Job Description – Product Development engineer

1. **Qualification** 
   1. **Required education/qualification**

Citizen of the United States

Bachelor of Science degree or higher in Mechanical, Product design or Industrial Engineering

Alternatively, min 5 year of work experience in related fields

* 1. **Necessary expertise**

Excellent verbal and written communication skills and reporting/documentation

Self-starter – work with minimum supervision and learns quickly

Experienced in risk assessment and mitigation

Expert analytical skills

Experience in product and process development

Guide and monitor external suppliers and contract manufacturers.

Solid technical understanding and high degree of flexibility

* 1. **Necessary social expertise**

Forward thinking and pro-active

Passionate and good cooperative skills

Good Problem solving skills

Reliable and good Team working skills

Good communication skills

Management skills

Good listing skills

* 1. **Necessary technical expertise**

Expert knowledge in 3 D CAD product Design, ideally in Pro E/Creo

Experience in product definitions and tolerance stack up analysis

Experience in using statistical analysis software.

Experience in process development and validation

Broader knowledge in Joining techniques, like gluing and welding.

Broader knowledge in production technologies and the industrial applications

Broader knowledge of product assessment and assembly (industrialization)

Basic knowledge of materials, standards and testing opportunities

Basic knowledge of Good manufacturing practices (GMP)

Basic knowledge of injection molding

Required:

Experience installing, modifying and qualifying production or QC testing equipment.

Familiarity with and use of statistics

Desired:

Experience with injection molding and extrusion equipment – installation, manufacturing and process engineering

Profound continuous improvement expertise

Designed experiment experience, using software such as Stat-Ease

Experience with Lean and Six-Sigma techniques

Experience operating under ISO 9001:2015 and ISO 13485:2018 Quality Management System

* 1. **Must be able to:**
  + Sit 80% of time and stand/walk 20% of time
  + Tolerate noise levels from office, production, and lab equipment
  + Comfortably communicate by teams, telephone and in person.
  + See details at close range (within a few feet of the observer) as required for business software and operating office and production machines.
  + Lift up to 40 lbs.
  + Sit at computer workstations for long periods of time.
  + Bend, squat or crouch, crawl, kneel, stoop, stretch and stand while performing tasks to meet job requirements.

1. **Core Tasks**
2. Product development
   1. Support product design development, specifications, qualification and integration from conception through to commercialization
   2. Set design schedule, identify critical path, communicate and resolve delays
3. Design of experiments
   1. Design and execute experiments in support of process/product development and continuous improvement projects
4. Process development
   1. Develop and commercialize new process methodology and equipment qualification
5. External vendor management
   1. Liaise with contractors, suppliers, and other outside parties to support process needs
6. Documentation:
   1. Track and document process metrics
   2. Prepare trial reports and statistical analysis
   3. Establish and maintain process work instructions
7. Safety:
   1. Apply a sound basic knowledge of safety, environmental and energy-related issues during the execution of projects, and
   2. As necessary, required to wear designated personal protective equipment
      1. to include, but not limited to, ANSI-approved safety eyewear, respirators, hardhats, gloves, hearing protection, full face shield, aprons, and footwear to prevent exposures to hazardous materials, noise, dust and/or airborne particles