What are the Big 3 for Providing a Safe Workplace With Regard to Equipment/Machinery?



1. Personal Protective Equipment; training; hazards.
2. Supervision; maintenance; inspections/ risk assessment.
3. Training; maintenance; guards.
4. Training; maintenance; inspections/risk assessment.

ANSWER

Training; maintenance; inspections/risk assessment.

WHY IS IT RIGHT

Training is required to use machinery

Training must be sufficient to ensure that all people know how to competently use any equipment they use at work, without unnecessary risks to the health and safety of themselves or others. Training therefore depends on the task, and to what extent an employee already has relevant knowledge and experience. Individual training needs are likely to be greatest when a person is first recruited, although further training may also be required in any of the following examples:

- if the work task and its associated risks change
- if new technology or equipment is introduced
- if the system of work changes

In many industrial sectors, there are well-recognized standards for training, whether delivered in-house or by external providers. These are often accompanied by some form of competence assessment to help ensure minimum standards of attainment. However, for many simple tasks, on-the-job training, which is locally assessed and backed up with simple records, will suffice. There will also be a need for refresher training to ensure that skills don’t decline. Again, the nature and frequency of refresher training should be sufficient to ensure ongoing health and safety, so far as reasonably practicable.

To be appropriately trained to prepare and check work equipment, doesn’t always

mean formal, certificated training. Often the work to prepare or check equipment prior to use can be carried out following manufacturer's instructions using basic skills and common sense. However, for certain types of equipment, there are well-recognized industry schemes that cover, for example, the mounting of abrasive wheels. There are also certain equipment-specific legal requirements.

Information Needed in Use of Work Equipment

Any worker who uses or operates work equipment, or any other person who may be affected by the use of the equipment, **must be made aware of the hazards involved**.

Any person using work equipment must be **properly trained** in the safe use of the equipment or machinery. There should also be **proper supervision** and **inspection of the use of work equipment** to ensure that safety procedures are followed correctly.

Risk assessments

Before any work equipment or machinery is used or installed a risk assessment must be carried out. The purpose of the risk assessment is to identify the hazards and risk of injury that may arise when using the work equipment. The risk assessment should also identify ways in which the hazards and risk may be eliminated or reduced.

Hazards

There are many ways in which work equipment and its use can create a risk of injury. The most common hazards are:

- **Entrapment**– for example when fingers are caught in the moving parts of a machine
- **Impact**– when workers are crushed by moving parts of equipment or by other items being processed by a machine
- **Contact**– when the body comes into contact with sharp edges, hot parts or live electrical items
- **Entanglement**-when clothing, hair or jewelry become caught in parts of a machine
- **Ejection**– when workers are hit by parts or objects flying out or off machines

Maintenance

Maintenance work should only be undertaken by those who are competent to do so, who have the necessary knowledge and experience to:

- know what to look at
- know what to look for
- know what to do, and
- be aware of, and able to avoid, unnecessary risks to themselves and others

In some cases, workers undertaking maintenance on certain types of equipment should have specific training which is relevant to that work (eg where they may encounter asbestos).

*Employers have the duty to provide suitable work equipment that is **well designed** and **suitable** for the job.*

When selecting new work equipment employers should:

- obtain full information about the safe use of the equipment
- ensure that the equipment has a CE safety mark to show that it complies with standards
- arrange adequate training for using the equipment

Inspections

Employers, you are legally required to provide safe equipment for use in connection with your work. Where the safe of equipment depends on the installation conditions or is exposed to conditions causing deterioration liable to result in dangerous situations, you must inspect your equipment to identify whether it can be operated, adjusted and maintained safely. Doing this on a regular basis can help you detect any deterioration and take action before it results in any health and safety risk.

Inspection frequencies depend on the type of work equipment, its use and the conditions to which it is exposed. This should be determined through:

- risk assessment, taking full account of any manufacturer's recommendations
- the advice of others, such as trade associations and consultants
- other sources, such as published advice on health and safety

Different types of inspection include:

- quick checks before use (eg the condition of electric cables on hand-held power tools, functional testing of brakes)
- weekly checks (eg tire pressures, presence of guarding, function of safety devices)
- more extensive examinations, undertaken every few months or longer (eg the general condition of a ladder, close examination of a safety harness, portable appliance testing).

Use of personal protective equipment and clothing

This may be necessary when certain hazards from work equipment cannot be avoided. Examples of personal protective equipment and clothing that may be necessary when using work equipment are:

- safety helmets
- gloves
- safety goggles
- ear protectors
- safety footwear
- types of clothing – for instance high visibility garments

Personal protective equipment or clothing must:

- be suitable for the task being undertaken
- give adequate protection against the hazard
- fit properly and comfortably

WHY IS EVERYTHING ELSE WRONG

The scope of work machinery is very wide. Consider work equipment as any machinery appliance, apparatus, tool, or installation like a conveyor belt at work.

The essence of providing a safe workplace is encapsulated in the **Big Three:**

1. **Training**
2. **Maintenance** and
3. **Inspection/Risk assessments**

Everything else takes a second place!!