

Wael Abdelrahman Abdelghany

Maintenance & Asset Management Manager | CMRP | PMP | CAMA2

Mobile: +966562420686

Email: engineerwael2009@gmail.com

www.linkedin.com/in/wael-abdelrahman-pmp-cmrp-cama2-69b343111/

PROFESSIONAL SUMMARY

Strategic Asset Management Leader and Certified Mechanical Engineer, I am a Certified Asset Management Assessor (**CAMA2**) and a Certified Professional in (**PMP®**, **CMRP**) with 16+ years of success in driving operational reliability across heavy industries and rotary equipment. Expert in optimizing asset lifecycles through data-driven **CAPEX and OPEX** decision making to maximize ROI and long-term profitability. Proven track record in leveraging EAM/CMMS systems, developing advanced PM/PdM strategies, and leading multidisciplinary teams to significantly reduce downtime and maintenance costs. Skilled in Root Cause Analysis (RCA) and proactive planning, committed to aligning asset performance with corporate strategic goals through continuous improvement and industry best practices, Expert in leading large-scale STO (Shutdowns, Turnarounds, and Outages) projects, ensuring seamless transition from execution to sustainable operation while aligning with ISO 55001:2024 standards.

ACADEMIC PROFILE & PROFESSIONAL CERTIFICATION

- **Faculty of Engineering** – Mansoura University.
- **B.SC** degree in **Mechanical Engineering** May 2009, Project Gas Turbine Power Design.
- **SEC** Classification Degree **Consultant**.
- Certified Project Management Professional (**PMP**)®.
- Certified Maintenance & Reliability Professional (**CMRP**).
- Certified Asset Management Assessor (**CAMA2**).

CORE COMPETENCIES & TECHNICAL SKILLS

- Lead and provide expert technical support to the Maintenance team in resolving unplanned mechanical breakdowns to ensure a quick return to production.
- Diagnose Mechanical, hydraulic, and pneumatic system failures and implement effective corrective actions.
 - Coordinate with machine and equipment suppliers for repairs, spare parts sourcing, and technical consultation.
 - Asset Management Auditing: conducted internal audits and gap analysis for Asset Management systems (AMS) based on ISO 55001 :2024 and GFMAM Landscape V3.
 - Strategic Alignment: Ensured the alignment of technical maintenance plans with the strategic Asset Management Plan (SAMP) to maximize asset value.
 - Maturity Assessment: performed maturity assessments of asset management practices to identify improvements and mitigate operational risks.
 - Expert in managing complex **STOs (Shutdowns, Turnarounds, and Outages)** with a focus on maximizing asset availability and minimizing downtime through **CAMA-certified** methodologies.
 - Eam/CMMS & Data Analysis, ISO 55000:2024, GFMAM landscape, Risk Based decision making, Life cycle costing (LLC) Analysis, Operational and Strategic Planning Alignment Expertise in leveraging Maximo and EAM Systems Asset Management for proactive decision making and performance optimization.
 - Develop, schedule, and oversee preventive maintenance plans and check lists for all mechanical systems and equipment.

- Manage spare parts inventory effectively, identify alternative suppliers, and drive cost optimization without compromising reliability.
- Supervise contractors under Annual Maintenance Contracts (AMC) and ensure their adherence to scope, quality, and safety standards.
- Drove significant improvements in asset reliability by implementing Reliability Centered Maintenance (**RCM**) programs and conducting rigorous Root Cause Failure Analysis (**RCFA**).
- Optimized Maintenance costs and enhanced operational efficiency through strategic improvements in key metrics like **MTBF** and **MTTR**.
- Reliability and Performance: Driving **PM/PdM** strategies, Root Cause Analysis, and failure analysis to maximize asset uptime.
- Ensured strict compliance with industry codes during the evaluation, selection, and commissioning of all Rotating Machinery.
- Conducted thorough technical evaluations of new equipment, verifying that Pumps, Compressors, and dry gas seal systems meet stringent operational requirements and specifications.
- Applied deep technical knowledge of relevant industry standards to guarantee asset integrity and operational readiness.
- demonstrates strong understanding and interpretation of mechanical, hydraulic, and pneumatic diagrams.
- **Rotating Equipment** (Pump, Compressors, Turbines), Heavy Equipment Operation and Maintenance, **PdM, RCFA**.
- Lead troubleshooting and Root Cause Analysis to prevent recurrence of mechanical failures.
- Provide technical recommendations for equipment upgrades, process improvements, and energy efficiency.
- Organize and coordinate maintenance teams to ensure continuous operational support across all shifts.
- Implement and sustain the **5S** Methodology to maintain high workplace standards and operational discipline.
- Plan, Prioritize, and optimize maintenance activities to minimize downtime and support uninterrupted production.
- Ensure all maintenance and repair work complies with internal quality standards, safety regulations, and industry's best practices.
- Contribute to company profitability by improving equipment reliability, optimizing maintenance costs, and reducing production losses.
- Promote a culture of safety and accountability, ensuring all team members adhere to health, safety, and environmental policies.
- Support management in developing long-term maintenance strategies and capital improvement plans.
- Proven full capacity to lead, motivate, and manage diverse teams, optimizing performance and workflow distribution.
- Mentoring and leading high performance technical teams, fostering and culture of safety and efficiency.

- Dedicated to a servant leadership style, focusing on the growth and well-being of the team to achieve collective success and organizational goals.
- Experienced in designing and conducting effective training programs and workshops for work teams to enhance technical skills and process knowledge.
- Skilled in efficiently managing workloads and distributing tasks ensuring operational effectiveness and timely project completion.
- Proficient in the operation maintenance and troubleshooting of steam boilers as well as gas and steam turbines.
- Comprehensive expertise in diagnosing failures performing standard maintenance and executing major reforms on various diesel engines.
- Hydraulics and Powertrain Systems: Skilled in managing and troubleshooting all types of hydraulic Pumps, powertrains and transmission systems.
- : Expert ability to diagnose faults in all types of heavy equipment applying scientific Original Equipment Manufacturer (**OEM**) Manuals recommended methods for repair and maintenance.
- Full ability to implement and utilize scientific methods for rapid fault identification and efficient repair processes.
- Committed to applying industry best practices and continuous improvement methodologies (**RCM, TPM, CBM**) to enhance reliability and operational efficiency.
- Ensure compliance with relevant safety, quality and environmental management procedures and controls within defined areas of work activity to guarantee safety legislative compliance and delivery of high-quality products and services.

PROFESSIONAL EXPERIENCE

- **Maintenance and Asset Management Manager** at Turq Al-jazirah Co for Buildings and roads from (January 2017 – Present).
- Directed comprehensive maintenance operations for a complex fleet of heavy equipment and Asphalt, Concrete and Crusher Plants, significantly boosting equipment availability.
- Implemented **PM** Schedules, apply all Maintenance strategies resulting in improved efficiency and adherence to stringent quality and safety standards.
- Managed inventory and procurement cycles ensuring 100% material readiness for critical repair operations.
- Reduced unplanned Outages by 15% by integrating predictive maintenance insights into the STO planning cycle.
- Oversee daily maintenance implementation, equipment inspections, and condition monitoring to mitigate risks and maximize availability.
- Successfully implemented a 'Flawless Start-up' initiative, resulting in zero leaks or rework post-Turnaround.
- The entire supply chain and procurement, life cycle, from strategic vendor sourcing and evaluation to inventory management (**EOQ/ROP**) ensuring 100% material readiness while controlling costs and mitigating risks.
- Sourcing and contracting with local (domestic) and international suppliers.
- Evaluating vendors based on quality availability pricing and the criticality risk of the source origin.

- Performing Planning and Scheduling work for various maintenance operations and hydraulic circuits and Pumps.
- Directed and optimized proactive and predictive maintenance strategies (**RCM, TPM**) for high wear asphalt, concrete and stone crusher plants, successfully maximizing uptime, minimizing downtime and ensuring safety compliance in challenging industrial environments.
- Diagnose mechanical hydraulic and pneumatic system failures and implement effective corrective actions.
- Implement and sustain the **5S** methodology to maintain high workplace standards and operational discipline.
- Planning and managing complex **STOs (Shutdowns, Turnarounds, and Outages)** with a focus on maximizing asset availability and minimizing downtime.
- Plans prioritize and optimize maintenance activities to minimize downtime and support uninterrupted production.
- Ensure all maintenance and repair work complies with internal quality standards, safety regulations and industry's best practices.
- Managed operation, maintenance, and availability of heavy fleet trucks including +800 trailers, dump trucks, and mining equipment.
- Developed and implemented preventive and reliability-based maintenance strategies to improve fleet availability and reduce operating costs.
- Controlled fleet maintenance budgets, spare parts, and contractor performance to ensure safe and efficient operations.
- **Manager of Maintenance and After Sales Services** at Ghabbour Auto Group (GB Auto) from (01/2016 to 12/2016).
- Optimized maintenance processes and warranty processes, achieving improve customer satisfaction and turnaround times.
- evaluation of inventory management for all spare parts and improving inventory accuracy.
- Utilize predictive maintenance tools, condition monitoring, and data analysis to identify trends, root causes, and improvement opportunities.
- Prepare monthly report highlighting work plans, major activity completed and attend regular maintenance dept. meeting.
- Monitor Maintenance planning section KPI's against target.
- Review and present manpower planning Follow up with operations, services, and company maintenance dept. for planning related issue.
- Drive inventory management of critical spares, oversee vendor/contractor performance, and ensure compliance with HSSE requirements.
- **Senior Maintenance Engineer** (Heavy Equipment, Komatsu) at Egyptian International Motors Co, (EIM), from (12-2012 to 12- 2016).
- Supervised advanced maintenance and repair operations for Komatsu equipment.
- Managed comprehensive troubleshooting, disassembly and assembly processes for all trucks, hydraulic systems, Equipment's and improving processes.
- Planned preventive and corrective maintenance programs for Cummins power generators to ensure high availability and operational continuity.

- Planned and calculated spare parts requirements for fleet assets and power generators, managed inventory levels, and coordinated with OEMs to support uninterrupted operations.
- Managed operation, maintenance, and technical support for Hyundai trailers.
- **Junior Maintenance Engineer** at Egyptian International Motors Co, (EIM), from (01-2010 to 12- 2012).
- Executed maintenance protocols and standardized repairs for trucks, automotive and heavy equipment.

Language Proficiency and Computer Knowledge

- Arabic: Native, English: Very Good.
- ICDL, EAM/CMMS/SAP software, Caterpillar SIS, Komatsu Linkone.

Professional Achievements

- Capital Fleet Optimization, conducted a comprehensive Capital Replacement Fleet Study, leveraging Lifecycle Costing (LCC) and data analytics to save over 45 million SAR through informed CAPEX/OPEX decision-making.
- Strategic Planning: Developed and implemented Strategic Asset Management Plans (SAMP) aligned with ISO 55001:2024 standards and the GFMAM Landscape to maximize Asset ROI and long-term profitability.
- Budgetary Excellence, managed multi-million SAR budgets for spare parts and contractor performance (AMC), achieving annual savings of 2 million SAR through TPM and 1 million SAR via strategic vendor sourcing.
- Operational Savings, realized over 3 million SAR in annual savings at Mining, Asphalt, and Concrete plants by deploying CBM and RCM methodologies.
- Maintenance Transformation, Led the transition from Run-to-Failure (RTF) to a proactive approach using RCM, Lean Maintenance, and 5S, reducing emergency breakdowns from 40% to 17%.
- Reliability Optimization, Enhanced MTBF and MTTR KPIs by executing Root Cause Failure Analysis (RCFA), resulting in zero delays caused by equipment failure.
- Integrated advanced Predictive Maintenance (PdM) insight into Shutdown, Turnaround, and Outage (STO) cycles, reducing unplanned outages by 15%.
- Quality Assurance: Achieved "Flawless Start-up" goals with zero leaks and zero rework post-turnaround by applying rigorous quality controls and ISO standards.
- Directed a fleet of 800+ heavy assets (Komatsu, Caterpillar, Hino, Actros, other), implementing reliability-based maintenance that significantly slashed operating costs.
- Achieved 100% Material Readiness for critical repairs by optimizing inventory via EOQ/ROP models and streamlining international procurement cycles.
- Provided high-level oversight for diverse equipment, including Rotating Machinery (Pumps, Turbines), Steam Boilers, and Diesel Engines using EAM/CMMS (Maximo, SAP).
- Safety Record achieved a 100% safety rating with Zero Injuries and Zero Near-Misses, embedding a culture of risk-based decision-making and HSSE compliance.
- Team Development, Mentored and upskilled technical teams, fostering a collaborative environment that improved overall maintenance efficiency and execution accuracy.