

PRAHLAD RATHOUR

Mechanical Design Engineer

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PROFILE SUMMARY

Mechanical Design Engineer with experience in transformer design, proficient in 2D and 3D software for creating accurate drawings and models. Skilled in delivering complete transformer body designs efficiently. Committed to using modern tools for high-quality output and continuously enhancing skills with industry advancements.

PROFESSIONAL EXPERIENCE

MECHANICAL DESIGN ENGINEER

Tesla Transformer (India) Ltd Bhopal (Jan 2025 - Present)

- Led transformer tank design, ensuring compliance with IS, IEC, and IEEE standards.
- Created accurate 2D/3D models for Power, Distribution, and Inverter Duty transformers, including GA, fabrication, core frames, bus bars, cable supports, and rating plates.
- Conducted structural analysis, load calculations, and simulations to improve efficiency and reliability.
- Worked with R&D, production, and QA teams to support prototyping, testing, and production ramp-up.
- Continuously updated knowledge of transformer design standards and technologies to enhance innovation and processes.

GRADUATE ENGINEER TRAINEE

Tesla Transformer (India) Ltd Bhopal (Jan 2024 - Jan 2025)

- Created 2D/3D models of core frames, tanks, bus bars & cable supports.
- Applied cooling layout, stress analysis & material optimization techniques.
- Implemented design automation to reduce cycle time and improve accuracy.
- Collaborated with R&D and production for smooth prototyping and manufacturing.
- Contributed to BOM preparation and technical documentation.
- Supported design reviews and project timelines for on-time delivery.

SKILLS

TECHNICAL Skills: - 2D/3D Modeling & Drafting | BOM Preparation & Documentation | Structural Analysis & FEA | Transformer Design & GA Drawings Software | Microsoft Office (Excel, Word, PowerPoint)

Software Skills: - AutoCAD Mechanical | SolidWorks | Creo Parametric | CATIA V5 | Siemens NX | Ansys Workbench

EDUCATION

- Master of Technology (M.Tech.) – Machine Design** (2025-2027)
Oriental Institute of Science & Technology Bhopal, Madhya Pradesh
CGPA: 7.00/10
- Bachelor of Technology (B.Tech.) - Mechanical Engineering** (2020-2024)
Samrat Ashok Technological Institute of Vidisha, Madhya Pradesh
CGPA: 7.74/10
- Higher Secondary (10+2) – Mathematics** (2019-2020)
Govt. Model School Jaithari
Percentage: 80.4%
- High Secondary (10th)** (2017-2018)
Govt. Model School Jaithari
Percentage: 93.6%

ACHIEVEMENT

- Developed Tender Drawing.
- Contributed to the Design of a 220 kV Class Transformer in period of Trainee.
- Completed a 3D Model of an 80 MVA Transformer within a Week.