



**SARAVANAN MUTHIAH PILLAI**  
**(PMI-PMP)®, MMUP-Grade A** Reg No: 29899  
Doha, Qatar. Phone: - +974 50772205, Email id: [saravanan.kannapiran@gmail.com](mailto:saravanan.kannapiran@gmail.com)

**EXTENSIVE EXPERIENCE AND EXPERT IN OPERATION & MAINTENANCE /PROJECT MANAGEMENT/ MANUFACTURING PLANT /CHEMICAL AND PROCESS INDUSTRY /SALT MAKING PLANT/ SEWAGE AND INDUSTRIAL WASTEWATER TREATMENT PLANT /INNOVATION/ ENERGY EFFICIENCY/ ASSET MANAGEMENT / KAIZEN / ARTIFICIAL INTELLIGENCE IN PREDICTIVE MAINTENANCE**

## Core Competencies

Operation and Maintenance



Preventive Maintenance & Job Plan



Predictive Maintenance



Troubleshooting, Root Cause Failure



Equipment Condition Monitoring



Calibration and Overhauling



Spares Inventory Management



Engineering Management



Sustainable Development



Process Equipment Improvement



Shutdown Planning & Execution



GHG & Carbon Reduction



Energy Saving Techniques



Cost Saving Techniques



## Personal Details

**Date of Birth:** 5<sup>th</sup> May 1976

**Languages Known:** Tamil, English

Passport No: Z 3707772

**Permanent Address :** 135/3, Mettupalayam, Coimbatore, Tamilnadu, India.

**Age & Marital Status :** 48 years, Married, having two children  
Valid Qatar Driving License

## Profile Summary

- ✓ 25+ years of experience in Operation & Maintenance and Project Management in Manufacturing Plant, Chemical Process industry, Salt making plant and Water treatment plants and specialization in advanced technologies and innovative solutions.
- ✓ Efficiently manage all O&M activities, focusing on preventive and predictive maintenance strategies, job planning, scheduling in accordance with Asset Management Software (EAMS), and report generation.
- ✓ Proven expertise in team development and performance enhancement through targeted training initiatives, aligning team capabilities with organizational goals and management objectives
- ✓ Service Level Agreements (SLA's) and achieving Monthly Key Performance Indicators (KPI's).
- ✓ Liaise with facility management contractors, service providers, and vendors, while managing contracts and contractors to ensure delivery of contracted performance, AMC, Insurance and Statutory compliance.
- ✓ Provide recommendations to the client on asset improvements works with innovative solutions along with Scope of works and Budgets to enhance system efficiency, supported by comprehensive reports
- ✓ Implement cost reduction techniques, promote Energy saving, sustainable development,
- ✓ Apply Kaizen principles for continuous improvement among the team
- ✓ Review, follow up and submit daily, weekly, and monthly reports, progress and incident reports ensuring timely submission to the line manager
- ✓ Ensure the availability of water services for customers through effective management of water production and distribution networks, as well as sewage treatment and network systems
- ✓ Excellent knowledge in MS Word, Excel, SAP, PowerPoint, AutoCAD
- ✓ FMECA analysis, RCM analysis, MTTR & MTBF analysis
- ✓ Condition Monitoring of equipment & implement Predictive Maintenance.
- ✓ Preparation of Criticality analysis, Mitigation plan, Rain Emergency preparedness and Shutdown work planning and execution.
- ✓ Develop 5-year spare parts inventory plan, annual overhauling and calibration schedules, and manage the usage and inventory of spare parts, maintenance supplies, and equipment, initiating reordering when necessary.
- ✓ Ensure the maintenance of Quality Control (QC) and Quality Assurance (QA) standards. Supervise all safety procedures and permits, including confined space entry and excavation, in coordination with the QHSE
- ✓ Certified Lead Auditor ISO 55000:14000 Asset Management System
- ✓ ISO 50001:2008 Energy Management System and ISO 46001:2019 - Water Efficiency Management System

**Academic Carrier**

**1990 -1994:** Diploma in **Electronics and Communication** Engineering, Tamilnadu, India.

**1996-1997:** Electrical Supervisory Competency Exam, Govt of Tamil Nadu, India.

**2004 -2008:** Bachelor of Engineering in Electrical and Electronics, Government College of Technology, ANNA UNIVERSITY, Coimbatore, Tamil Nadu, India.

**2021-2022:** Electrical Engineer license UPDA (GRADE A) -Issued by MMUP Ministry of Qatar Government

**Additional courses/Training/Certificates**

**1995-2002:** Various training such as Fire safety, First aid, ISO 9001:2000 Internal Auditor, 5S, Industrial Automation, Switch gear Operation and Maintenance training attended.

**2012-2013:** Awarded 1st place Maintaining best in "Facility Management" within KG Group Companies.

**2012-2013:** Factory onsite Testing for 11KV/415, 3250 KVA Transformer & 1600A SF6 11 KV breaker at Schneider Electric infrastructure Ltd -Transformer, Katambi works, Vadodara, Gujarat, India.

**2014-2015:** Training in Operation/Maintenance/Trouble shooting /Protection of AC/DC Motors, Generators, Transformer, HV Switchgear done by Kirloskar Electric Company Ltd.

**2016-2017:** AutoCAD (Electrical) Course at Coimbatore, India

**2018-2019:** Green House Gas(GHG), Life Cycle analysis(LCA) Training by CII, Hyderabad India

**2018-2019:** National Water Award From Govt of India & Green Company Gold award from CII for best Energy Efficiency and Energy Saving practices under my lead.

**2019-2020:** CONFINED SPACE ENTRY AND RESCUE Course by ENERTECH QATAR, Doha.

**2019-2020:** LOTO & Permit to Work Course by ENERTECH QATAR, Doha

**2019-2020:** IBM Maximo V7.6 Training in MWH Global (Asset Management) ASHIGHAL, Doha, Qatar

**2020-2021:** Headworks & Gravity Belt Thickener - Training by Huber & SBR Blower - Training by SBR Blower Vendor (Howden) arranged by PWA at IA-STW, Qatar

**2020-2021:** FMECA & RCM training by Qatar Skill center, Doha , Qatar

**2020-2021:** ISO 31000 Risk Management training By DNV-GL, Doha, Qatar

**2021-2022:** MV VFD training on Operation, Maintenance and troubleshooting by ABB, Qatar

**2023-2024:** ISO 55001:2014 Asset Management System Lead Auditor Course by DNV, DUBAI

**2024-2025 :** ISO 50001 :2018 Energy Management & ISO 46001:20019 Water Efficiency Management System

**2024-2025:** Project Management Professional (PMP)® - From Project Management Institute (PMI)

**Proficiency Overview & Major Equipment Handled**

- ✓ Vertical Thin film dryers for Salt separation Process
- ✓ MEE - Multiple Effect Evaporators
- ✓ Special and customized Chemical and Process Equipment
- ✓ 20 Ton Steam boilers and 12 TON Steam thermic Fluid heaters for Process
- ✓ 23 MW Biomass Power Plant and 1 MW Roof top Solar power Plant
- ✓ Pumping stations and associated equipment - Design Capacity from 500 m3/day to 500000 m3/day
- ✓ 240 MLD - Qatar South Sewage water treatment Plant and Equipment.
- ✓ 45 MLD Desalination Water Treatment Plant & 90 MLD Industrial Wastewater treatment plant Equipment
- ✓ Submersible Pumps, Penstocks, Actuators, Aeration blowers, Air Diffusers, Valves ,OCU, Bio Air, Mechanical Screens, Chemical dosing system, FOG separator, Screw conveyors, Cranes, Thickening Belts, Dewatering Centrifuges, Decanter, Sand and Disc filters, Ultra filtration and UV banks, Centralized ACs, Chillers , Portable water equipment's, Surge vessels, Air release valves, Flow meters, Analyzers
- ✓ RO Systems, Multimedia filters, fine, course Screens, Intake systems, Clarifiers & Energy Recovery devices.
- ✓ Substations - CGL and Schneider make Transformers of 1MVA, 2 MVA (6.6KV/433V), 2MVA, 2.5MVA (22KV/433V with OLTC) 2.5MVA, 3MVA (11KV/433V) 12MVA (110/11KV) with OLTC
- ✓ Switch Gears at 11 KV, 22KV, 33KV and 110/11KV Voltage systems.
- ✓ LT Breakers, MCCBs, MV panels, Bus ducts SB, DB's and APFC for 433 Voltage Systems.
- ✓ UPS & Battery bank of various capacity up to 3\*175KVA/415 V UPS hot stand-by.

# Application for the Position of Engineering Manager

- ✓ Cummins and Caterpillar Generators of 380 KVA to 2000KVA with parallel operation, Cooling towers, AlfaLaval make Centrifuge pumps, Submersible pumps, blowers, Pumps etc..
- ✓ Variable Speed / Frequency Drive up to 100 KW. Make: Siemens, ABB, Schneider, Danfoss, Hitachi, Lenze, Yashikawa,Delta,etc..
- ✓ ELGI and Ingersoll-Rand make Compressors up to 4000 CFM, Driers, and Flow meters,
- ✓ Kirloskar and Schneider make VCB, SF6 HT breakers up to 1000A.
- ✓ Programmable Logic Controllers (PLC) *Siemens S7 300 with SIMATIC Manager, Allen Bradley SLCs with RS Logix 500, Supervisory Control & Data Acquisition (SCADA) RS 32 & ,Distributed Control System(DCS),PLC Commissioning & Maintenance with different Logic various*
- ✓ AC Motors up to 150 KW and DC motors and Servo motors and servo controllers
- ✓ Level Float Switches, Hydrostatic Level Indicators, Ultrasonic level Sensors, Bubbler Systems
- ✓ Mechanical Screens, WAP, OCU, BIO Air and Lifting Equipment Fire Trace.
- ✓ Clip on Flowmeters, Electromagnetic Flowmeters.

## **Projects Coordinated and handled**

- ✓ **Project :** DSSTW (Doha south Sewage treatment Plant) and Pumping stations Improvement Projects  
**Company:** Metito Overseas Qatar , Client - Ashghal (PWA)
- ✓ **Project :** AA DOM 13-14 M 1576 -FILTRATION SYSTEM AND OUTFALL DISCHARGE Pumping stations AS-01  
**Company:** Public Works Authority - Ashghal
- ✓ **Project :** BY Pass Pumping station at PS Wakra 1 , PS 44  
**Company:** Public Works Authority - Ashghal
- ✓ **Project :** IASTW ( Industrial Area Sewage Treatment) ,Barwa Baraha PTP, Barwa City PTP, Al Kahrana PTP improvement Projects  
**Company:** Metito Overseas Qatar , Client - Ashghal (PWA)
- ✓ **Project :** Chemical Processing manufacturing Plant  
**Company:** K.G Fabrics Ltd ,Erode,TN,India
- ✓ **Project :** 25000 Spindles Textile manufacturing Plant  
**Company:** Kannapiran Mills Limited,Unit:Balaji Mills,TN,India
- ✓ **Project :** 20000 Spindle - Textile manufacturing Plant with Process Equipments  
**Company:** Kannapiran Mills Limited,TN,India
- ✓ **Project :** 1.0 MW Roof top Solar Power generation and synchronized with plant MV panel  
**Company:** KG Fabriks Limited, Perundurai,,Erode.TN,India

## **Employment Profile**

### **FROM FEB 2025 TO TILL DATE**

Designation : Team Leader – Facility Maintenance (HIA-MWP)  
10 MLD- WWTP, 35 Nos SLS (Sewage Lifting Pumping Stations)

Organization : Hamad International Airport (HIA), Qatar

### **Job Profile**

Facility Maintenance and responsible for Operation and maintenance activities and services delivered by the operation and maintenance Contractor relating ensuring availability / maintainability / reliability of Assets. Projects Engineering Consultancy Supervision and Construction Management (Professional Secondment services from UNII engineering Design Consultancy) for Projects Department at Hamad International airport in WWTP (Waste Water Treatment Plant and SLS ( Sewage Lifting Stations) located in Midfield areas, Qatar Aviation system warehouses, catering buildings, Aircraft maintenance hangers, Cargo buildings, Passenger Terminal Complex, Qatar Duty Free, Emir's Terminals), Doha International Airport and subsidiary buildings.

**FROM JULY 2020 TO JAN 2025**

Designation : **Zonal Maintenance Manager (Plants)**  
**240 MLD STW & 90 MLD Industrial STW.**

Organization : **Metito Overseas Qatar WLL, Qatar Doha.**

Client : **ASHGHAL, Public Works Authority (PWA), Qatar**

**Job Profile**

Responsible for the operation and maintenance of all sewage and industrial wastewater treatment plants, surface and groundwater pumping stations, and associated distribution networks within Qatar's South Zone. Oversee contract execution and ensure accurate and timely reporting to PWA (Ashghal) and METITO management.

- ✓ Plans and issues work schedules to O&M personnel to ensure continual **safe and efficient operation of the plants**
- ✓ Maintain and protect the records of the O&M contract, i.e., log sheets, record of maintenance, incident reports, Checklist, daily operational process flow records and consolidated reports.
- ✓ **Optimising the Energy, Chemical consumption and minimise waste** without affecting water production and final water quality.
- ✓ **Attending meeting/ technical discussion** with Client PWA and vendors
- ✓ Review monthly maintenance reports and SLA and KPI for invoicing.
- ✓ Coordinate with ongoing **improvement projects** and the commissioning team to ensure seamless execution of work without disrupting plant operation
- ✓ Responsible for ALL PM and CM and unplanned operational or maintenance events.
- ✓ **Resolves problems and/or conflicts and maintains open communication with the client** including providing regular written reports to ensure satisfaction.
- ✓ **Prepare scope and budgets for work orders related to non-routine tasks**, obtain client approval, and execute repair works for pipe damages and blockage clearance. Ensure proper approval of the **Traffic Diversion Plan (TTP)** from the Ministry of Interior (MOI)
- ✓ Initiate and implement improvement programs to enhance plant operations and introduce **new innovations for continuous improvement**
- ✓ Respond to emergencies, **execute shutdown activities** and off-hour maintenance/operations, **ensuring 24/7 availability for critical situations.**
- ✓ Spares Inventory managements and cost controls and **budget meetings**
- ✓ Prepare monthly reports on **specific energy consumption per MLD, Maintenance spares cost per MLD, chemical cost per MLD, and manpower cost per MLD**. Define targets and objectives in line with **global industry standards** to enhance sustainability and drive continuous improvement
- ✓ Implement **Reliability-Centered Maintenance (RCM)** and **Failure Mode, Effects, and Criticality Analysis (FMECA)** for assets, while **monitoring Mean Time to Repair (MTTR) and Mean Time Between Failures (MTBF)** to optimize performance
- ✓ Prepare consolidated monthly, Quarterly and annual reports for all facilities, ensuring comprehensive performance analysis and reporting
- ✓ Review and **submit asset replacement proposals** to the client for **obsolete assets**, ensuring optimal system efficiency and reliability
- ✓ Follow up with the **workshop on the condition**, availability, and required repairs of all equipment, ensuring readiness for operations, and **effectively manage available resources across all facilities**
- ✓ Manage **training** programs for the team to enhance their **skills and improve overall efficiency**.
- ✓ Introduced **appreciation certificates, Awards & gifts to recognize the best practices to motivate the team**
- ✓ **Carry out any other activities as and when required by the senior management**
- ✓ Take responsibility for coordinating, supervising, and ensuring the adherence to safety procedures collaboration with the QHSE department.
- ✓ Developed an **Artificial Intelligence (AI)** model in collaboration with a Singapore-based AI company to enhance efficiency, optimize energy consumption, increase production and quality, prevent

breakdowns, and extend asset life expectancy in the plant.

## **FROM NOVEMBER 2019 TO JUNE 2020**

Designation : **Senior Electrical Engineer -1,**  
Organization : **ASHGHAL, Public Works Authority (PWA), Salwa Road, Doha, Qatar.**

### **JOB PROFILE:-**

Responsible to inspect the on-going Operation and maintenance activities and services delivered by the Primary Framework Contractor.

- ✓ Attended FAT and SAT related to Pumping stations ongoing projects on behalf of PWA.
- ✓ Coordinated for Taking Over / Handing Over Process of Plants in Zonal Catchment.
- ✓ Carry out design and material reviews to ensure compliance with relevant standards, project specifications and DNO&M requirements.
- ✓ Support growth of the team, in particular the provision of Electrical knowledge and technical support
- ✓ Ensure Ashghal DNO&M electrical systems/ components and associated works are compliant with the local and international standards and best practice
- ✓ Review the quarterly, annual and long term preventative and routine maintenance plans to ensure that the Drainage Network performs to the specified level of operations.
- ✓ Ensure that the asset inventory for electrical systems/ components is accurate and maintained in a suitable format for the applicable Computer Based Asset Management System.
- ✓ Review monthly maintenance reports and KPI submitted by the contractors for invoicing.

## **FROM AUGUST 2016 TO OCTOBER 2019**

Designation : **Engineering Manager (Manufacturing Plant)**  
Organization : **K.G.Fabriks Ltd, Erode ,India -638052**

### **ABOUT THE ORGANIZATION**

K.G. Fabriks Ltd is a textile manufacturing and chemical processing industry equipped with a 1 MW rooftop solar power plant. The company operates entirely on renewable energy sources such as solar and wind power. The facility includes advanced systems such as boilers, thermic fluid heaters, HVAC systems, Multiple Effect Evaporators (MEE), Salt Separation system-Vertical Thin Film Dryers (VTFD), and Zero Liquid Discharge (ZLD) sustainable operations

### **JOB PROFILE:-**

- ✓ Led the engineering team across all manufacturing disciplines, including utilities, effluent wastewater treatment plant, RO plant, Multiple Effect Evaporator (MEE), Vertical Thin Film Dryer (VTFD), dyeing and sizing, weaving, pumping stations, steam and thermic fluid boilers, and infrastructure facilities.
- ✓ Participated in daily technical meetings with the General Manager and department managers to address operational challenges, provide effective solutions, and coordinate with the team.
- ✓ Executed routine, preventive, and corrective maintenance activities, and ensured timely preparation and submission of weekly, monthly, and annual reports for all equipment in the manufacturing plant.
- ✓ Submitted daily operational reports to top management and established performance standards for key metrics, including power vs. production, compressed air vs. production, steam generation vs. production, and effluent water treated vs. power consumption. Also responsible for preparing monthly and annual maintenance budgets for all equipment.

### **ACHIEVEMENTS**

- ✓ Successfully completed the Erection and commissioning of Primary and secondary clarifiers in ETP for capacity addition during the project expansion and laundry machines, dryers, Dying and sizing machine and warping machine with all utility requirement within a stipulated time.
- ✓ Improved condensate recovery of the plant from 54 % to 76 % - **huge annual savings** achieved.
- ✓ Introduced and developed in house **electronics service station** and fully reduced the outside service charges of all department electronic boards.

# Application for the Position of Engineering Manager

- ✓ Fixed EMFM flow meter for steam lines and water lines, Electronic CFM meter for air line.
- ✓ Leading the factory team for **GREEN CO 2018** award and achieved our factory as India's **1<sup>st</sup> GREEN COMPANY GOLD** rated in the integrated Textile sector by CII
- ✓ Heading the Team to get **NATIONAL WATER AWARD (1<sup>st</sup> place)** in medium and small-scale sector from GOVT of India. (2019)
- ✓ Reduction of **GHG, LCA** and implementation of Higg index and Sustainability measures.
- ✓ About 26 innovative (**Kaizen**) projects have been successfully completed.
- ✓ **40 % reduction in Maintenance cost** were achieved within 3 years.
- ✓ **Energy audit** was done with team of Centre for energy and Environment (CEEP) and IIT Chennai.

## FROM AUG 2008 TO JUNE 2016 (8 YEARS)

Designation	: Chief Engineer ( Chemical Process Industry)
Organization	: Sri Kannapiran Mills Pvt Ltd, Coimbatore, India -641301
Experience	: Textile Manufacturing plant with Chemical Process

### JOB PROFILE

- ✓ Operation and Maintenance of 22KV and 11 KV, HT substation equipment, Process machineries & 415V Electrical Distribution Network to ensure the safety, reliability, continuity of power supply.
- ✓ Arranging and Conducting Internal and external calibration of all electrical Protection and Measuring equipment such as earth fault ,Over current& Voltage, and Energy Meters, , Pressure Meters.
- ✓ Prepare, evaluate and control preventive and corrective maintenance call- off contracts and service orders related to 11kV/22 KV substations cable, OH lines, LV equipment.
- ✓ Preparing monthly and yearly budgets, authorized to approve work requests, material requests, contract work requests, service orders etc. within the delegated powers, to ensure prompt execution of work, using "Systems, Application & Products in data Processing" (SAP).
- ✓ Facility Management in all the factory buildings in the company and Officer Quarters for Lighting, Water, Sewage treatment plant ,Air conditioning, and Painting, Gardening, Networking, Cleanliness etc...

### ACHIEVEMENTS

- ✓ Formed active team and Implemented energy saving techniques and achieved 14% energy saving in total plant energy consumption and got 1<sup>st</sup> place energy saving competition in our group companies.
- ✓ Effectively coordinated for the new projects with Engineering and Civil consultants for getting drawings and given approvals for execution within the short period.
- ✓ Preparing Failure analysis and finding root cause for failures in electrical equipment and corrective action and preventive action taken and thus it helped to zero breakdown.

## FROM JANUARY 2000 TO JULY 2004 (4 YEARS)

Designation	: Electrical Engineer
Organization	: M/s. KG Denim Limited, Mettupalayam, Coimbatore(Dt)-641302
Experience	: DENIM Manufacring Plant and Continuous automated machines

## FROM JUNE 1994 TO MAY 1999 (5 YEARS)

Designation	: Senior Electrical Supervisor( May 1994 to December 1999)
Organization	: M/s. Sri Sharadha Parameshwari Textiles Limited, Coimbatore.
Experience	: Textile manufacturing industry and process equipment

I hereby declare that all above information's are true and correct to the best of my Knowledge.

Place : Doha,Qatar

Yours Truly

Date : 05.05.2025

**SARAVANAN MUTHIAH PILLAI**