

Rohit Jagdish Patel

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EDUCATION

Clemson University

Master's of Science (Mechanical engineering, Major: Design & Manufacturing)

Clemson, SC

Aug 2024 - Present

Savitribai Phule Pune University, MET's BKC Institute of Engineering

Nashik, India

Bachelor of Engineering (Mechanical, 1st Division) | GPA:3.2/4.0

May 2018

Honors & Awards: Best Paper Award, 2nd Place, Manufacturing Domain, SPICON 2022 (Sardar Patel International Conference).

WORK EXPERIENCE

Gabriel India Ltd.

Nashik, India

Senior Manufacturing Engineer

September 2023- May 2024

- Directed Tooling & Process Improvement across diverse automotive lines, optimizing Front Fork Grinding, Shock absorber Welding, Paint, and assembly line for 2&3 wheelers
- Aided in developing tooling optimization strategies that increased machining efficiency by 25%
- Improvement of existing tooling for improvements in PQCDSM
- Managed Feasibility Evaluation, Capital Expenditure, and adeptly handled PPAP/APQP documentation
- Managed design, vendor selection, and development of production lines, automation cells and production equipment from concept to commissioning
- Led a cross-functional team to design factory and production line layout, which increased throughput by 20% and reduced labor cost by \$150,000 annually
- Applied six sigma techniques to identify and eliminate inefficiencies, reducing customer complaints defects by 10% and saving \$95,000 annually.
- Collaborated with design and operations teams to troubleshoot and resolve manufacturing issues, enhancing process reliability by 15%
- Supported risk management activities including planning, design & clinical risk management DFMEA, production risk management PFMEA, and overall risk summary reporting

Orbital Systems (Bombay) Pvt. Ltd.

Nashik, India

Jr. Mechanical Design Engineer

August 2022- August 2023

- Developed rotary machines & layouts aligning with customer RFQs, integrating ergonomics, assembly, and function considerations into designs
- Managed end-to-end project execution, from operation sequences, costing, and quotations to design approvals and material coordination
- Collaborated with vendors to source components and materials, resulting in a 15% reduction in material costs and 5% reduction in lead time
- Coordinated extensively across departments, resolving shop floor issues, conducting project reviews, and providing on-site support, while preparing technical documentation and pneumatic/hydraulic circuits

Sukhdhan Automation Pvt. Ltd.

Nashik, India

Mechanical Design Engineer

July 2018- July 2022

- Analyzed RFQs, conducting cost estimations and creating conceptual layouts for the Design Approval Process (DAP)
- Led complete mechanical designs of special-purpose machines, including calculations for selecting standard products and generating operational pneumatic or hydraulic circuits
- Prepared time diagrams for sequence of operations and created Dimensional Drawings, Assembly Drawings, Part Drawings, and comprehensive Bill of Materials

PUBLICATION

- Patil, A., Sunnapwar, V., Bhole, K., **Patel, R.**, Bharambe, M., & Shinde, S. (2024, March). *Investigation of open pocket 3D milling of Ti6Al4V by grey relational approach*. In *AIP Conference Proceedings* (Vol. 2985, No. 1). AIP Publishing
- Ingle Sushil, V., Patil Amit, S., & **Patel Rohit, J.** (2017). *Machining Challenges in Stainless Steel—A Review*. *Int. J. Adv. Res. Ideas Innov. Technol*, 3(8)

SKILLS

- Technical:** Process Improvement, Tooling Management, Feasibility Assessment, Project Management, Machine element design, Finite element analysis, PFD, Quality tools (8D, 5 whys, and A3 reports), Manufacturing processes, SAP ERP
- Software:** SOLIDEDGE, SolidWorks (Proficient), CREO (Working Knowledge), ANSYS (Elementary proficiency)