

CARLOS CANO

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MECHANICAL DESIGN ENGINEER

Mechanical Design Engineer with experience in precision component design, system integration, and thermal equipment development. Expert in using advanced CAD/CAE tools including **Siemens Teamcenter/NX** for PLM and design validation. Proven ability to apply rigorous **GD&T** and **DFM/DFA** principles to ensure high-performance system reliability and seamless manufacturing execution. Seeking to contribute expertise to complex mechanical design and metrology challenges.

WORK EXPERIENCE

Product Engineer Jr.

Jr. Product Engineer

Monterrey, Mexico

Jan 2024 - Sep 2025

- Utilized **Siemens Teamcenter and NX** to design, develop, and release new products, including configurations, complex mechanical components, and fluid routing solutions (PLM).
- Created precise **3D models and assemblies**, alongside detailed part drawings and installation sheets, ensuring technical accuracy for both design and manufacturing teams.
- Exercised judgment within established practices to resolve technical design issues, demonstrating independent problem-solving capabilities.

TOYO KASEI

Mechanical Design Engineer

Guadalajara, Mexico

Jan 2021 - Jan 2022

- Generated high-precision 3D models and technical drawings in **SolidWorks**, applying rigorous **Geometric Dimensioning and Tolerancing (GD&T)** principles essential for precision component assembly and metrology.
- Conducted design modifications for industrial heating elements (ovens), utilizing Lean principles to optimize thermal performance.
- Created a **3D model of the entire factory production lines** to establish a digital baseline for future equipment layout and design integration.

MAQPower

Mechanical Design Engineer

Guadalajara, Mexico

Feb 2023 - May 2023

- Provided technical design support for a specialized **compressor installation system** for an important client, ensuring all mechanical and structural requirements were met.

ACADEMIC EXPERIENCE

PSI Plastics

Plastic Injection Mold for Flower Pots

Zapopan, Mexico

Mar 2023 - Jun 2023

- Conducted advanced **Finite Element Analysis (FEA)** in **SolidWorks** to verify critical stress points and optimize component geometry for robust high-tolerance performance.

Designed the mold implementing rigorous **Design for Manufacturing/Assembly (DFM/DFA)** principles.

Sumitomo

Gearbox Design for Milling Process

Guadalajara, Mexico

Feb 2022 - Jul 2022

- Designed a functional **gearbox** intended for use in an industrial **milling process**, focusing on mechanical load calculations, material selection, and component fatigue analysis.

EDUCATION

ITESM

BS in Mechanical Engineering

Guadalajara, Mexico

Public University of Navarre

Program abroad with a concentration in prototyping and manufacturing engineering

Pamplona, Spain

SKILLS

Precision Design: GD&T Methodology, DFM/DFA, Kinematic Design, Thermal & Fluid Mechanics, Mechanical Component Design.

Engineering & Design: Finite Element Analysis (FEA), Siemens Teamcenter (**PLM**), Displacement Measurement, Prototyping, Measurement Uncertainty.

Software: SolidWorks, CATIA V5, NX Siemens, Ansys (FEA), AutoCAD, Inventor, Matlab/Simulink, CAM Software.