



Safety in tyre and exhaust centres

Tyre and exhaust centres can be extremely hazardous places. The following details highlight some of the hazards and risks that may exist and the steps that you can take to prevent accidents. The list is by no means exhaustive, but can be used as a starting point in assisting you to complete a risk assessment for your workplace.

Main types of hazard

Slips, trips and falls

Falls may be caused by spillages of oil and water and also by poor housekeeping, e.g. trailing cables and airlines, or tyres, tubes etc. not being stored properly.

Fumes

Vehicle exhaust fumes are toxic.

Welding

Welding operations can give rise to risks such as burns, eye damage from metal fragments, sparks etc., and fire damage due to accidental ignition.

Lifting equipment

Misuse or failure of equipment such as jacks and lifting devices can lead to extremely serious injuries or even death.

Manual handling

There is a risk of back injuries and muscular strains from lifting and moving heavy or bulky items such as tyres

Managing the risk

- Keep all floors, passages, steps and gangways as free as possible
- Clean all spillages immediately
- Position cables so that they do not become a tripping hazard
- Ensure all parts of the premises are well lit
- Provide guard rails in areas where someone could fall

- Do not run vehicle engines indoors for prolonged periods unless a ventilation system is provided to extract exhaust fumes

- Ensure all oxyacetylene equipment has a flashback flame arrestor and a non return valve
- Ensure visual pressure gauges/volume indicators are fitted
- Inspect welding equipment regularly (particularly the welding tip and hosing) for signs of wear
- Secure all acetylene cylinders in the upright position and protect from damage in racks or trolleys
- Train staff in safe working procedures and provide suitable protective equipment such as goggles, gloves and overalls
- Change cylinders away from sources of ignition

- Use axle props to support raised vehicles, never let anyone work beneath a vehicle supported only by a jack or jacks
- Ensure appropriate pins are used in props
- Ensure all lifting devices are marked with the maximum safe working load and that these loads are not exceeded
- Ensure that a periodic examination of all lifting equipment is carried out by a competent person and that any defects are repaired immediately
- Train staff in the use of all lifting equipment

- Assess all of the manual handling work that you and your staff perform such as lifting, carrying, pulling and pushing
- Consider ways to avoid the need for manual handling
- Use mechanical devices where possible - e.g. sack barrows and wheel fits
- Provide training on how to lift safely
- Design the workplace so that people do not have to lift many items



Main types of hazard

Split-rim wheels

Fortunately this type of wheel is now becoming less common. However, work with such wheels is one of the most hazardous activities in this type of business, due to the fact that they are constructed of several components and the higher pressures involved.

Wheel balancing

Contact with rotating wheels during wheel balancing may cause friction burns, entanglement etc.

Working with wheels and tyres

Air blasts from over inflation of car tyres can lead to very serious injuries.

Bead breaker

Operatives fingers could become trapped in this machine.

Brake dust

Dust from the brake linings is harmful if inhaled. Very old brake linings may contain asbestos products.

Compressed air

Injuries, occasionally fatal, have been caused by accidental or deliberate injection into the body. Fingers could also become trapped in the drive or other moving parts of the compressor.

Managing the risk

- Before removing any divided wheel from a vehicle ensure it is completely deflated by removing the valve core
- Inflation should only take place in a strong, firmly secured cage or using a horizontal stool and associated clamping mechanism
- Check for loose stones, weights etc. before commencing
- Ensure the machine is fitted with a fully interlocked cover and that the drive shafts and rotating road wheels are properly guarded
- Raise and support vehicles safely
- Remove valve core to deflate tyres
- Inflate tyres to correct pressure (see supplier's instructions)
- Use an airline with a dead man's handle
- Never apply heat to a wheel to which a tyre is fitted
- Position the machine away from throughfares in an unobstructed, tidy and well lit workspace
- Never blow dust from brake housings using an airline
- Use wet rags instead. Dispose of used rags in a plastic waste bag when still wet
- Ensure the area is well ventilated
- Ensure water traps are provided in all compressed air supply lines
- Have the compressor examined regularly by a competent person
- Never use compressed air to clean up
- Ban horseplay with compressed air
- Ensure the pressure rating of hand tools is compatible with that of the supply line
- Ensure adequate guarding to the drive and other moving parts of the compressor
- Locate compressor to minimise the level of noise to which staff are exposed



Main types of hazard

Battery charging

During and after charging, batteries give off hydrogen, an easily ignited and explosive gas.

Electrical safety

Electric shock or fire can be caused by poor electrical safety.

Fire

Risk of fire starting from hot work on premises or use of flammable substances.

Hazardous substances

Some items of stock and chemicals used for cleaning can be harmful.

Unauthorised access

Customers may be exposed to hazardous substances, dangerous equipment etc., if permitted access to work areas.

Managing the risk

- Remove batteries from vehicles and charge in a well ventilated area
 - Switch off battery charger before connecting or disconnecting
 - Follow manufacturer's instructions

 - Ensure that the electrical system and equipment is checked regularly and faults repaired immediately
 - Protect cables against mechanical damage
 - Ensure all electrical equipment used outdoors is supplied through a circuit protected by a 30mA RCD and that it is suitable for outdoor use

 - A fire risk assessment should be carried out to identify possible sources of ignition
 - Ensure any hot work is properly controlled
 - Plan an escape route and keep this area clear at all times
 - Have an assembly point away from the building where people can gather safely in the event of an emergency
 - Clear up rubbish regularly, don't allow it to build up

 - Ask suppliers for Material Safety Data Sheets for any hazardous substance you use
 - Store all substances in their original containers in a locked cupboard
 - Provide staff with training to allow them to use chemicals safely
 - Provide protective equipment - e.g. gloves if necessary

 - Do not allow customers to enter workshops unless under supervision
 - Have signs up showing public where to report to and areas which are restricted
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