Lockout Tagout Training for Manufacturing

Service Objectives

Purpose-built training that enables factory teams to control hazardous energy safely during servicing and non-routine interventions.

- Map all applicable energy sources across machines and production cells.
- Select and apply correct lockout devices and isolation points using an isolation hierarchy.
- Drain, dissipate, and verify zero energy with safe test-for-zero practices.
- Execute group lockout with hasps and lock boxes, including shift handover control.
- Develop and use machine-specific energy control procedures and compatible tagging.
- Integrate LOTO with permit-to-work, hot work, confined space, and controlled troubleshooting exceptions.

> Aligned with OSHA 29 CFR 1910.147, EN ISO 14118, ISO 12100, IEC 60204-1, and UAE frameworks (OSHAD and Dubai Municipality OSH guidelines) to ensure enforceable plant rules and audit-ready records.

Who This Service Is For

- UAE manufacturers operating presses, injection moulding, CNCs, conveyors, mixers, ovens, boilers, robotics, and utilities.
- HSE managers, maintenance supervisors, authorised electrical and mechanical technicians, reliability engineers.
- Production shift leaders, sanitation/cleaning teams (CIP), TPM teams, and contractor coordinators.
- Plants with multilingual workforces and mixed OEM equipment (EU/NA/APAC) needing consistent symbols and procedures.
- Sectors: glass, aluminium, steel products, plastics, FMCG, pharmaceuticals, and building materials.

Duration & Process Overview

Delivery is primarily on-site at your factory for realistic, hands-on practice. Available in English and Arabic with bilingual materials and signage conventions. Pre-course microlearning and post-course verification can be blended in.

- Operators (Awareness): 4 hours; on-site classroom + demo; 12–20 participants.
- Authorised Employees (Electrical/Mechanical): 1 day (6–8 hours); on-site walkdowns; 10–16 participants.
- Supervisors/Permit Issuers: 1 day (6–8 hours); scenario workshops; 10–14 participants.
- Train-the-Trainer: 2 days; on-site + curriculum handover; 6–10 participants.

Methodology

A practical, machine-centric approach that moves from core principles to supervised walkdowns, group lockout drills, and assessment at your assets.

Phase	Objective	Deliverable
Pre-course Scoping	Understand plant context, assets, permits, and documentation.	Needs analysis; scenario design; collection of procedures/P&IDs/schematics.
Energy Control Fundamentals	Build baseline on energy types, isolation hierarchy, and failure modes.	Foundation aligned to OSHA/EN ISO/IEC standards and UAE frameworks.
Machine-Specific LOTO	Create/validate procedures and label isolation points at real machines.	Drafted or validated machine-specific energy control procedures.
Electrical Isolation & Verification	Reinforce that E-stops/software are not isolation; practise test-for-zero.	Safe isolation steps for MCCs, VFDs, disconnects; verified zero-energy.
Group Lockout & Shift Handover	Coordinate multi-trade work and 24/7 operations without losing control.	Hasp/lock box drills; checklists; clear accountability across shifts.
Contractors, Permits & Special Modes	Align LOTO with permits, line breaks, CIP, and controlled troubleshooting.	Compatible tagging; cross-permit verification; defined exceptions.
Supervisor & Authorised Employee Practicum	Simulate real plant tasks and document steps end-to-end.	Observed competency; auditable records; permit closure discipline.
Assessment & Certification	Validate knowledge and practical capability at the machine.	Certificate of completion with modules, hours, and pass criteria.

Module 1: Energy Control Fundamentals

- Definitions, legal expectations, isolation hierarchy, interlocks vs isolation.

Module 2: Machine-Specific LOTO for Production Lines

- Procedures at presses, moulding, CNC, conveyors, mixers; consistent devices and tags.

Module 3: Electrical Isolation and Verification

- Safe isolation; instrumented test-for-zero; MCCs, VFDs, field disconnects.

Module 4: Group Lockout, Lock Boxes, and Shift Handover

- Hasp/lock box administration, handover checklists, staged release.

Module 5: Contractors, Permits, and Special Modes

- Integration with contractor systems, permit-to-work, line breaks, controlled testing.

Module 6: Supervisor and Authorised Employee Practicum

- Team coordination, zero-energy verification, documentation, permit closure.