



Pranshu Shubham

E-Mail: s.pranshu108@gmail.com Mobile: +919868111116 LinkedIn: www.linkedin.com/in/pranshus/

Summary

Operations leader with 4.5 years of experience at ASML across product qualification, manufacturing, and design consulting of precision semiconductor capital equipment. Combines cleanroom rigor with a collaborative approach towards production, design, sourcing, and compliance operations and institutionalizing industry knowledge. Led process improvements that reduced cycle time by over 30% to accelerate machine delivery for customers like TSMC, Samsung, Intel, and SK Hynix. Managed 1,000+ critical component lifecycles and assessed 50+ design cases to guide component selection and reduce component-related failures.

Professional Experience

Mechanical Component Engineer | ASML B.V. | The Netherlands (2025-2026)

- Standardized and maintained PLM data for 1,000+ engineering components, ensuring compliance with European industrial and safety regulations. Maintained the preferred component list used by default across 10+ design clusters, and led early-stage discussions with designers to drive commonality and offset supply chain risk through preferred component and supplier use.
- Represented component engineering in weekly meetings, communicating industrialization perspectives on adhesive-related projects. Co-authored an adhesive design and application reference guide with adhesive experts, enabling design teams to become self-reliant in adhesive selection.
- Collaborated with factory and design teams to investigate 50+ galling cases & offer industrialization perspective in component selection to reduce component-related failures.
- Co-led the phase-out of a high-risk adhesive linked to failures costing up to €100K per occurrence, aligning the highest-usage design teams to fully phase it out. Supported development of an exception approval flowchart for engineering and management stakeholders, enabling a stepped replacement over 1-2 years.
- Coordinated a disruption-free vendor changeover for 20+ critical adhesives over 2 months, working with adhesive experts, supply chain, and supplier teams to shift quality control from a third party to the manufacturer.
- Resolved 5+ urgent component escalations monthly for engineering teams across the US, EU, and Taiwan, unblocking design work on obsolete modules where delays carried direct daily cost.
- Reviewed 100+ PFAS-flagged components, driving alternatives that cleared 10+ and phased out 3 more, positioning ASML ahead of regulatory deadlines and among industry leaders moving toward sustainable impact by 2030.

System Qualification Test Engineer | ASML B.V. | The Netherlands (2021-2025)

- Qualified high-precision EUV light source systems across 3 variants (Production & New Product Introduction), directly validating tool performance for semiconductor manufacturing leaders such as TSMC, Samsung, Intel, and SK Hynix.
- Spearheaded continuous improvement projects across material handling, qualification procedures and IT automation, yielding a cycle time reduction of up to 30% (2022-2023), enabling swifter delivery of systems for customers. Developed a 5S handbook, an auditing tool, and shop floor processes to ensure ease of execution and transparent communication of 5S actions.
- Trained colleagues on applying the 4C method in lean management and leveraged cross-functional relationships to increase self-reliance towards resolving complex shop-floor bottlenecks and elevate operational standards.
- Established knowledge-sharing routines to discuss technical challenges, leading to improved knowledge documentation, greater self-reliance, and more effective troubleshooting during unaided hours in high-stress cleanroom environments.

Education

TU Eindhoven, The Netherlands, MSc Mechanical Engineering (2018 - 2021)

Specialization in Microsystems/Microfabrication (Semiconductor Manufacturing | Machine Learning)

Dissertation Thesis: "Design and Implementation of Training in Hardware for Efficient Artificial Intelligence"

Manipal Institute of Technology, India, B.Tech Mechanical Engineering (2014 - 2018)

Minor in Business Management (Finance | Human Resource Management | Operations | Marketing)

Accomplishments and Awards

- 5S Project Coordinator Pilot (2024):** Selected from a pool of test engineers to collaborate in a multinational team of 5 tasked with improving shop floor 5S processes.
- 2nd Position, ASML CI Award (2024):** For improvement project that led to 70% reduction in testing cycle time.

License & Certifications

- Semiconductor Packaging (ASU, Coursera - 2024) & Semiconductor Fabrication 101 (Purdue University - 2024)
- Six Sigma Green Belt Specialisation Course (Kennesaw State University, Coursera - 2024)
- AI Infrastructure & Operations (NVIDIA, Coursera - 2024) & AI Data Science Bootcamp (Fruitpunch AI Eindhoven - 2021)
- The Business of HealthCare (PennMed Wharton, Coursera - 2022)

Co-Curriculars

- Vertical Head for Conglomerates representing IIMA PGPM Placement Committee (2026)
- Author and Editor of "Chip-ping-In" Newsletter for semiconductor insights through an MBA lens (2026)
- Volunteer for expat cultural events in The Netherlands (2025)
- Led structures sub-team at SolarMobil Manipal. Represented it and secured 3rd position in regional research competition (2017)