Arc Flash Training for Manufacturing

> Industry-focused training aligned with NFPA 70E, IEC 61482, ISO 45001, and UAE authority expectations. Delivered on-site across the UAE, with content localised to your equipment, procedures, and workforce.

Service Objectives

- Recognise, assess, and control arc flash and shock hazards around LV/MV equipment, MCCs, distribution boards, VFDs, and energized production assets.
- Apply NFPA 70E and IEC 61482 practices within plant PTW/LOTO and ISO 45001 systems in the UAE context.
- Determine approach boundaries; interpret incident energy on labels and one-line diagrams to plan jobs safely.
- Select correct arc-rated PPE per IEC 61482-2/ASTM F1506; verify glove classes; integrate insulated tools and barriers.
- Authorise and manage justified energized work; enforce absence-of-voltage verification; coordinate electro-mechanical isolations.
- Strengthen emergency response and evidence preservation; embed practices that support reliability and throughput.

Who This Service Is For

- Electrical technicians, maintenance planners, shift engineers, I/E supervisors, reliability engineers, and HSE managers.
- Contractors and OEM service teams executing shutdowns, commissioning, or energized diagnostics.
- Facilities and utilities teams overseeing compressors, chillers, steam/compressed air, UPS, and generators across campuses.
- Production managers and supervisors who authorise maintenance access and balance uptime with safe work.
- Discrete and process manufacturing: automotive components, metal fabrication, FMCG packaging, cement, paper mills, food & beverage, plastics extrusion.
- Teams who rack breakers, open energized panels for diagnostics, test control circuits, and coordinate LOTO across electro-mechanical boundaries.

Duration & Process Overview

- Awareness (operators & supervisors): 1 day (6–7 hours), 12–20 participants, on-site or virtual. Core concepts, labels, boundaries, basic PPE.
- Practitioner (electrical & maintenance): 2 days (12–14 hours), 8–16 participants, on-site or hybrid. Hands-on exercises, job planning, LOTO integration.

- Blended Advanced: 3 days (including scenarios), 6–12 participants, hybrid. Site-specific casework, supervisor module, assessments.
- Scheduling & delivery: on-site across the UAE; hybrid/virtual refreshers; can be split across shifts; English delivery with Arabic and Hindi/Urdu options; pre-course coordination for room/equipment and photography restrictions.

Methodology

Phase	What It Covers	Deliverable
Needs Analysis & Pre-Course Coordination	Review one-line diagrams, sample arc flash labels, PTW/LOTO templates, workforce languages, site photos (if allowed), and access restrictions.	Confirmed scope, logistics brief, and tailored training plan.
Site-Specific Localisation	Contextualise NFPA 70E/IEC 61482 practices to your PTW system, MCCs/switchrooms, maintenance strategy, and change control.	Customised modules, scenarios, and job aids tied to your equipment.
Delivery & Practical Application	Core knowledge blocks, hands-on demonstrations, and case-based exercises using your diagrams, device settings, and representative labels.	Completed sessions (awareness/practitioner/blended) with participation records.
Assessment & Certification	Scenario-based quizzes and practical demonstrations mapped to roles (awareness, practitioner, supervisor).	NPM Certificate of Completion with learning outcomes, hours, delivery mode, assessment method, and unique ID.
Post-Training Support	Job aid templates, toolbox talk materials, and optional refresher micro-sessions to sustain competency.	Take-away materials and optional refresh schedule.

Needs Analysis & Pre-Course Coordination

- Aligns training scope with plant realities and data (diagrams, labels, PTW/LOTO, languages, access).

Site-Specific Localisation

- Adapts content to MCC layouts, switching practices, maintenance regimes, and change management.

Delivery & Practical Application

- Combines standards with hands-on and scenarios (e.g., VFD diagnostics, MCC bucket reset, boundary setting).

Assessment & Certification

- Role-based evaluations with documented outcomes; certificates carry unique IDs and refresher guidance.

Post-Training Support

- Reinforces behaviours through job aids, toolbox talk materials, and optional micro-refreshers.