

ELSA MONSUY

Professional Engineer |
Manufacturing Systems | Quality
Assurance

☎ (713) 820-2968

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🏠 Houston, Texas

KEY ACHIEVEMENTS



Manufacturing Efficiency

Implemented systematic process improvements resulting in 15% production capacity increase through lean manufacturing principles.



Quality Systems

Developed ISO-compliant quality protocols reducing non-conforming products by 20% while maintaining stringent specifications.



Project Leadership

Led international manufacturing projects with multi-disciplinary teams ensuring regulatory compliance and operational excellence.



Technical Documentation

Standardized CAD documentation procedures reducing ECO processing time by 25% and improving design consistency.

SUMMARY

Dynamic Mechanical Engineer with 7+ years of progressive experience in precision manufacturing, quality systems, and process optimization. Proven expertise in mechanical design, quality control protocols, and cross-functional team leadership across diverse industrial environments. Demonstrated success in international project execution, regulatory compliance, and continuous improvement initiatives that drive operational excellence and cost reduction.

EXPERIENCE

Mechanical Designer

Systel

September 2021 - Present

Houston, TX

- Develop comprehensive parts specifications and Bills of Materials through Engineering Change Order (ECO) systems, ensuring precise material control for complex mechanical assemblies
- Generate and maintain technical assembly documentation utilizing Autodesk Inventor, supporting manufacturing excellence and quality assurance protocols
- Execute detailed engineering drawings and technical layouts using AutoCAD, Inventor, and SolidWorks to support manufacturing operations and regulatory compliance
- Provide technical expertise and troubleshooting support to manufacturing teams during production assembly, optimizing operational efficiency and product quality
- Collaborate with external manufacturers and vendors to establish component specifications, ensuring supply chain reliability and quality standards
- Support sales and marketing initiatives by developing conceptual drawings and product modeling, facilitating client presentations and project approvals

CORE SKILLS

Engineering Design

SolidWorks, AutoCAD, Autodesk Inventor, Mechanical Design, Technical Documentation, Blueprint Interpretation

Quality Systems

Quality Control Protocols, First Article Inspection, Statistical Process Control, ISO Standards, Lean Manufacturing

Project Management

Cross-functional Leadership, Process Improvement, Vendor Relations, Risk Assessment, International Coordination

Technical Systems

ERP Systems, MS Project, Advanced Excel, Data Analysis, Calibration Management

Manufacturing Engineering Intern

Diamond Blocks Services

May 2018 - August 2018

Malabo, Equatorial Guinea

- Analyzed and interpreted complex engineering drawings and technical blueprints to ensure accurate manufacturing specifications and adherence to design standards
- Executed comprehensive time-motion studies to identify process optimization opportunities and enhance production capacity through systematic workflow analysis
- Performed rigorous validation testing of product sub-systems to verify reliability performance and ensure compliance with engineering specifications
- Delivered integrated technical support across maintenance, production quality, and safety departments to ensure operational excellence and regulatory compliance
- Participated in team leadership efforts to continually improve product development processes, contributing engineering analysis and innovative solutions

Quality Control Inspector

AmTex Machine Products

August 2016 - April 2018

Houston, TX

- Executed comprehensive quality control inspections to maintain consistent product standards and ensure adherence to customer specifications
- Conducted first article inspections and precision dimensional analysis to verify compliance with engineering tolerances and manufacturing requirements
- Facilitated weekly cross-functional evaluations with material operations and planning teams to optimize resource allocation and workflow efficiency
- Ensured non-conforming products were properly identified and documented, maintaining detailed quality records for traceability and continuous improvement
- Maintained, monitored, and recorded comprehensive information pertaining to product and production processes, supporting quality management systems and regulatory compliance
- Performed systematic specification verification, dimensional analysis, and calibration audits to ensure measurement system accuracy and traceability

EDUCATION

Bachelor of Science in Mechanical Engineering

University of Houston

May 2018

Houston, TX