

CHAPTER 1 Health and safety legislation and regulations

Test your knowledge 1.1

The lower back is most likely to be injured because of the strain exerted when not using correct lifting techniques. Back strain usually occurs when the muscles surrounding the spine stretch too far, lift too much weight, or move in such a way that causes injury. By using the correct lifting technique shown in Figure 1.1 the back remains straight and consequently it suffers less strain. Note how, in this position, the legs are bent and straightened as the load is raised.

Test your knowledge 1.2

- (a) The Display Equipment Regulations
- (b) The Working Time Regulations
- (c) The Provision and Use of Work Equipment Regulations
- (d) The Workplace (Health, Safety and Welfare) Regulations.

Test your knowledge 1.4

Any three of the following would be correct answers:

Grinding (e.g. using a bench grinding machine)
Welding
Milling
Turning
Cutting
Forging
Soldering.

Test your knowledge 1.5

Goggles (used for eye protection)

Test your knowledge 1.9

A fire involving a solvent is classified as a Class B fire. A carbon dioxide (CO₂) extinguisher would be preferred although a dry powder extinguisher would also be suitable. Water and pressurized water (APW) extinguishers must not be used on Class B fires because they can make the fire worse.

Test your knowledge 1.11

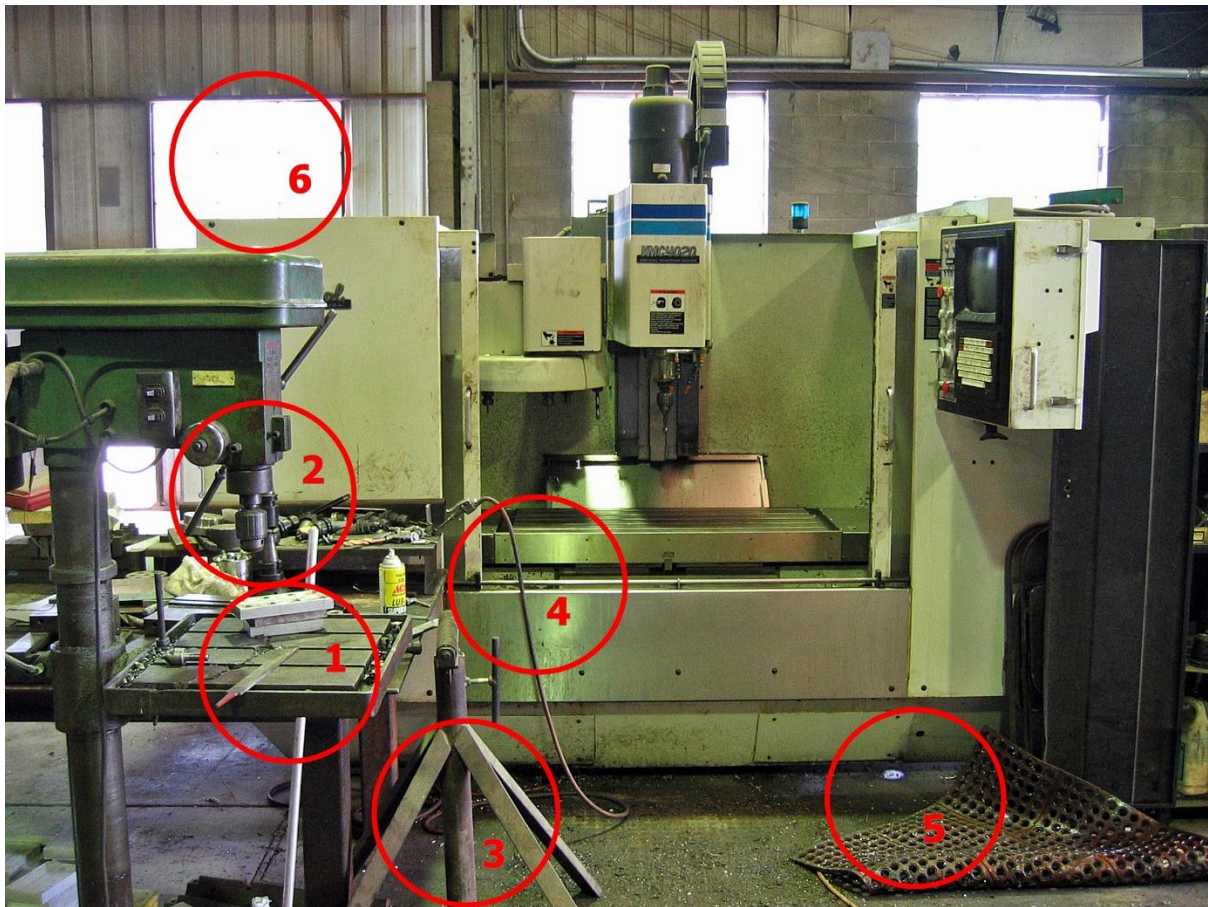
Typical examples might be any two of the following:

- An explosion occurs in a store used for lubricants, paints and solvents
- A generator catches fire and causes the lengthy closure of a pumping station
- The load bearing part of a crane lift fails, causing it to collapse together with its load
- The door of an aircraft hangar becomes detached from its frame and falls onto a contractor's van.

Test your knowledge 1.12

1. 10/2/2016 at 14.30 pm
2. Brian Fox
3. Fracture of the lower arm
4. Production Technician (full-time)
5. John Jones, Production Manager.

Activity 1.6



1. Untidy – miscellaneous tools left out on drill table
2. No drill guard fitted
3. Stand left in work area – trip hazard
4. Hose left in work area – trip hazard
5. Floor mat turned over – trip hazard
6. Inadequate lighting of work area (better lighting is needed over the pillar drill and CNC machine and strong light from the windows is causing glare on display screen).