MOHAMMED SHARIF

ENGINEERING DEPARTMENT MANAGER

Poultry Processing | Industrial Engineering | Electrical Power & Automation

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Abha, Saudi Arabia



PROFESSIONAL PROFILE

Engineering Department Manager with progressive experience in poultry processing, industrial maintenance, utilities, electrical engineering and automation. Leads multidisciplinary engineering operations and capital projects across slaughterhouses, hatcheries, feed mills and poultry farms.

PROFESSIONAL EXPERIENCE

Balady Poultry Company | Abha, Saudi Arabia

Engineering Department Manager | June 2025 – Present

- Lead the engineering department across poultry slaughterhouses, hatcheries, feed mills, farms and supporting infrastructure.
- Direct engineering strategies, technical standards, asset reliability, maintenance programs and continuous improvement initiatives.
- Oversee the design, installation, testing, commissioning and expansion of poultry processing lines and associated facilities.
- Manage engineering projects from technical specifications, supplier evaluation and contract coordination through commissioning and handover.
- Ensure reliable operation of refrigeration, boilers, HVAC, water treatment, wastewater treatment, rendering and plant utility systems.
- Supervise electrical power distribution, backup generation, industrial automation, instrumentation and energy-efficiency improvements.
- Plan and control engineering capital and operating budgets, procurement requirements, manpower and project schedules.
- Coordinate with suppliers, contractors, consultants and production, quality, safety and operations departments.
- Promote food-safety requirements, occupational safety, environmental compliance, root-cause analysis and team development.

Maintenance Manager

Balady Poultry Company | Sep. 2023 – May 2026

Deputy of Maintenance Manager

Balady Poultry Company | Feb. 2021 – Aug. 2023

Electrical Engineer

Balady Poultry Company | July 2018 – Feb. 2021

POULTRY PROCESSING EQUIPMENT, PACKAGING SYSTEMS & PRODUCTION ANALYSIS

- Multihead Weighing Systems – Cabinplant: Experience with Cabinplant multihead weighing systems for poultry giblets and cut-up products, including automated weighing, portioning, product distribution and integration with downstream packaging lines to improve accuracy, efficiency and reduce product giveaway.
- Conveyor and Product Handling Systems – Kromeka: Experience with Kromeka conveyor systems for poultry transportation, distribution, sorting and transfer between processing and packaging equipment, including integration, troubleshooting, preventive maintenance and production flow optimization.
- Automated Packaging Machinery: Technical experience with stretch wrapping, tray sealing, shrink packaging and vacuum packaging machines, including installation, commissioning, troubleshooting, maintenance and production-line integration to support packaging quality and equipment reliability.
- Production Monitoring and Analysis – CAT2: Experience using CAT2 production analysis systems to monitor performance, assess efficiency, identify process losses and support data-driven improvements in productivity, yield and overall plant performance.

ORIGINAL TECHNICAL FUNCTIONS & RESPONSIBILITIES

- Basic Functions / Job Objectives: Having strong experience in the operation, maintenance, installation, and troubleshooting of BAADER (LINCO) and Meyn poultry processing lines, starting from the receiving area through to the weighing line. Responsible for ensuring that all factory equipment, instrumentation, machinery, electrical panels, and components are maintained in optimal operating condition to meet specified production and operational requirements.

Duties and Responsibility:

- Installation, wiring, troubleshooting, adjusting and setting parameters of water stunner 032 to achieve the best stunning which suitable with speed line and average weight of product.
- Installation and doing electrical wiring for all components of SCALDER such as air blowers, solenoids, electrical valves, temperature sensors, Controller for steam and temperature, and doing the maintenance and calibration for the required components.
- Doing electrical wiring for all tunnel picker's components such as motors, hydraulic pumps, waters valves...etc., and doing the maintenance and adjustment for that.
- Testing, adjusting, and doing electrical wiring for all machines in EV area such (a blade cutting motor for vent cutter machine), (water pump, shackle washer giblet line, and spoon adjust motor for EV 218), (brush motor for cropper), (water pump for in out washer machine), (gizzard process machine, gizzard table machine, gizzard heart liver separator and chillers).
- Installation, setting, and wiring of control system drives such as VLT, VFD, and soft starter.
- Installation, adjusting and doing electrical wiring for different types of sensors such as torque sensors, photocells sensors, temperature sensor…etc.
- Inspecting, maintaining and calibrating all temperatures, humidity and recording devices including meters and gauges.
- Installing and doing electrical wiring for different types of drive units.
- Doing electrical wiring for Encoders in transfer machine in both sides master and slaves and having a strong experience and knowledge to achieve the synchronization for the machine.
- Having a good knowledge about weighing transfer 512 such as doing calibration for all loadcells, achieving the synchronization, doing reset for the board from HMI.
- Installation, doing electrical wiring for vacuum pump, offal pump, and offal stations…etc.
- Monitoring the air chiller from HMI and see what is the situation for the ATU and LTL (speed up, catch up, or line need to be cut...etc.).

- Testing, doing electrical wiring for all components in weighing line such as sensors, solenoids, encoders, and drive units…etc.
- Having a good knowledge and experience about (B logic software) such as printing different types of reports, running the production with different program, changing the drop station number regarding the weight required, doing different types of testing for the solenoids, monitoring the synchronization from the software…etc.
- Diagnose, troubleshoot, update and repair malfunctioning plant equipment. Maintain, repair and overhaul treatment plant equipment including pumps, motors, compressors, belt press, valves, drive units, hydraulic control units, and hydraulic pressure systems.
- Full knowledge regarding utility equipment such as air compressor, boilers, water pumps…etc.
- Establishing building systems procedures and trains technicians to perform same.
- Ensuring safe and effective operations and working environment.
- Reads, writes, modifies and maintains automated building software and hardware for designated systems.
- Driving project schedules while working closely with design and construction to ensure milestones and completion dates are on track.
- Monitoring, setting, and periodic maintenance for HVAC system components, Generators, Firefighting system.
- Installation of electrical and lighting system, lay-out of power system, test electrical system and continuity of circuits in electrical drawing.

EDUCATION

- Master of Engineering, Electrical Engineering (Power)

Universiti Teknologi Malaysia (UTM), Johor Bahru, Malaysia | May 2017 – June 2018

- Bachelor of Science, Electrical and Electronic Engineering

Omdurman Islamic University (OIU), Khartoum, Sudan | Sep 2011 – June 2016

RESEARCH / WORK EXPERIENCE

University Technology Malaysia (UTM). Johor Bahru, Malaysia Research assistant

- Study Name: Improving Power System Quality in a Grid Connected with High Penetration of PV Using D-STATCOM.
- Background: The increase in energy demand has become problematic considering that over seventy-five percent of total global energy demand is supplied by the burning of fossil fuels. As a result, an energy efficient alternative has been adopted which involved an effort put into distributed generation networks with integration of renewable energy systems in to the grid. Furthermore, there has been a recent a rapid expansion of the PV technology due to its great ability to support the grid. Recently a high volume of concern has been raised to the distribution network operators due to the negative impact of high penetration level of PV. This negative impact consists of power quality issues related to PV system such as: transient voltage, harmonics, and voltage sag swell. FACTS devices are capable of mitigating the power quality issues. In this project STATCOM is used to mitigate the power quality issues caused by the integration of photovoltaic in an electric power system. STATCOM, as an advanced compensator, consisting of power electronic devices, by connecting STATCOM to PV grid connected, the system can reach steady state faster during the transient fault and improve the voltage during fault period. Also, STATCOM can mitigate the harmonics related to the power electronic devices in PV farm.
- Objective: The simulation evaluated the system performances with and without STATCOM using MATLAB/SIMULINK environment to further explain that STATCOM has an excellent scope for mitigating

the power quality issues. Omdurman Islamic university (OIU). Khartoum, Sudan Research assistant

- Study Name: Improving Transient Stability of Power Systems by using STATCOM
- Background: In modern power system utilities, increased power demand often lead to the situation where the system no longer remains in secure operating region. Flexible AC Transmission Systems (FACTS) controllers can play an important role in power system security enhancement. The goal of FACTS devices study is to measure their impact on the state of the electrical networks into which they are introduced. Their principal function is to improve the static and dynamic properties of the electrical networks by increasing the margins of static and dynamic stability.
- Objective: In this project the modeling of Static Synchronous Compensator (STATCOM), discussed, implemented and the transient stability of a power system was tested when three phase faults were applied at a certain branch of the power system. The dynamic response of the system implemented using the MATLAB/Simulink environment to simulate the study system in: A steady state, under three phase faults, without STATCOM and under three phase faults, and with STATCOM. The simulation result indicated the effect of the STATCOM in damping oscillation and improving power system stability.

ORIGINAL CAREER OBJECTIVE

Competent and resourceful Electrical Engineer with the ability to handle multiple projects simultaneously with high professionalism and accuracy. Looking to exercise my knowledge of electrical and electronic circuits and current discharge while offering the ability to bring innovative ideas and effectively work in teams to bring concrete and theoretical knowledge of different electrical instruments. Working currently in poultry field as a maintenance engineer and maintenance leader in slaughterhouse automation line, Rendering plant, waste water treatment, refrigeration plant, Boilers, and other utilities.

RELEVANT RESEARCH-BASED COURSEWORK

Integrated Resource Planning in Energy Sector

- Description: A course designed to give an overview understanding of energy supply, demand, energy balance and sustainability issues. It covered the assessment of past, current and future energy system and provides the analytical framework and assessment methodologies needed to promote Integrated Recourse Planning (IRP) in electricity sector. IRP is the process of selecting electric resources mix on the basis of comparing the benefits and costs of demand and supply resources. By adapting this knowledge, students were able to develop essential technical skill in solving real-world problem of providing electricity at lowest possible economic, social and environmental cost.

Analysis of Power System & Computational Methods

- Description: This reviewed basic Power Network Concepts, Power Transmission Lines Transformer and generator and their respective parameters and equivalent circuit models. Students were taught how to formulate rigorously power system network model and Bus admittance matrix and to appreciate all assumptions made. The application of Bus admittance matrix to Fault Analysis and the application of symmetrical sequence components to unbalanced fault analysis were covered. Further application of the power system network model and numerical techniques were used to solve Power Flow analysis using Newton-Raphson Method and the Decoupled Load Flow.
- Students wrote and developed basic fault analysis and load flow analysis program. The programs were tested with IEEE test systems with the aim to achieve results comparable with commercial software. Commercial grade professional software was used to design simple and practical reactive power and voltage control. The concept of multi-machine transient stability analysis was be covered in the course in order to understand large scale power system response to any power disturbance.

Power System Transmission and Security

- Description: This course was divided into 2 parts: The first part introduced students to power systems transmission system while the second part introduced students to power systems security. In the first part, it covered the power transmission in details ranging from transmission line modelling to

transmission line design. Key issues such as transmission losses in determining the economic dispatch of power system were covered. The second part covered the issue of power system security in which the concentration was given involving transmission system security. The concept of contingency analysis, N-1 security was discussed. Then the issue of congestion management and allocation in deregulated electricity market were also covered in this course.

Modern Power System Protection

- Description: This course covered major views, theories and applications in the area of power system protection. It examined some key issues in overcurrent protection with special focus in IDMT relay application in power system network. Students were also taught with the topic related to power system fault diagnostic. The students evaluated the performance of power system protection and interpreted various causes of fault in power system.

Lightning Protection and Grounding System

- Description: This course covered the following areas: lightning phenomena; earth performance under lightning current as well as under short-circuit condition; lightning related damages, lightning parameters, lightning surge propagation in transmission lines, lightning effects on human being and animals, principle of lightning protection based on IEC standard, lightning protection for building structures, lightning protection of transmission line and shielding failure, interaction of lightning with low voltage; and introduction to earthing systems: resistance value; measurement of soil resistivity and earth resistance value, step potential, touch potential and transfer potential, soil characteristics under impulse condition, transmission-line tower earthing installation, computer network earthing, design of AC substation earthing system.

HONORS & CERTIFICATES

- Certificate of Training Completion: Protection of Electrical Equipment- Awarded by the Sudanese Electrical Company in Khartoum
- Certificate of Best Student in Master of Electrical Engineering- Awarded by the University Technology Malaysia (UTM).

ADDITIONAL SKILLS

- Proficiency in MATLAB/Simulink
- Proficiency in Power World Stimulator
- Proficiency in Microsoft Word, Excel, PowerPoint
- Ability to work with teams by thinking critically and collectively coming up with solutions.
- Proficiency in AutoCAD for engineering drawings and technical layouts.

MOHAMMED SHARIF

ENGINEERING DEPARTMENT MANAGER

ADDITIONAL EXECUTIVE PROFILE & LEADERSHIP EXPERIENCE

EXECUTIVE PROFILE

- Engineering Department Manager at Balady Poultry Company, a publicly listed Saudi company, with over 10 years of experience in poultry processing, integrated industrial projects, electrical engineering, plant utilities and engineering leadership. Holds a Master of Engineering in Electrical Engineering (Power) from Universiti Teknologi Malaysia (UTM). Contributes to the development and expansion of an integrated poultry production value chain spanning feed manufacturing, hatcheries, farms, slaughterhouses, processing, packaging and cold-chain facilities.
- Supports Balady's industrial growth strategy, with current production exceeding 200,000 birds per day and a planned increase to over 700,000 birds per day in early 2027, subject to commissioning of the new facility.

SELECTED STRATEGIC PROJECTS & ACHIEVEMENTS

- **Feed Manufacturing:** Contributed to the establishment and development of an integrated feed mill with production capacity of up to 1,200 tonnes per day, including material handling, storage and industrial automation systems.
- **Hatchery Development:** Contributed to hatchery projects with combined annual capacity exceeding 80 million chicks, including associated engineering systems and operational technologies.
- **Poultry Processing:** Contributed to the development of a new integrated poultry slaughtering and processing facility designed for 500,000 birds per day, covering slaughtering, cut-up, packaging, chilling, freezing and supporting utilities.
- **Poultry Farms:** Oversees engineering infrastructure and environmental-control systems, including ventilation, cooling, heating, feeding, water supply and automation.
- **Industrial Infrastructure:** Oversees electrical generation and distribution, industrial refrigeration, water treatment, wastewater and waste-management systems supporting reliable production.

ENGINEERING LEADERSHIP & MANAGEMENT

- **Strategic Planning & Capital Projects:** Leads engineering planning, technical studies, technology assessments, project design, procurement, construction, installation, testing, commissioning and handover, with attention to schedule, quality and budget.
- **Plant Engineering & Integration:** Oversees multidisciplinary engineering activities across slaughterhouses, feed mills, hatcheries, farms, cold storage and utilities, integrating electrical, mechanical and automation systems.
- **Maintenance & Reliability:** Develops preventive, predictive and corrective maintenance strategies, improves equipment availability, reduces unplanned downtime, and manages maintenance resources, spare parts and industrial assets.
- **Energy, Utilities & Sustainability:** Directs technical oversight of power distribution and generation, renewable-energy opportunities, refrigeration, steam, compressed air, water treatment and industrial wastewater, emphasizing efficiency and operational cost control.
- **Technology & Continuous Improvement:** Evaluates equipment upgrades, automation and process optimization to improve throughput, product quality, resource utilization and production efficiency.

- **Contracts & Technical Partners:** Leads technical specifications, bid evaluations, supplier and contractor coordination, technical negotiations and monitoring of contract performance against approved standards.
- **Safety, Quality & Compliance:** Integrates occupational safety, food safety, biosecurity, environmental requirements, risk management and business continuity into engineering activities.
- **Team Leadership:** Leads multidisciplinary engineering and technical teams, develops capabilities and KPIs, and coordinates engineering priorities with executive management, production, finance, procurement, quality and safety functions.