ARUNA BUDDHIKA DABAREGE MADURANGA

Maintenance Electrical Supervisor

Weboda, 11858, Sri Lanka
+94 71 744 2625
Professional Electrical Specialist (18+ Years Experience)
aruncaraudio@gmail.com

PROFESSIONAL SUMMARY

Highly accomplished and technically proficient Maintenance Electrical Supervisor with over 18 years of robust experience in electrical systems engineering within the high-stakes petroleum refinery and industrial sectors. Proven expertise in leading technical teams, spearheading large-scale preventive maintenance programs, and ensuring absolute alignment with hazardous area safety regulations. Adept at optimizing electrical reliability, executing root-cause diagnostics, and minimizing plant downtime across complex distributions, transformers, and industrial HVAC control systems.

WORK EXPERIENCE

Senior Electrical Technician / Maintenance Specialist **07/2010 – Present**

Ceylon Petroleum Corporation (Oil Refinery) — Sapugaskanda, Sri Lanka

- Spearheaded the planning and execution of preventive, routine, and breakdown maintenance protocols for high-capacity power distribution transformers (up to 1250 kVA), SF6 switchgear, and advanced protective relays.
- Diagnosed, overhauled, and maintained heavy-duty industrial induction motors (up to 450 kW / 3300V) and managed high-precision motor rewinding operations up to 250 kW / 415V.
- Orchestrated rigorous inspection, installation, and strict upkeep of certified flame-proof and explosion-proof (ATEX/Ex compliant) electrical infrastructure in highly volatile petrochemical process areas.
- Managed comprehensive heavy industrial cable laying, glanding, and jointing operations, maintaining an uncompromised standard of technical precision and safety compliance.
- Directed the end-to-end operation, routine servicing, and complex breakdown repairs of large-scale industrial HVAC utilities, including split and chilled-water systems ranging from 9,000 Btu/hr up to 150 RT.
- Administered maintenance logs, continuous asset histories, and strategic scheduling for critical plant utilities, encompassing large industrial UPS systems (up to 15 kVA), hydro-jetting units, and high-pressure compressors.
- Enforced stringent workplace safety protocols, actively driving daily toolbox meetings and safety audits to minimize unplanned downtime during major refinery turnaround maintenance and critical shutdown cycles.

Technical Supervisor (Electrical) **10/2006 – 07/2010**

Color Products Pvt Ltd — Sri Lanka

- Supervised daily electrical maintenance operations, production line utility grids, and automated factory equipment installations.
- Led hands-on troubleshooting, fine-tuning, and emergency restoration of electrical control panels, PLC units, and variable frequency drives (VFD).
- Guided, allocated, and evaluated daily tasks for a dedicated technical team of junior electricians and maintenance staff while successfully maintaining a 100% accident-free safety record.

EDUCATION & PROFESSIONAL QUALIFICATIONS

National Diploma in Technology (Electrical Engineering) **Expected 10/2026**

Ceylon German Technical Training Institute — NVQ Level 5 Equivalent

Diploma in Human Resource Management (HRM) — Completed 04/2026

NYSCO (National Youth Services Council) — Professional Qualification

Diploma in PLC Programming & Automation Specialization — Credentialed

Diploma in English Language for Professional Communication — Credentialed

Certificate in Solar PV Systems Installation & Commissioning — Credentialed

Certificate in Computer Software & Industrial Applications — Credentialed

TECHNICAL & CORE SKILLS

Transformers (up to 1250 kVA) | SF6 Switchgear & Protection Systems | PLC Programming & Automation | VFD Troubleshooting | Industrial HVAC & Chilled-Water Systems (up to 150 RT) | UPS Systems (up to 15 kVA) | ATEX / Ex Flame-Proof Compliance | Petrochemical & Refinery Safety | Induction Motor Maintenance (up to 450 kW / 3300V) | Precision Motor Rewinding | Team Leadership & Workforce Supervision | Human Resource Management | Preventive & Breakdown Maintenance Planning | Solar PV Installation & Capacity Calculation | IoT, Arduino & ESP32 Prototyping