Job Title: Robotic Systems Controls Engineer

Location: Minneapolis, MN

Company Overview: Mereen-Johnson is a vibrant, forward-looking, and growing company. Founded in 1905, Mereen-Johnson is an industry leading manufacturer of high production machinery used primarily (but not exclusively) in the woodworking industry. Our world-class machines are in over 40 countries around the world. Our Automation and Robotics Division is dedicated to providing solutions for our wood industry customers and beyond.

Position Overview: We are seeking a highly skilled and motivated Robotic Systems Controls Engineer to join our dynamic team. The position will play a crucial role in designing, implementing, and maintaining robotic systems to meet the specific needs of our customers. The successful candidate will collaborate with cross-functional teams to integrate robotics solutions that enhance operational efficiency, improve quality, and reduce costs.

Key Responsibilities:

- 1. **Robotic System Design:** Design and develop robotic systems tailored to meet the unique requirements of clients, considering factors such as production goals, space constraints, safety regulations, and budgetary considerations.
- 2. **Integration Planning:** Collaborate with project stakeholders to identify integration requirements, define project scope, develop timelines, and allocate resources effectively.
- 3. **Hardware and Software Integration:** Integrate robotic hardware and software components, including robotic arms, sensors, actuators, vision systems, and control systems, ensuring seamless interoperability and optimal performance.
- 4. **Programming and Configuration:** Develop, test, integrate and debug PLC's, Robot specific programs, visions systems, and HMI's into Robotic and Automation Systems ensuring accuracy, reliability, and efficiency in automated operations.
- 5. **Testing and Validation:** Conduct rigorous testing and validation of robotic systems to verify functionality, performance, and safety standards, troubleshooting any issues and fine-tuning parameters as necessary.
- 6. **Documentation and Reporting:** Prepare comprehensive documentation, including technical specifications, operation manuals, and project reports, to facilitate knowledge transfer and support ongoing maintenance and troubleshooting activities.

- 7. **Training and Support:** Provide training and technical support to end-users, maintenance personnel, and other stakeholders, ensuring smooth adoption and operation of robotic systems throughout their lifecycle.
- 8. **Continuous Improvement:** Stay abreast of emerging trends, technologies, and best practices in robotics and automation, actively seeking opportunities to enhance system capabilities, optimize processes, and drive innovation.

Qualifications:

- Bachelor's degree in Engineering, Computer Science, Robotics, or a related field;
 Master's degree preferred. Associate degree in a technical field with strong industry experience will be considered.
- Proven experience with at least 5 years in robotic system integration, including design, programming, and deployment.
- Proficiency in programming Programmable Logic Controllers (PLC's), Vision Systems, HMI's and experience with at least one Robot Specific programming language (i.e. FANUC, Kawasaki, Staubli, Kuka, ABB). Proficiency in other languages such as C++, Python, or ROS is a plus.
- Strong understanding of robotics principles, kinematics, dynamics, and control systems.
- Experience and understanding of Safety Requirements for implementation of Robotic Systems.
- Familiarity with robotic hardware and software components, including sensors, actuators, vision systems, and PLCs (Programmable Logic Controllers).
- Excellent problem-solving skills, with the ability to troubleshoot complex technical issues and implement effective solutions.
- Strong communication and interpersonal skills, with the ability to collaborate effectively with cross-functional teams and communicate technical concepts to non-technical stakeholders.
- Ability to manage multiple projects simultaneously, prioritize tasks, and meet deadlines in a fast-paced environment.
- Commitment to quality, safety, and continuous improvement.

Why Join Us: As a Robotic Systems Controls at Mereen-Johnson you will have the opportunity to work on cutting-edge projects, collaborate with industry experts, and make a meaningful impact on the future of automation. We offer a competitive salary, comprehensive benefits package, and a collaborative work environment that fosters creativity, innovation, and professional growth.

If you are passionate about robotics and automation and thrive in a dynamic, challenging environment, we want to hear from you. Join us in shaping the future of robotics and revolutionizing industries worldwide.