

S. Mohamed Rafick B.E.,

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PROFESSIONAL SUMMARY

Results-driven Mechanical Engineer with 7.5+ years of experience in Product engineering, Design development, and Quality systems. Expertise in DFMA, DFMEA, DTV, Value engineering, and Cost reductions. Team Lead, proven cross-functional leadership and ISO quality Champion. Experienced across full product lifecycle from requirements to production support.

CORE COMPETENCIES

- Mechanical Detailed Design | Product Engineering | Standard Design Principles.
 - Project Management and Development | Design Validation & Verification.
 - Market Research | Analytical Thinking | Problem Solving skills.
 - GD&T, Tolerance Stack-up | Quality Compliance | Risk Management & Technical Risk Assessment.
 - Engineering Calculations | Simulations | CAD & PLM Admin.
 - Cross-functional, Stakeholder Communications | Documentation | WI | Trainings & KT.
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TOOLS AND TECHNOLOGIES

- Proficient in Autodesk Inventor (iLogic & API), Vault, SolidWorks MBD, PDM, Geomagic Control X, Geomagic Design X, SAP Macro Automation, Fiori, ERP, Advanced excel, iLogic and Macro creation, Power BI, Navisworks, Autodesk Fusion 360, recap and flow analysis.
 - Good in AutoCAD, Drive works Solo, Ansys – (Static structural).
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DOMAIN EXPERT

- Parametric Modelling | engineering drawings and specifications | 3D Plant Design.
 - Resource Handling | Team Lead.
 - High Voltage Sustaining & Utility design | Air Brake Insulator Substation Switches Design (8-362 kV, 1200-5500A).
 - ISO QMS led, CAPA, RCA, and Internal Auditor.
 - Casting and sheet metal Design, Prototype Design, RFQ and Generative Design.
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EXPERIENCE

HUBBELL INCORPORATED | CHENNAI | ENGINEER 1 | APR 2021 – PRESENT

Engineer 2 | Mar 2023 – Feb 2025

Associate Engineer 1 | Oct 2021 – Feb 2023

Associate Engineer 2 | Apr 2021 – Oct 2021

ROLE SUMMARY: End-to-end design product development of High/Medium/Low Voltage Air-Break Substation, Transmission and Distribution Switches (8kV–362kV, 1200A–5500A) with exposure to AIS 550kV & 800kV NPD per ASME, ANSI, and IEEE standards with tolerance stack-up and advanced GD&T.

ACHIEVEMENTS:

- ECO/ECR Project Ownership, lead and mentored an India team of 7 engineers on long-term Projects.
- 15–20% cost reduction (15-150\$/item) through 6 DTV and +10% efficiency through 2 DFMA initiatives.
- Served as QMS ISO Quality Champion, Team Internal Auditor and improvised ISO process by 13.5%.
- Major contribution on 800kV AIS NPD and achieved all design milestones on PDM Cleanup of 90,000+ Data.
- Reduced team design rework time and incidents by 35% with proven results.
- Individual contribution, consolidation and standardized entire product family of 370+ variants in AGCH5/AGCH5V product line which gives big satisfaction to Mfg., shop floor and quality departments.
- Excellent analytics, major contribution on building 54 DTV projects for 2025 & 2026 Project pipelines.
- CAD templates and drafting automation, cutting design routine cycle time by 30%, PDM admin.

INTERNATIONAL TRAVELS

- Hubbell Churchill and Moores plants, Leeds, Alabama, USA; Hubbell Juarez Av. John Pablo Plant 1 & 2, Mexico.

ENVISION INTEGRATED SERVICES (P) LTD. | CHENNAI | AUG 2020 – MAR 2021

Junior Engineer Design

ROLE SUMMARY: Ford Motor Company Factory Plant Layouts and equipment 3D Designs and clash simulation engineering services.

ACHIEVEMENTS:

- Team Lead of 15 engineers on 4 Short term projects.
- Improvised flexible and user-friendly parametric modelling and assembly.
- Ford Motor appreciation on excellent contribution towards delivering and leading SVAP-PE/P708 Clash Simulation Project deliverables with required Level of Details.

MSM CONSULTING SERVICES (P) LTD | CHENNAI | SEP 2019 – FEB 2020

Junior Engineer Design

ROLES SUMMARY: Ford Motor Company Factory Plant Layouts and equipment 3D Designs Reverse engineering Projects.

ACHIEVEMENTS:

- Team Lead of 5 engineers on 7-8 major projects.
- Recognized for continuous supporting for delivering to customer on FTM & AAT “Inline/Box / Wheel & Tyre / Repair” with quality and dedication.
- Best Performance Award – Easi Engineering Services for high quality deliverables and customer focus.

SCHNEIDER ELECTRIC INDIA (P) LTD | CHENNAI | AUG 2018 – AUG 2019

Engineering Apprenticeship

ROLE SUMMARY: DTP management, material handling and Level 1 production, quality and Inventory management support on MCB, RCCB lines. Excellent cross function support on finished goods, quality and testing team.

ACHIEVEMENTS:

- Implemented a simple solution to access and reduce shop floor excess production stocks.
- Voluntarily created daily entire production shift deliverables report with issues & solution suggestions including production scrap and control report in a well-structured excel report and got appreciation from team, supervisor and manager.

AXLES INDIA PVT LTD | CHENNAI | MAY 2018 – JUL 2018

Trainee Operating Engineer

ROLE SUMMARY: Multidisciplinary heavy machinery's hands-on training and quality inspection on production outputs.

EDUCATION

M.I.E.T Engineering College, Trichy | 2014 – 2018 | CGPA 7.23

- Bachelor of Engineering (B.E.) - Mechanical Engineering
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CERTIFICATION

- 2025: AIS Design; Distribution Power Engineering Fundamentals.
 - 2024: CSWP SolidWorks; Power BI Desktop.
 - 2023: GD&T (Basic to Advance), Stack-Up; Critical Thinking with Emotional Intelligence.
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AWARDS & RECOGNITION

- Certificate of Appreciation – Hubbell India (2025) for remarkable achievement & excellence.
 - Certificate of Recognition – Hubbell India (2023) for nomination in Innovative Project.
 - Hubbell Burndy India Toastmasters Club & World record participation.
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