

PROFILE

Mechanical Engineering undergraduate with Tier-1 automotive quality internship experience under German engineering standards. Proficient in IATF 16949, SPC, FMEA, GD&T, and precision metrology. Six Sigma Green Belt with proven data-driven problem solving. Strong CAD/CAE foundation. Seeking Quality Assurance, Product Development, or Manufacturing Engineering roles at a global MNC.

TECHNICAL SKILLS

QUALITY & QMS

IATF 16949 · ISO 9001 · FMEA · SPC / X-R Charts · 8D · Poka-Yoke · Control Plans · FAI · Jidoka

METROLOGY

CMM · GD&T · Micrometers · Vernier · Surface Roughness · Tolerance Stack-up

CAD / CAE

SolidWorks · CATIA V5 · PTC Creo · AutoCAD · Fusion 360 · ANSYS

MANUFACTURING

Forging · Casting · Machining · Sheet Metal · 3D Printing · DFM/DFA · PLM

TOOLS

MS Office · Excel (SPC) · Engineering Drawing

EDUCATION

B.E. – Mechanical Engineering

PVG's College of Engineering, Nashik

Nov 2023 – Jul 2027

Machine Design · Manufacturing · Metrology · Theory of Machines · CAD/CAM

HSC – Science (PCM)

Dr. Kakasaheb Deodhar English School, Nashik

Dec 2020 – Dec 2022

CERTIFICATIONS

Six Sigma Green Belt

DMAIC Methodology · Certified

Six Sigma – Advanced Define & Measure

Kennesaw State University via Coursera

Six Sigma – Advanced Analyze Phase

Coursera

Certified Product Manager (CPM)

Product Management Certification

ACTIVITIES

SAE Collegiate Club – PVG CoE

Core Design & Quality Member · 2023–Present

National Service Scheme (NSS)

Active Volunteer · Rural Dev & Health Campaigns · 2023–Present

01 Professional Experience

Quality Department Intern

Jan – Feb 2026

Rothe Erde India Pvt. Ltd. (Formerly Thyssenkrupp Engine Components) · Nashik, MH · Tier-1 Automotive Supplier

- Applied CMM, Vernier callipers, micrometers & surface roughness tester to inspect micron-level tolerances on high-strength forged crankshafts for heavy-duty commercial vehicles.
- Supported IATF 16949 QMS implementation; executed SPC using X-bar & R charts and conducted FMEA to proactively mitigate production failure modes.
- Contributed to Control Plan development and First Article Inspection (FAI) for new part introduction on the forging production line.
- Applied 8D structured problem-solving and corrective action workflows for recurring quality non-conformances; gained hands-on exposure to Poka-Yoke setups.

02 Key Projects

Six Sigma DMAIC – Incoming Raw Material Inspection Improvement

Green Belt Certification Project · DMAIC Methodology · Statistical Process Control 2026

Defect Rate 8.5%→3.8% (↓55%) | Sigma 2.4→3.1 | DPMO 195K→87K | \$720K Projected Savings / yr

- Applied SIPOC, Process Mapping, Root Cause Analysis, Hypothesis Testing, ANOVA, Gauge R&R, SPC, Poka-Yoke, Standardized Work, and AQL-based Supplier Inspection across the DMAIC cycle.

FMEA & Quality Analysis – SAE TIFAN 2026 Transplanter

SAE India National Competition · FMEA · Prototype Validation · IS Standards 2025–26

- Conducted FMEA on planting and drive mechanisms; assigned RPN ratings and drove corrective design iterations — achieved consistent seedling depth of 40–60 mm across varied soil conditions.
- Applied shaft design calculations and bearing selection per IS standards, ensuring full dimensional and tolerance compliance of all drivetrain components.

GD&T & Tolerance Engineering – Press Tool Design

Machine Design Course Project · GD&T · Tolerance Stack-up · Process Capability 2025

- Designed compound die for blanking & piercing on 2 mm mild steel; applied GD&T fits (H7/p6, H7/h6), calculated die clearance (6–8% per IS standards) and estimated tool life at 50,000+ strokes.

03 Core Competencies

- Quality Assurance & Control
- Root Cause & Failure Analysis
- GD&T & Tolerance Engineering
- Product Development & DFM/DFA
- Technical Documentation
- CAD / CAE Modelling
- Precision Metrology & Inspection
- Statistical Process Control (SPC)
- Defect Prevention & Zero-Defect Mindset
- Cross-functional Collaboration
- Continuous Improvement (CI / Kaizen)
- Analytical & Structured Thinking