

WELDING & CUTTING SAFETY AWARENESS

Comprehensive Training for Malaysian Regulatory
Compliance & Worker Protection

MALAYSIAN REGULATORY TRANSITION 2024

As of June 1, 2024, the Malaysian safety landscape has shifted dramatically. The Occupational Safety and Health (Amendment) Act 2022 now covers ALL workplaces, effectively absorbing and repealing the old Factories and Machinery Act 1967.

Regulation	2026 Status
OSHA 1994	Active (Amended)
FMA 1967	Repealed 2024
Fire Services Act	Active (BOMBA)

2024 INDUSTRIAL ACCIDENT TRENDS

4,409

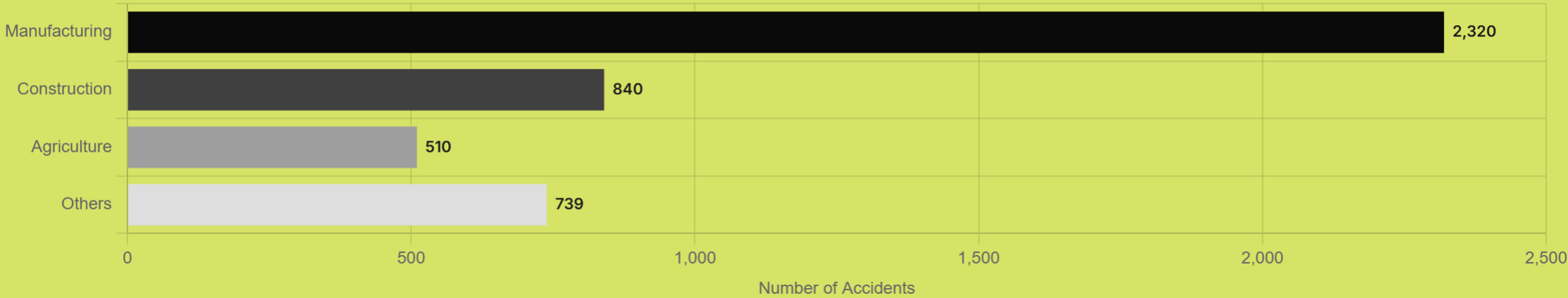
Workplace Accidents (Jan-May 2024)

25%

Fires caused by Hot Work (DOSH)

RM500K

Max Fine for Safety Violations



PRIMARY WELDING & CUTTING HAZARDS

Fire & Explosion

Sparks and slag can travel up to 10 meters, igniting flammable materials or gas cylinders in the vicinity.

Toxic Fumes & Gases

Inhalation of zinc, lead, or manganese fumes can cause metal fume fever and chronic respiratory issues.

Electric Shock

Touching live parts or cables can result in fatal shocks, especially in wet conditions or confined spaces.

UV Radiation & Burns

Electric arcs emit intense UV and IR radiation, causing painful 'arc eye' and severe skin burns if unprotected.

ESSENTIAL WELDING PPE REQUIREMENTS

Compliance with the 2024 OSHA Amendment requires employers to provide mandatory PPE. Failure to do so can result in fines up to RM500,000.

- Auto-Darkening Welding Shield
- Leather Apron & Gauntlets
- N95 or PAPR Respirator (Fumes)
- Flame-Resistant Clothing (FRC)
- Safety Boots (Steel Toe)
- Hearing Protection (Noise > 82dB)



SAFE WORK PRACTICES & CONTROLS

Administrative and Engineering controls are the first line of defense before relying on PPE.

Engineering Controls

- Local Exhaust Ventilation (LEV)
- Welding Curtains/Screens
- Cylinder Trolleys & Strapping
- Insulated Cable Connectors

Administrative Rules

- Designated Welding Areas
- OSH Coordinator Oversight
- Equipment Daily Checks
- 5+ Staff: OSH Coordinator

HOT WORK PERMIT (HWP) PROCEDURES

01. PRE-WORK INSPECTION: Clear all flammables within 10m; seal drains/ducts.

02. GAS TESTING: Mandated gas tests in confined spaces or hazardous zones.

03. FIRE WATCH: Assign a dedicated person with an extinguisher during work.

04. POST-WORK MONITORING: Check area for 30-60 mins for smoldering fires.

BOMBA & FIRE SAFETY COMPLIANCE

Strict adherence to the Fire Services Act 1988 (Act 341) is mandatory for all industrial premises in 2026.

Fire Extinguisher Rules:

- Service every 12 months.
- Valid BOMBA electronic sticker.
- Type ABC Powder or CO2 at stations.

EMERGENCY RESPONSE PROCEDURES

Immediate Action

Stop work immediately. Shut off gas supply and electrical power at the power at the source. Activate the nearest fire alarm.

Worker Rights (Sec 26A)

Under OSHA 2024, employees have the legal right to remove themselves from 'imminent danger' without penalty.

Evacuation & First Aid

Evacuate to the assembly point. Provide first aid for burns (cool water) or arc eye while awaiting BOMBA or paramedics.

Emergency Contacts

- MERS 999 (General)
- Local BOMBA Station
- On-site OSH Coordinator
- ERT Leader: [Update On-Site]

REGULATORY APPOINTMENTS & INSPECTIONS

Maintaining legal compliance in 2026 requires active oversight and rigorous inspection cycles for welding plants.

OSH Coordinator

Mandatory for workplaces with 5+ employees (effective June 2024). Requires trained OSH Coordinator if no SHO is present.

Certificate of Fitness (CF)

Designated plants (boilers, pressure vessels) require CF renewal every 15 months via DOSH licensed inspectors.

PENALTY FRAMEWORK & ENFORCEMENT

RM500K

Maximum fine for corporate violations under 2024 OSHA Amendments

Safety is non-negotiable. With fines increasing 1,000% (RM50K to RM500K) and potential jail terms of 2 years, proactive welding safety and BOMBA compliance are critical for business continuity.

TRAINING COMPLETED

**Return to Work Safely. Consult your OSH Coordinator for Hot Work
Work Permits.**