



PR/160846 | Senior Mechanical Engineer – Laboratory Automation & Robotics

Job Information

Recruiter

JAC Recruitment Malaysia

Job ID

1604919

Industry

Medical Device

Job Type

Permanent Full-time

Location

Malaysia

Salary

Negotiable, based on experience

Refreshed

August 11th, 2026 03:00

General Requirements

Minimum Experience Level

Over 3 years

Career Level

Mid Career

Minimum English Level

Fluent

Minimum Japanese Level

None

Minimum Education Level

Associate Degree/Diploma

Visa Status

No permission to work in Japan required

Job Description

A global leader in laboratory automation, life sciences, and diagnostic solutions is expanding its engineering footprint through a newly established R&D innovation center. Dedicated to advancing healthcare and scientific discovery, the organization develops cutting-edge automation, robotics, and precision instrumentation technologies used by laboratories, pharmaceutical companies, and healthcare providers worldwide.

As part of its growth journey, the company is seeking an experienced Senior Mechanical Engineer to play a key role in the development of next-generation laboratory instruments and automation platforms. This is an exciting opportunity to contribute to innovative products while helping build a world-class engineering organization from the ground up.

Job Responsibilities

- Lead the complete mechanical development lifecycle of laboratory instruments and robotic systems, from requirements analysis and concept generation through design, verification, and product release.
- Serve as the technical lead for complex product development and modification projects, ensuring delivery of high-quality, manufacturable solutions.

- Develop innovative mechanical concepts and designs, focusing on usability, reliability, performance, and cost optimization.
- Collaborate with cross-functional teams including software, electronics, systems, quality, and manufacturing engineering to ensure successful product integration.
- Conduct engineering analyses such as tolerance stack-up, worst-case calculations, statistical tolerance analysis, and FEM simulations to validate designs.
- Drive Design-to-Cost and Design-for-Manufacturing initiatives to optimize product performance and production efficiency.
- Evaluate manufacturing processes, including additive manufacturing technologies, and recommend suitable solutions for product development and production.
- Prepare and maintain technical documentation, engineering reports, risk assessments, and design reviews.
- Identify technical risks, design weaknesses, and improvement opportunities throughout the development process.
- Ensure compliance with applicable development processes, SOPs, quality standards, and regulatory requirements.
- Contribute to continuous improvement of mechanical engineering practices, methodologies, and design standards.
- Mentor and coach junior engineers, providing technical guidance and supporting professional development.
- Support project planning activities to achieve project objectives, timelines, quality targets, and budgets.

Job Requirements

- Bachelor's or Master's Degree in Mechanical Engineering or a related engineering discipline.
- Minimum 6 years of experience in mechanical design and product development, preferably within the medical device, life sciences, laboratory automation, robotics, or precision instrumentation industries.
- Proven experience leading complex product or module development projects throughout the full development lifecycle.
- Strong expertise in mechanical design engineering for precision instruments, automation systems, or medical devices.
- Solid understanding of system architecture, product integration, usability engineering, and value engineering principles.
- Experience designing products for volume manufacturing, including Design-to-Cost and Design-for-Manufacturing methodologies.
- Proficiency in 3D CAD software, preferably PTC Creo.
- Proficiency in tolerance analysis, worst-case calculations, statistical analysis, and engineering validation techniques.
- Experience performing FEM simulations and interpreting results to improve product performance and reliability.
- Strong knowledge of manufacturing processes, materials, machining, injection molding, sheet metal, and additive manufacturing technologies.
- Ability to analyze complex technical problems and develop practical, innovative solutions.
- Experience serving as a technical lead within multidisciplinary product development teams.
- Strong technical documentation, communication, presentation, and stakeholder management skills.
- Demonstrated ability to mentor engineers and contribute to a collaborative engineering culture.
- Excellent problem-solving skills, attention to detail, and ability to work independently in a fast-paced R&D environment.

Preferred Qualifications

- Experience in laboratory automation, robotics, life sciences, diagnostics, or medical device industries.
- Knowledge of ISO-GPS dimensioning, requirement engineering, and regulated product development environments.
- Experience working within international and cross-functional engineering teams.

- Familiarity with risk management and product compliance requirements for regulated industries.

Notice: By submitting an application for this position, you acknowledge and consent to the disclosure of your personal information to the Privacy Policy and Terms and Conditions, for the purpose of recruitment and candidate evaluation.

Privacy Policy Link: <https://www.jac-recruitment.my/privacy-policy>

Terms and Conditions Link: <https://www.jac-recruitment.my/terms-of-use>

Company Description