



Sunita Mukherjee

Design Engineer II

Design engineer with 6 years of experience in manufactured component development, applying DFMEA, GD&T, tolerance analysis, and ANSYS validation across cast, welded, and sheet metal product lines. Redesigned a cast aluminum housing assembly using DFMEA analysis, decreasing the product return rate by 45.7%. Resolved 25 customer quality complaints across three roles while reducing material usage and annual costs by \$46,870 through lighter-gauge profile adoption and load capacity validation in ANSYS.

Contact Information



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Thermopolis, WY 12345

Education

Bachelor of Science in Mechanical Engineering

University of Wyoming, Laramie, WY
| 2016 – 2020

Key Skills

- SolidWorks
- ANSYS
- AutoCAD
- GD&T
- DFMEA
- APQP
- ISO 9001
- DVP&R
- PPAP
- FMEA
- Tolerance Analysis
- Sheet Metal Design

Professional Experience

DESIGN ENGINEER II | WIND RIVER PRECISION MANUFACTURING, THERMOPOLIS, WY
2023 – PRESENT

- Redesigned a cast aluminum housing assembly using DFMEA analysis, decreasing the product return rate by 45.7% within 9 months of production release.
- Resolved 14 customer quality complaints on a gear drive product line by revising tolerance stacks and updating inspection criteria, closing each case in an average of 4 days.
- Reduced material usage by 45.9% on a steel bracket family by switching to a lighter-gauge profile and validating load capacity in ANSYS, saving \$46,870 annually.

DESIGN ENGINEER I | BIGHORN VALLEY INDUSTRIAL PRODUCTS, WORLAND, WY
2021 – 2023

- Investigated and resolved 7 customer quality complaints tied to weld joint failures, implementing revised joint geometry that passed DVP&R testing on the first cycle.
- Cut material usage by 22.4% on tubular frame weldments by optimizing cross-section profiles in SolidWorks, eliminating \$32,410 in annual raw steel spend.
- Performed GD&T reviews on incoming vendor components, identifying dimensional nonconformances on 18 parts before they reached the assembly floor.
- Collaborated with manufacturing and QC teams to update 11 work instructions following APQP requirements, reducing rework hours from 26 to 17 per month.

ASSOCIATE DESIGN ENGINEER | OWL CREEK METAL FABRICATION LLC, RIVERTON, WY
2020 – 2021

- Assisted lead engineers in closing 4 customer quality complaints related to sheet metal enclosures by revising bend radii and adding locating features to press brake tooling.
- Modeled 43 component parts in SolidWorks for a conveyor roller product line, maintaining parametric file standards under the ISO 9001 document control system.
- Reduced material usage by 14.03% on a stainless steel panel design by nesting blanks more efficiently, cutting scrap weight by 310 pounds per production run.

Certifications

- Fundamentals of Engineering Exam, NCEES, 2020