

Machinery and equipment





Machinery and equipment

People who service or repair vehicles, machinery and equipment could be at risk when:

- working at height
- using rigging, jacks etc. to lift machinery and equipment
- using power tools, welders and extension leads that may be damaged or wet
- exposed to poor isolation of energy sources or stored energy, such as spring-loaded or counter-balance mechanisms, compressed air or fluids, or parts held in position by hydraulics or pneumatic (air) rams
- placing hands close to mechanisms and being injured if caught or trapped by moving parts
- moving heavy parts or repairing failed parts (e.g. electric motors or gear box assemblies)
- disabling or removing normal safety systems to access mechanisms
- working in low light or bright directional light
- entering confined spaces
- working alone or in isolation
- exposed to excessive or sustained noise levels.

Spray booths, sanding and grinding equipment, airless spray equipment and compressed air all create potential hazards.

Chemical or thermal burns can result in significant body tissue damage.

All machinery and equipment should be regularly serviced and maintained according to the manufacturer's instructions. All equipment operators must be instructed, trained and supervised in its safe use.

Machinery and equipment should only be used for its intended purpose.

Moving parts of machinery can cause bruising, crushing, fractures, lacerations, dislocations, amputations and even fatalities.

Where there is a risk of injury from moving parts or processes, guarding in the form of a physical or other barrier must be used as a first line of defence. There must also be isolation or disengaging procedures in place when cleaning or maintenance is performed.

Further information

Code of Practice: Managing the Risks of Plant in the Workplace

safework.sa.gov.au/cop

Product safety recall

Subscribe to the recalls section of the Product Safety Australia website productsafety.gov.au for daily recall notifications. These can then be delegated to one or two responsible workers who are tasked with checking for and removing any recalled products from use.

Angle grinders

Hazards/risks

Angle grinders can be dangerous power tools. Kickbacks can result in severe cuts. Discs can shatter or disintegrate, especially when thin cutting discs are used. The fragments produced may cause eye injuries or become lodged in other parts of the operator's body.

Electrical cords can become damaged in the workshop environment, creating the risk of electric shock (read about electrical safety on page 24).

Sparks and flying particles can also introduce an ignition source where hazardous flammable chemicals and gases are used in close proximity.

Safety solutions

Consider whether an angle grinder is actually the best tool to perform the task.

Ensure all grinders have fitted guards and that these are not removed.

Ensure all workers maintain a safe distance from grinding work in progress, and use welding screens to stop others being hit by flying particles and sparks.

Conduct grinding and cutting work well away from hazardous chemicals, gases and spray booths.

Check that electrical cords are undamaged and in a safe working condition.

Have grinders inspected and tested by a competent person every 3 months (as a best practice recommendation).

Provide operators with training and instruction on safe work procedures for angle grinders.

Provide operators with personal protective equipment (PPE) that is appropriate for the nature of the work and of a suitable size and fit (e.g. goggles, face shields), and ensure that it is maintained in good condition.

Further information

SafeWork SA *Safety Alert – Angle Grinders*
safework.sa.gov.au



Compressors and compressed gases

Hazards/risks

Compressed and liquefied gases are in vessels under pressure, and are used in workshops as fuel, as a source of oxygen or as a shielding gas in certain types of welding.

Risk factors associated with their use include the following:

Fire or explosion: Gas leakage is one of the greatest hazards when storing, handling and using cylinders. An ignition source, such as a spark from an angle grinder being used nearby, could cause a fire or explosion.

Asphyxiation: Dangerously low levels of oxygen can cause fatigue and, in extreme cases death. Working in an area with inadequate ventilation can present an asphyxiation hazard. For example, gases that are heavier than air can accumulate in pits, while those lighter than air can accumulate in roof spaces and lofts/mezzanines. Read more about working in confined spaces on page 52.

Uncontrolled release of pressure:

A sudden release of compressed air may cause hearing damage or even rupture an ear drum. Compressed air can also deeply penetrate the skin, resulting in an air bubble in the bloodstream (an embolism). Even a small quantity of air or other gas in the bloodstream can be fatal.

Safety solutions

Ensure the Safety Data Sheet (SDS) for any gas in use is available.

Store cylinders upright and restrained to prevent them falling or rolling.

Regularly maintain regulators and valves, and keep them away from contaminants (e.g. oils, greases).

Carry out pre-operational inspections, in particular checking for leaks.

Carry out inspections for rusting/pitting on compressors at least every two years, and internal inspections at least every 4 years.

Train workers in the safe storage, handling and use of compressed air and all air-operated tools and equipment. Compressed air must never be deliberately misused.

Install compressors in an area that minimises noise.

Register air tanks and receivers (if required).

Drain air tanks daily to prevent rusting and pitting.

Ensure PVC air lines (if used) are rated for compressed gas.

Further information

Code of Practice: Managing Risks of Hazardous Chemicals in the Workplace

safework.sa.gov.au/cop

Electrical

Hazards/risks

Electrical equipment that is not properly earthed or maintained can lead to electric shock, serious burns or even death.

Safety solutions

Substitute electrical with compressed air-operated equipment (no need for electrical testing).

Substitute electrical with extra-low voltage equipment (e.g. 24 volt hand-held angle grinder).

Ensure all AC power circuits are protected with appropriately rated fuses or circuit breakers.

Arrange electrical leads so they are not easily damaged, and do not run across floors and doorways or over sharp edges.

Only use leads and tools designed for wet or damp conditions when they must be used in those circumstances.

Ensure powerboards used for portable equipment are RCD protected.

If any current protective device (RCD or circuit breaker) is triggered, do not re-energise the system until the reason has been identified by a competent person.

Regularly conduct visual inspections and testing of electrical equipment, including RCDs (the nature and frequency will vary depending on the electrical risks).

Maintain all electrical equipment in accordance with the WHS Regulations and keep log book records of all inspections, servicing and maintenance.

Earth containers accordingly when solvents are being decanted, to control static electricity.

Disconnect, or isolate, and label accordingly any equipment identified as unsafe, and ensure it is not reconnected until it has been repaired and tested.

Further information

Code of Practice: Managing Electrical Risks in the Workplace

safework.sa.gov.au/cop

SafeWork SA Safety Alert – Isolation procedures

safework.sa.gov.au

Australian Standard AS/NZS 3760: In-service safety inspection and testing of electrical equipment



Guarding

Hazards/risks

Workers who operate or maintain unguarded or inadequately guarded machinery and equipment are at risk of minor abrasions, burns or cuts, and more severe injuries such as lacerations, crushing, fractures or even amputation. Common hazards arise from nip points, rotating parts, noise, sparks and flying debris.

When the operation of any machine part, process or function, or unintended contact with it, may cause injury to workers or others in the immediate work area, it must be guarded as a first line of defence.

Guarding in the form of a physical or other type of barrier can:

- prevent contact with moving parts that do not require regular adjustment
- control access to dangerous moving parts, machines and equipment
- screen harmful emissions (e.g. radiation)
- minimise noise (use of sound-absorbing materials)
- prevent ejected parts or off-cuts from striking people.

Safety solutions

If guarding is used, ensure that it:

- is a permanently fixed barrier, if access to the area of plant requiring guarding is not necessary during operation, maintenance or cleaning, or
- is an interlocked physical barrier, if access to the area requiring guarding is necessary during operation, maintenance or cleaning, or
- can only be altered or removed with a tool, if it is not reasonably practicable to use either a permanently fixed or interlocked physical barrier, or
- includes a presence-sensing safeguarding system, if it is not reasonably practicable to use either a permanently fixed, interlocked or fixed-in-position physical barrier.

Further information

Code of Practice: Managing Risks of Plant in the Workplace for more information on types of barriers, environmental factors, colour coding etc.

safework.sa.gov.au/cop

Various forms of guarding and interlocking are also described in Australian Standard *AS4024.1: Safety of machinery (parts 1601 and 1602)*.

Guarding must:

- be of solid construction, securely mounted and resistant to impact or shock
- prevent by-passing or disabling of the guard, and disable plant operation if it is removed
- not create a risk in itself (e.g. it must not obstruct operator visibility, weaken the plant, cause operator discomfort or create new hazards such as pinch points or sharp edges)
- be properly maintained, and enable ease of servicing, maintenance and repair
- control any risk from broken/ejected parts and workpieces.

Noise

Hazards/risks

Unwanted or damaging sounds may cause noise-induced hearing loss or tinnitus (ringing in the ears). It may also cause other health effects such as stress, hypersensitivity to noise, and increased blood pressure and heart rate.

It can also interfere with communication at work, which can lead to incidents.

The harmful effects of noise may be cumulative (e.g. going to nightclubs may result in young people having some early damage to their hearing before joining the workforce).

Specialist skills or equipment are not needed to make a preliminary assessment to identify sources of hazardous noise in your workplace. However, it should be done in consultation with those who understand the work processes, such as affected workers.

Conduct a walk-through inspection of your workplace to help determine:

- sources of excessive, distracting or disruptive noise (e.g. is it difficult to hear a normal voice within one metre of a noise source)
- workers likely to be exposed to excessive noise
- work activities that are noisy and may pose a risk to hearing
- ways of reducing noise levels.

If you are unsure about the level of exposure or how to minimise the risks effectively, you should take the next step to assess hearing loss risks.

Safety solutions

Eliminate the noise source.

Keep noise levels below the exposure standard of 85dB(A) in an 8-hour day so that critical situations can still be communicated despite noise. Refer to the Code of Practice for information on work shifts exceeding 8 hours.

Substitute noisy machinery with quieter models – or ‘buy quiet’ when purchasing new or replacement equipment, which is a cost-effective way to control noise at the source.

Introduce engineering controls to treat noise at its source or in its transmission path (e.g. use sound dampeners or silencers, noise barriers/partitions/screens and isolation).

Introduce administrative controls to reduce the number of workers exposed to noise (e.g. training and education, job rotation, job redesign or designing rosters).

Provide personal protective equipment (PPE) that is:

- suitable for the nature of the work and the hazard (e.g. earmuffs, ear plugs)
- comfortable to wear, and of a suitable size and fit
- maintained, repaired or replaced when required
- used or worn by workers who have been trained in its use and care.

If workers are frequently required to wear PPE to reduce the risk of hearing loss from noise exceeding the exposure standard of 85dB(A), implement an audiometric testing regime. Keep testing records.

Further information

Code of Practice: Managing Noise and Preventing Hearing Loss at Work

safework.sa.gov.au/cop

Vehicle hoists

Hazards/risks

Failure of lifting equipment can cause crush injuries or fatalities.

Moving vehicles on and off hoists also presents potential hazards.

Safety solutions

Train operators in the safe use of hoists and ensure they do not work under a suspended load without checking that safety features are engaged and operating correctly.

Prominently display equipment operating and maintenance instructions, as well as the safe working load.

Ensure hoists have a valid design registration number issued by a work health and safety regulator in Australia.

To avoid worker entrapment, ensure that moving parts of the hoist or its load are located at least 600mm away from any other fixed structure or equipment that moves.

Ensure that operator controls are undamaged, clearly marked and positioned for effective, safe use.

Check that the dropper bar (safety prop) is fitted to any in-ground, hydraulic, ram-type hoist.

Conduct pre-operational inspections daily (e.g. look for leaks in hydraulic and pneumatic components).

Inspect and maintain the hoist at least every 3 months.

Arrange for a comprehensive annual inspection to be carried out by an independent, qualified, competent person.

Undertake hoist inspections in accordance with the manufacturer's instructions, and with reference to Australian Standards:

- *AS/NZS 2550.9: Cranes – Safe use. Part 9: Vehicle hoists*
- *AS/NZS 1418.9: Cranes (including hoists and winches). Part 9: Vehicle hoists.*

Ensure electrical hoists and wiring are tested with reference to Australian Standard *AS/NZS 3000: Australian Wiring Rules*.

Record all inspections, servicing and maintenance in a log book which is available for all users, maintenance or inspection personnel.

Further information

SafeWork SA:

- *Safety Alert – Vehicle hoists*
- *Safety Alert – Working under elevated motor vehicles.*

safework.sa.gov.au



Vehicle jacks

Hazards/risks

These portable devices require experience in their placement before use to minimise risk to the operator.

Associated risks include the sudden fall of vehicles due to overbalancing, incorrect use of jacking points, poor maintenance or leaking hydraulic fluid, and use of jacks on surfaces that are not level or firm.

Safety solutions

Train operators in the correct and safe use of the equipment, including ensuring that:

- jacks are based on a firm, level and secure surface (preferably concrete)
- vehicle stands are used when a vehicle is raised and wheels are chocked
- nobody remains in a vehicle that is being jacked
- nobody places any portion of their body under a vehicle supported by a jack.

Prominently display equipment operating and maintenance instructions, as well as the safe working load.

Conduct daily pre-operational equipment inspections.

Inspect and maintain the jack at least every 3 months, in accordance with the manufacturer's instructions, to ensure it can be manoeuvred effectively.

Record all inspections, servicing and maintenance in a log book which is available for all users, maintenance or inspection personnel.





Vehicle ramps and stands

Hazards/risks

Common risks arise when ramps and stands are poorly placed, unsuitable for the work involved (e.g. load capacity), used on unstable/uneven surfaces, or poorly stored and maintained (creating weaknesses).

Safety solutions

Conduct pre-operational inspections daily.

Ensure axle stands are based on a solid, level and secure surface (preferably concrete).

Secure vehicles on ramps to prevent movement (e.g. use of handbrake, wheel chocks etc).

Do not adjust stand heights when they are bearing weight.

Mark ramps and stands with rated safe working load.

Only use ramps and stands in pairs.

Slowly drive vehicles onto ramps or stands with guidance from another person outside the vehicle.

Further information

Australian Standards:

- *AS/NZS 2640: Portable ramps for vehicles*
- *AS/NZS 2538: Vehicle support stands*

Welding

Hazards/risks

Welding is a potentially hazardous activity and precautions are required to avoid electrocution, fire and explosion, burns, electric shock, vision damage, inhalation of poisonous gases and fumes, and exposure to intense ultraviolet radiation.

Radiation hazards emitted from electric arc and laser welding have the potential to cause eye disorders and skin burns such as 'arc eye' or 'welder's flash'.

Radiation from laser welding is less obvious than from electric welding arcs, but both are serious hazards. Workers directly involved in welding processes are at the greatest risk, however other workers could also be exposed to harmful radiation.

Safety solutions

Only allow competent (trained and experienced) workers to be involved in welding. Trainees and apprentices should only be permitted to weld if they are being trained and supervised by a competent person.

Install non-flammable screens and partitions.

Use physical barriers and warning signs – unless safeguards are used, entry into the welding area should not be permitted.

Store cylinders upright and restrained to prevent them falling or rolling.

Light up gas cylinders using a flint or piezo electric lighter, not matches or cigarette lighters.

Keep all fittings and hoses away from contaminants such as oil and grease.

Never weld or heat empty containers, or weld in confined or poorly ventilated areas.

Provide personal protective equipment (PPE), such as filter shades for goggles, face shields to protect the eyes from radiation, gloves and other protective clothing to cover exposed skin, that is:

- suitable for the nature of the work and the hazard (e.g. earmuffs, ear plugs)
- comfortable to wear, and of a suitable size and fit
- maintained, repaired or replaced when required
- used or worn by workers who have been trained in its use and care.

Further information

Code of Practice: Welding Processes
safework.sa.gov.au/cop



Quick safety scans – machinery and equipment

Use these quick safety scans to look at key work health and safety (WHS) issues in your workplace. Those items where you tick 'Sometimes' or 'Never' will need action to fix or improve. Use the safety solutions suggested earlier to help you.

Angle grinders	Always	Sometimes	Never
Workers conduct pre-operational checks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Handgrips have an automatic cut-off or dead-man switch	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Grinders have adjustable handles to suit both left and right-handed operators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Guards are kept in place (covering half the disc and positioned between the disc and the operator)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Correct types of disc are used for tasks performed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Operators are trained/instructed in safe work procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Grinders are not used close to flammable materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plugs are removed from power points before changing discs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Regular short breaks are taken to prevent muscle fatigue when grinding for extended periods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Grinders are regularly checked for electrical safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other workers are protected by a welding screen or stand well back when someone is grinding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Safe work procedures are in place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appropriate PPE is provided and used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Workers are trained in the correct use and care of PPE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PPE is maintained, repaired or replaced as required	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Compressors and compressed gases	Always	Sometimes	Never
Safety Data Sheets (SDS) are available for relevant gases	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cylinders are stored upright and restrained	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Regulators and valves are maintained	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Safe work procedures are in place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air receiver/air tank is registered (if required)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Workers are trained in equipment use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Workers conduct pre-operational checks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A chemical register is available and is maintained	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Electrical	Always	Sometimes	Never
Outlets, plugs, sockets, leads and power points are in good condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Temporary extension leads, multiple double adaptors and powerboards in series are not used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Power circuits are protected with appropriately rated fuses or circuit breakers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Powerboards used for portable electrical equipment are RCD protected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electrical equipment is never used in 'wet' areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unsafe equipment is disconnected/isolated/labelled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Testing and tagging is current for all fixed and portable electrical equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Main and isolation switches are clearly labelled/accessible	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electrical leads, power boards and equipment are kept away from potential sources of damage (e.g. water, heat, being run over)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Compressed air or extra-low voltage equipment is substituted for electrically operated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Electrical equipment is maintained in good condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maintenance records are kept and available	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Guarding	Always	Sometimes	Never
Guards are designed and fitted to equipment, where required, according to relevant Australian Standards and the manufacturer's specifications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Guards are altered or removed with a tool (if permanent fixed or interlocked physical barriers cannot be used)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Guards remain in place and plant is disabled if they are removed (deliberately or unintended)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Guarding is maintained	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Guarding enables easy servicing, maintenance or repair	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Machines are turned off and disconnected when servicing, maintenance and repairs are carried out	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pulley wheels on air compressors are guarded	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bench grinders/brushers/buffers are guarded (spark shields, side/upper tongue guards, emergency stops, tool rests)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pedestal drills are guarded (veebelt access restricted, emergency stops, rotating parts guarded)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lathes and milling machines are guarded (rotating parts guarded, DC braking system, lead feed screws, emergency stops), where practicable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Workers are fully instructed about safe procedures for guarding, isolation devices, locks, danger tags and emergency stops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Noise	Always	Sometimes	Never
Noisy tasks are identified, eliminated or minimised	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Noise levels are kept below the exposure standard of 85dB(A) in an 8-hour day and below the peak level of 140d(C)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Noise control guarding, screens or partitions are used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advisory/warning signage is in place (e.g. <i>Hearing Protection Must Be Worn</i>)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Correct hearing protection (PPE) is provided and used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Workers are trained in the correct use and care of PPE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PPE is maintained, repaired or replaced as required	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Critical situations can be communicated despite noise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Audiometric testing is carried out, if needed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Audiometric testing records are kept	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Vehicle hoists	Always	Sometimes	Never
Pre-operational checks are made daily	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspections and maintenance are carried out, at least every 3 months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A comprehensive annual inspection is conducted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspection, servicing and maintenance records are kept in a log book	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Workers are trained in correct and safe use of hoists	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There is a minimum 600mm clearance between hoists and other equipment or fixed structures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Safe working load is displayed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Operating and maintenance instructions are displayed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Vehicle jacks	Always	Sometimes	Never
Pre-operational checks are made daily	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspections and maintenance are carried out, at least every 3 months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A comprehensive annual inspection is conducted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspection, servicing and maintenance records are kept	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Workers are trained in correct and safe use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Safe working load is displayed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Operating and maintenance instructions are displayed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Vehicle ramps and stands	Always	Sometimes	Never
Pre-operational checks are made daily	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Routine inspections and maintenance are carried out	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A comprehensive annual inspection is conducted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspection, servicing and maintenance records are kept	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Axle stands are based on solid and secure footings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vehicles on ramps are secured to prevent movement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Safe working load is displayed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Operating instructions are displayed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Welding	Always	Sometimes	Never
Welding equipment is used according to the manufacturer's recommendations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Non-flammable welding screens/partitions are used	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Signs warn that welding is taking place, and entry to the work area is restricted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There is adequate ventilation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PPE is provided and used (e.g. masks, aprons, gauntlets)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Workers are trained in the use and care of PPE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PPE is maintained, repaired or replaced as required	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oxy/gas cylinders are secured in trolleys or prevented from falling (e.g. chained)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flashback arrestors are fitted at the blow pipe and to the oxygen and fuel gas regulators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>