



المفید
AL MUFEEB
ELECTRICAL SERVICES W.L.L.

Building the Future



We are Serving

Power plants, Transmission & Distribution Substations,
Energy, Solar, Wind energy,
Processing Industries, & all electrical Systems.



About us

Al Mufeed Electrical Services (AME)

Al Mufeed Electrical Services is a leading and rapidly growing technology-driven engineering and electrical company in the Kingdom of Bahrain. Specializing in sustainable solutions, we excel in delivering large-scale urban and industrial infrastructure projects while maintaining a strong presence in various industrial and commercial sectors. With a focus on clean energy, we are committed to supporting the nation's Net Zero goals.

Our comprehensive range of services covers the entire project lifecycle, from engineering and procurement to commissioning, operations, and maintenance. This makes us a reliable one-stop service provider. We ensure timely project delivery using advanced project management techniques, maintaining the highest standards of safety and sustainability.

We offer a wide array of specialized services, including Power Plants, Transmission & Distribution Substations, Energy Solutions, Solar and Wind Energy projects, Processing Industries, and all types of Electrical Systems. Our expertise in these areas ensures the efficient design, installation, and management of systems that contribute to energy sustainability and the optimization of industrial operations.



Vision :

To be a prominent company in providing integrated solution for electrical, instrumentation, automation and control, globally.

Mission :

Providing integrated solution in electrical, instrumentation automation and control that augmenting value for clients.

Our Core Values



Excellence in Quality :

ISO 9001 certification drives our unwavering focus on delivering projects with exceptional quality.



Commitment to Safety :

As an ISO 45001-certified organization, we prioritize the health and safety of our teams, clients, and stakeholders.



Recognition and Expertise :

Our MTC Grade 1 accreditation with EDD Bahrain reflects our leadership and expertise in the electrical contracting field.



Collaborative Solutions :

By partnering with top engineering firms in Middle East & Asia - Pacific, we bring innovative, cost-effective solutions to complex challenges.



Client-Centric Approach :

We focus on understanding and exceeding our clients' expectations, ensuring every project is a success.

From concept to completion, AME delivers reliable, safe, and innovative electrical solutions, empowering our clients to achieve their goals with confidence.

Services



Electrical Installation

Electrical installations are a crucial part of setting up any residential, commercial, or industrial facility, ensuring that the power distribution system is both safe and efficient.

Services Include :

- ▶ **High-Voltage and Low-Voltage Systems** : Installation of both low- and high-voltage systems to meet specific project needs, ensuring safe transmission and distribution of electrical power.
- ▶ **Cable Laying and Routing** : Laying of cables through conduits, trays, or underground, including both **low-voltage cables** for residential / commercial use and **high-voltage cables** for industrial and utility applications.
- ▶ **Switchgear Installation** : Installation of electrical switchgear to control, protect, and isolate electrical equipment. This includes **circuit breakers**, **disconnect switches**, and **fuse protection**.
- ▶ **Panel Wiring and Integration** : Proper wiring of control panels, motor control centers (MCCs), and distribution boards (DBs) to ensure proper integration of power supply and control.
- ▶ **Compliance** : Ensuring all installations comply with national and international electrical standards (e.g., IEC, NEC) for safety, operational reliability, and performance.

Benefits :

- Reliable and safe power distribution.
- Compliance with safety codes and regulations.
- Energy-efficient systems tailored to the specific needs of each project.

Testing and Commissioning

Before an electrical system is put into service, rigorous testing and commissioning ensure it operates correctly, efficiently, and safely under various load conditions.

Services Include :

- ▶ **Load Flow Analysis** : Conducting simulations to determine the flow of electrical power across the system, helping to identify bottlenecks, under-utilized components, or overloaded circuits.

Objective : Optimize system capacity and prevent overloading. Short-Circuit.

- ▶ **Analysis** : Analyzing potential short-circuit currents and the impact on system components, ensuring that protection devices (such as circuit breakers and fuses) are properly rated to withstand these conditions.

Objective : Prevent damage and ensure correct operation of protection devices during faults.

- ▶ **Harmonic Analysis** : Assessing harmonic distortion in electrical systems, which can cause overheating, reduced efficiency, and equipment failure.

Objective : Mitigate harmonic distortion by implementing filters or equipment upgrades.

- ▶ **Arc Flash Analysis** : Determining the potential arc flash hazards within a system, assessing risks to personnel and recommending safety measures.

Objective : Enhance safety and reduce risk to personnel during operation or maintenance.



Benefits :

- Assurance of system safety and functionality.
- Minimization of operational risks and downtime.
- Compliance with industry standards and regulations.

Services



Electrical Studies

Electrical studies help analyze and optimize the performance, efficiency, and safety of electrical systems, ensuring they meet both current and future needs.

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Objective : Enhance safety and reduce risk to personnel during operation or maintenance.

Benefits :

- Enhanced system performance and efficiency.
- Proactive identification of potential issues and weaknesses.
- Improved compliance with safety regulations and operational standards.

Substation and Transformer Maintenance

Regular inspection, testing, and maintenance are essential to keep substations and transformers in good working order, ensuring reliable power distribution and reducing downtime.

Services Include :

- ▶ **Routine Inspection** : Periodic inspection of equipment such as transformers, circuit breakers, busbars, and switchgear to detect early signs of wear or failure.
- ▶ **Oil Testing** : Performing tests on transformer oil (e.g., Dielectric Strength, Moisture Content, Acidity testing) to assess the health of the transformer and prevent operational issues.
- ▶ **Thermal Imaging** : Using infrared thermography to detect abnormal heating in electrical components, which can indicate loose connections, overloads, or imminent failures.
- ▶ **Preventive Maintenance** : Cleaning, lubricating, and checking for wear in equipment to avoid sudden breakdowns and extend the life of assets.
- ▶ **Upgrades** : Periodic upgrades and retrofits of substations and transformers to keep up with changing operational demands and standards.



Benefits :

- Extended lifespan of electrical equipment.
- Improved reliability and reduced risk of failure.
- Cost-effective operation by preventing unplanned outages.

Services



Benefits :

- ◆ Improved visibility and safety.
- ◆ Reduced energy consumption and lower operational costs.
- ◆ Enhanced aesthetics and functionality of spaces.

Lighting Systems Installation

Designing, installing, and maintaining high-performance lighting systems, tailored for residential, commercial, and industrial environments, ensuring optimal light output while minimizing energy consumption.

Services Include :

- ▶ **Interior and Exterior Lighting Design** : Designing lighting solutions based on user requirements, focusing on energy efficiency and performance.
- ▶ **Indoor Solutions** : Office lighting, task lighting, and ambient lighting that enhance comfort and productivity.
- ▶ **Outdoor Solutions** : Street lighting, security lighting, and landscape lighting for safety, visibility, and aesthetics.
- ▶ **LED Retrofits and Upgrades** : Replacing outdated lighting systems with energy-efficient LED fixtures to reduce energy consumption and operational costs.
- ▶ **Control Systems** : Implementing automated lighting control systems, such as dimmers, motion sensors, and daylight harvesting systems, for increased energy efficiency.
- ▶ **Installation and Maintenance** : Ensuring proper installation and periodic maintenance of lighting systems for optimal performance.

Cable Laying and Jointing

Professional services for the installation of electrical cables, both underground and overhead, to ensure secure, efficient, and safe power transmission.

Services Include :

- ▶ **Cable Laying** : Installing low- and high-voltage cables in underground ducts, trenches, or overhead systems, ensuring they meet required specifications and safety standards.
- ▶ **High-Voltage Cable Jointing** : Expert installation of high-voltage cable joints and terminations, ensuring that connections are secure and reliable.
- ▶ **Cable Testing** : Testing the integrity of cables during and after installation to ensure they are free from defects, properly insulated, and safe to use.
- ▶ **Termination Services** : Professional cable termination, ensuring correct and safe connections between cables and electrical equipment such as transformers, generators, and switchgear.



Benefits :

- ◆ Efficient and secure power transmission.
- ◆ Minimization of cable faults or failures.
- ◆ Long-lasting and reliable cable installations.



Services



Energy Audits and Efficiency Upgrades

Energy audits help identify inefficiencies within electrical systems, and upgrades implement energy-saving solutions to reduce consumption and operational costs.

Services Include :

- ▶ **Energy Audits** : Thorough evaluation of energy use in a building or facility, identifying areas where energy is being wasted or inefficiently used.
- ▶ **Areas Covered** : Lighting systems, HVAC, motors, drives, and overall electrical distribution systems.
- ▶ **Energy Efficiency Upgrades** : Implementing recommendations from the energy audit, including LED retrofitting, power factor correction, and renewable energy integration (e.g., solar panels, wind turbines).
- ▶ **Demand Response Management** : Designing systems to optimize energy use during peak periods and reduce the risk of overloading the grid.
- ▶ **Carbon Footprint Reduction** : Helping clients reduce emissions and comply with environmental regulations through energy-efficient upgrades.

Benefits :

- Lower energy bills.
- Reduced environmental impact.
- Compliance with sustainability and efficiency standards.

Trading & Panel manufacturing

Providing high-quality electrical products and custom panels, backed by technical expertise and comprehensive support.

Services Include :

- ▶ **Electrical Equipment Trading** : Supplying top-grade electrical components such as transformers, LV & MV switchgear, cables, RMU's, control panels, Bus ducts for commercial & industrial sectors and protection devices from globally recognized brands.
- ▶ **Custom LV Switchgear Assembly** : Design and manufacturing of low-voltage switchgear panels to meet specific client requirements for safety, reliability, and efficiency.
- ▶ **Comprehensive Support** : Offering after-sales support, installation assistance, and technical expertise to ensure optimal performance and client satisfaction.



Benefits :

- Access to high-quality electrical products and components.
- Tailored solutions for specific operational needs.
- Continuous technical support and after-sales service.



Authorized supplier of EWA-approved electrical equipment, including cables, transformers, LV switchgear, APFC panels, and other related electrical components.

Each of these services is carried out with a commitment to **safety, precision, and adherence to industry best practices**, ensuring superior results for clients across all sectors.

Projects



Products



Clients & Consultant



Trust us for innovative solutions tailored to your electrical engineering needs.



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