

Integra-Cast, Inc

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Job Description

Job Title: Foundry Process Improvement Manager	Work Location: New Britain, CT	Department: Operations
Job Number:	Supervisor (Reports to): Operations Manager	Supervises (Directly Oversees): 0
Status: Full-Time / Exempt	Classification: Operations	Revision Date: 8/2024

PURPOSE

The Foundry Process Improvement Manager is responsible for enhancing wax casting operations by analyzing and optimizing manufacturing processes. This role involves implementing Lean Manufacturing and Six Sigma methodologies, designing efficient production systems, and managing projects for process upgrades and new technology. The engineer ensures compliance with quality, safety, and environmental standards, while also providing training to staff. Additionally, they will lead data-driven improvements, collaborate with cross-functional teams, and stay updated on advancements in casting technologies.

ESSENTIAL DUTIES AND IMPORTANCE OF JOB RESPONSIBILITIES:

Most critical part of the job responsibilities; requires most of the employee's time and effort.

1. Process Optimization and Improvement:

- Analyze current business and manufacturing processes to identify inefficiencies, bottlenecks, and general opportunities for improvement.
- Develop and implement process improvements to enhance production and product quality, reduce cycle times, and minimize waste.
- Utilize Lean Manufacturing, Six Sigma, and other continuous improvement methodologies to drive process enhancements.
- Document existing and updated processes for inclusion in the ISO/QMS systems.

2. Systems Engineering:

- Design, implement, and optimize production systems that integrate personnel, equipment, and materials to produce castings efficiently.
- Develop and maintain process flow diagrams, work instructions, and standard operating procedures (SOPs) for casting operations.
- Collaborate with cross-functional teams, including design, manufacturing, and quality assurance, to ensure seamless integration of new systems and processes.

3. Project Management:

- Lead and manage projects aimed at improving wax casting operations, including the introduction of new technologies, process upgrades, and system implementations.
- Coordinate with suppliers and vendors for the procurement, installation, and maintenance of new equipment or systems.

- Develop project timelines, budgets, and resource plans, ensuring projects are completed on time and within budget.

4. **Quality Assurance:**

- Work closely with the Quality Assurance team to ensure that wax casting processes meet or exceed industry standards and customer specifications.
- Conduct root cause analysis for defects and non-conformances, implementing corrective actions to prevent recurrence.
- Participate in audits and inspections to ensure compliance with internal and external quality standards.

5. **Data Analysis and Reporting:**

- Establish Key Performance Indicators (KPI's) such as yield rates, cycle times, and defect rates.
- Collect, analyze, and interpret production data to monitor process performance and identify trends and generate regular reports on KPI's,
- Use statistical tools to predict and improve process outcomes.

6. **Training and Development:**

- Provide training and guidance to production staff on new processes, systems, and equipment.
- Develop training materials and conduct workshops to enhance the skills of the workforce.
- Mentor junior engineers and technicians, fostering a culture of continuous improvement.

7. **Health, Safety, and Environmental Compliance:**

- Ensure that all manufacturing operations and processes comply with health, safety, and environmental regulations.
- Implement best practices for safe handling and disposal of materials.
- Participate in safety audits and contribute to the development of safety protocols.

8. **Research and Development:**

- Stay updated on the latest advancements in casting and foundry technologies.
- Conduct research on new materials, equipment, and techniques to enhance the casting and general production process.
- Collaborate with R&D teams to develop prototypes and test new products or processes.

WORK EXPERIENCE / EDUCATION REQUIREMENTS:

- **Education:**
 - Bachelor's degree in Industrial Engineering, Mechanical Engineering, Materials Science, or a related field.
- **Experience:**
 - Proven experience in process optimization, systems engineering, or project management in a manufacturing environment.
 - 3-5 years of experience in the foundry industry with preference given to candidates with casting and wax casting processes.
- **Technical Skills:**
 - Extensive experience with Lean Manufacturing, Six Sigma, and other process improvement methodologies.
 - Experience with statistical analysis and data-driven decision-making.

- Knowledge of wax casting techniques, including pattern making, mold design, and investment casting preferred.
- Knowledge of CAD/CAM software and other engineering tools.
- **Soft Skills:**
 - Excellent problem-solving abilities and attention to detail.
 - Strong communication skills, both written and verbal.
 - Ability to work independently and as part of a team.
 - Strong project management skills with the ability to manage multiple projects simultaneously.
- **Certifications:**
 - Lean Six Sigma Green Belt preferred.

COMPETENCIES

- **Process Optimization:** Expertise in analyzing and enhancing manufacturing processes using Lean Manufacturing, Six Sigma, and other improvement methodologies.
- **Systems Engineering:** Skill in designing, implementing, and optimizing production systems with effective integration of personnel, equipment, and materials.
- **Project Management:** Strong capability in leading projects, managing budgets and resources, and coordinating with suppliers and vendors.
- **Quality Assurance:** Proficiency in ensuring process compliance with industry standards, conducting root cause analysis, and implementing corrective actions.
- **Data Analysis:** Ability to establish, monitor, and analyze Key Performance Indicators (KPIs) using statistical tools to improve process outcomes.
- **Training and Development:** Skill in developing and delivering training programs, creating materials, and mentoring team members.
- **Health, Safety, and Environmental Compliance:** Knowledge of regulations and best practices for safe material handling and environmental compliance.
- **Research and Development:** Experience in staying updated on technological advancements, conducting research, and collaborating on new product development.
- **Collaboration and Communication:** Strong interpersonal and communication skills for effective teamwork and stakeholder engagement.
- **Problem-Solving and Innovation:** Ability to identify issues, develop innovative solutions, and drive a culture of continuous improvement.

PHYSICAL REQUIREMENTS:

- This position involves working in both office and foundry environments.
- Regular exposure to a manufacturing environment, including noise, heat, and fumes.
- Must be able to lift up to 50 pounds occasionally and stand for extended periods.

POSITION FUNCTIONAL REQUIREMENTS (ADA)

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| <ol style="list-style-type: none"> 1. Standing 2. Walking 3. Keying 4. Sitting | <ol style="list-style-type: none"> 5. Talking 6. Lifting / Carrying 7. Repetitive motions 8. Hearing |
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Other Duties: Please note this job description is not designed to cover or contain a comprehensive listing of activities, duties or responsibilities that are required of the employee for this job. Duties, responsibilities and activities may change at any time with or without notice.

AAP/EEO: Integra-Cast, Inc, is an Equal Opportunity/ Affirmative Action employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex including sexual orientation and gender identity, national origin, disability, protect veteran status, or any other characteristic protected by applicable Federal, state or local law.

Print Employee Name:

Employee Signature:

Date: