

Allianz Engineering Inspection Services Ltd

Engineering Plant & Inspection Guide

Identification of plant equipment
with applicable legislation and
periodicity of inspection



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Contents

Identifying types of plant can often be difficult, so we have put together this plant guide to assist in the identification of plant and equipment along with applicable legislation, periodicity of inspection and industries where it might be used.



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Disclaimer

The information contained in this guide is of a general informational nature. We have used reasonable endeavours to ensure the accuracy and completeness of the contents but the information does not constitute professional advice and must not be relied upon as such. To the extent permitted by law, we do not accept responsibility for any loss which may arise from reliance on the information contained in this guide.

Electrical and Mechanical

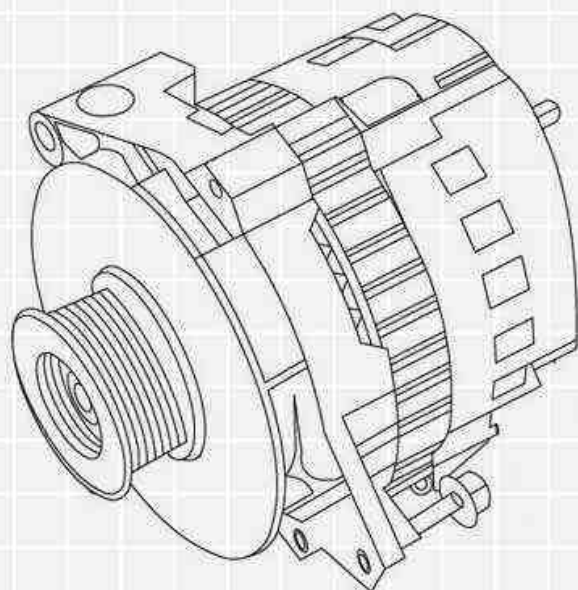
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Alternators

These machines are used to produce electrical power from a mechanically driven unit such as a diesel engine. They are generally found in industrial locations however they can also be used for the provision of electrical power in the event of an interruption to the normal supply.



Why inspect it??

To determine the provision, suitability and security of guarding.

To ascertain the mechanical and electrical integrity of installation.

To identify any obvious signs of deterioration, damage or wear (i.e. leakage, excessive noise, vibration or heat).

Industries where found

- ✓ Refuse & Waste
- ✓ Plant Hirers / Groundworkers
- ✓ Woodworkers
- ✓ Construction
- ✓ Doctors / Vets and Dentists
- ✓ Plastics Manufacture
- ✓ Road Haulage
- ✓ Food Manufacture
- ✓ Hotels
- ✓ Restaurants
- ✓ Leisure Centres
- ✓ Property Owners
- ✓ Retailers
- ✓ Motor Trades
- ✓ Dry Cleaners
- ✓ Metal Workers & Engineers
- ✓ Paper & Board

Applicable legislation

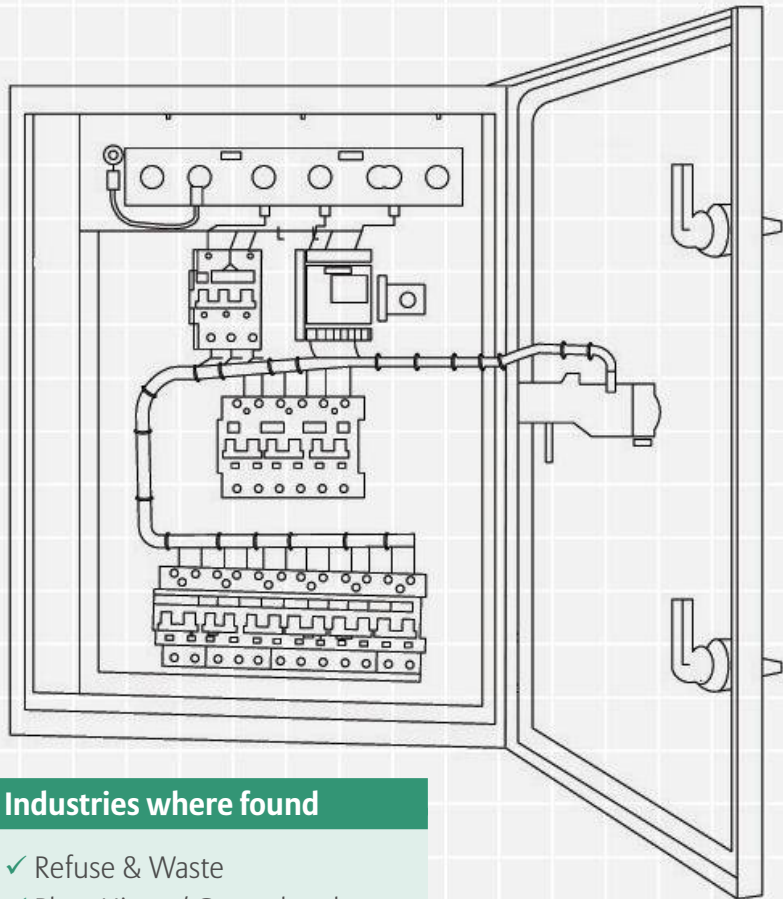
→ PUWER

Periodicity of Inspection

12 months.

Control Panels

These are generally metallic enclosures for the purpose of housing electrical equipment and/or component parts.



Why inspect it??

To determine the provision, suitability and security of interlocks etc.

To ascertain the mechanical and electrical integrity of installation.

To identify any obvious signs of deterioration, damage or wear.

Industries where found

- ✓ Refuse & Waste
- ✓ Plant Hirers / Groundworkers
- ✓ Woodworkers
- ✓ Construction
- ✓ Doctors / Vets and Dentists
- ✓ Plastics Manufacture
- ✓ Road Haulage
- ✓ Food Manufacture
- ✓ Hotels
- ✓ Restaurants
- ✓ Leisure Centres
- ✓ Property Owners
- ✓ Retailers
- ✓ Motor Trades
- ✓ Dry Cleaners
- ✓ Metal Workers & Engineers
- ✓ Paper & Board

Applicable legislation

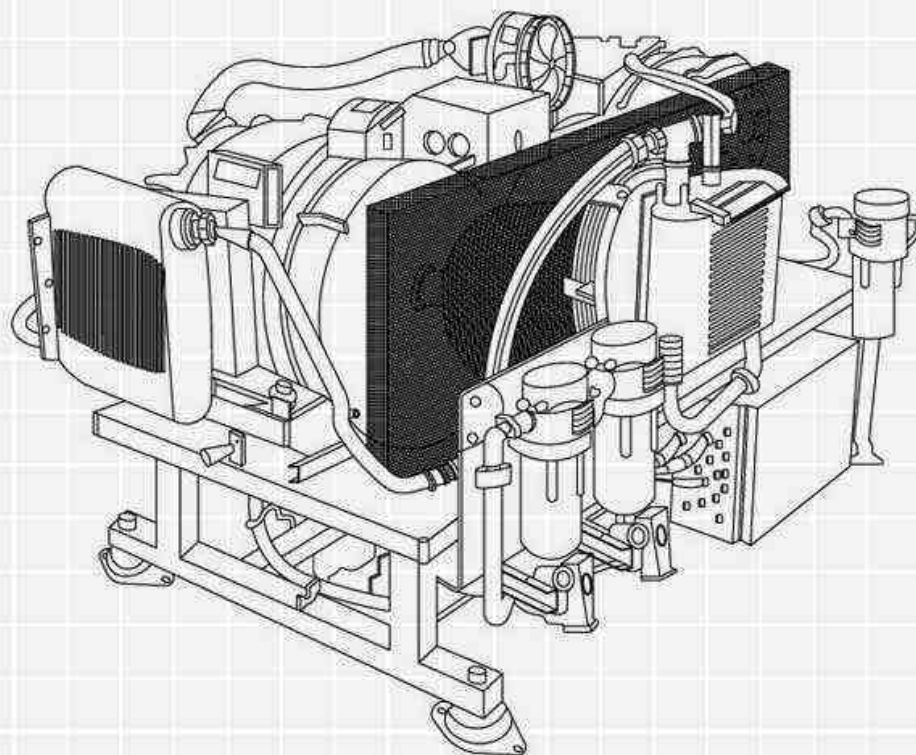
- PUWER
- EAWR

Periodicity of inspection

24 months.

Engines, Motors, Pumps & Compressors

These items of plant can be found in most industrial locations and come in a variety of sizes, outputs and uses.



Why inspect it?

To determine the provision, suitability and security of guarding.

To ascertain the mechanical and electrical integrity of installation.

To identify any obvious signs of deterioration, damage or wear (i.e. leakage, excessive noise, vibration or heat).

Industries where found

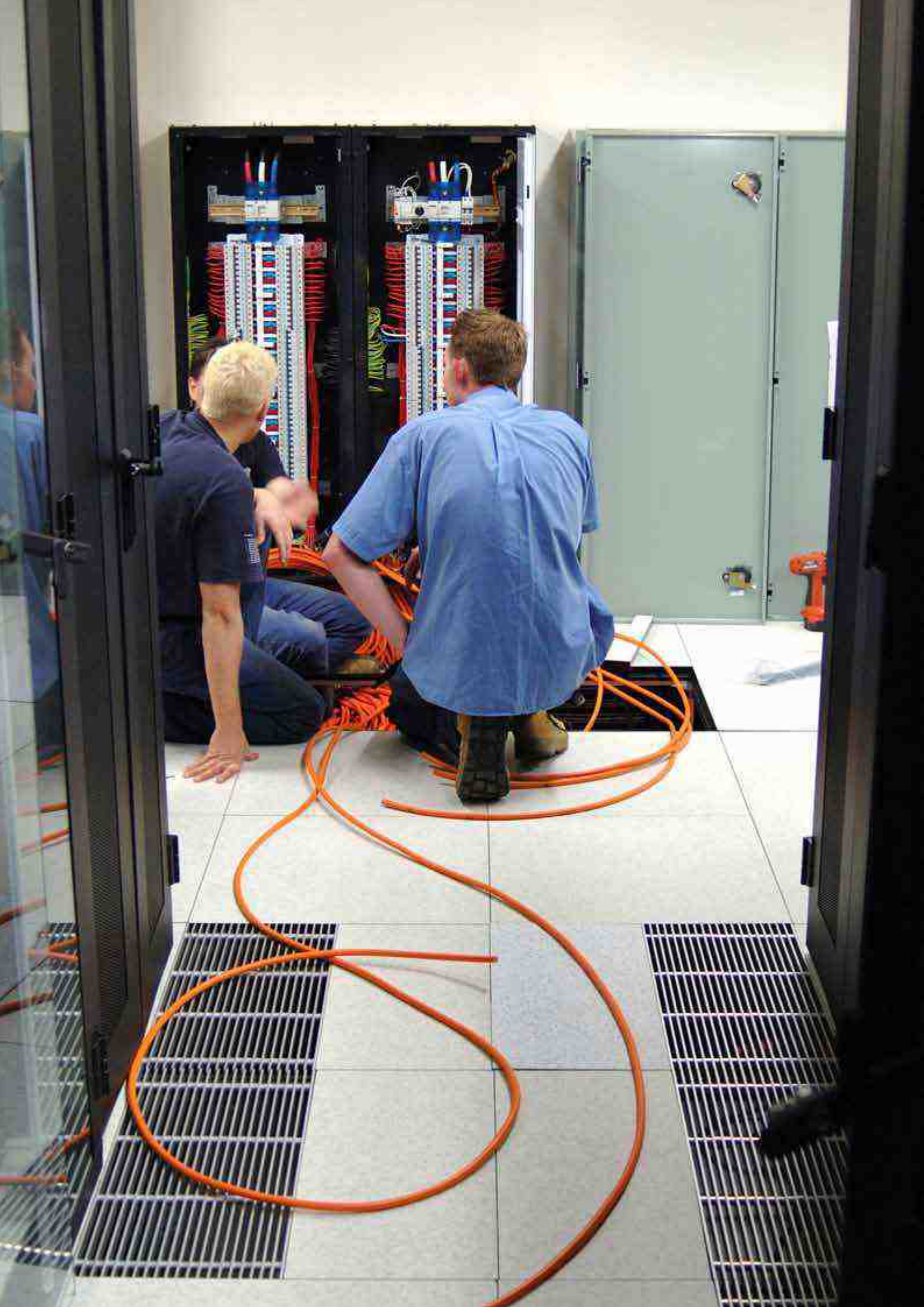
- ✓ Refuse & Waste
- ✓ Plant Hirers / Groundworkers
- ✓ Woodworkers
- ✓ Construction
- ✓ Doctors / Vets and Dentists
- ✓ Plastics Manufacture
- ✓ Road Haulage
- ✓ Food Manufacture
- ✓ Hotels
- ✓ Restaurants
- ✓ Leisure Centres
- ✓ Property Owners
- ✓ Retailers
- ✓ Motor Trades
- ✓ Dry Cleaners
- ✓ Metal Workers & Engineers
- ✓ Paper & Board

Applicable legislation

→ PUWER

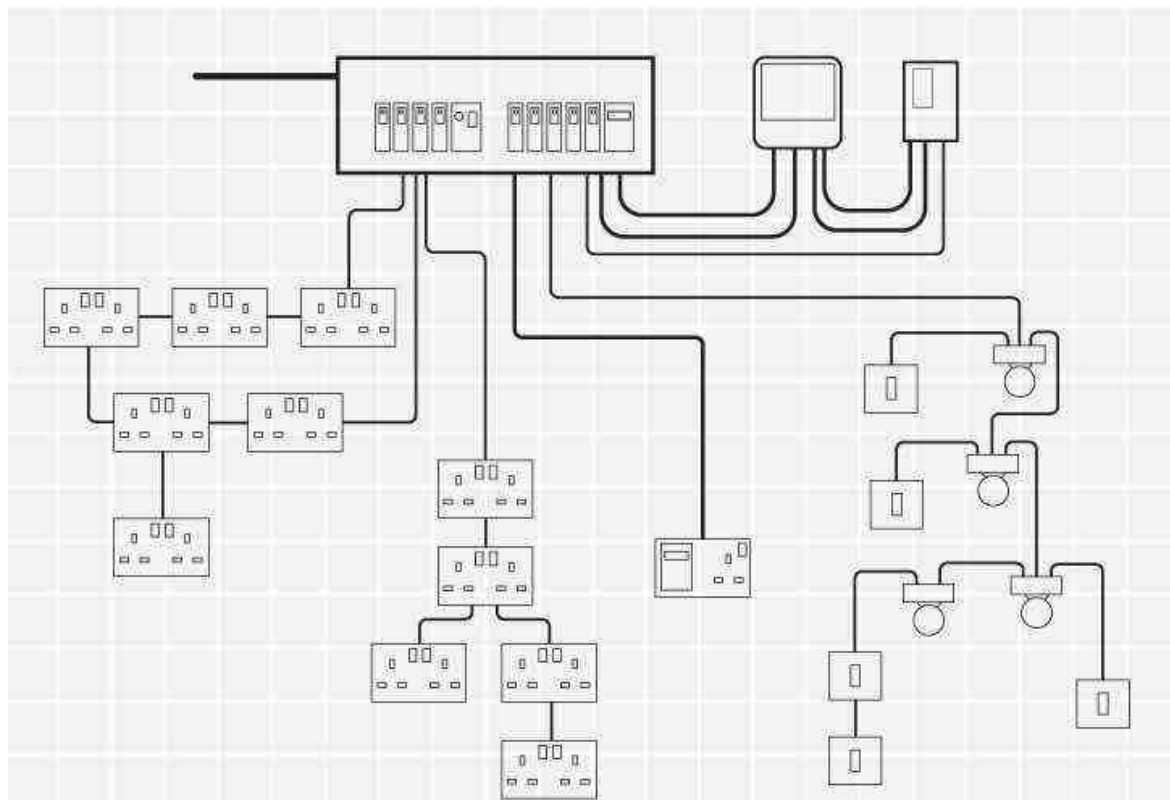
Periodicity of inspection

24 months.



Fixed Wiring

Almost every location will have electrical fixed wiring installed. The complexity and size of the installation will depend on the type of location.



Why inspect it?

The purpose of inspection and testing of fixed wiring installation is to provide for the safety of persons and livestock against the effects of electrical shocks and burns, to protect against damage to property by fire and heat arising from an installation defect and to confirm that the installation is not damaged or deteriorated so as to impair safety.

Industries where found

- ✓ Refuse & Waste
- ✓ Plant Hirers / Groundworkers
- ✓ Woodworkers
- ✓ Construction
- ✓ Doctors / Vets and Dentists
- ✓ Plastics Manufacture
- ✓ Road Haulage
- ✓ Food Manufacture
- ✓ Hotels
- ✓ Restaurants
- ✓ Leisure Centres
- ✓ Property Owners
- ✓ Retailers
- ✓ Motor Trades
- ✓ Dry Cleaners
- ✓ Metal Workers & Engineers
- ✓ Paper & Board

Applicable legislation

→ [EAWR](#)

Periodicity of inspection

Generally 3 or 5 years depending on type of location.

Gearboxes

These items of plant can be found in most industrial locations and come in a variety of sizes, outputs and uses.

Why inspect it?

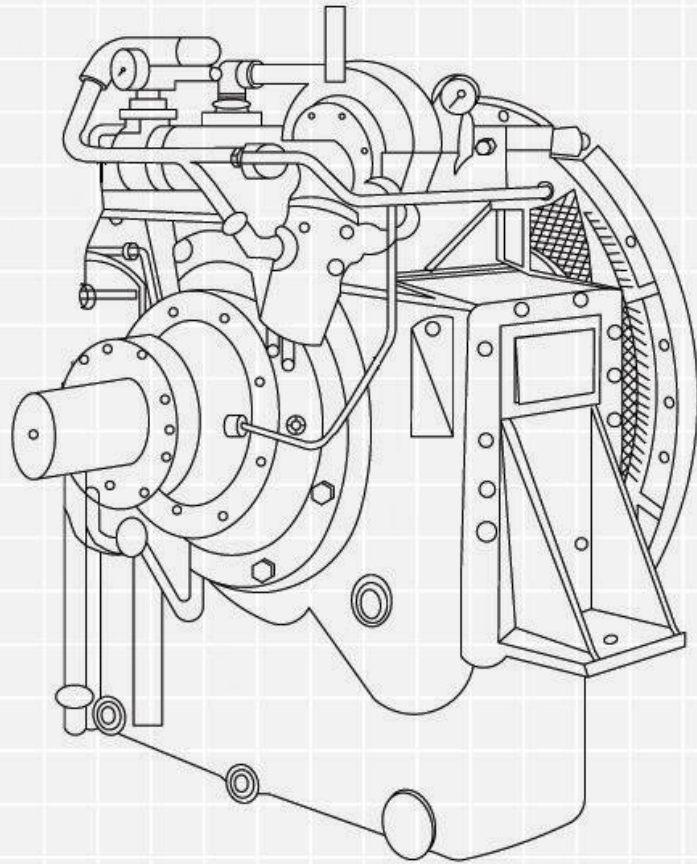
To determine the provision, suitability and security of guarding.

To ascertain the mechanical and electrical integrity of installation.

To identify any obvious signs of deterioration, damage or wear (i.e. leakage, excessive noise, vibration or heat).

Industries where found

- ✓ Refuse & Waste
- ✓ Plant Hirers / Groundworkers
- ✓ Woodworkers
- ✓ Construction
- ✓ Doctors / Vets and Dentists
- ✓ Plastics Manufacture
- ✓ Road Haulage
- ✓ Food Manufacture
- ✓ Hotels
- ✓ Restaurants
- ✓ Leisure Centres
- ✓ Property Owners
- ✓ Retailers
- ✓ Motor Trades
- ✓ Dry Cleaners
- ✓ Metal Workers & Engineers
- ✓ Paper & Board



Applicable legislation

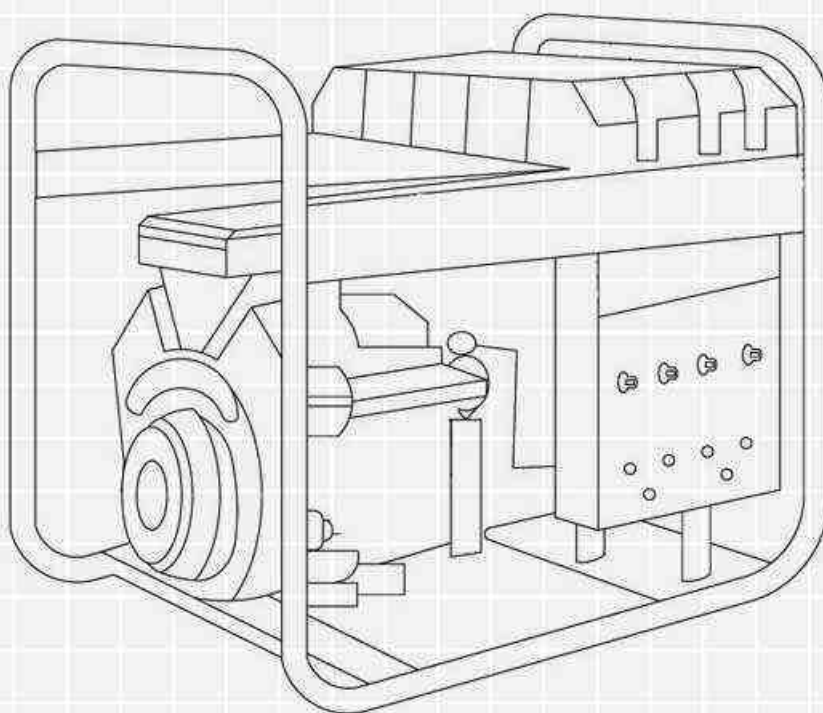
→ PUWER

Periodicity of inspection

24 months.

Generators

These machines are used to produce electrical power from a mechanically driven unit such as a diesel engine. They are generally found in industrial locations however they can also be used for the provision of electrical power in the event of an interruption to the normal supply.



Why inspect it?

To determine the provision, suitability and security of guarding.

To ascertain the mechanical and electrical integrity of installation.

To identify any obvious signs of deterioration, damage or wear (i.e. leakage, excessive noise, vibration or heat).

Industries where found

- ✓ Refue & Waste
- ✓ Plant Hirers / Groundworkers
- ✓ Woodworkers
- ✓ Construction
- ✓ Doctors / Vets and Dentists
- ✓ Plastics Manufacture
- ✓ Road Haulage
- ✓ Food Manufacture
- ✓ Hotels
- ✓ Restaurants
- ✓ Leisure Centres
- ✓ Property Owners
- ✓ Retailers
- ✓ Motor Trades
- ✓ Dry Cleaners
- ✓ Metal Workers & Engineers
- ✓ Paper & Board

Applicable legislation

→ PUWER

Periodicity of inspection

12 months.

Lift and Crane

Index

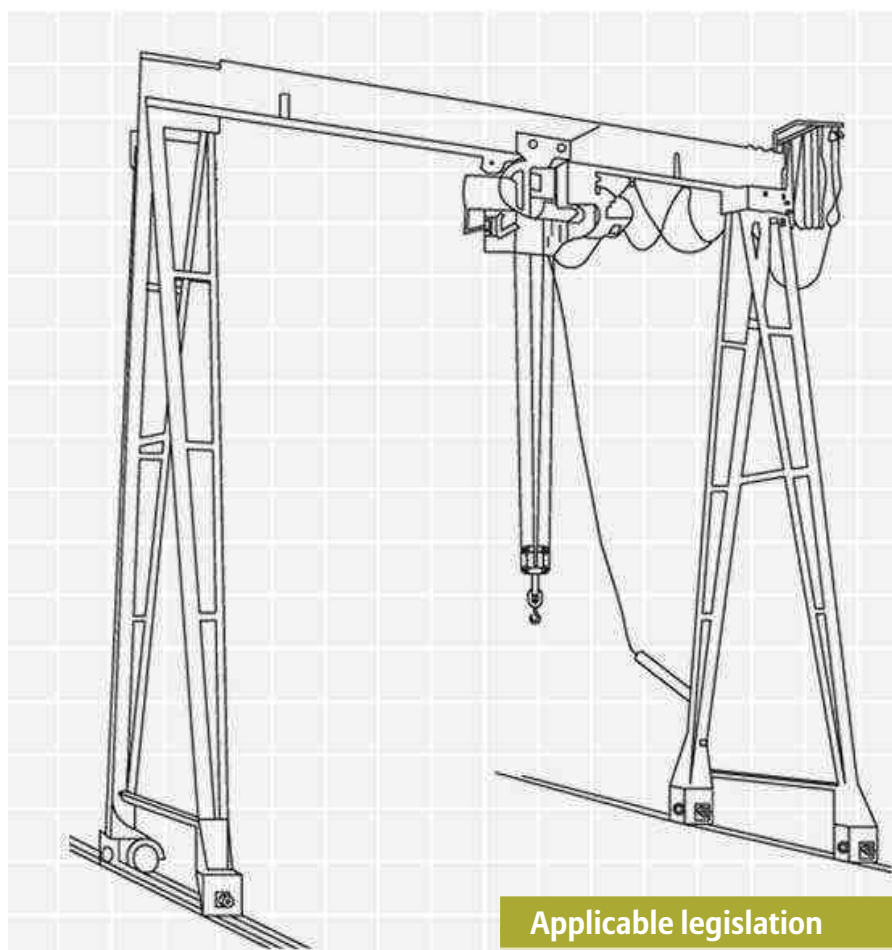
- Cranes
- Dock Levellers
- Escalators
- Excavators and Loading Shovels
- Forklift Truck
- Goods Lifts
- Lifting Appliances
- Lifting Machines
- Lorry Mounted Cranes
- Mobile Cranes
- Motor Vehicle Lifting Tables
- Pallet Truck
- Passenger Lifts
- Separate Lift Accessories
- Window Cleaning and Building Maintenance Equipment



Cranes

This type of equipment is used in a variety of industrial environments. Typically, cranes are used for the lifting, lowering and movement of loads in locations such as factories and docksides.

Such equipment comprises of supporting structures and beams, hoist and drive assemblies, lifting chains or ropes, load hooks and can be both manual or powered.



Why inspect it?

The main hazard associated with this equipment is the loss of load due to lifting assembly component failure.

The mechanical failure of critical load bearing components and insecurity of load can all compromise safety to persons, both operating and in the vicinity of the equipment.

Industries where found

- ✓ Refuse & Waste
- ✓ Plant Hirers / Groundworkers
- ✓ Woodworkers
- ✓ Plastics Manufacture
- ✓ Road Haulage
- ✓ Logistics
- ✓ Food Manufacture
- ✓ Hotels
- ✓ Restaurants
- ✓ Retailers
- ✓ Dry Cleaners

Applicable legislation

- PUWER
- LOLER

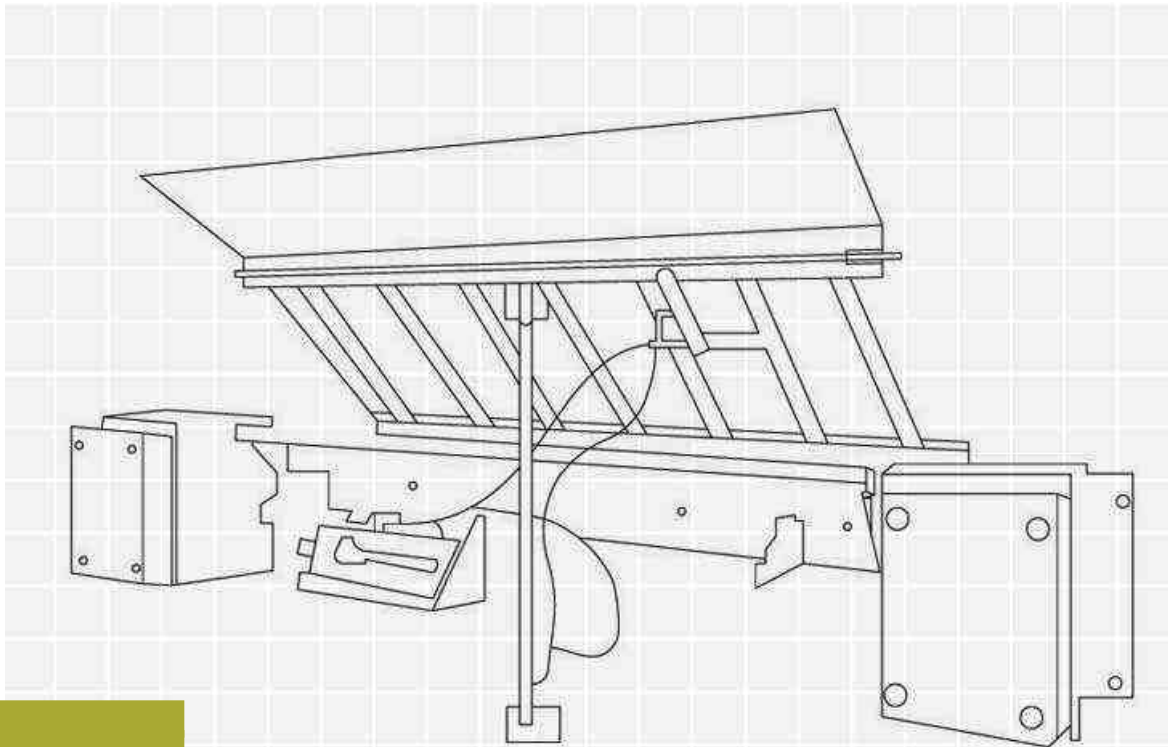
Periodicity of inspection

12 months.

Dock Levellers

This type of equipment is used in a variety of industrial and commercial environments. Typically, dock levellers are used for the loading and unloading of goods in locations such as factories, warehouses and distribution outlets.

Such equipment comprises of platforms, hydraulic levelling assemblies and guarding devices.



Why inspect it?

The main hazards associated with this equipment are the entrapment of limbs in the moving elements, malfunction of drive assemblies and platform free fall.

The mechanical failure of critical load bearing components and excessive wear in elements of the equipment can all compromise safety to persons using the equipment.

Industries where found

- ✓ Hotels
- ✓ Leisure Centres
- ✓ Property Owners

Applicable legislation

→ PUWER

Periodicity of inspection

12 months.

Escalators

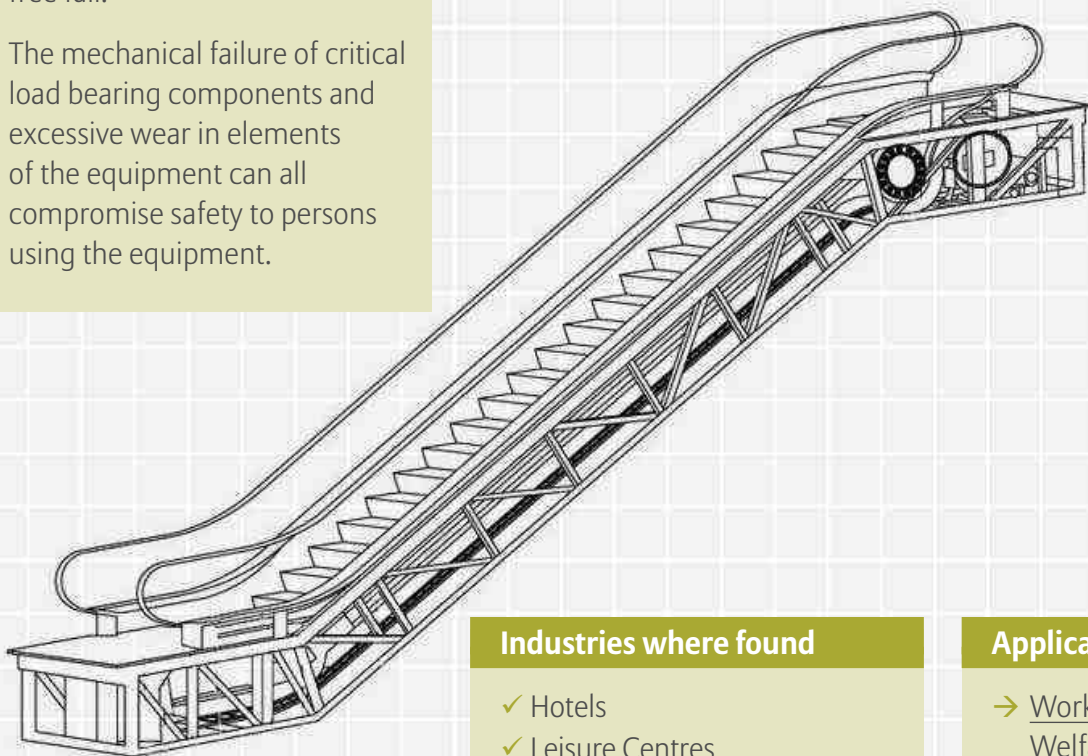
This type of equipment is used in a variety of commercial environments. Typically, escalators are used for the transportation and movement of people in locations such as shopping malls, offices, airports and rail and underground stations.

Such equipment comprises of moving walkways, drive assemblies, guard railing and balustrades.

Why inspect it?

The main hazards associated with this equipment are the entrapment of limbs in the moving elements, malfunction of drive assemblies and platform free fall.

The mechanical failure of critical load bearing components and excessive wear in elements of the equipment can all compromise safety to persons using the equipment.



Industries where found

- ✓ Hotels
- ✓ Leisure Centres
- ✓ Property Owners
- ✓ Retailers

Applicable legislation

→ [Workplace \(Health, Safety and Welfare\) Regulations 1992](#)

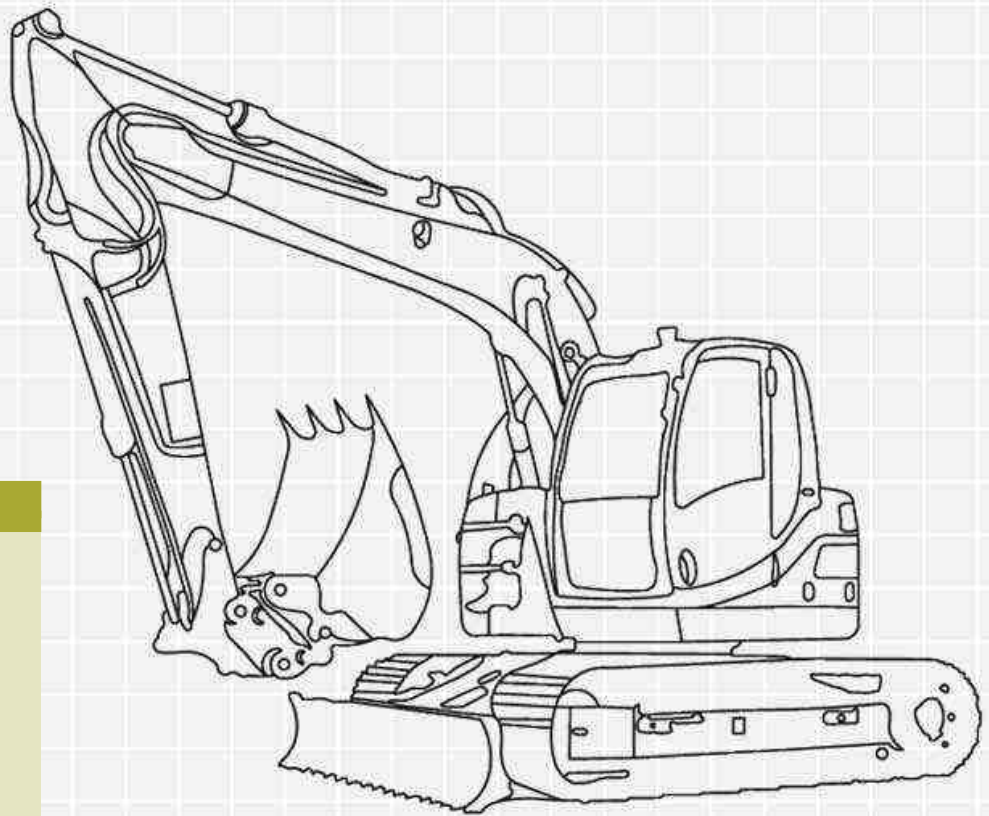
Periodicity of inspection

6 months (as per industry guidance).

Excavators and Loading Shovels

Excavators and Loading Shovels are used in a variety of industrial environments. Typically, this equipment is used for the excavation and subsequent loading of spoil and aggregate, in locations such as quarries, agricultural, highway maintenance and construction sites.

Such equipment comprises of supporting structures and booms, slew unit assemblies, outrigger stability support assemblies, hydraulic drive systems, buckets and quick hitches.



Why inspect it?

The main hazards associated with this equipment are loss of stability of equipment due to overload and loss of load due to boom assembly component failure.

The mechanical failure of critical load bearing components and lack of adequate stability support can all compromise safety to persons, both operating and in the vicinity of the equipment.

Industries where found

- ✓ Refuse & Waste
- ✓ Plant Hirers / Groundworkers
- ✓ Construction

Applicable legislation

→ PUWER

Periodicity of inspection

12 months.

Forklift Trucks

Forklift trucks are used in a variety of industrial and commercial environments. Typically such equipment is used for the movement of palletised loads in locations such as factories, warehouses and distribution centres. The principle component parts of a forklift truck are: front end loading forks, lifting chains, lifting, side-shifting and tilting hydraulic assemblies, operator protection systems and load guards.



Why inspect it?

The main hazards associated with such equipment are loss of stability of equipment due to overload and loss of load due to lifting assembly component failure. The mechanical failure of critical load bearing components, insecurity of counterweight, degradation of tyres and operator guarding systems can all compromise safety to persons, both operating and in the vicinity of the equipment.

Industries where found

- ✓ Refuse & Waste
- ✓ Plant Hirers / Groundworkers
- ✓ Woodworkers
- ✓ Construction
- ✓ Plastics Manufacture
- ✓ Road Haulage
- ✓ Logistics
- ✓ Food Manufacture
- ✓ Retailers
- ✓ Paper & Board

Applicable legislation

- PUWER
- LOLER

Periodicity of inspection

12 months (6 months if person carrying attachments are used).

Goods Lifts

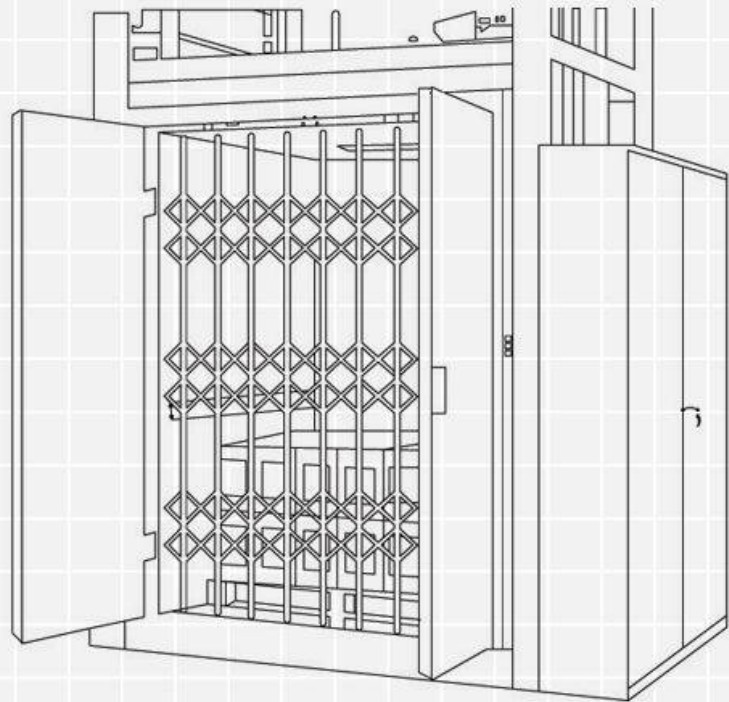
This type of equipment is used in a variety of commercial and industrial environments. Typically, goods lifts are used for the movement of goods from one level to another in locations such as factories, shopping malls and offices.

Such equipment comprises of a car or carrier moving along a fixed vertical path with interlocked landing doors, suspension ropes or chains, electric and hydraulic drive assemblies, safety devices and electric/electronic control systems. Goods lifts are used for carrying goods only and do not carry passengers.

Why inspect it?

The main hazards associated with this equipment are the entrapment of limbs in the moving elements, malfunction of drive assemblies and carrier free fall.

The mechanical failure of critical load bearing components and excessive wear in elements of the equipment can all compromise safety to persons operating the equipment.



Industries where found

- ✓ Plastics Manufacture
- ✓ Logistics
- ✓ Food Manufacture
- ✓ Hotels
- ✓ Restaurants
- ✓ Leisure Centres
- ✓ Property Owners
- ✓ Retailers
- ✓ Motor Trades
- ✓ Paper & Board

Applicable legislation

- PUWER
- LOLER

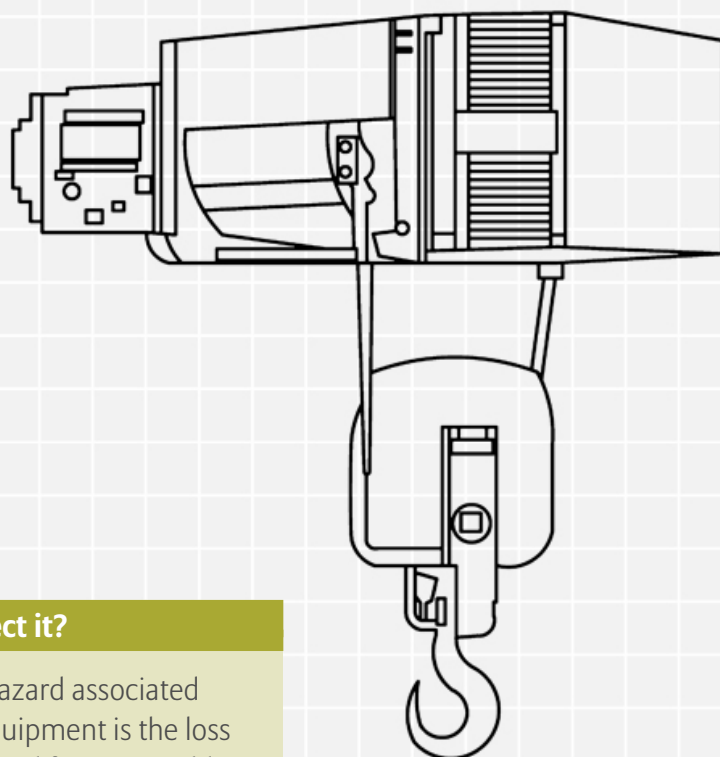
Periodicity of inspection

12 months.

Lifting Appliances

This type of equipment is used in a variety of industrial environments. Typically, lifting appliances are used for the lifting and lowering of loads in locations such as factories and workshops.

Such equipment comprises of supporting beams, hoisting mechanisms, lifting chains or ropes, load hooks and can be both manual or powered.



Why inspect it?

The main hazard associated with this equipment is the loss of load due to lifting assembly component failure.

The mechanical failure of critical load bearing components and insecurity of load can all compromise safety to persons, both operating and in the vicinity of the equipment.

Industries where found

- ✓ Refuse & Waste
- ✓ Plant Hirers / Groundworkers
- ✓ Woodworkers
- ✓ Construction
- ✓ Plastics Manufacture
- ✓ Road Haulage
- ✓ Logistics
- ✓ Food Manufacture
- ✓ Property Owners
- ✓ Retailers
- ✓ Motor Trades
- ✓ Metal Workers & Engineers
- ✓ Paper & Board

Applicable legislation

- [PUWER](#)
- [LOLER](#)

Periodicity of inspection

12 months.

Lifting Machines

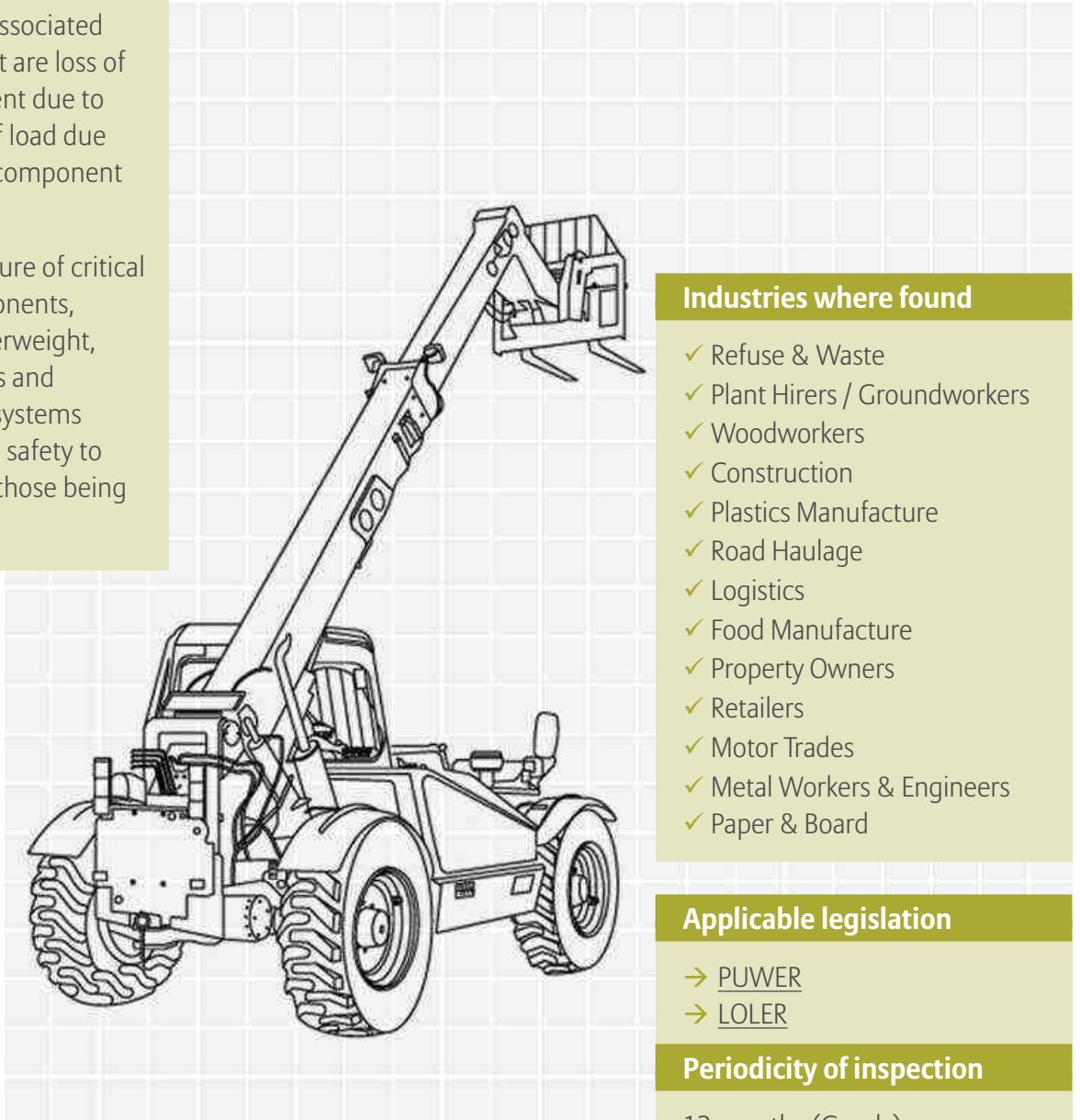
This type of equipment is used in a variety of industrial and commercial environments. Typically, lifting machines are used for the lifting and lowering of loads which can include people and the general movement of goods in locations such as factories, distribution outlets, agricultural and construction sites.

Such equipment comprises of supporting structures and beams, drive, hoist and slew unit assemblies, outrigger stability support assemblies, operator protection systems, load guards, load forks and carriage units.

Why inspect it?

The main hazards associated with this equipment are loss of stability of equipment due to overload and loss of load due to lifting assembly component failure.

The mechanical failure of critical load bearing components, insecurity of counterweight, degradation of tyres and operator guarding systems can all compromise safety to persons, especially those being lifted.



Industries where found

- ✓ Refuse & Waste
- ✓ Plant Hirers / Groundworkers
- ✓ Woodworkers
- ✓ Construction
- ✓ Plastics Manufacture
- ✓ Road Haulage
- ✓ Logistics
- ✓ Food Manufacture
- ✓ Property Owners
- ✓ Retailers
- ✓ Motor Trades
- ✓ Metal Workers & Engineers
- ✓ Paper & Board

Applicable legislation

- [PUWER](#)
- [LOLER](#)

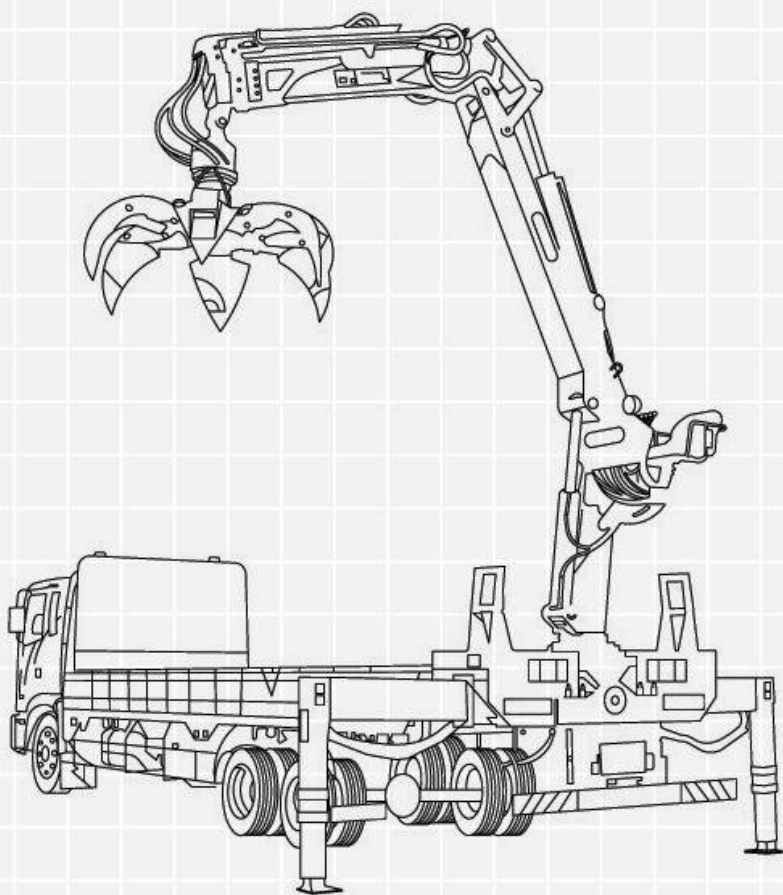
Periodicity of inspection

12 months (Goods),
6 months (People).

Lorry Mounted Cranes

Lorry mounted cranes are used in a variety of industrial and commercial environments. Typically, this equipment is used for the lifting and lowering of loads in locations such as factories, distribution outlets, agricultural and construction sites.

Such equipment comprises of supporting structures and beams, hoist and slew unit assemblies, outrigger stability support assemblies, load forks, hooks and carriage units.



Why inspect it?

The main hazards associated with this equipment are loss of stability of equipment due to overload and loss of load due to lifting assembly component failure.

The mechanical failure of critical load bearing components and lack of adequate stability support can all compromise safety to persons, both operating and in the vicinity of the equipment.

Industries where found

- ✓ Refuse & Waste
- ✓ Plant Hirers / Groundworkers
- ✓ Construction
- ✓ Road Haulage
- ✓ Logistics
- ✓ Motor Trades
- ✓ Metal Workers & Engineers
- ✓ Paper & Board

Applicable legislation

- PUWER
- LOLER

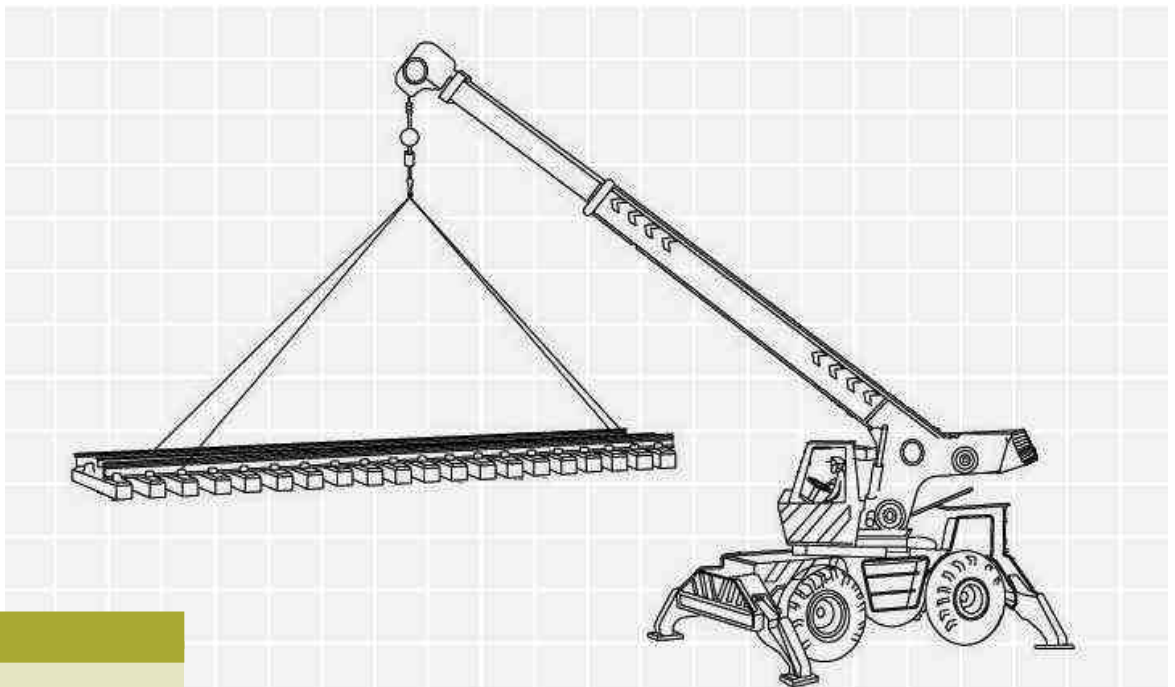
Periodicity of inspection

12 months.

Mobile Cranes

Mobile cranes are used in a variety of industrial environments. Typically, this equipment is used for the lifting, lowering and movement of loads which can include people in locations such as factories, docksides and construction sites.

Such equipment comprises of supporting structures and beams, drive, hoist and slew unit assemblies, outrigger stability support assemblies, lifting ropes, luffing assemblies and operator protection systems.



Why inspect it?

The main hazards associated with this equipment are loss of stability of equipment due to overload and loss of load due to lifting assembly component failure.

The mechanical failure of critical load bearing components, insecurity of counterweight, degradation of tyres/tracks and operator guarding systems can all compromise safety to persons, both operating and in the vicinity of the equipment.

Industries where found

- ✓ Refuse & Waste
- ✓ Plant Hirers / Groundworkers
- ✓ Construction
- ✓ Road Haulage
- ✓ Logistics
- ✓ Motor Trades
- ✓ Metal Workers & Engineers
- ✓ Paper & Board

Applicable legislation

- PUWER
- LOLER

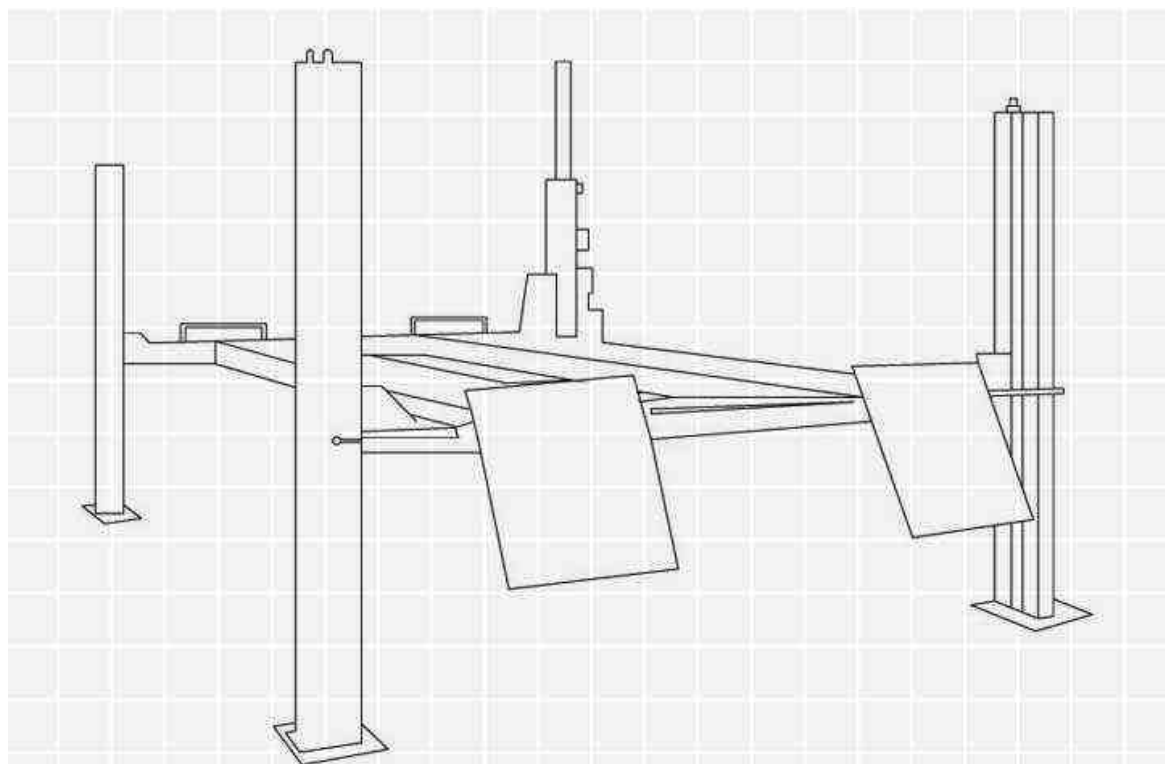
Periodicity of inspection

12 months (Goods),
6 months (People).

Motor Vehicle Lifting Tables

This type of equipment is used in vehicle garages and repair workshop facilities. Typically, motor vehicle lifting tables are used for the raising and lowering of vehicles for access by repair personnel.

Such equipment comprises of platforms, hoist drive assemblies, ropes, load nut assemblies, guards and personnel safety devices.



Why inspect it?

The main hazards associated with this equipment are the entrapment of limbs in the moving elements, malfunction of drive assemblies and platform free fall.

The mechanical failure of critical load bearing components and excessive wear in elements of the equipment can all compromise safety to persons using the equipment.

Industries where found

- ✓ Road Haulage
- ✓ Logistics
- ✓ Motor Trades

Applicable legislation

- PUWER
- LOLER

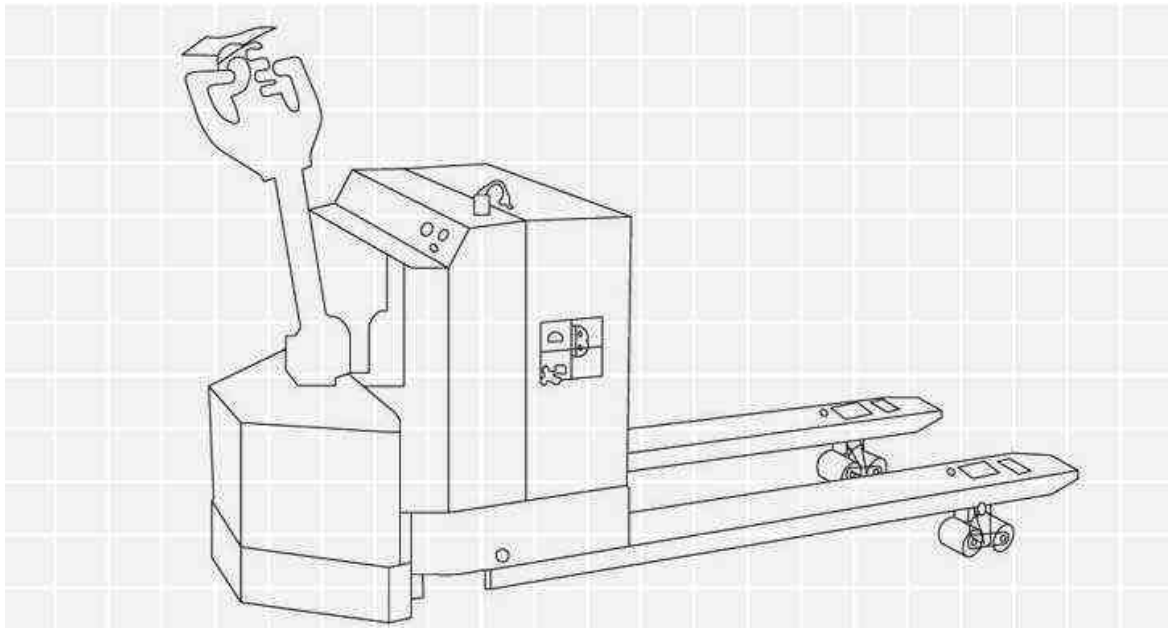
Periodicity of inspection

6 months (as per industry guidance).

Pallet Trucks

This type of equipment is used in a variety of industrial and commercial environments. Typically, pallet trucks are used for the movement of palletised loads in locations such as factories, warehouses and distribution centres.

Principal component parts include: front end loading forks, hydraulic lifting assemblies and underside carriage roller sets.



Why inspect it?

The main hazards associated with such equipment are loss of stability of equipment due to overload or underside carriage roller failure.

The mechanical failure of critical load bearing components can compromise safety to persons, both operating and in the vicinity of the equipment.

Industries where found

- ✓ Refuse & Waste
- ✓ Plant Hirers / Groundworkers
- ✓ Woodworkers
- ✓ Construction
- ✓ Doctors / Vets and Dentists
- ✓ Plastics Manufacture
- ✓ Road Haulage
- ✓ Logistics
- ✓ Food Manufacture
- ✓ Hotels
- ✓ Restaurants
- ✓ Leisure Centres
- ✓ Property Owners
- ✓ Retailers
- ✓ Motor Trades
- ✓ Dry Cleaners
- ✓ Metal Workers & Engineers
- ✓ Paper & Board

Applicable legislation

→ PUWER

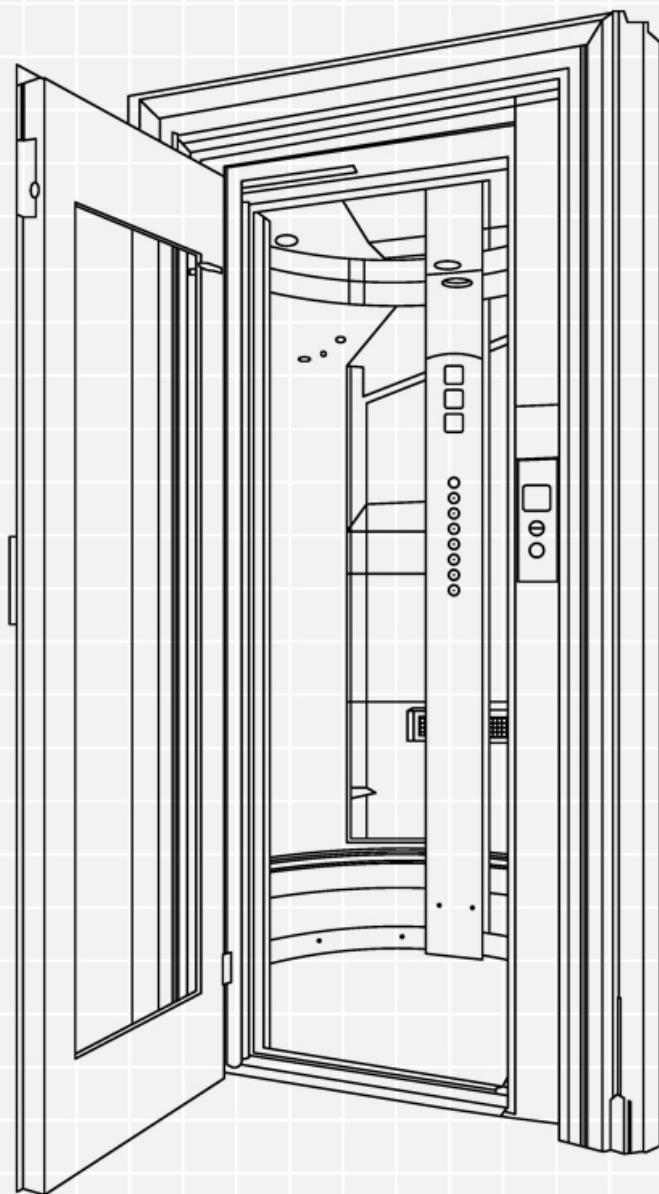
Periodicity of inspection

12 months.

Passenger Lifts

Passenger lifts are used in a variety of commercial and industrial environments. Typically, this equipment is used for the movement of passengers from one level to another in locations such as factories, shopping malls, offices, hospitals, railway and underground stations.

Such equipment comprises of a car moving along a fixed vertical path with interlocked landing doors, suspension ropes or belts, electric and hydraulic drive assemblies, safety devices and electric/electronic control systems.



Why inspect it?

The main hazards associated with this equipment are the entrapment of limbs in the moving elements, malfunction of drive assemblies, tripping and car free fall.

The mechanical failure of critical load bearing components and excessive wear in elements of the equipment can all compromise safety to persons using the equipment.

Applicable legislation

→ PUWER

→ LOLER

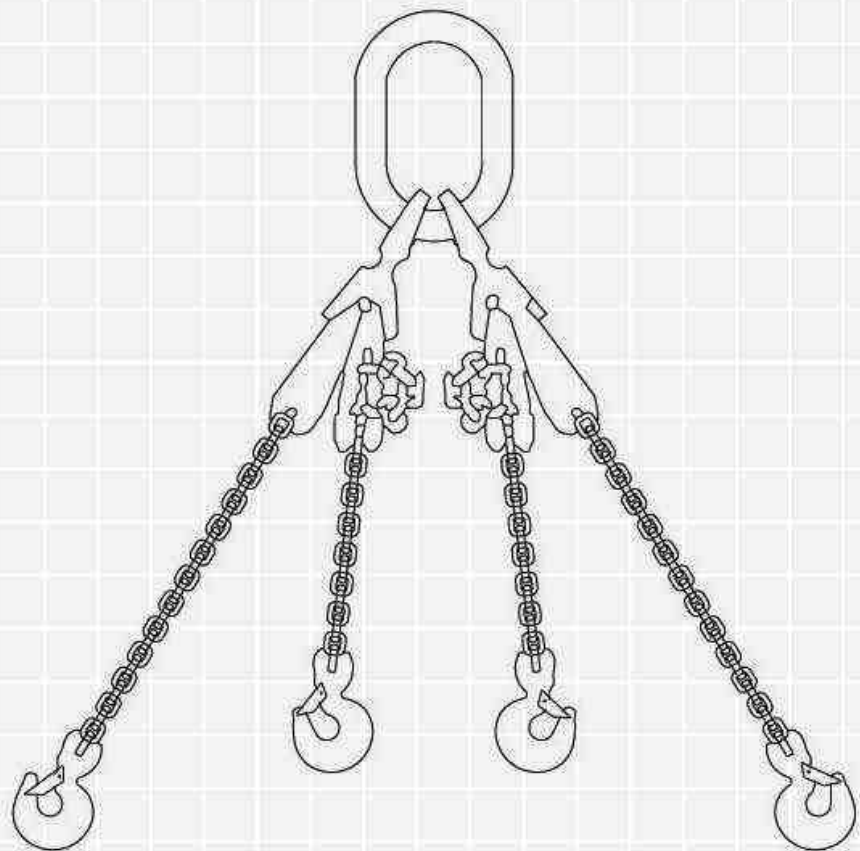
Periodicity of inspection

6 months.

Separate Lifting Accessories

This type of equipment is used in a variety of industrial, commercial and transportation environments. Typically, separate lifting accessories are used for the lifting and lowering of loads in locations such as factories, utility service depots, repair facilities, garages and construction sites.

Such equipment comprises of chains or ropes (fibre and ferrous) and load hook assemblies.



Why inspect it?

The main hazards associated with this equipment are the loss of load due to lifting assembly component failure and inadequate security of the load.

The mechanical failure of critical load bearing components and insecurity of the load can compromise safety to persons, both using and in the vicinity of the equipment.

Industries where found

- ✓ Refuse & Waste
- ✓ Plant Hirers / Groundworkers
- ✓ Woodworkers
- ✓ Construction
- ✓ Plastics Manufacture
- ✓ Road Haulage
- ✓ Logistics
- ✓ Food Manufacture
- ✓ Motor Trades
- ✓ Metal Workers & Engineers
- ✓ Paper & Board

Applicable legislation

- PUWER
- LOLER

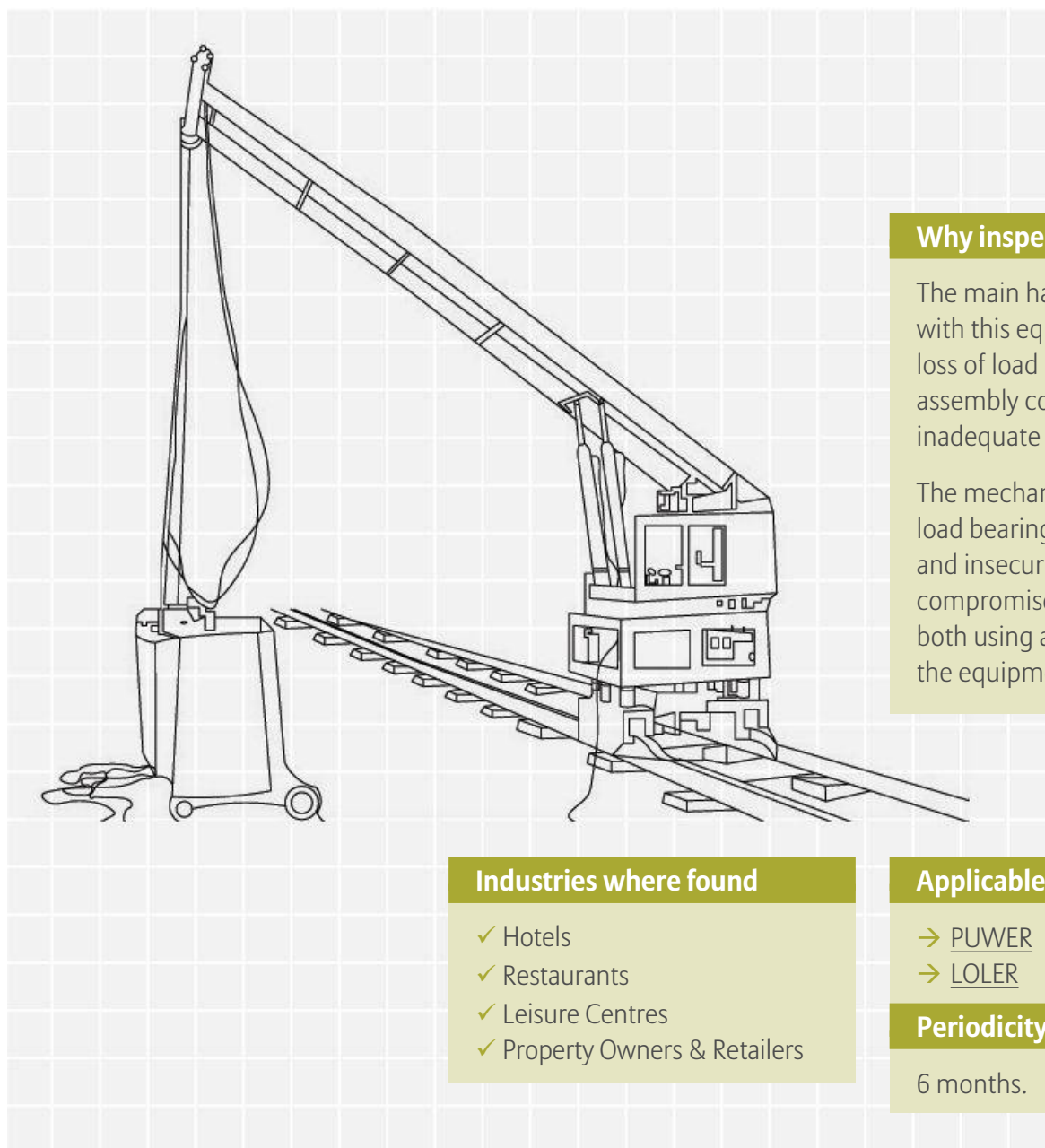
Periodicity of inspection

6 months.

Window Cleaning and Building Maintenance Equipment

This type of equipment is used in a variety of industrial, commercial and transportation environments. Typically, separate lifting accessories are used for the lifting and lowering of loads in locations such as factories, utility service depots, repair facilities, garages and construction sites.

Such equipment comprises of chains or ropes (fibre and ferrous) and load hook assemblies.



Why inspect it?

The main hazards associated with this equipment are the loss of load due to lifting assembly component failure and inadequate security of the load.

The mechanical failure of critical load bearing components and insecurity of the load can compromise safety to persons, both using and in the vicinity of the equipment.

Industries where found

- ✓ Hotels
- ✓ Restaurants
- ✓ Leisure Centres
- ✓ Property Owners & Retailers

Applicable legislation

- PUWER
- LOLER

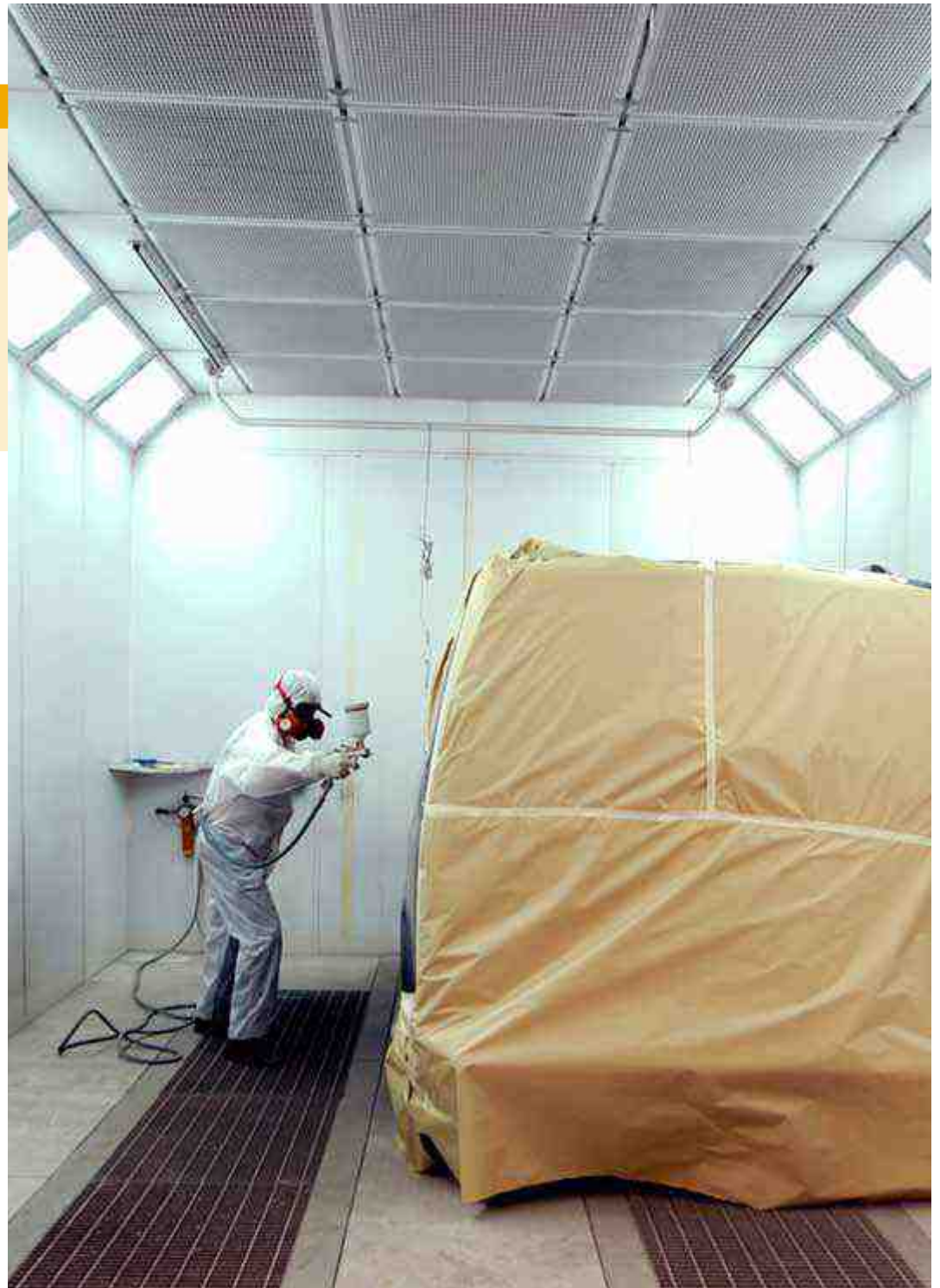
Periodicity of inspection

6 months.

Local Exhaust Ventilation Plant

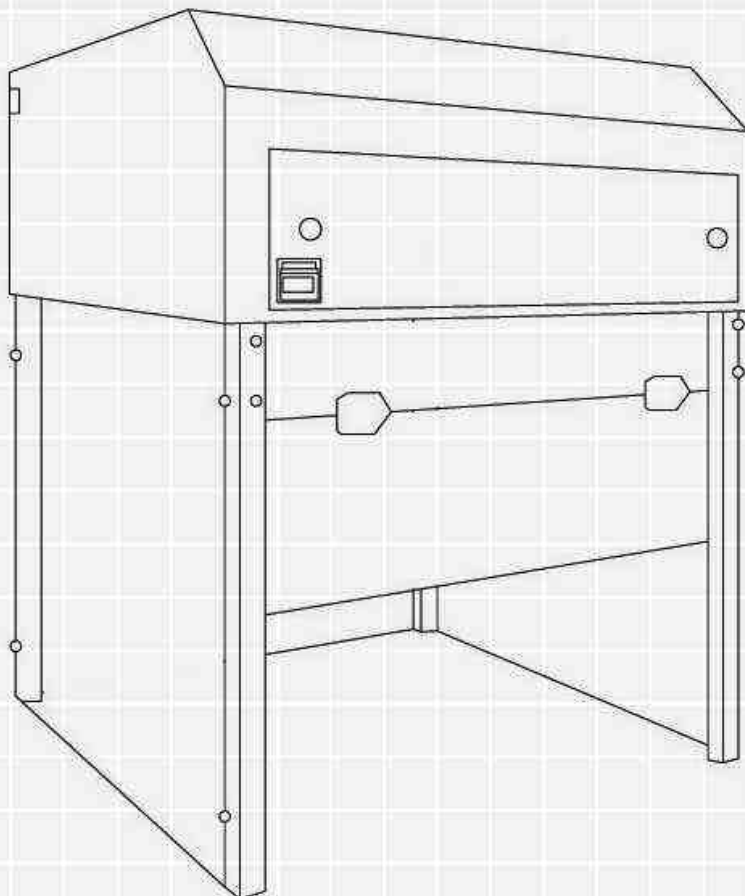
Index

- Fume Cupboards
- Local Exhaust Ventilation (LEV) Systems
- Shot Blast Cabinets
- Spray Booths



Fume Cupboards

Fume cupboards are partially enclosed units fitted with a sliding front facia which can be adjusted depending on the type of work being carried out.



Why inspect it?

The purpose of the thorough examination and test is to assess the performance of the system to demonstrate that the plant is performing correctly and effectively.

Industries where found

- ✓ Doctors / Vets and Dentists
- ✓ Food Manufacture
- ✓ Metal Workers & Engineers
- ✓ Paper & Board

Applicable legislation

→ [COSHH](#)

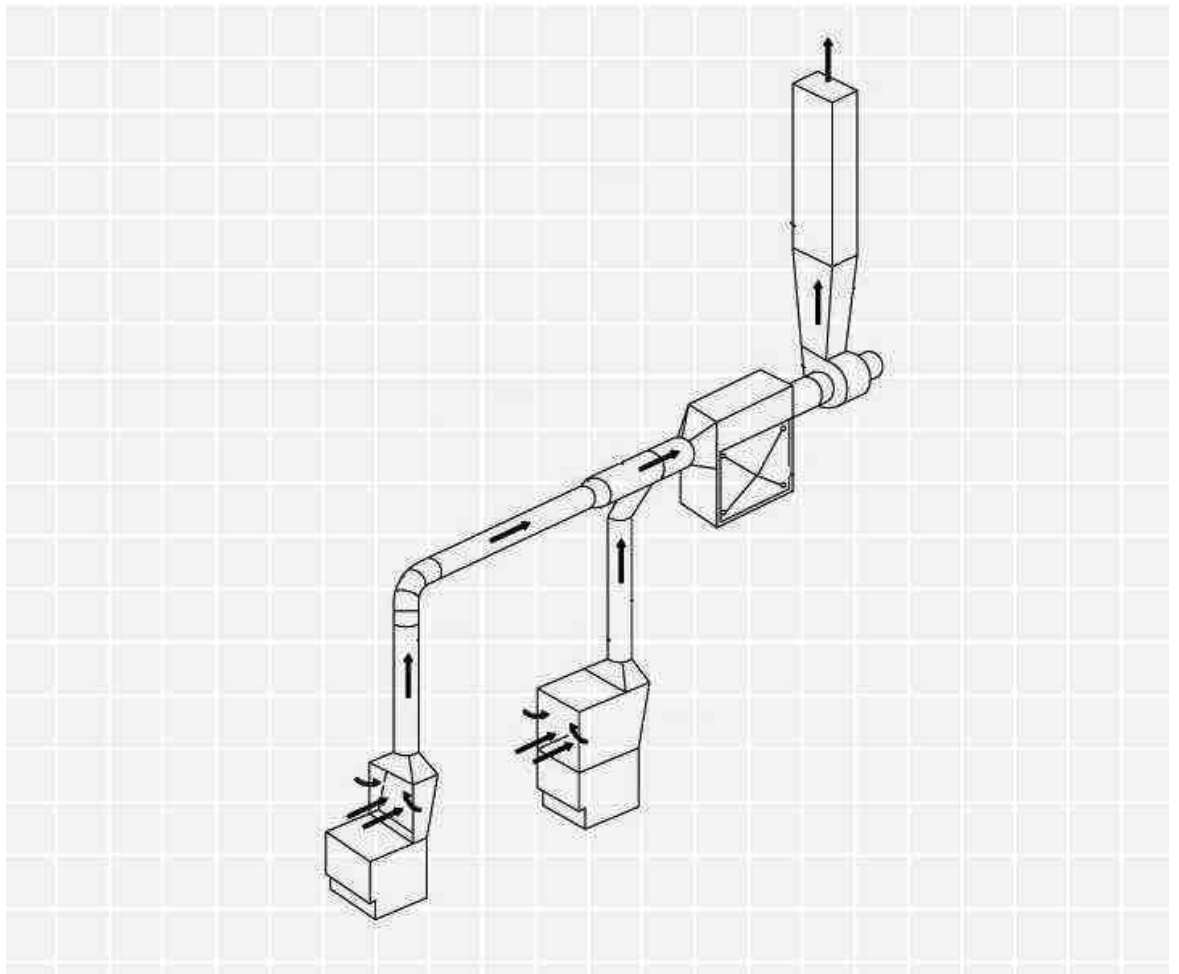
Periodicity of inspection

14 months.

Local Exhaust Ventilation Plant

Local Exhaust Ventilation (LEV) Systems

A LEV system is one that uses extract ventilation to prevent or reduce the level of airborne hazardous substances from being breathed by people in the workplace.



Why inspect it?

The purpose of the thorough examination and test is to assess the performance of the system to demonstrate that the plant is performing correctly and effectively.

Industries where found

- ✓ Woodworkers
- ✓ Plastics Manufacture
- ✓ Motor Trades
- ✓ Dry Cleaners
- ✓ Metal Workers & Engineers
- ✓ Paper & Board

Applicable legislation

→ [COSHH](#)

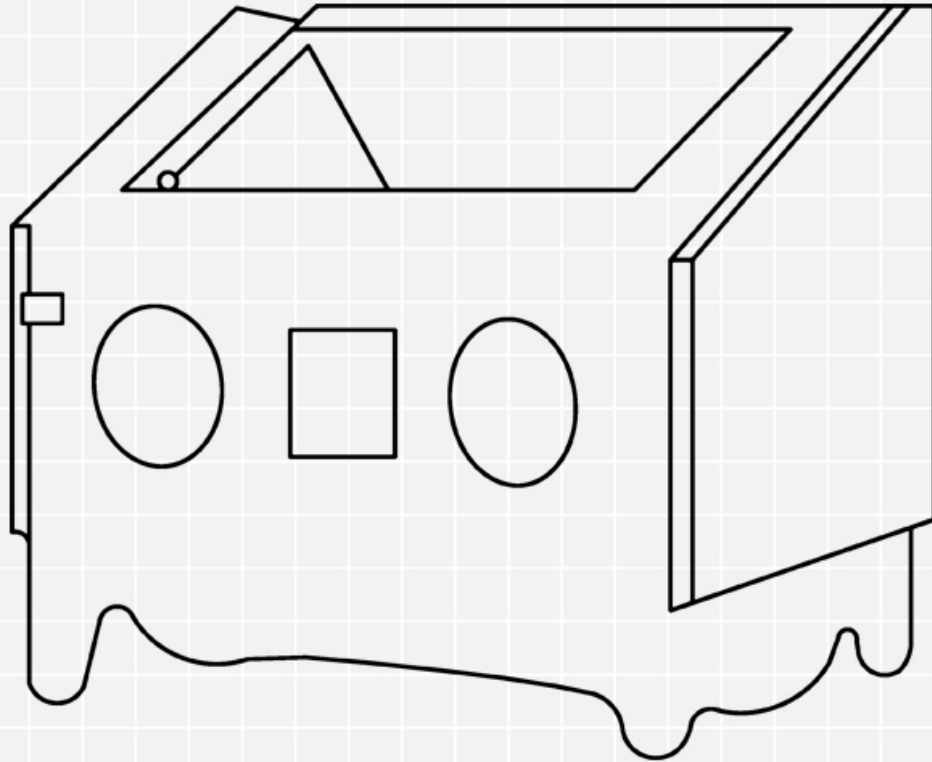
Periodicity of inspection

14 months.



Shot Blast Cabinets

This plant is generally used for the cleaning or finishing of metal components.



Why inspect it?

The purpose of the thorough examination and test is to assess the performance of the system to demonstrate that the plant is performing correctly and effectively.

Industries where found

- ✓ Refuse & Waste
- ✓ Motor Trades
- ✓ Metal Workers & Engineers
- ✓ Paper & Board

Applicable legislation

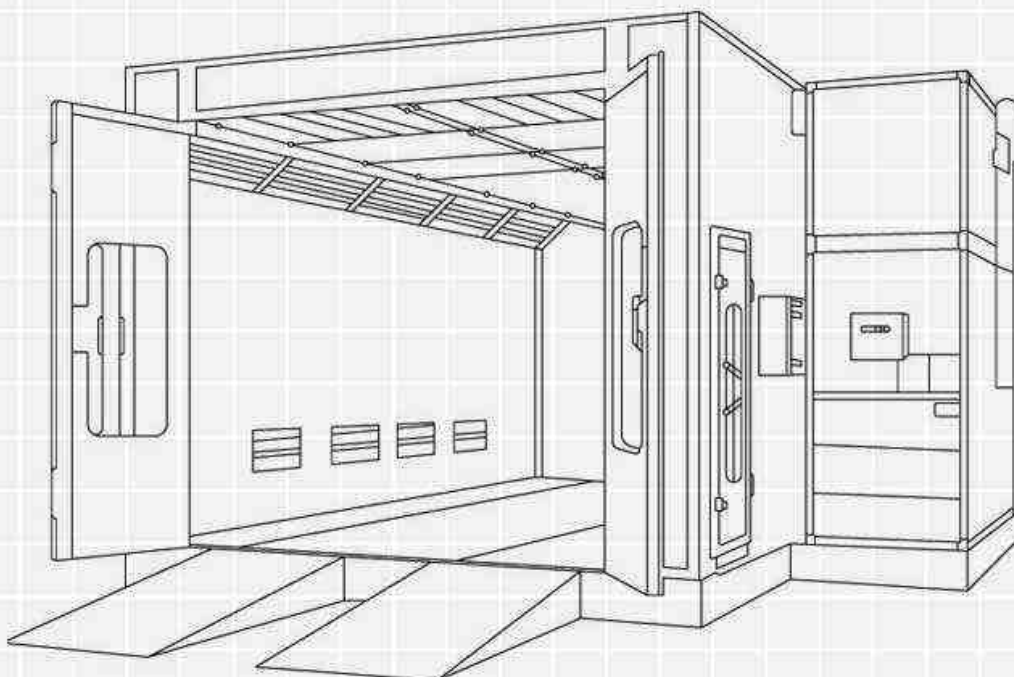
→ [COSHH](#)

Periodicity of inspection

New castings: 1 Month.
Abrading metals: 6 months.
All others: 14 months.

Spray Booths

Spray booths and enclosures are used in a variety of industries. They may be large booths which completely contain the process or enclosures where the operation is only partially contained.



Why inspect it?

The purpose of the thorough examination and test is to assess the performance of the system to demonstrate that the plant is performing correctly and effectively.

Industries where found

- ✓ Motor Trades
- ✓ Metal Workers & Engineers
- ✓ Paper & Board

Applicable legislation

→ [COSHH](#)

Periodicity of inspection

14 months.

Power Press

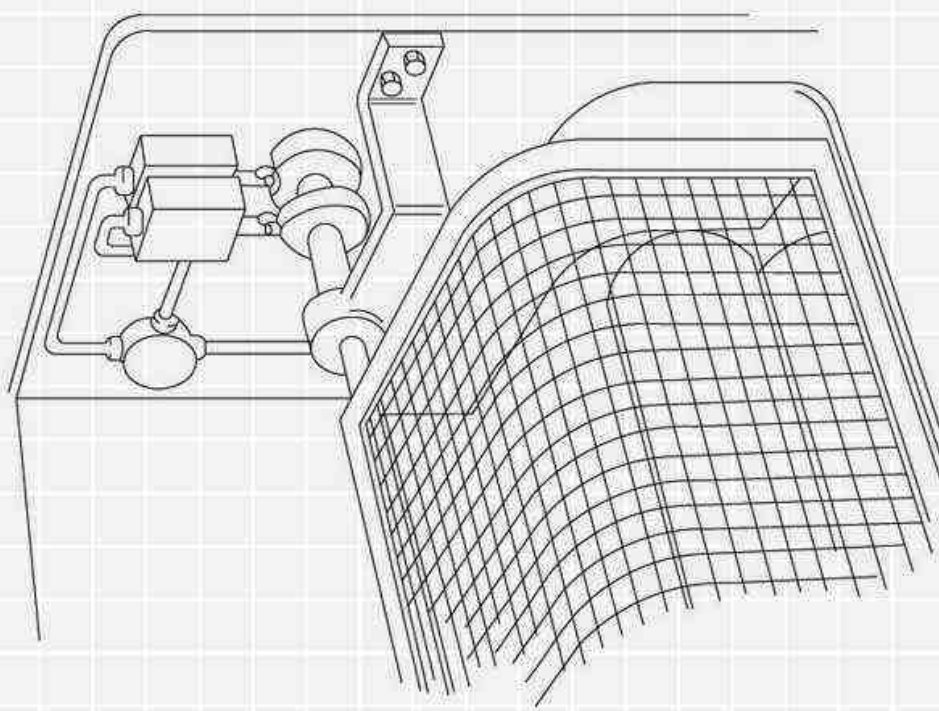
Index

- Guard & Protective Devices
- Guillotine (Metal)
- Guillotine (Paper)
- Injection Moulding Machines
- Power Press
- Press Brakes
- Wood Working Machines



Guard & Protective Devices

To ensure any equipment where access to dangerous moving parts is possible by the operator or third parties is not possible.



Why inspect it?

The purpose of the inspection is to determine whether the guarding and protection devices fitted to hazardous machinery are adequate and installed safely.

Industries where found

✓ Metal Workers & Engineers

Applicable legislation

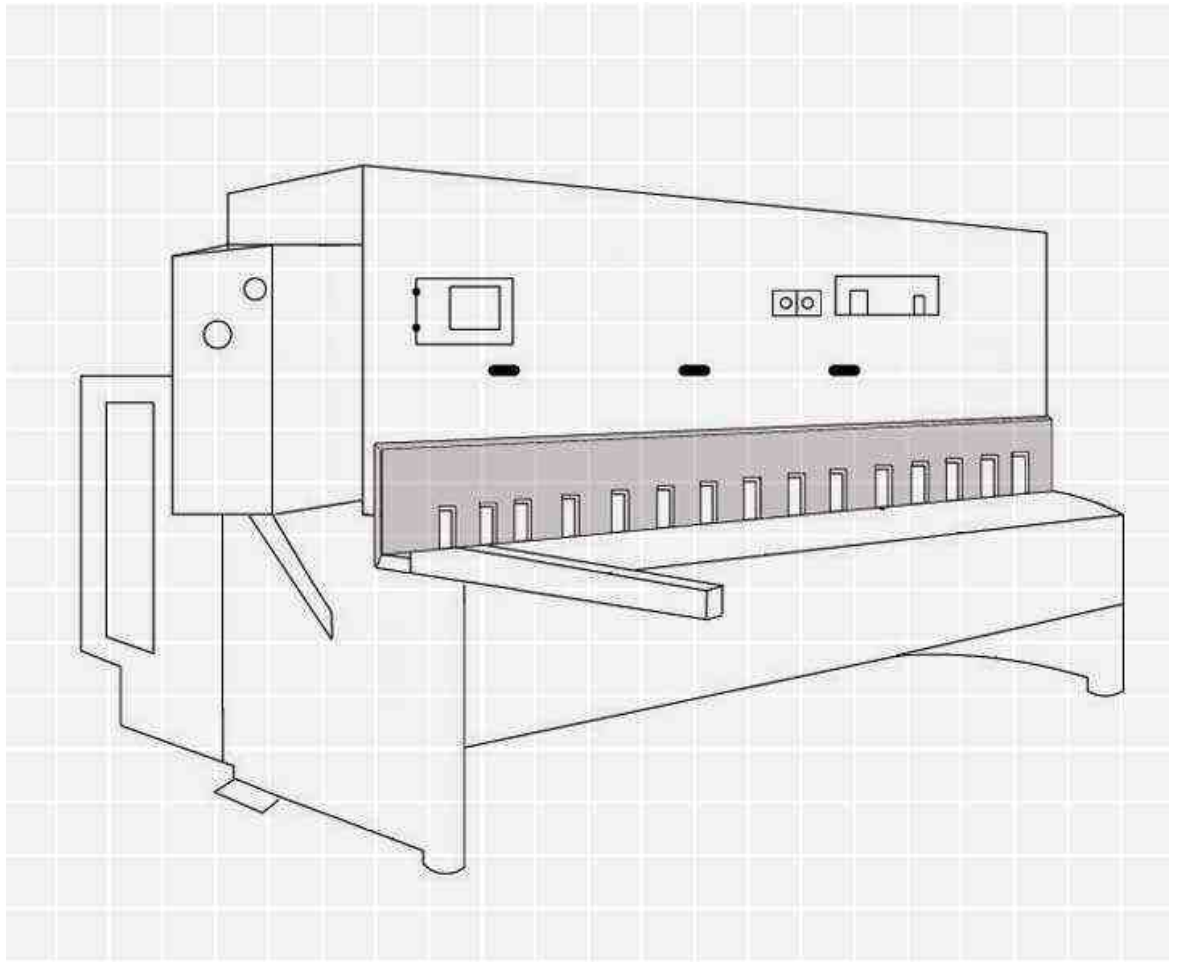
→ PUWER

Periodicity of inspection

12 months.

Guillotine (Metal)

An electro mechanical and/or hydraulic machine designed to cut single layer sheets of steel on a worktable by means of powered blade (knife) passing against a fixed blade.



Why inspect it?

To ensure that all guards and protection devices are in sound condition and operate correctly preventing access to the danger zone or other potentially dangerous moving parts.

Industries where found

- ✓ Plastics Manufacture
- ✓ Metal Workers & Engineers
- ✓ Paper & Board

Applicable legislation

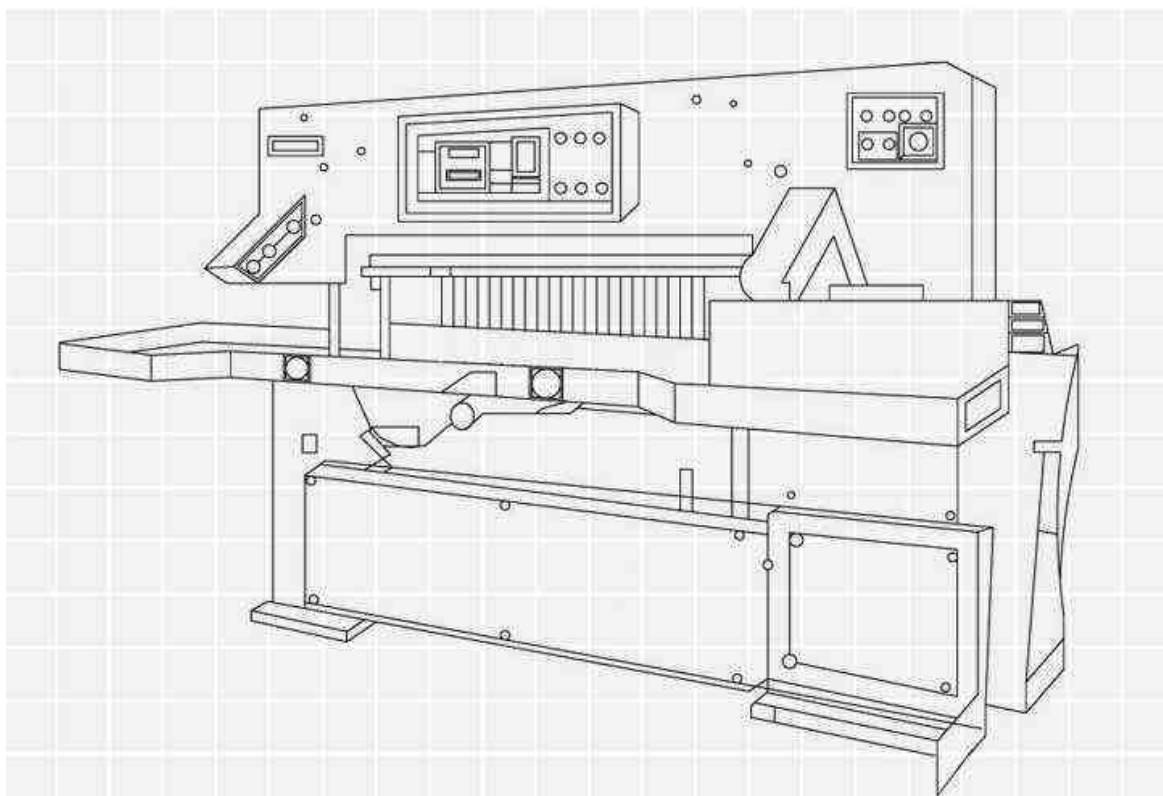
→ PUWER

Periodicity of inspection

12 monthly.

Guillotine (Paper)

An electro mechanical / hydraulic machine designed to cut paper (multiple layers) on a worktable by means of powered blade (knife) passing against a fixed blade.



Why inspect it?

To ensure that all guards and protection devices are in sound condition and operate correctly preventing access to the danger zone or other potentially dangerous moving parts.

Industries where found

- ✓ Plastics Manufacture
- ✓ Metal Workers & Engineers
- ✓ Paper & Board

Applicable legislation

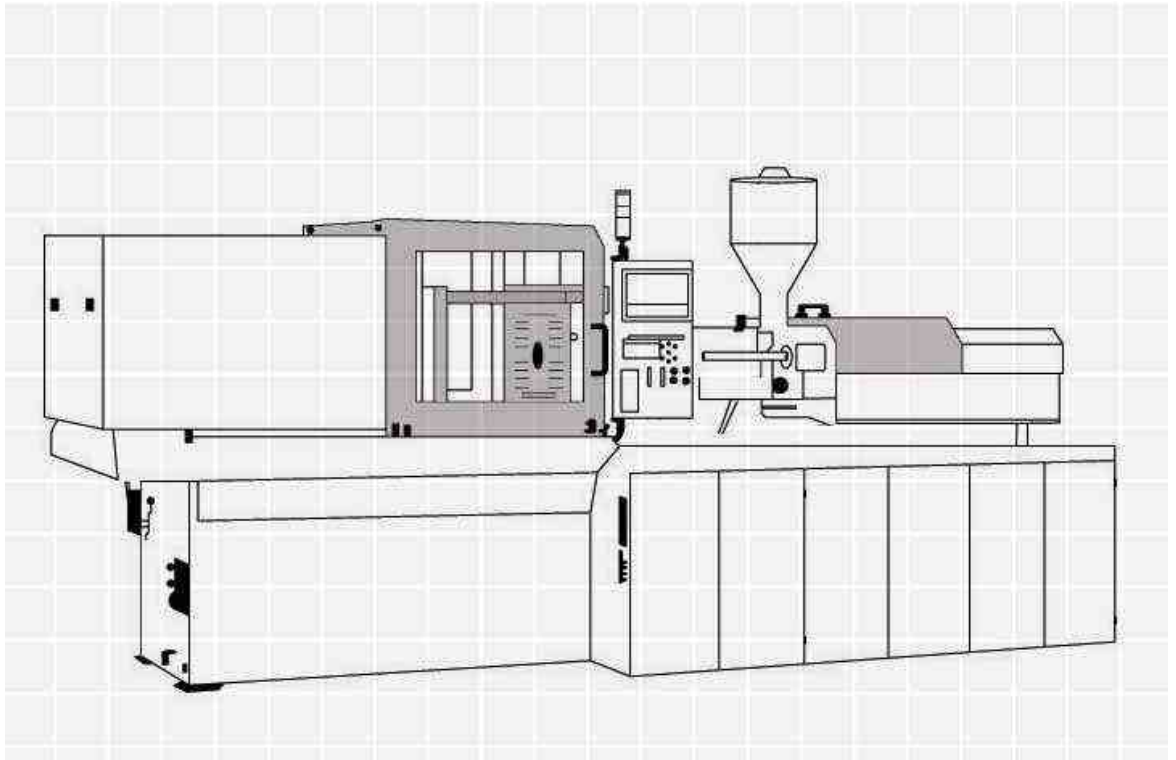
→ PUWER

Periodicity of inspection

6 monthly.

Injection Moulding Machines (Moulding Machinery)

Machinery that can be an electro/mechanical and/or hydraulic by way of compressing, injecting or blowing a plastic or rubber compound into a mould.



Why inspect it?

To ensure that all guards and protection devices are in sound condition and operate correctly preventing access to the danger zone or other potentially dangerous moving parts.

Industries where found

- ✓ Plastics Manufacture
- ✓ Metal Workers & Engineers

Applicable legislation

→ PUWER

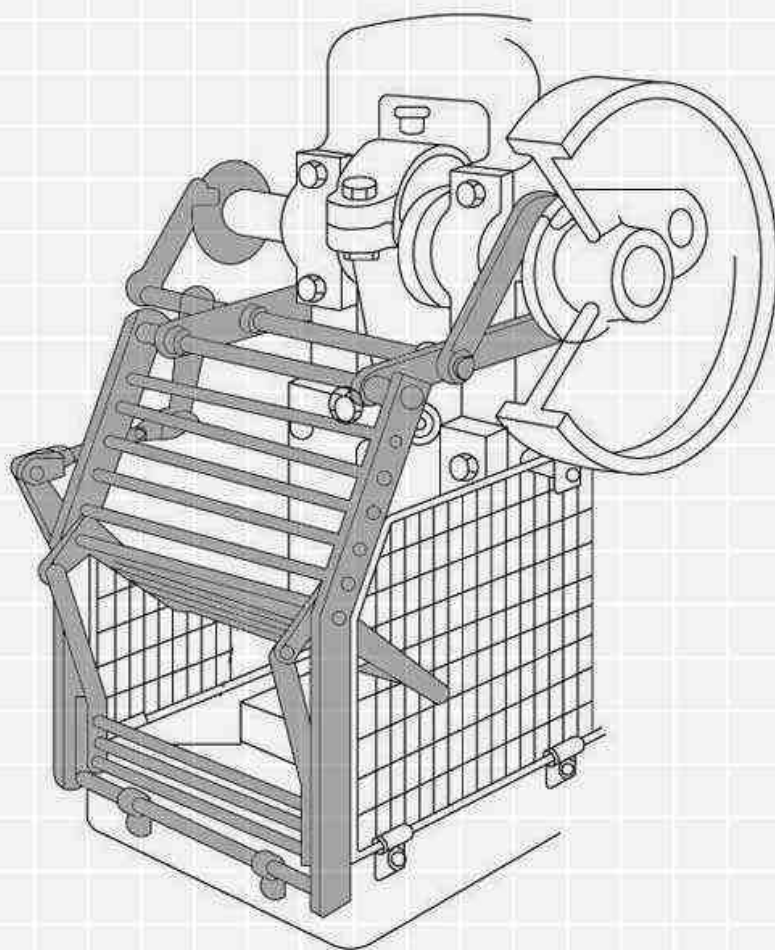
Periodicity of inspection

12 monthly.

Power Press

A power press is defined as a machine that is used wholly or partly for the working of metal which is power driven and which embodies a flywheel and a clutch mechanism.

They are considered highly dangerous machines and they have been the cause of many accidents over the years.



Why inspect it?

To ensure that it has been installed correctly and that all guards and protection devices are in sound condition and operate correctly preventing access to the danger zone or other potentially dangerous moving parts.

Industries where found

✓ Metal Workers & Engineers

Applicable legislation

→ PUWER (as applied to power presses) Part IV

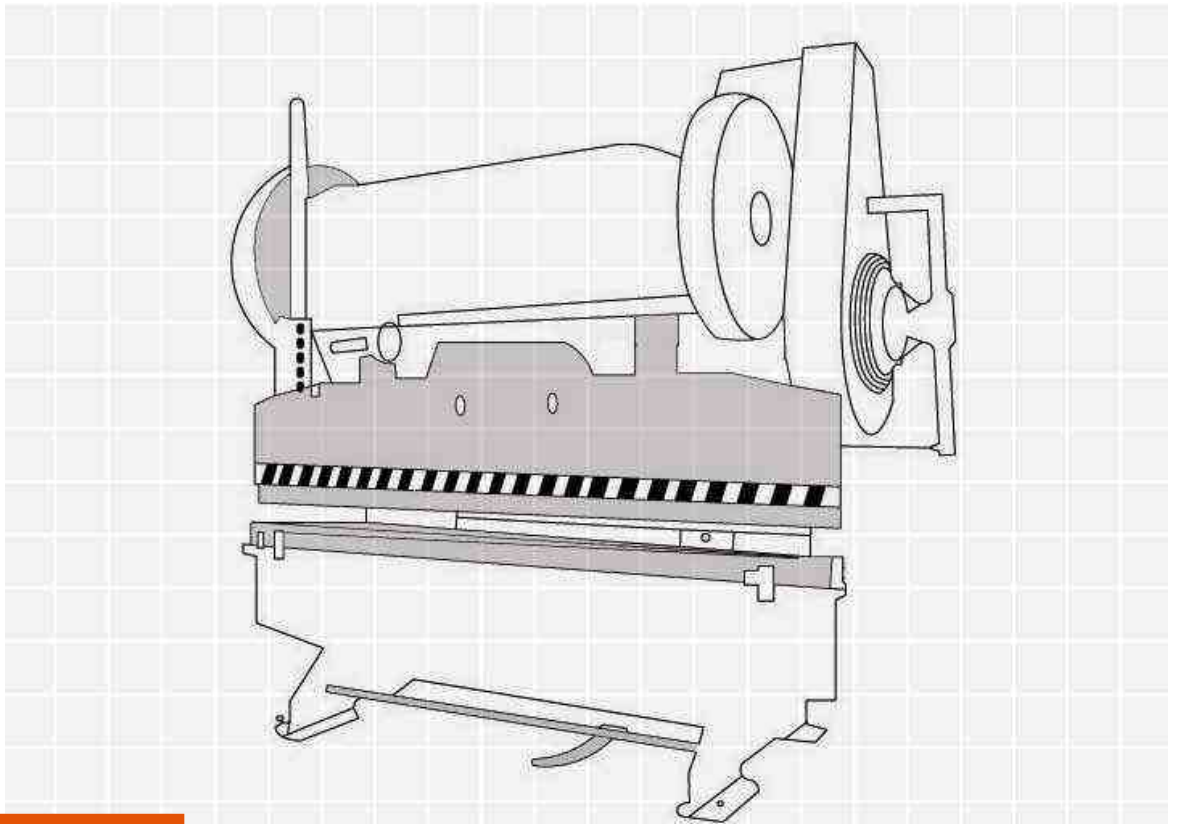
Periodicity of inspection

6 monthly – interlocking and photoelectric.

Press Brakes

A press brake is defined as a machine that is used wholly or partly for the working of metal which is power driven and which embodies a flywheel and a clutch mechanism.

They are considered highly dangerous machines, that have been the cause of many accidents over the years. The injuries are usually serious often resulting in amputations of fingers or hands.



Why inspect it?

To ensure that it has been installed correctly and that all guards and protection devices are in sound condition and operate correctly preventing access to the danger zone or other potentially dangerous moving parts.

Industries where found

✓ Metal Workers & Engineers

Applicable legislation

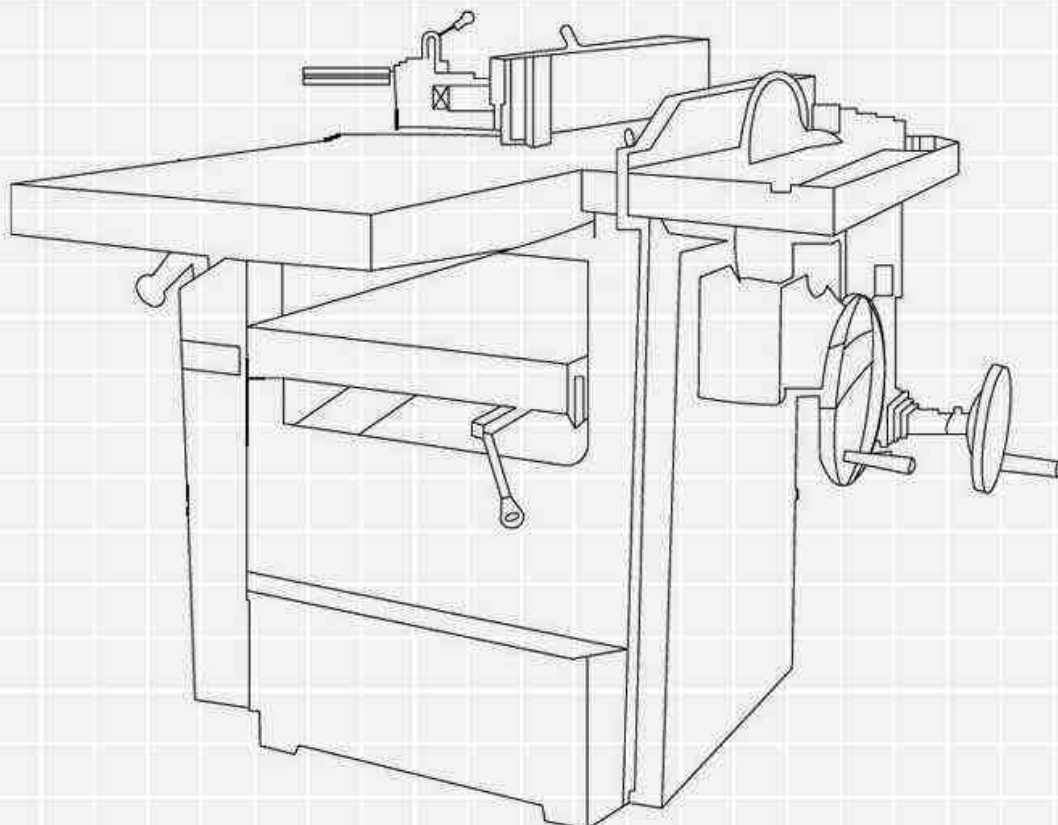
→ PUWER (as applied to power presses) Part IV

Periodicity of inspection

6 monthly – Interlocking and Photoelectric.

Wood Working Machines

High speed machinery that would include circular saws, cross cut saws, planning and planners and moulders.



Why inspect it?

To ensure that all guards are correctly positioned of sound construction and protective devices operate correctly.

Industries where found

✓ Woodworkers

Applicable legislation

→ PUWER

Periodicity of inspection

12 monthly.

Pressure Plant

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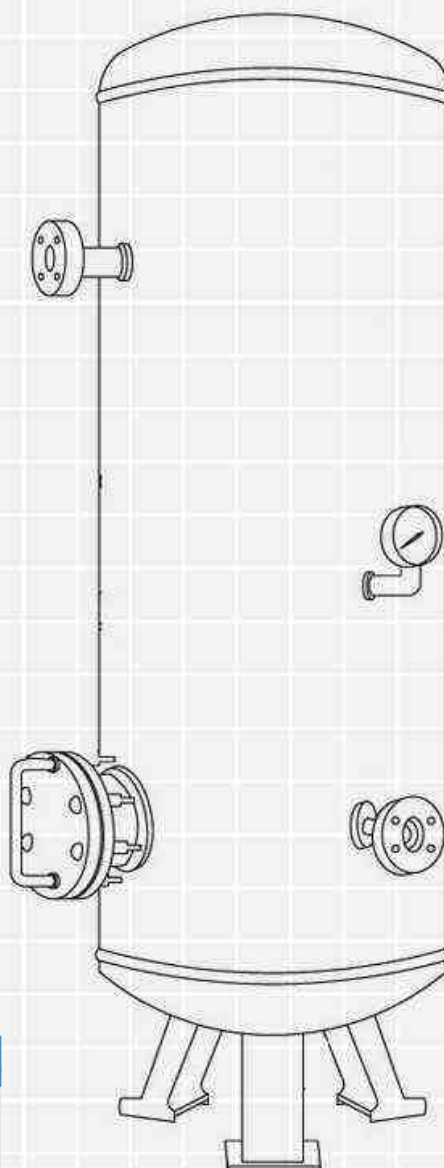
- Air Receivers
- Autoclaves
- Blowdown Vessels
- Bulk Storage Vessels
- Café Boilers
- Calorifiers
- Hot Water Boilers
- Jacketed Reactor Vessels
- Pressurisation Units
- Refrigeration / Air Conditioning Plant
- Steam Boilers
- Steam Vessels



Air Receivers

This type of plant is used in a variety of situations and industries. Typically compressed air is used for production purposes, operation of hand tools and provision of breathing air.

Systems generally comprise of air receiver, cooler, air dryer, pipework and protective devices e.g. safety valve, pressure gauge, high temperature cut-out.



Why inspect it?

The main hazard with this type of plant is that the vessel may fail because its safe working pressure has been exceeded or because its ability to withstand pressure has been reduced through in-service degradation e.g. corrosion, fatigue. There is a potential in air/oil receivers for carbon residues on the surfaces to spontaneously ignite.

Industries where found

- ✓ Refuse & Waste
- ✓ Plant Hirers / Groundworkers
- ✓ Woodworkers
- ✓ Construction
- ✓ Doctors / Vets and Dentists
- ✓ Plastics Manufacture
- ✓ Road Haulage
- ✓ Food Manufacture
- ✓ Hotels
- ✓ Restaurants
- ✓ Leisure Centres
- ✓ Property Owners
- ✓ Retailers
- ✓ Motor Trades
- ✓ Dry Cleaners
- ✓ Metal Workers & Engineers
- ✓ Paper & Board

Applicable legislation

- [PUWER](#)
- [PSSR](#)

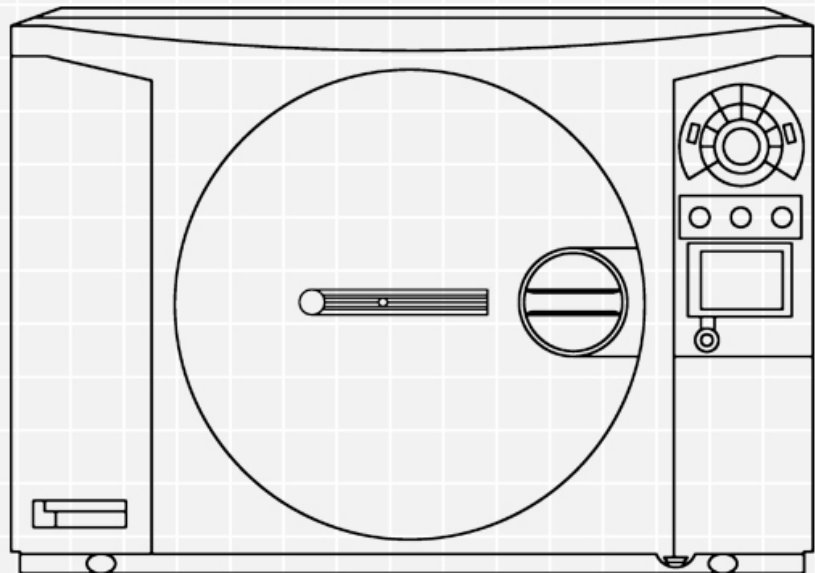
Periodicity of inspection

Typically 26 months.

Autoclaves

This type of plant is used in a variety of situations and industries. Typically steam is used for sterilisation.

These items are generally self contained and are often designed to sit on a desk or work surface. Systems generally comprise of an integral steam chamber and heating element, pipework and protective devices e.g. safety valve, pressure gauge and devices to prevent door opening during operation.



Why inspect it?

Most common hazard with this type of plant is failure of the quick opening door. There are many safety features incorporated into the operating system that are required to be inspected to ensure correct operation.

Autoclaves may also fail because its safe working pressure has been exceeded or because its ability to withstand pressure has been reduced through in-service degradation e.g. corrosion, fatigue.

Industries where found

- ✓ Doctors / Vets and Dentists
- ✓ Food Manufacture
- ✓ Dry Cleaners
- ✓ Paper & Board

Applicable legislation

→ [PSSR](#)

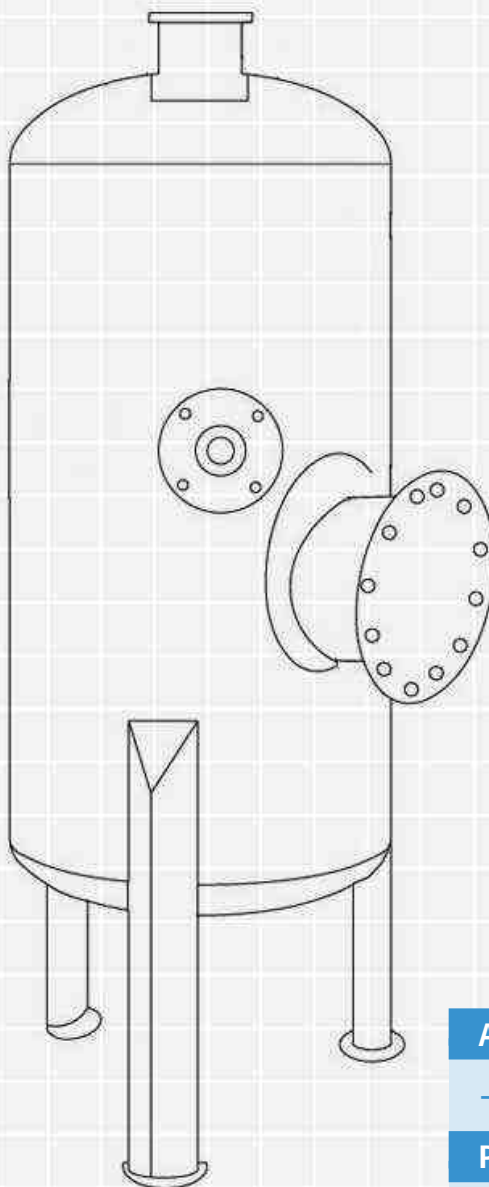
Periodicity of inspection

14 months.

Blowdown Vessels

This type of plant is an integral part of a steam boiler system.

Their purpose is to contain the hot water and suspended solids blown down from the steam boiler before it is released to the drains.



Why inspect it?

The main hazard with this type of plant is that the vessel may fail because its safe working pressure has been exceeded or because its ability to withstand pressure has been reduced through in-service degradation e.g. corrosion or fatigue.

Industries where found

- ✓ Woodworkers
- ✓ Construction
- ✓ Plastics Manufacture
- ✓ Road Haulage
- ✓ Logistics
- ✓ Food Manufacture
- ✓ Metal Workers & Engineers
- ✓ Paper & Board

Applicable legislation

→ [PSSR](#)

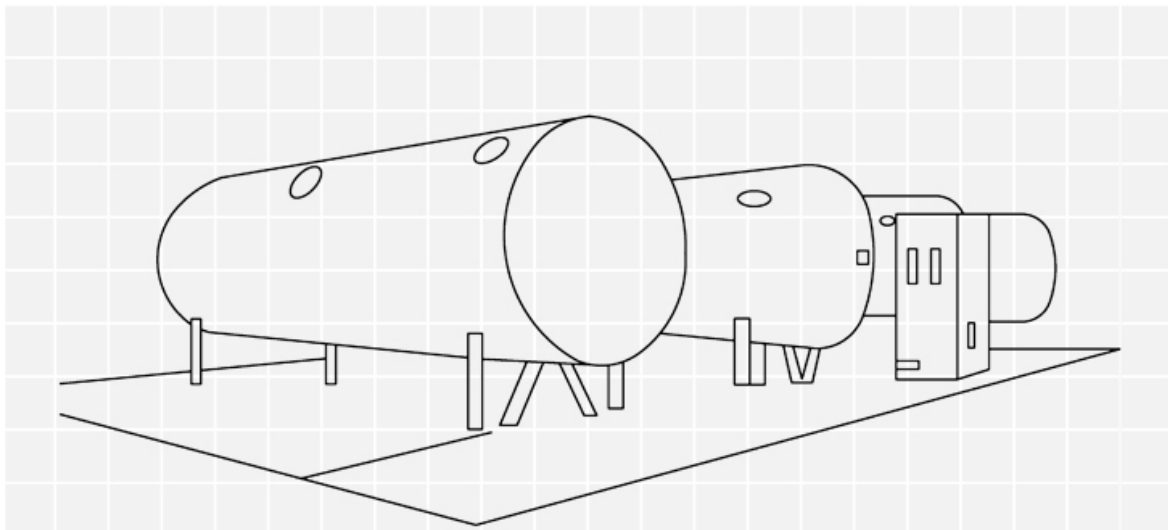
Periodicity of inspection

Same periodicity of the boiler to which it is connected:
Shell boiler – 14 months.
Water tube boiler – 26 months.

Bulk Storage Vessels

These vessels are generally installed where there is a requirement for the bulk storage of fluids. Some fluids e.g. Chlorine, Ammonia, LPG may be stored under pressures greater than 0.5 barg.

The vessel maybe pressurised with a blanket of nitrogen to ensure that the product does not become contaminated.



Why inspect it?

The main hazard with this type of plant is that the vessel may fail because its safe working pressure has been exceeded or because its ability to withstand pressure has been reduced through in-service degradation e.g. corrosion or fatigue.

Where the vessel contains a hazardous fluid i.e. toxic or flammable then a more rigorous approach to plant inspection may be necessary.

Flat bottom storage vessels present an additional issue with respect the integrity of the base.

Industries where found

- ✓ Plastics Manufacture
- ✓ Road Haulage
- ✓ Logistics
- ✓ Food Manufacture
- ✓ Property Owners
- ✓ Motor Trades
- ✓ Metal Workers & Engineers
- ✓ Paper & Board

Applicable legislation

- PUWER
- PSSR
- COMAH

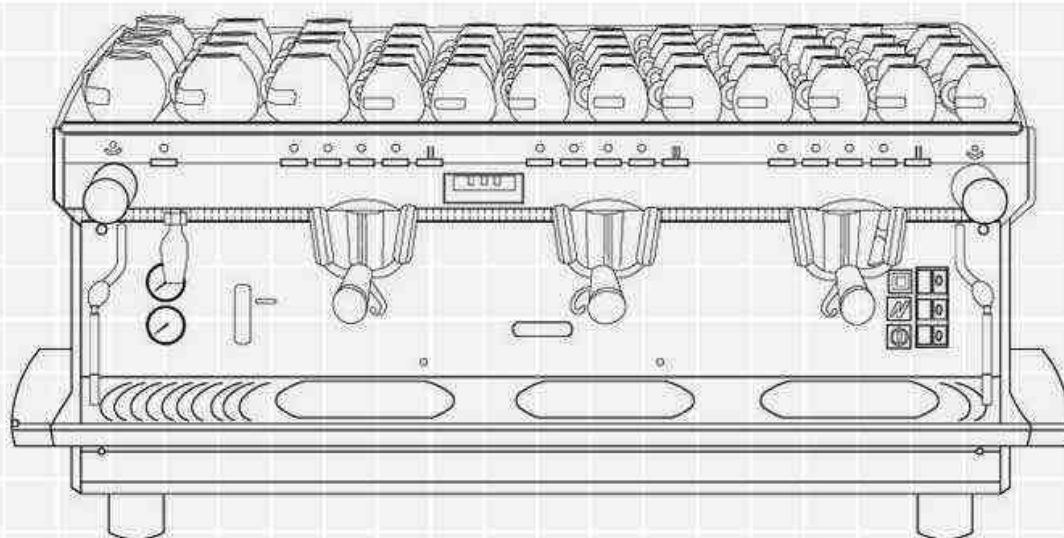
Periodicity of inspection

Will vary depending on risk assessment.

Café Boilers

This type of plant is used in a variety of facilities. Although only used for the production of coffee based hot drinks they are found in restaurants, hotels, coffee shops and leisure facilities.

Systems generally comprise of steam boiler, separate or combined hot water boiler, pipework and protective devices e.g. safety valve, pressure gauge, water level controls and heating element cut-out device.



Why inspect it?

The main hazard with this type of plant is that the vessel may fail because its safe working pressure has been exceeded or because its ability to withstand pressure has been reduced through in-service degradation e.g. corrosion, fatigue or excessive scale on the heating surfaces.

Industries where found

- ✓ Hotels
- ✓ Restaurants
- ✓ Leisure Centres
- ✓ Property Owners
- ✓ Retailers

Applicable legislation

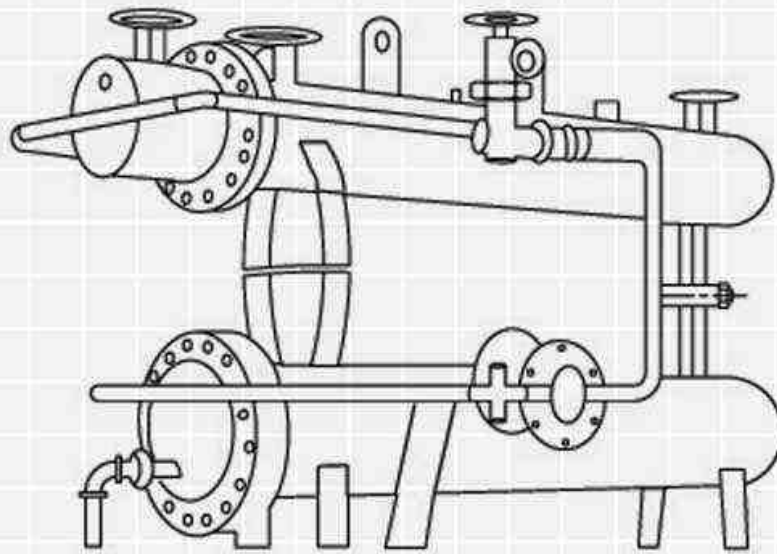
- PUWER
- PSSR

Periodicity of inspection

14 months - Due to the complexity of the operation of these items it is essential that the inspection coincides with the planned service and maintenance regime.

Calorifiers

This type of plant is generally used in certain hot water systems. They are used to transfer heat from one medium to another without them mixing. Often referred to as heat exchangers. May be steam or hot water heated.



Why inspect it?

The main hazard with this type of plant is that the vessel may fail because its safe working pressure has been exceeded or because its ability to withstand pressure has been reduced through in-service degradation e.g. corrosion or fatigue.

Industries where found

- ✓ Refuse & Waste
- ✓ Plant Hirers / Groundworkers
- ✓ Plastics Manufacture
- ✓ Food Manufacture
- ✓ Metal Workers & Engineers
- ✓ Paper & Board

Applicable legislation

- PUWER
- PSSR

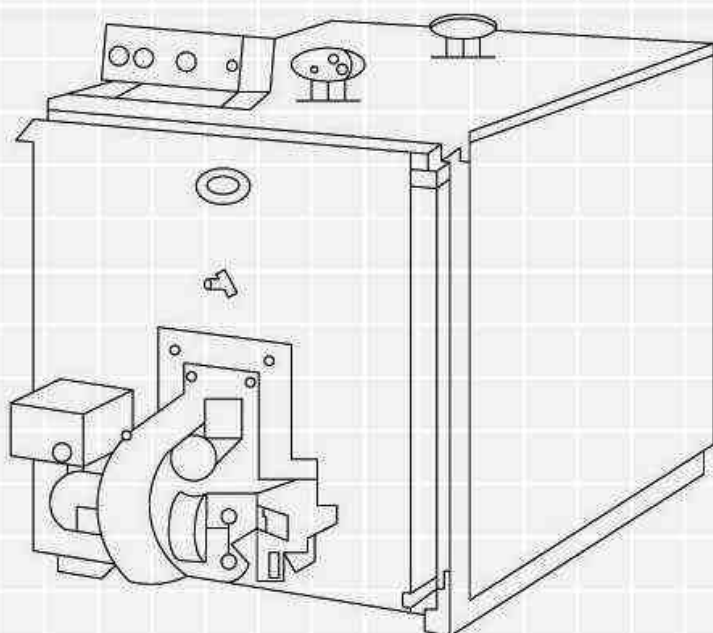
Periodicity of inspection

26 months.

Hot Water Boilers

This type of plant is used in a variety of situations and industries. Typically hot water is used for production purposes and heating.

Systems generally comprise of hot water boiler, pipework and protective devices e.g. safety valve, pressure gauge, high temperature cut-outs and flame failure devices.



Why inspect it?

The main hazard with this type of plant is that the vessel may fail because its safe working pressure has been exceeded or because its ability to withstand pressure has been reduced through in-service degradation e.g. corrosion, fatigue or excessive scale on the heating surfaces.

Industries where found

- ✓ Refuse & Waste
- ✓ Plant Hirers / Groundworkers
- ✓ Woodworkers
- ✓ Construction
- ✓ Doctors / Vets and Dentists
- ✓ Plastics Manufacture
- ✓ Road Haulage
- ✓ Logistics
- ✓ Food Manufacture
- ✓ Hotels
- ✓ Restaurants
- ✓ Leisure Centres
- ✓ Property Owners
- ✓ Retailers
- ✓ Motor Trades
- ✓ Dry Cleaners
- ✓ Metal Workers & Engineers
- ✓ Paper & Board

Applicable legislation

- PUWER
- PSSR

Periodicity of inspection

PUWER – 24 months.

PUWER applies to those boilers in which the water temperature is below 100°C.

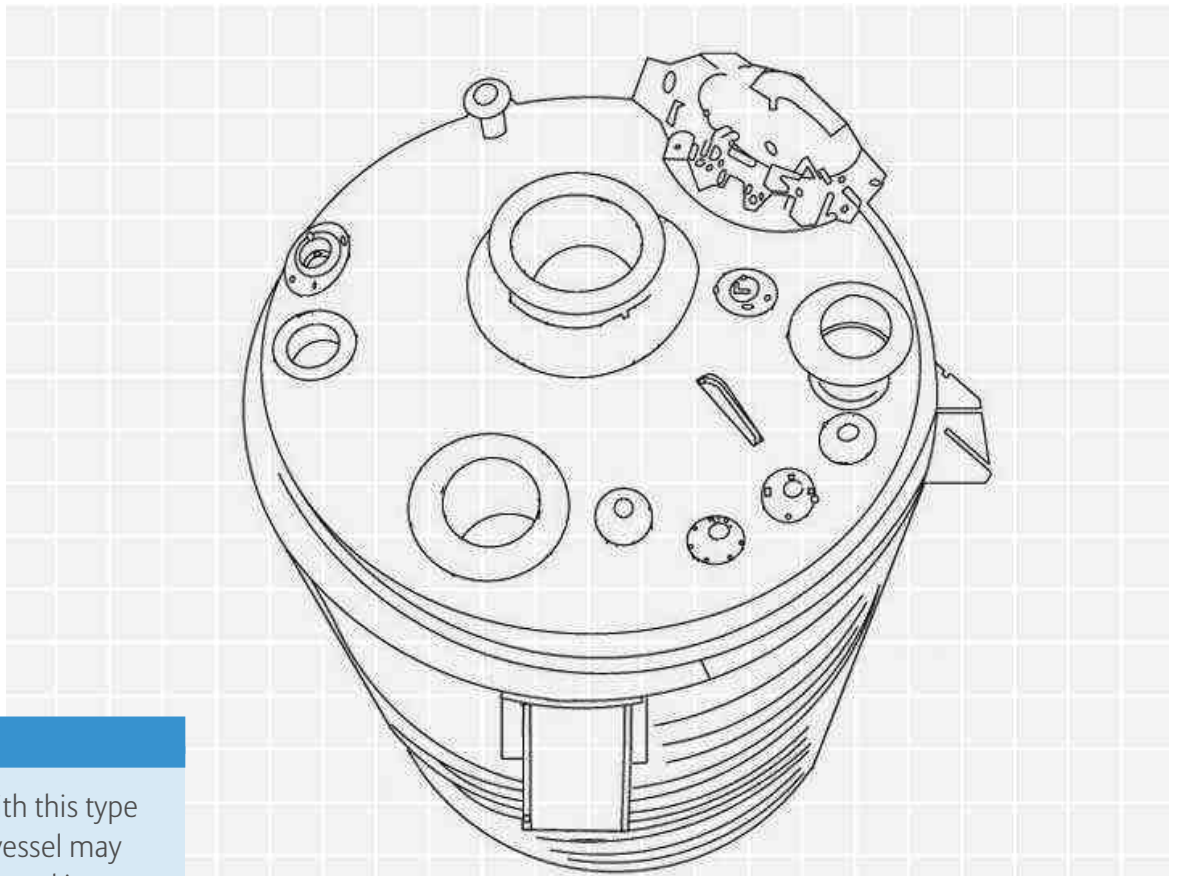
PSSR – 14 months.

PSSR applies to those boilers in which the water temperature is at or above 100°C.

Jacketed Reactor Vessels

These vessels are generally installed in chemical process systems. The jackets (or coils) may be supplied with a variety of heating and cooling fluids such as steam, water or thermal fluid.

The vessel may be pressurised with a blanket of nitrogen to ensure that the product does not become contaminated.



Why inspect it?

The main hazard with this type of plant is that the vessel may fail because its safe working pressure has been exceeded or because its ability to withstand pressure has been reduced through in-service degradation e.g. corrosion or fatigue.

Where the vessel contains a hazardous fluid i.e. toxic or flammable then a more rigorous approach to plant inspection may be necessary.

Industries where found

- ✓ Chemical & pharmaceutical works

Applicable legislation

- [PUWER](#)
- [PSSR](#)
- [COMAH](#)

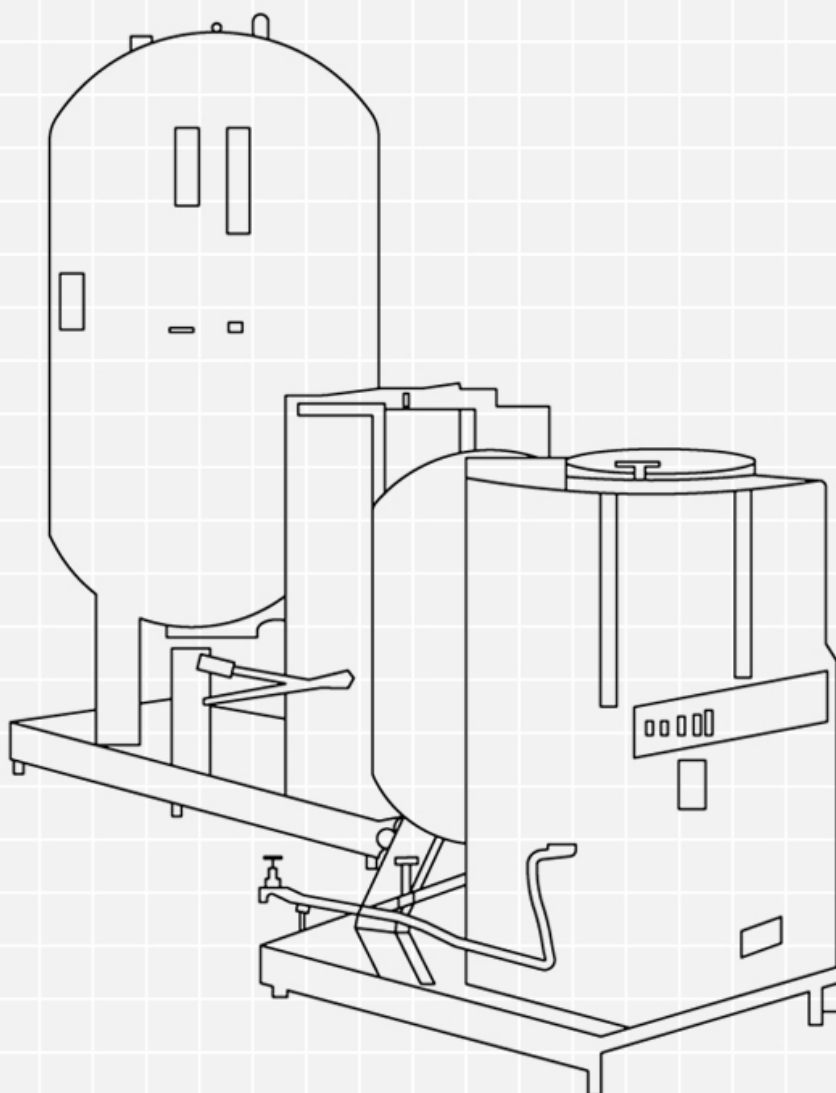
Periodicity of inspection

Will vary depending on risk assessment.

Pressurisation Units

This type of plant is generally used in certain hot water systems. They may also be known as expansion vessels.

They are used to maintain a predetermined pressure in the system through the application of air/gas pressure that is separated from the water by a rubber membrane.



Why inspect it?

The main hazard with this type of plant is that the vessel may fail because its safe working pressure has been exceeded or because its ability to withstand pressure has been reduced through in-service degradation e.g. corrosion or fatigue.

Industries where found

- ✓ Refuse & Waste
- ✓ Plant Hirers / Groundworkers
- ✓ Woodworkers
- ✓ Plastics Manufacture
- ✓ Road Haulage
- ✓ Logistics
- ✓ Food Manufacture
- ✓ Leisure Centres
- ✓ Property Owners
- ✓ Metal Workers & Engineers
- ✓ Paper & Board

Applicable legislation

- PUWER
- PSSR

Periodicity of inspection

60 months.

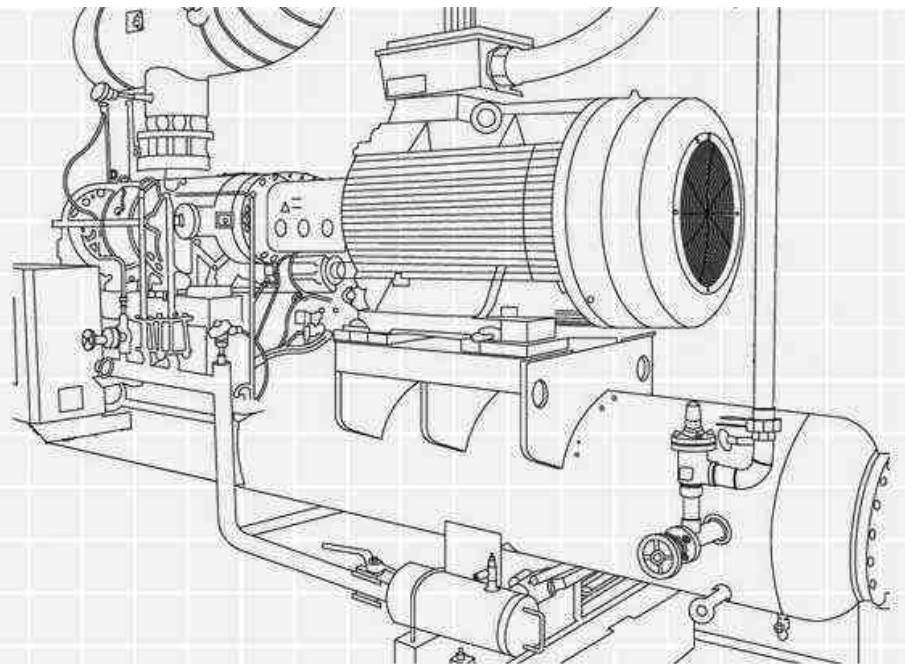
Refrigeration & Air Conditioning Plant

This type of plant can be found in a variety of locations. Typically air conditioning plant is found in office blocks etc however larger refrigeration systems can be found in industrial locations e.g. cold storage, food production, dairies, pharmaceutical and petrochemical sites.

Why inspect it?

The main hazard with this type of plant is that the vessel may fail because its safe working pressure has been exceeded or because its ability to withstand pressure has been reduced through in-service degradation e.g. corrosion or fatigue.

The smaller air conditioning plant is inspected in order to determine the provision, suitability and security of guarding, to ascertain the mechanical and electrical integrity of installation and to identify any obvious signs of deterioration, damage or wear (i.e. leakage, excessive noise, vibration or heat).



Industries where found

- ✓ Refuse & Waste
- ✓ Plant Hirers / Groundworkers
- ✓ Woodworkers
- ✓ Construction
- ✓ Doctors / Vets and Dentists
- ✓ Plastics Manufacture
- ✓ Road Haulage
- ✓ Logistics
- ✓ Food Manufacture
- ✓ Hotels
- ✓ Restaurants
- ✓ Leisure Centres
- ✓ Property Owners
- ✓ Retailers
- ✓ Motor Trades
- ✓ Dry Cleaners
- ✓ Metal Workers & Engineers
- ✓ Paper & Board

Applicable legislation

- [PUWER](#)
- [PSSR](#)

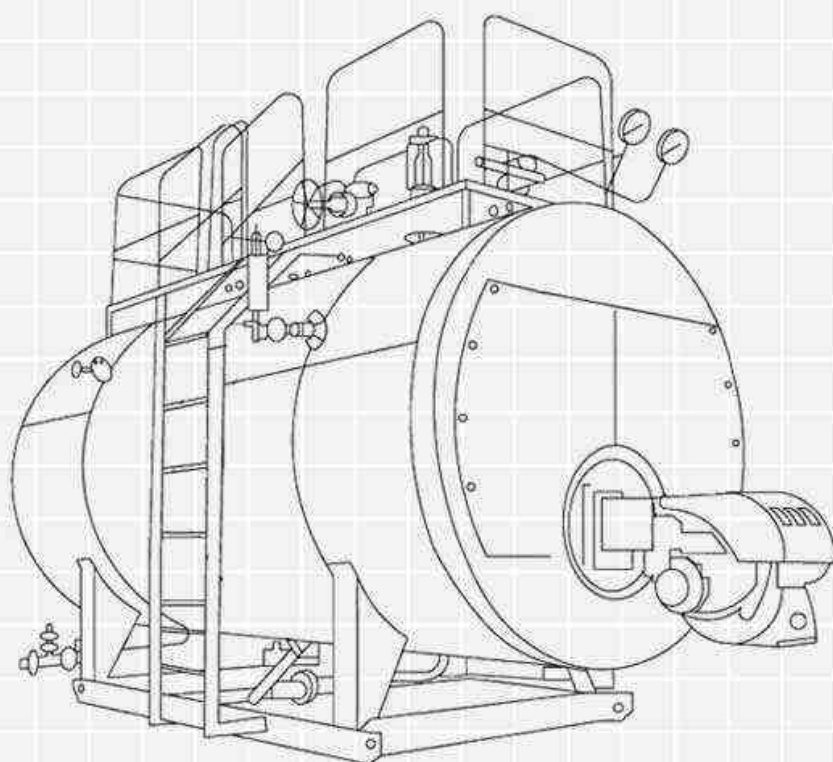
Periodicity of inspection

Typically 48 months.

Steam Boilers

This type of plant is used in a variety of situations and industries. Typically steam is used for production purposes, power generation, heating and sterilisation.

Systems generally comprise of steam boiler, blowdown receiver, pipework and protective devices e.g. safety valve, pressure gauge, water level controls, water level gauges and flame failure devices.



Why inspect it?

The main hazard with this type of plant is that the vessel may fail because its safe working pressure has been exceeded or because its ability to withstand pressure has been reduced through in-service degradation e.g. corrosion, fatigue or lack of appropriate water treatment. The PSSR identifies the additional hazard of the scalding effects of steam.

Industries where found

- ✓ Doctors/Vets and Dentists
- ✓ Food Manufacture
- ✓ Dry Cleaners

Applicable legislation

→ [PSSR](#)

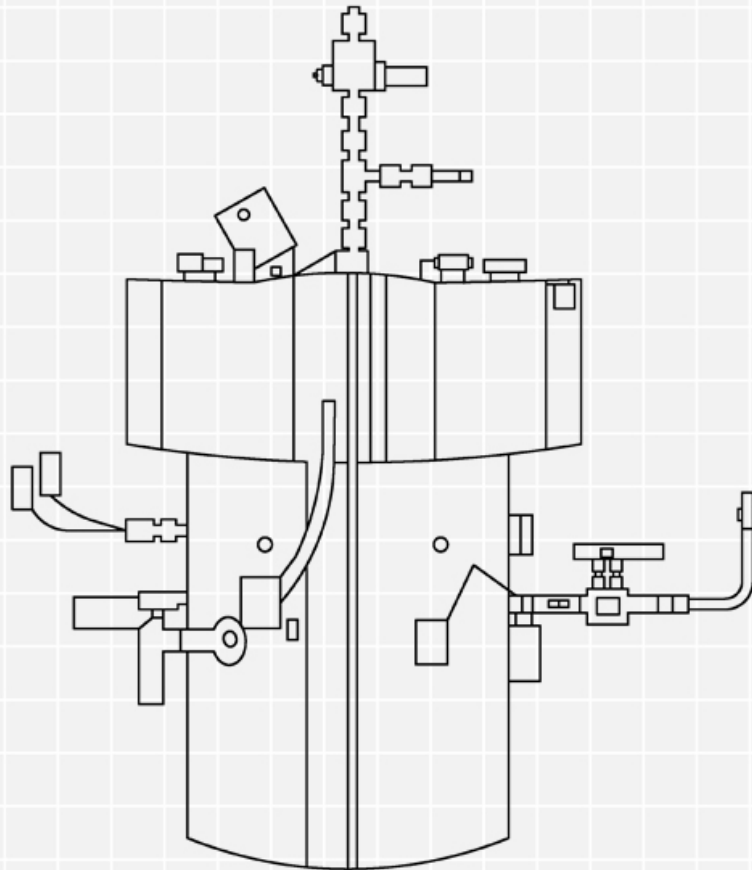
Periodicity of inspection

Horizontal Multi-tubular Boilers;
Vertical Boilers; Autoclaves –
14 months.

Water-tube Boilers –
26 months.

Steam Vessels

This type of plant is generally installed in steam systems to provide steam storage space to prevent undue fluctuations of pressure as demand rises or falls.



Why inspect it?

The main hazard with this type of plant is that the vessel may fail because its safe working pressure has been exceeded or because its ability to withstand pressure has been reduced through in-service degradation e.g. corrosion or fatigue.

Industries where found

- ✓ Food Manufacture
- ✓ Dry Cleaners
- ✓ Paper & Board

Applicable legislation

→ [PSSR](#)

Periodicity of inspection

26 months.

Electrical and Mechanical

Plant/Equipment Type	Applicable Legislation	Periodicity of Inspection
Alternator	<u>PUWER</u>	12 months
Control Panels	<u>PUWER</u> / <u>EAWR</u>	24 months
Engines, Motors, Pumps & Compressors	<u>PUWER</u>	24 months
Fixed Wiring	<u>EAWR</u>	3 or 5 years – depending on type of location
Gearboxes	<u>PUWER</u>	24 months
Generators	<u>PUWER</u>	12 months

Lift and Crane

Plant/Equipment Type	Applicable Legislation	Periodicity of Inspection
Crane	<u>PUWER</u> / <u>LOLER</u>	12 months
Dock Levellers	<u>PUWER</u>	12 months
Escalators	<u>Workplace (Health, Safety and Welfare) Regulations 1992</u>	6 months (as per industry guidance)
Excavators and Loading Shovels	<u>PUWER</u>	12 months
Forklift Trucks	<u>PUWER</u> / <u>LOLER</u>	12 months (6 months if person carrying attachments are used)
Goods Lifts	<u>PUWER</u> / <u>LOLER</u>	12 months
Lifting Appliances	<u>PUWER</u> / <u>LOLER</u>	12 months
Lifting Machines	<u>PUWER</u> / <u>LOLER</u>	12 months (Goods) 6 months (People)
Lorry Mounted Cranes	<u>PUWER</u> / <u>LOLER</u>	12 months
Mobile Cranes	<u>PUWER</u> / <u>LOLER</u>	12 months (Goods) 6 months (People)
Motor Vehicle Lifting Tables	<u>PUWER</u> / <u>LOLER</u>	6 months (as per industry guidance)
Pallet Trucks	<u>PUWER</u>	12 months
Passenger Lifts	<u>PUWER</u> / <u>LOLER</u>	6 months
Separate Lifting Accessories	<u>PUWER</u> / <u>LOLER</u>	6 months
Window Cleaning Equipment and Building Maintenance Equipment	<u>PUWER</u> / <u>LOLER</u>	6 months

Local Exhaust Ventilation Plant

Plant/Equipment Type	Applicable Legislation	Periodicity of Inspection
Fume Cupboard	<u>COSHH</u>	14 months
Local Exhaust Ventilation (LEV) Systems	<u>COSHH</u>	14 months
Shot Blast Cabinets	<u>COSHH</u>	New casting: 1 month Abrading metal: 6 months All other: 14 months
Spray Booths	<u>COSHH</u>	14 months

Power Press

Plant/Equipment Type	Applicable Legislation	Periodicity of Inspection
Guard & Protective Devices	<u>PUWER</u>	12 months
Guillotine (Metal)	<u>PUWER</u>	12 months
Guillotine (Paper)	<u>PUWER</u>	6 months
Injection Moulding Machine (Moulding Machinery)	<u>PUWER</u>	12 months
Power Press	<u>PUWER</u>	6 months – interlocking and photoelectric
Press Brakes	<u>PUWER</u>	6 months
Wood Working Machines	<u>PUWER</u> (as applied to power) Part IV	12 months

Pressure Plant

Plant/Equipment Type	Applicable Legislation	Periodicity of Inspection
Air Receivers	<u>PUWER</u> / <u>PSSR</u>	Typically 26 months
Autoclaves	<u>PSSR</u>	14 months
Blowdown Vessels	<u>PSSR</u>	Same periodicity of the boiler to which it is connected: Shell Boiler – 14 months Water tube boiler – 26 months
Bulk Storage Vessel	<u>PUWER</u> / <u>PSSR</u> / <u>COMAH</u>	Will vary depending on risk assessment
Café Boilers	<u>PUWER</u> / <u>PSSR</u>	14 months
Calorifiers	<u>PUWER</u> / <u>PSSR</u>	26 months
Hot Water Boilers	<u>PUWER</u> / <u>PSSR</u>	<u>PUWER</u> – 24 months <u>PUWER</u> applies to those boilers in which the temperature is below 100 °C. <u>PSSR</u> – 14 months. <u>PSSR</u> applies to those boilers in which the water temperature is at or above 100 °C
Jacket Reactor Vessel	<u>PUWER</u> / <u>PSSR</u> / <u>COMAH</u>	Will vary depending on risk assessment
Pressurisation Units	<u>PUWER</u> / <u>PSSR</u>	60 months
Refrigeration & Air Conditioning Plant	<u>PUWER</u> / <u>PSSR</u>	48 months
Steam Boilers	<u>PSSR</u>	Horizontal Multi-tubular Boilers; Vertical Boilers; Autoclaves – 14 months Water-tube Boilers – 26 months.
Steam Vessels	<u>PSSR</u>	26 months

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