

S17 – Opening Statement

Isolation & Lock off

Stored energy whether it be electrical, pneumatic, hydraulic or gravitational can cause equipment to move or pipes to burst. A system for controlling that energy is an essential measure to reduce risk when maintenance is being undertaken.

Ensuring that people are aware of where to isolate and having a process for them to prove that the isolation is effective will remove the risk of contact with moving machinery, pressurised air and oil injuries.

This procedure gives guidance on an isolation and lock off system. It includes templates for a site-specific procedure and a list of isolators and the items of equipment they isolate.



S17 – Isolation & Lock off

What is this?

This is a written procedure which covers all aspects of isolation and lock off, and provides detailed information on its implementation within the workplace.

The person responsible for implementing this procedure is:

What is needed on site?

The person responsible for implementing this procedure must ensure that:

- there are accessible written procedures for isolation and lock off, and the procedures must identify the lock off points for all items/sections of plant;
- isolators are clearly labelled, indicating the sections of plant that they isolate;
- identification signs on all items of plant and equipment correspond to the isolation signage;
- there are authorised personnel working on plant who are trained to understand the relevant isolation and lock off safe working practices, and know where lock off points are located;
- sufficient hasps and padlocks are provided to enable compliance with the written procedure;
- trained, competent and authorised personnel are available if isolation involves the removal of fuses.

Note: The above also applies if contractors are being used, and if so, further controls may be necessary, i.e. permit to work.

What is isolation and lock off?

Isolation and lock off are two distinct control measures. If used correctly the control measures will ensure that people do not come into contact with moving equipment, live electrical circuits or stored energy from electricity, pneumatics, hydraulics or gravity.

They involve physically isolating the source of energy from the individuals concerned, and applying some form of personal lock to ensure that equipment is not inadvertently re-energised.



How do you isolate?

By turning either panel switches in the electrical control room or local isolators (usually adjacent to the equipment) to the **off** position. Alternatively it can be done by releasing energy, i.e. closing taps and valves, chocking weights and moving parts such as hopper doors, crusher jaws and flywheels, or removing material from conveyors and bins.

How do you lock off?

When electrical isolators are switched to the off position, holes line up through which a calliper can be inserted and locked with a personal padlock. This ensures that unless the padlock is removed the equipment cannot be switched back on and re-energised. Other forms of energy can be locked off by applying valve and tap isolators.

Are stop buttons and pull wires a safe means of isolation?

Stop buttons, trip wires and keys are **not** a means of isolation. These devices are linked to the control circuit and do not isolate the energy from the equipment.

Review

A review of the entire operation is beneficial at routine intervals (6 monthly) to evaluate the overall performance of the isolation procedures.

Legislation

- Health and Safety at Work etc. Act 1974
- Management of Health and Safety Regulations 1999
- Control of Asbestos Regulations 2002
- Electricity at Work Regulations 1989
- The Provision and Use of Work Equipment Regulations 1998

Note: This list is by no means exhaustive but identifies some of the key pieces of legislation surrounding isolation and lock off.

Associated documentation

- Isolator list H&SIL01
- Isolation and lock off site procedure template H&SIL02

