

YENGKONG SAYAOVONG

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SUMMARY

Mechanical Designer with 6+ years of experience engineering complex transformer assemblies for extra-high-voltage power systems. Proven track record designing internal layouts, resolving configuration risks, leading release reviews, and improving CAD/model stability in high-volume manufacturing environments. Consistently reduces rework, prevents \$20K–\$40K in annual scrap exposure, and improves design accuracy by up to 30% through disciplined engineering practices and cross-functional problem solving. Brings strong ownership of design releases, system-level thinking, and a focus on manufacturability, configuration control, and engineering quality standards.

EXPERIENCE

Mechanical Designer, Prolec-GE Waukesha

Jan 2020 – Present

Waukesha, WI

- **Engineer complex mechanical assemblies in high-power systems.** Define component placement, structural clearances, and routing paths. Ensure build feasibility and maintain configuration accuracy across designs.
- **Design and release mechanical systems in a high-volume manufacturing environment.** Support large-scale production demands and tight release timelines. Reduce configuration discrepancies by 20% and minimize rework risks.
- **Collaborate with manufacturing to resolve design and assembly issues.** Address dimensional conflicts, material discrepancies, and routing interferences. Prevent an estimated \$20K–\$40K in scrap and rework annually.
- **Lead structured engineering design reviews focused on quality and manufacturability.** Use standardized checklists to identify configuration gaps and tolerance risks early. Reduce drawing and BOM rework by 15–25%.
- **Troubleshoot and resolve recurring CAD model failures.** Correct broken dependencies, missing parameters, and system inconsistencies. Maintain model integrity and prevent downstream manufacturing errors.
- **Train and mentor new designers on CAD workflows and release processes.** Guide them through configuration logic and root-cause problem solving. Accelerate onboarding from 6–9 months to 4 months and improve early design accuracy.

SKILLS

- Mechanical Layout & Internal Assembly Design
- Tolerance & Clearance Analysis
- Creo Parametric
- Feature-Tree & Regeneration Troubleshooting
- BOM Validation
- SAP & TDMS
- Root Cause Analysis
- Release Review & Quality Control
- CAD Standardization & Automation
- DFM-Oriented Design Support

EDUCATION

Milwaukee Area Technical College

Apr 2021

A.A.S Mechanical Design Technology