

Ahmed Alaaelden Hassan Hassan

E-mail: Ahmed_alaa@outlook.com | Phone: +966575468693

LinkedIn: [linkedin.com/in/ahmed-hassan-ahmed007](https://www.linkedin.com/in/ahmed-hassan-ahmed007)

Riyadh, Saudi Arabia | Nationality: Egyptian | Transferable Iqama (KSA).

**Industrial Engineer | Lean Six Sigma Green Belt | Lean Six Sigma Black Belt | ISO 9001 Lead Auditor |
Production & Quality Engineer | Continuous Improvement**

PROFESSIONAL SUMMARY

Industrial Engineer and **certified LSSGB, LSSBB and ISO 9001 Lead Auditor** with 5 years of experience across quality, production, and technical office roles in automotive and manufacturing environments in Egypt and Saudi Arabia. Led root cause analysis and corrective actions using Fishbone, 5-Why, Pareto, and 4M, and applied FMEA and SPC using Minitab, Power BI and Excel while improving Toyota and PSA customer Projects. Delivered a DMAIC Six Sigma project with **€113.5K** in annual savings, a **7%** total defect reduction, and an **11%** increase in Production lines efficiency. Experienced in developing and implementing **SOPs**, Standard Work Instructions, and process documentation to standardize operations, improve process consistency, and sustain quality improvements. **ISO 9001 Lead Auditor** currently working in a Saudi manufacturing facility, reviewing drawings and specifications and coordinating with production and site teams.

KEY ACHIEVEMENTS

- Rollc KSA:** Designed and implemented a fabrication drawing system with a direct interface to the production team, standardizing drawing release to eliminate fabrication errors and reduce scrap.
- Sumitomo Electric Industries:** Led a DMAIC Six Sigma project on Toyota Customer project, delivering **€113.5K** in annual savings and an **11%** increase in line efficiency - Reduced total defects by **7%** and scrap rate by **1.12%** through operator training, process improvements, and supplier engagement - Led **10 production lines** around **410** operators as Shift Leader, managing daily output and quality performance - Directed a cross-functional quality team of junior quality engineers, technicians, and quality inspectors as Senior Quality Engineer.
- Graduation Project:** Rubber Recycling, featured on "**Mostaqbal Masr**" (Channel 1, Egyptian TV) and covered by **Al-Shorouk, Al-Ahram, Sada El-Balad, and Al-Dostor**.

WORK EXPERIENCE

- Rollc KSA | Industrial Engineer** *Riyadh, KSA | Mar. 2024 – Present*
 - Designed and implemented a standardized fabrication drawing system interfacing directly with production, reducing fabrication errors and improving drawing release consistency and scrap performance.
 - Developed and updated SOPs, Standard Work Instructions, and process documentation to standardize manufacturing and installation activities and improve process consistency.
 - Managed material submittals, method statements, and technical documentation, ensuring timely approvals and full compliance with project standards and local codes.
 - Analyzed drawings, specifications, and project requirements to identify discrepancies, improve manufacturability, and align engineering requirements with production and site execution.
 - Supported process improvement and problem-solving initiatives, identifying process gaps, risks, and constraints and coordinating corrective actions to improve quality, efficiency, and delivery.
 - Prepared and reviewed shop drawings, Method Statements, Material Submittals, and as-built documentation, ensuring compliance with project requirements and applicable standards.
 - Attended technical coordination meetings and contributed to reports, presentations, and handover packages, ensuring alignment with client and stakeholder expectations.

- **Sumitomo electric industries ltd.**

6th October City, Egypt | Jun. 2022 – Mar. 2024

- **Production Shift Leader**

- a) Led production teams across **10 production lines** and continuous improvement initiatives, applying Lean Six Sigma, Kaizen, TPS, and process optimization to improve productivity, quality, OEE, and operational efficiency.
- b) Developed improvement plans using Process Mapping, Root Cause Analysis, Data Analysis, Cost-Benefit Evaluation, Fishbone, 5-Why, Pareto Analysis, and DMAIC to identify and eliminate waste, bottlenecks, process variation, and manufacturing losses.
- c) Analyzed production processes to identify waste, bottlenecks, process variation, and opportunities for improving flow and productivity.
- d) Led Kaizen, 5S, Standard Work, Visual Management, Poka-Yoke, SMED, and Process Control initiatives to reduce downtime, improve flow, optimize changeovers, and increase equipment utilization.
- e) Established and monitored Production & Quality KPIs, including Productivity, OEE, Scrap, Defects, Efficiency, Process Performance, and Process Variation, using statistical analysis and SPC to evaluate improvement effectiveness and sustainability.
- f) Planned, executed, and monitored Continuous Improvement projects, applying Lean Six Sigma tools, FMEA, and structured problem-solving to achieve measurable waste reduction, quality improvement, and manufacturing performance gains.
- g) Participated in **FMEA cross-functional teams** to identify potential **process and product failure modes**, analyze failure effects and causes, assess associated risks, and identify high-risk areas and improvement opportunities.

- **Senior Quality Engineer**

- a) Led a cross-functional quality team of **Junior Quality Engineers, Technicians, and Quality Inspectors**, assigning tasks, monitoring performance, and supporting quality improvement activities.
- b) Promoted Lean Six Sigma and continuous improvement methodologies, including **Six Sigma, Poka-Yoke, Kaizen, DMAIC, SPC, and Standard Work**, to improve quality and manufacturing performance.
- c) Led structured **Root Cause Analysis (RCA)** and corrective action activities using **Fishbone, 5-Why, Pareto Analysis, and 4M** to resolve complex quality and manufacturing issues, including investigating and closing **Non-Conformance Reports (NCRs)**.
- d) Conducted statistical and process analysis using **Minitab** to identify process variation, defect trends, quality issues, and improvement opportunities.
- e) Developed and implemented inspection plans, conducted process audits, and monitored quality **KPIs**, defect trends, scrap, and process performance to identify 8 wastes-reduction opportunities and ensure corrective actions remained effective.
- f) Collaborated with **Toyota representatives and cross-functional technical and management teams** to address customer concerns, communicate analysis results, and drive continuous improvement initiatives.

- **Six Sigma Green Belt Project Leader**

- a) Led a Six Sigma project to reduce **“Annoyance Defects” for Toyota customers** in automotive connectors, applying **DMAIC** with a target of **95% defect reduction and zero customer complaints**.
- b) Implemented **operator training, process and jig improvements, and supplier engagement**, achieving a **1.12% reduction in scrap rate and 7% total defect reduction**.
- c) Monitored project progress and corrective actions weekly, achieving **€113.5K annual savings** and an **11% increase in line efficiency**, while meeting quality and customer-focused objectives before September 2023.

- **MCE “Metal Cast Egypt” | Production Engineer**

6th October City, Egypt | Aug. 2020 – Jun. 2021

- a) Supervised day-to-day production operations, ensuring adherence to safety and quality standards.
- b) Managed manpower distribution, attendance, and resource allocation across shifts.

- c) Conducted productivity analyses and generated daily/weekly performance reports.
- d) Initiated preventive maintenance schedules and optimized machine changeover processes.

EDUCATION

Bachelor of Mechanical Production Engineering, Helwan University, Egypt | 2021

Graduated with "Good"; "Excellent" in graduation project.

CERTIFICATIONS

- **Lean Six Sigma Black Belt** - Certified by IMC (Accredited with IQF, CSSC, CPD UK, and PECB). - Certificate no: C-2026-061975.
- **Lean Six Sigma Green Belt** - Certified by IMC (Accredited with IQF, CSSC, CPD UK, and PECB). - Certificate no: C-2025-48024.
- **ISO 9001:2015 Lead Auditor** - Certified by IMC (Accredited with IQF, CSSC, CPD UK, PMI, IFPSM, ASCM, and ASQE). - Certificate no: C-2026-060550.
- **Total Quality Management (Expert Level)** - Certified by IMC (Accredited with IQF, CSSC, CPD UK, PMI, IFPSM, ASCM, and ASQE). - Certificate no: C-2026-060507.
- **Six Sigma Yellow Belt Specialization** - University System of Georgia.
- **Six Sigma Green Belt Specialization** - University System of Georgia.
- **ASSOCIATE** - SolidWorks Authorized Training Centre.
- **Design Thinking and Global Startup** - Korea Advanced Institute of Science and Technology.
- **Creative Design, Prototyping, and Testing** - University of Maryland.
- **Transferring Energy from Here to Their Course** - University of Michigan.
- **Hydraulic Course** - Yasser Fahmy Hydraulic Engineering (Bosch Rexroth agent in Egypt).
- **Automotive Diploma** — Pixels Egypt.
- **The Internet of Things and Embedded Systems** — University of California, Irvine.

SKILLS

- **Programs:** Solidworks – Ansys – keyShot – Automation Studio – Microsoft Office – ClickCharts – FluidSIM
MiniTab WorkStation – Fusion 360 – MiniTab – AutoCAD – Siemens NX – Power BI
- **Languages:** Arabic (native) – English (fluent)

INTERNSHIPS

- The Arab Contractors – Engines & HVAC/Firefighting (2018)
- Yasser Fahmy Co. (Bosch Rexroth agent in Egypt) – Hydraulics (2018–2020)
- Garzen Co. – Technical office (2018)

REFERENCES

- **Certificates:** <https://drive.google.com/drive/folders/1EIhpNRZ9uZLHzXQZA2IFEk0zs7-KfTyC?usp=sharing>
- **Thesis:** https://drive.google.com/file/d/1EQm-W_oRhL90ZG9v9xzUeCwMI8_SJ4DE/view?usp=sharing
- **Previous work:** <https://drive.google.com/drive/folders/1zx6ZhWclBpRY3ZZ1QJudTy--DRtEuVrn?usp=sharing>
- **Six Sigma projects :** <https://drive.google.com/drive/folders/1dUubyCSPHdJk1GIQ-JzDeL0IQnoWXXIV?usp=sharing>
- **Freelance Account:** <https://www.freelancer.com/u/AhmedAlaa001>
- **Research gate Account:** <https://www.researchgate.net/profile/Ahmed-Alaa-55>

