



Job Description

Silfab Solar Inc. – Mississauga, Ontario

Job Title: *Process Engineer*
Department: *Engineering and Maintenance Department*
Reports to: *Maintenance Supervisor/Manager*

To make a difference in the world by reducing carbon emissions and improving access to clean energy with every module we make.

Silfab Solar is the largest automated Solar manufacturing facility in North America. We are an international leader in the development, manufacturing, distribution and innovation of ultra-high efficiency PV modules, operating with Just-In-Time manufacturing and leveraging over 35 years of Solar experience. Our state of the art facilities located in Toronto, Canada and in Bellingham, Washington have helped pioneer smart module technology and innovative process to produce superior reliability and performance specifically designed for North American market.

At Silfab Solar, our team members have been actively shaping sustainable solutions since its inception and we are looking to grow our team of 200+ experts who are dedicated to our mission and to evolving technology for the next generation of Solar products.

Primary Responsibilities

- ✚ Perform complete troubleshooting and changeover different configurations for stringers (TT1200, TT1600, TT1800 and TT 2100), Laminators, bussing stations, EL, Flashers.
- ✚ Optimize the soldering recipes for materials on the equipment for better productivity and to reduce losses in the process of complete finished product and achieve low breakage yield.
- ✚ Coordinate with research and development department to qualify BOMs and process techniques in order to optimize Cell-to-Module Loss.
- ✚ Programming and optimizing for ATN soldering parameters for cycle time and quality
- ✚ Optimize gel content, Adhesion tests to ensure supplier material meets internal qualification requirements in compliance with ASTM D2765 & ASTM D903
- ✚ Optimize the manufacturing process to ensure product meets highest quality of safety in compliance to UL 1703 standard, in addition to IEC 61215 module performance.
- ✚ Optimize the process in terms to meet mechanical load testing of Solar Modules in compliance with IEC- 61215 standards.
- ✚ Optimize the gel content tests, adhesion tests for Buerkle Laminators (2 Step, 3 Step) for the lamination process with different materials
- ✚ Perform Non Uniformity tests, Calibration and set up new products on QuickSun 820A Module Solar Simulator in compliance with IEC-60904-9
- ✚ Perform Non Uniformity tests, Calibration and set up new products on Pasan, SunSim 3c in compliance with IEC60904 standards.
- ✚ Knowledge on calibrating vision systems [Vitronic Vision system and Omron]



- ✚ Starts-up new products and equipment and supervises installation, troubleshoots initial production, ensures new processes and products meet requirements, documents and transfers to production
- ✚ Participates in multi-functional teams (industrial staff, R&D, Marketing, etc.) to resolve problems and develop new products, Process study and continuous process/quality improvement.
- ✚ Maintains safety, product quality/yield, and manufacturing effectiveness through daily troubleshooting and resolution of process difficulties working in a cross-functional team environment
- ✚ Attend and participate in a variety of meetings and task force groups to integrate activities, communicate issues, obtain approvals, resolve problems and maintain specific level of knowledge pertaining to new developments, requirements and policies.
- ✚ Perform all duties to operate all equipment, all within limitation of the standard methods and procedures and in accordance with strict adherence to safety, environmental quality and productivity requirements.
- ✚ Ensure finished product meets Silfab Ontario quality standard.
- ✚ Understand machine controls, properties of materials, associated quality tests and standards to determine root causes of quality defects and effectively trouble-shoot the process.
- ✚ Perform other tasks management may deem necessary

Education and Experience

- ✚ Graduate in Mechanical/Electrical Technology program at College/university
- ✚ 2-3 years of work experience in Solar Module manufacturing plant

Technical Skills

- ✚ Strong computer skills with demonstrated proficiency in Microsoft Office, 5S, Six sigma AND Lean Manufacturing training courses.
- ✚ Good Knowledge of the application of statistical tools in process control and product monitoring
- ✚ Knowledge of Computerized Maintenance Systems (CMMS) an asset

Core Competencies

- ✚ Demonstrated ability to work effectively with cross-functional team members
- ✚ Mechanical aptitude/ interest
- ✚ Excellent inter-personal and communication skills
- ✚ Team oriented
- ✚ High degree of attention to detail, precision and follow through
- ✚ Willing and able to work rotating shift
- ✚ Be able to conceive and manage small projects

Compensation

Competitive market based salary package with full benefits will be offered to successful candidate based on experience.