpose)

Under the direction of the Senior Application Engineers, this role is a product technical leadership role which supports sales, engineering, manufacturing and field services by providing commercial and technical product expertise related to low and medium voltage power distribution equipment, E-houses and control systems. This role will support the sales product applications, new product development and design standards of electrical control systems for safe, effective, and efficient operation of States Mfg. products and processes while meeting and exceeding company quality and production standards and customer documentation and delivery requirements.

Job Duties and Responsibilities (Essential Functions)

- Ideal candidate will have 2+ years designing electrical and mechanical product control systems for LV and MV switchgear assemblies, developing and implementing engineering standards, complying with applicable codes and customer specifications within a project management structure to ensure workflow remains within schedule and budget requirements.
- Review and interpret customer specifications and sales agreements and provide direction to sales, managers, engineers, designers manufacturing, test and field service teams.
- Provide suggestions for improving the design process using standardized practices, tools and systems, improving the quality and productivity of the design and support process while improving safety, improving delivery schedules and reducing costs.
- Evaluate and select electrical/electronic components for control systems, switchgear, panelboards, control panels.
- Provide technical advice to Field Service and Test so they can support customers and manufacturing.
- Participate in cross-functional teams, project kickoffs, design reviews and readiness reviews to address and resolve manufacturing, design and quality problems, and pursue continuous improvement of design and manufacturing and installation processes and methods.
- Work with engineering management to provide training, author documentation, procedures and work instructions to mentor and grow the technical competencies of engineering teams.
- Support new product development initiatives by remaining up to date with new industry products, technologies and trends.
- Preserve and grow strong relationships with States Mfg suppliers, manufacturers and vendors.
- Provide onsite presale and aftermarket commercial and technical support with up to 10% local regional daytrips to customers and suppliers, including a small number of occasional domestic trips.
- Follow all housekeeping procedures and rules, comply with all quality and safety regulations.
- Mentor and train sales team by participating in the quoting process, creating compliance matrices, reviewing quotes, providing advisory technical leadership.

- Collaborate with equipment suppliers and manufacturers to assist with our product development goals.
- Review mechanical and electrical elements of quotes to ensure compliance to customer specifications and industry practices and standards such as UL.
- Advise mechanical, electrical, controls engineers and designers during kickoff meetings on reference projects and templates.
- Perform project design reviews and peer checking of the mechanical and electrical elements of a product or design, and review sequences of operation for control systems.
- Support the organization and implementation of manufacturing and field service feedback ideas for product improvements, lessons learned and opportunities for design standardization.
- Assist with new product development by providing ideas, evaluating new markets and new technologies for implementation and integration in our products
- Participate in, and advise on, post project reviews.
- Provide product development support for low voltage, medium voltage, standard and custom products.

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

- Lead and enforce design compliance to customer orders, company standards and product development initiatives for multi-phase and DC switchgear, switchboards, panelboards, LV and MV equipment.
- Support product assembly, manufacturing and testing related to the fulfillment and execution of customer applications.
- Develop product/project quotes.
- Establish and maintain internal, customer, and supplier relationships.
- Proficient with Microsoft Office products, including Outlook, Excel, Word, PowerPoint.
- Design knowledge and experience of switchgear, switchboards, panelboards in accordance with customer's functional requirements.
- Support sales quoting process, bid decisions and scoping.
- 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, or equivalent experience.
- 2+ years of engineering and technical leadership experience.
- Proven ability in engineering disciplines related to the electrical power and controls industry.
- Demonstrated ability to understand and have competencies across electrical, mechanical and software design and commissioning functions.
- Must be self-motivated, have good interpersonal skills, be very detail-oriented, and capable of analyzing and solving complex problems through collaboration, innovative thought and experience.
- Understands, or experience with SolidWorks PDM design tools, or equivalent, mechanical design environment.
- Understands, or experience with AutoCAD Electrical design tools, or equivalent, electrical design environment.

- Commercial and design experience related to renewables, emerging energy markets, data centers battery systems, stored energy and charging stations a plus.
- 2+ years of engineering experience.
- Ability to design and implement in own area of expertise.

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: Application Engineer

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
Environmental						Physical Factors					
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		Manual Tasks					
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		
Sensory Tasks						Scrubbing/washing/polishing				X	
Seeing close (reading)	X					Scraping				X	
Seeing far (observation)			X			Equipment Operation					
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