**Process Technician**

**Location**: Brooklyn Park, MN

**Reports To**: Production Supervisor

**Position Type**: Full Time

The Process Technician is a critical hands-on role responsible for ensuring that all plastic injection molding processes operate efficiently, safely, and consistently, according to established standards. This role executes process setups, troubleshoots production issues, and collaborates closely with the Process Engineer to reduce scrap and minimize machine downtime.

**Essential Duties and Responsibilities**

**Process Execution and Monitoring**

* **Execute and Verify Setups:** Perform mold and machine setups, including starting up and shutting down injection molding machines and auxiliary equipment (Thermolators, dryers, conveyors). Enable and verify press alarm limits for key process variables such as mold protect, cushion, injection pressure, charge time, and temperature to ensure early detection of process drift. Verify that processes meet documented production parameters before handing off to production operators.
* **Process Monitoring:** Continuously monitor molding processes using both visual inspection and live machine data (sensor feedback, alarm history, shot-to-shot trends) to ensure stability and adherence to established Scientific Molding principles and process sheets.
* **Troubleshooting:** Respond to and troubleshoot basic to intermediate-level process variations and mechanical faults, including issues with resin delivery, temperature control, and machine cycles. Utilize data from machine monitoring systems and historical IQMS records to diagnose root causes and prevent recurrence. Work closely with the Tool Room and Maintenance team to resolve recurring issues.
* **Validation Support:** Assist the Process Engineer with new mold qualifications and validation runs, gathering data and providing hands-on support.

**Quality and Documentation**

* **Scrap Reduction:** Actively identify root causes of molded part defects and implement immediate, approved corrective actions to minimize scrap and maximize material yield.
* **Record Keeping:** Maintain accurate and complete documentation in IQMS for all setups, alarm settings, process changes, machine adjustments, and troubleshooting activities, ensuring full traceability between parameter changes, shot data, and quality outcomes.
* **Quality Assurance:** Conduct regular checks on molded parts using measuring tools (calipers, micrometers) to ensure components meet dimensional and cosmetic requirements. Record and trend key process outputs (e.g., shot weight, cushion, charge time) and report anomalies or trends suggesting drift. Ensure all process documentation meets ISO 13485 and internal quality system requirements.

**Safety and Communication**

* **Safety Compliance:** Adhere to all plant safety rules, policies, and housekeeping standards, including lock-out/tag-out procedures for mold and machine maintenance.
* **Communication:** Communicate effectively with the Process Engineer, Production Manager, and Machine Operators regarding machine status, process adjustments, and part quality issues. Participate in daily Tier or shift hand-off meetings to provide feedback on press performance, alarm activity, and scrap trends.
* **Training Support:** Update procedures, provide training and guidance to operators on proper start-up, shut-down, and routine machine monitoring procedures.

**Qualifications and Skills**

* **Experience:** Minimum of 2 years of hands-on experience as a Process Technician, Mold Setter, or similar role in a plastic injection molding environment.
* **Technical Knowledge:** Strong working knowledge of various thermoplastic resins and their processing characteristics. Experience with machine monitoring systems and interpretation of real-time process data, alarms, or trend charts preferred.
* **Scientific Molding:** Demonstrated understanding of key molding parameters and Scientific Molding techniques. Able to correlate molding parameters with part performance and identify control limits that maintain process capability.
* **Mechanical Aptitude:** Proficient in the use of hand tools and precision measuring instruments (calipers, micrometers, height gauges).
* **Communication Skills:** Strong verbal and written communication skills with the ability to clearly convey technical information (e.g., process changes, troubleshooting results) to team members, management, and shop floor personnel. Must be able to deliver and receiveconstructive feedback in a professional manner.
* **Certifications (Preferred):** Completion of a formal training program in plastics technology or injection molding (e.g., RJG, Paulson). Training in process monitoring or Scientific Molding analysis (e.g., RJG eDART, FimmTech, or equivalent) preferred.
* **Soft Skills:** Must be a self-starter, highly organized, and possess excellent problem-solving and teamwork skills. Detail-oriented mindset with strong commitment to data integrity and documentation accuracy.
* **Physical Requirements:** Must be able to stand for extended periods, and lift and move up to 50 lbs.