**Job Title:** Mechanical Project Engineer

**Department:** Engineering

**Reports To:** Engineering Manager

**FLSA Status:** Exempt

**Prepared By:** Steve Halfaker

**Date:** March 16, 2020

The Mechanical Project Engineer utilizes knowledge and experience to support the design and implementation of our industry leading die cast lubrication spray systems along with developing custom automated solutions in material handling and product inspection. Leveraging strong engineering and creative skills along with mechanical component familiarity, this position works to design mechanical and robotic systems in collaboration with sales, purchasing, and management, to serve customers in the die casting and industrial manufacturing industries.

**Responsibilities:**

* Use creativity and innovation to develop custom automated material handling and test/inspection equipment consisting of electro/mechanical solutions that will incorporate robotics, rotary actuators, conveyors, servos, power transmission, pneumatics, hydraulics, and custom manufactured components to satisfy customer design requirements.
* Design die cast lubrication robotic tooling that incorporates proprietary pulse spray system nozzles in a configuration to produce maximum effectiveness based upon simulated performance data.
* Operate in a SolidWorks CAD environment to develop and evolve designs to meet project requirements.
* Develop overall equipment layouts for customer presentation and design review support.
* Troubleshoot designs and manufacturing issues by interfacing with other engineers and manufacturing staff to find solutions.
* When required, travel to customer locations to verify design requirements, direct mechanical install, start-up, and operator training.
* Embrace the challenge of taking design projects from concept through customer design approval and actual machine run-off at a customer site.
* Create project BOMs, listing all designed-in components, and sequence of operation documents stating how mechanical systems will function to accomplish all required processes.
* Specify testing and QC requirements in conjunction with input from electrical and robotic engineering to ensure system validation prior to shipment or start-up at customer site.
* Travel to customer locations to obtain design criteria, commissioning, operating, and troubleshooting of fully integrated system.
* Maintain and improve professional and technical knowledge by attending or participating in direct training, educational worships, and professional publications and societies.

**Requirements:**

* BS or AAS degree in ME or MET or equivalent experience.
* Minimum 7 years of machine design and automation experience in the automotive or industrial manufacturing industry.
* Experience in using various types of power transmission devices such as motors, servos, pneumatics, and hydraulics, along with material handling systems such as roller, belt, gravity, and magnetic conveyors, and feeding systems.
* Previous experience with aluminum die casting a plus.
* Excellent problem solving and communication skills.
* Proficient in computer skills such as SolidWorks CAD and Microsoft Windows and Office Suite.
* Travel up to 20% of the work week, including some overnight when assisting with equipment installation and commissioning.
* Bilingual – English and Japanese a plus.

**Physical Demands:**

The physical demands described here are representative of those that must be met by an employee to successfully perform the general duties of this job. While performing the duties of this job the employee is regularly required to stand, walk, sit, and to use enough hand, arm, and finger dexterity to operate computer equipment. Requires physical work associated with some travel including driving, flying, and lifting suitcases and portable computer equipment. Requires visual acuity to read words and numbers. Requires speaking and hearing ability to communicate in person and over the phone.

**Work environment**

The work environment characteristics are those generally associated with an office, conference room, and manufacturing settings.

**Employment Statement**

Nothing in this job description restricts Ryoei USA’s right to assign or reassign duties and responsibilities to this job at any time. All terms and conditions of Ryoei USA’s at-will employment, duties, and responsibilities are subject to the Ryoei USA’s Employee Handbook.

**Work Hours**

This is a full-time position. Hours will vary based upon needs and will include evening and weekend hours as required.

**Salary and Compensation**

* This is a salaried based position. The starting pay will be commensurate with the qualifications and experience of the candidate.
* Benefits include paid vacation and recognized holidays, health care benefits, and travel reimbursement.

Ryoei USA, Inc. is an Equal Opportunity Employer.