

Title: Lead Specialist, Instrument

Job Overview:

As an Engineer, Instrument, your primary responsibility is to design, develop, and maintain instrumentation systems and equipment for an organization. You will utilize your technical expertise in instrumentation to support projects, troubleshoot issues, and ensure the efficient and reliable operation of instruments and control systems. This role requires strong knowledge of instrumentation principles, experience in design and maintenance, and the ability to collaborate effectively with cross-functional teams.

Key Responsibilities:

Instrumentation System Design: Design and develop instrumentation systems, including selection of appropriate instruments, sensors, control valves, and other components based on project requirements and industry standards.

Instrumentation Installation and Commissioning: Oversee the installation and commissioning of instrumentation systems, ensuring compliance with specifications, codes, and safety regulations.

Instrument Calibration and Maintenance: Develop and implement calibration and maintenance programs for instrumentation systems to ensure accurate and reliable operation. Perform routine calibration and maintenance activities as needed.

Troubleshooting and Issue Resolution: Identify and resolve technical issues related to instrumentation systems, troubleshooting problems, and implementing corrective actions to minimize downtime and optimize performance.

Instrumentation Documentation: Prepare and maintain documentation, including instrument datasheets, wiring diagrams, loop diagrams, and operating manuals. Ensure accurate and up-to-date documentation for instrumentation systems.

Control System Integration: Collaborate with control system engineers to integrate instrumentation systems with control systems, ensuring seamless communication and functionality.

Safety and Compliance: Ensure compliance with relevant safety regulations, industry standards, and company policies for instrumentation design, installation, and maintenance activities.

Project Support: Provide technical support to project teams, including participating in design reviews, preparing technical specifications, and assisting with procurement activities related to instrumentation.

Continuous Improvement: Identify opportunities to improve instrumentation systems' reliability, efficiency, and performance. Implement best practices and contribute to continuous improvement initiatives.

Training and Knowledge Sharing: Stay updated with the latest trends and advancements in instrumentation technology. Provide training and knowledge sharing to team members and other stakeholders as needed.

Qualifications:

Bachelor's degree in Instrumentation Engineering, Electrical Engineering, or a related field.

Minimum of 8 years of experience in the design, maintenance, and troubleshooting of instrumentation systems.

Strong knowledge of instrumentation principles, including sensors, transmitters, control valves, and other instruments used in industrial processes.

Experience in designing and implementing instrumentation systems, including instrument selection, sizing, and specification.

Proficiency in using engineering software and tools for instrumentation design, such as AutoCAD, DCS/PLC programming software, and simulation tools.

Familiarity with relevant industry standards and codes, such as ISA, IEC, and API, for instrumentation design and installation.

Hands-on experience in instrument calibration, maintenance, and troubleshooting.

Knowledge of control systems and their integration with instrumentation systems.

Strong analytical and problem-solving skills, with the ability to diagnose and resolve complex technical issues.

Excellent communication and interpersonal skills, with the ability to collaborate effectively with cross-functional teams and stakeholders.

Proficiency in using computerized maintenance management systems (CMMS) and other relevant software applications.

Strong attention to detail and organizational skills, with the ability to manage multiple tasks and projects simultaneously.

Knowledge of safety practices and regulations related to instrumentation design, installation, and maintenance.

Ability to work independently and as part of a team, with a proactive and self-motivated mindset.