

Shrey P. Solanki

shrey.solanki75@gmail.com • 519-731-8664

- 71 Koch Dr, Guelph, Ontario- N1G 4H5

Leader, Mentor, Problem Solver

Mechanical engineer with hands-on experience in designing plastic and metal components, creating 2D/3D CAD models, and developing functional prototypes for medical, aerospace, and industrial products. Skilled in using SOLIDWORKS, CREO, AutoCAD, and NX to produce accurate models and detailed engineering drawings with GD&T and ASME standards. Strong knowledge of manufacturing processes including CNC machining, injection molding, and fabrication, with a focus on quality, cost, and manufacturability. Experienced in creating BOMs, conducting tolerance analysis, and performing design verification testing to ensure part integrity. Proficient in managing projects, documenting findings, and using ERP tools like Microsoft Dynamics NAV to support smooth production. Familiar with ISO 9001, AS9100, and ISO 13485 standards. Collaborative team player with a background in cross-functional coordination and continuous improvement in design and production environments.

AREAS OF EXPERTISE

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| <ul style="list-style-type: none">• Expertise in designing new products and making plan(process) for manufacturing.• 2D/3D modelling, drawing, BOMs and assembly in CAD software like SOLIDWORKS, AUTOCAD, CREO, NX 10.• Knowledge of aerospace parts, medical components, fabrication, injection molding, custom mechanical equipment's, custom automation.• Knowledge of Geometric Dimensioning and Tolerancing (GD&T) and ASME standard | <ul style="list-style-type: none">• Experience of project and time management.• Knowledge of ISO 9001/AS9100, ISO 13485 and ISO 14001.• Expertise in manufacturing processes including CNC machining, additive manufacturing, welding, fabrication, and die cast, casting, and injection molding.• Experience in using MS OFFICE (EXCEL, POWERPOINT, OUTLOOK, WORD). |
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PROFESSIONAL EXPERIENCE

HPG Inc @PRECINMAC, Milton, Ontario
Supervisor

01/2025

- Overseeing daily operations by effectively assigning tasks to team members, supervising activities on the production floor, and ensuring smooth coordination between departments to maintain an organized and efficient workflow.
- Utilizing ERP software (Microsoft Dynamics NAV) to accurately manage and track the entire production process, from order entry to final delivery. By effectively leveraging the system's features, ensured real-time data entry, inventory control, and scheduling, which helped streamline operations, reduce delays, and maintain consistency in workflow.
- Applied the 5S methodology (Sort, Set in order, Shine, Standardize, Sustain) to organize the production floor, reduce waste, and improve efficiency.
- Interpreting blueprints and CAD drawings to identify design improvements and implementing them into the production process for increased accuracy and efficiency.
- Also involved in building prototypes, conducting research, and documenting results to support product development and validation.

HPG Inc @PRECINMAC, Milton, Ontario
CAD Drafter (CNC Machinist)

01/2024

- Utilizes CAD software (SOLIDWORKS) to produce precise drawings of products, including 2D,3D mechanical parts (such as solid component, aerospace parts) and 3D assembly models.

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- Designs 3D models and drawings that are easy to manufacture by applying engineering knowledge.
- Creating NC program for CNC machine for different kind of parts and operating CNC machine.
- Responsible for selecting suitable materials and manufacturing methods for plastic and metal components, focusing on strength, cost-effectiveness, and ease of production.
- Implemented continuous process improvements, focusing on safe work practices to reduce costs, improve product quality, and increase throughput for both new and existing processes.
- Create detailed engineering drawings with correct dimensions and layout to show how parts should be made, and prepare bill of materials (BOMs) with proper documentation to support manufacturing and assembly.
- Analyzed engineering drawings meticulously to decide dimensional tolerances, aesthetic shapes, mechanical properties, and suitable materials for customer satisfaction and facilitate reverse engineering processes.

Amit Machine Tools, Surat, Gujarat, India

09/2018 - 09/2022

Mechanical Design Engineer (CAD/CAM Engineer)

- Skillfully used AutoCAD, SolidWorks, and CREO to create detailed 2D/3D CAD model and drawing for electrical enclosure, custom automation (worked on automated CNC fixture picker with the help of robotic arm), sheet metal, injection molding parts, custom Mechanical equipment(boilers), medical components (Bone plate, Bone Cutter), and Aerospace parts and, turbine blades ensuring all met industry standards ASI 9001/ISO9000, ISO 13485 and ISO 14000.
- Producing all drawings for CNC machining while incorporating Geometric Dimensioning and Tolerancing (GD&T) and ASME standard for precision and accuracy.
- Assisted in the engineering and design of transfer, progressive, hot stamp, and blanking tools, ensuring designs met customer specifications and manufacturing standards.
- Creating prototype with the help of power tools for new product and doing testing on part to check stress and other data.
- Sourcing materials for manufacture, including obtaining quotes and communicating with vendors.
- Utilized expertise in die design and mold creation for precise components like medical bone plates and diamond holders, demonstrating readiness for analysis to optimize manufacturing efficiency, structural integrity, and product performance.
- Generated and kept accurate documentation, including Bills of Materials (BOMs) and product development sheets, and technical data's using Excel.

PROFESSIONAL TRAINING & DEVELOPMENT

- Certified SOLIDWORKS Associate (CSWA)
- Certified SOLIDWORKS Professional (CSWP)

EDUCATION

UNIVERSITY OF GUELPH, Guelph, ON

Master of Engineering, Mechanical Engineering, 2023

- Analyze mechanical and electrical system, Design in Cad Software and Worked on “Automated Egg Picker in Barn” Project.

GUJARAT TECHNOLOGICAL UNIVERSITY, Gujarat, India

Bachelor of Engineering, Mechanical Engineering, 2018