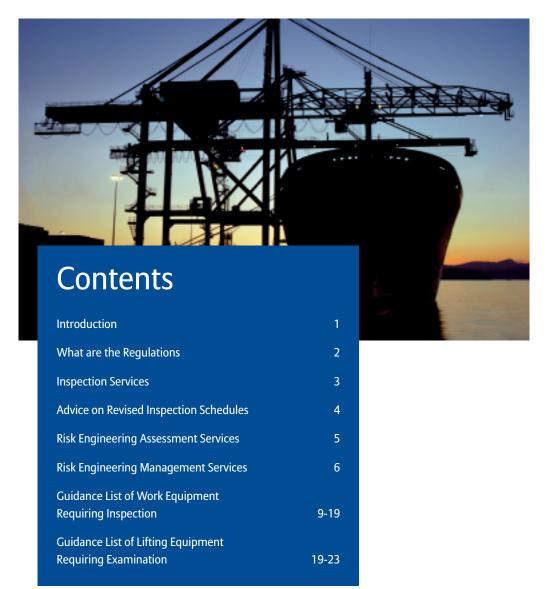


## **Solutions for Compliance**

Allianz Engineering Inspection Services Ltd





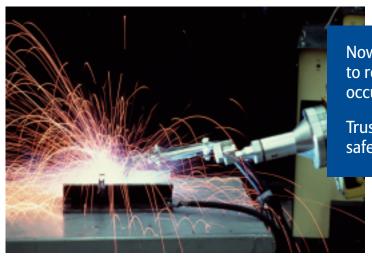
Approved Code of Practice and Guidance extracts quoted in this booklet have been taken from the following Health and Safety Commission documents, which have been prepared by the Health and Safety Executive:

L22 The Provision and Use of Work Equipment Regulations (Northern Ireland) 1999

L113 The Lifting Operations and Lifting Equipment Regulations (Northern Ireland) 1999







Now is the time to reduce occupational hazards.

Trust us to deliver a safer workplace.

### Introduction

## Now is the time to reduce occupational hazards

Regulations that came into force in September 1999 place strict requirements on all employers to consider the hazards connected with the use of work and lifting equipment and reduce the associated risks.

#### Trust us to deliver a safer workplace

Allianz Engineering understands the practical impact of these regulations and can help our clients and engineer surveyors interpret and comply with them.

We are a UKAS accredited, independent, 3rd party inspection body meeting the requirements of BS EN ISO/IEC 17020 international standard.

"Risks to health and safety should be assessed taking into account matters such as the type of work equipment, substances and electrical or mechanical hazards to which people may be exposed."

PUWER (NI) 99 Guidance

## What are the regulations?

#### PUWER (NI) 99

(The Provision and Use of Work Equipment Regulations (Northern Ireland) 1999) relates to the provision of work equipment and its safe use.

These regulations require consideration to be given to:

- The nature and degree of risk associated with the equipment and its use
- The means available to reduce those risks

#### LOLER (NI)

(The Lifting Operations and Lifting Equipment Regulations (Northern Ireland) 1999) apply in addition to the requirements of PUWER (NI) 99, for lifting equipment and lifting operations.

These regulations require:

- The planning, supervision and execution of lifting operations to ensure safety
- The safe use of lifting equipment
- The periodic thorough examination of lifting equipment by a competent person

## Allianz Engineering solutions for compliance

Include:

#### • Inspection Services

revised to comply with the legislation.

#### Risk Engineering

Assessment Services helping companies assess the risks involved in the use of different items of work and lifting equipment, making recommendations for the reduction of risks within the workplace.

#### Risk Engineering

Management Services providing management of, and practical solutions for the reduction of risk

"You should ensure that persons who determine the nature of the inspections required and who carry out inspections are competent to do so."

PUWER (NI) 99 ACOP

### **Inspection Services**

## Allianz Engineering carry out periodic inspections and thorough examinations against:

- The inspection requirements of PUWER (NI) 99 and the thorough examination requirements of LOLER (NI)
- Items of work and lifting equipment on the inspection schedule
- Against SAFed (Safety Assessment Federation Limited) guideline periodicities

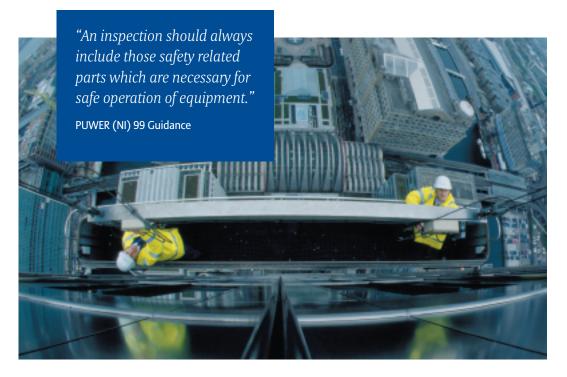
These guidelines take into account the vast amount of experience we have of the inspection needs of the plant. Adherence to SAFed Guidelines ensures compliance with your legal obligations in this respect.

In addition Allianz Engineering will provide reports of inspection or thorough examination in accordance with the requirements of the regulations:

We will issue inspection and examination reports detailing:

- · Defects identified
- Appropriate recommendations for continued safe use

This work will be carried out by our nationwide team of Engineer Surveyors, all of whom are authorised, impartial, competent persons.



### **Advice on Inspection Schedules**

"An inspection will vary from a simple visual to a detailed comprehensive inspection, which may include dismantling and/or testing."



Advising clients of additional inspection requirements not covered by their current inspection schedule, either:

#### From SAFed guidelines

Advise on additional items requiring periodic inspection in line with SAFed guidelines.

Or from:

#### **Identification of Inspection Requirement**

A systematic and independent means of identifying the requirement for either:

- · Visual check prior to use
- Periodic Inspection
- Independent periodic examination, or
- Further detailed risk assessment

## Risk Engineering Assessment Services

A systematic and independent means of assessing risks relating to the use of work equipment in given operating environments.

Our reports offer practical recommendations to help reduce the risk of accidents occurring.

### Equipment and Operational Safety Risk Assessment

This involves assessing the hazards to personal safety associated with:

- The failure of either the work or lifting equipment
- · Shortcomings in operational regimes

Recommendations will be made to reduce or eliminate those risks identified.

#### **Risk Assessment Review**

This is a review of the risk assessments, to make sure they remain relevant and accurate.

These reviews can be carried out either at:

- Prescribed intervals or
- When circumstances in the company change

#### Examination Scheme (LOLER (NI))

This can be compiled in conjunction with any risk assessment in order to establish an examination scheme that is tailored to the specific circumstances of each individual client.

The scheme will define:

- · The relevant legislation for compliance
- The frequency of examination for a given item of lifting equipment on the schedule
- The processes and procedure necessary to complete a thorough examination

"Where appropriate lifting equipment should be fitted with suitable devices to minimise any risk of the load falling freely."

LOLER (NI) ACOP

## Risk Engineering Management Services

Tailor made services for the management of and practical solutions to enable risks in the workplace to be reduced.

#### **Site Operational Assessment**

An assessment of:

- · operating procedures
- · maintenance regimes
- · training regimes
- legislative compliance
- relevant supporting documentation

#### Provides:

- a critique of the processes in operation
- · advice on improvements

#### Post-Installation Examination

Assesses the integrity of an installation, which includes:

- the scrutiny of the method statements for erection/installation
- a visual examination of the work or lifting equipment

#### Ensures:

- · equipment is correctly installed
- the methodology used for installation is appropriate

#### Post-Incident Examination

A visual examination of the equipment subsequent to an incident which could adversely effect safety of work or lifting equipment. Ensures:

- · remedial work has been carried out
- the equipment can be used safely

"Where practicable, loads should not be carried or suspended over areas occupied by persons."

LOLER (NI) ACOP

#### **Testing Assessment**

An expert witness of the testing of work equipment and visually examining the equipment subsequent to test.

#### Ensures:

• the integrity of the testing procedure

#### **Risk Reduction Service**

A technical consultative service which provides practical solutions to the problems associated with risk reduction

#### Involves:

- advising clients on suitable methods
- an assessment of the integrity of the methods used to reduce the risk associated with work and lifting equipment

Provides an independent service to manage the risk associated with a client's work or lifting equipment:

- Oversee the implementation of control measures devised to minimise or eliminate risk
- Review the integrity of the control measures currently in place
- Assess the continued effectiveness of the control measures, to ensure that they constantly meet the demands of the business

#### **Risk Awareness Training**

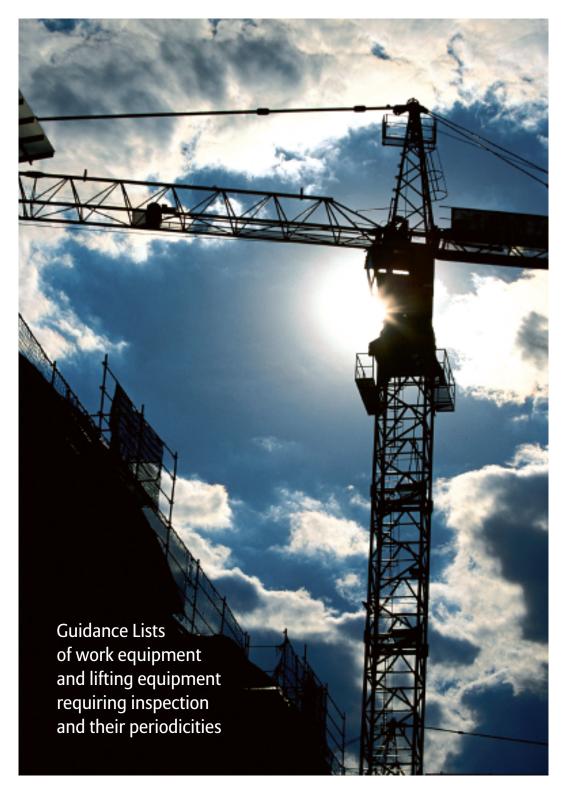
Awareness seminars and presentations relating to:

- Specific work and lifting equipment hazards
- Available protection systems and methods
   Seminars can include:
- a review of the relevant compliance
- an indication of practical solutions to the elimination or minimising of hazards associated with the use of work or lifting equipment

Seminars can be tailored to specific client requirements.

"Where this is not practicable you should establish a safe system of work which minimises the risks to persons who may need to be below the load."

LOLER (NI) ACOP



#### Introduction

The Provision and Use of Work Equipment Regulations (PUWER (NI) 99)) requires that where the risk assessment carried out under the requirements of the Management of Health and Safety at Work Regulations (NI) 2000 has identified a significant risk to the operator or other workers from the installation or the use of the work equipment, then a suitable inspection should be carried out. Inspections should be undertaken by such persons who have the necessary knowledge and experience to do so.

Where the work equipment is of a type where the safe operation is critically dependant on its condition in use and deterioration would lead to a significant risk to the operator or other person, the frequency of the inspections should be based on how quickly the work equipment is likely to deteriorate and therefore give rise to significant risk.

Allianz Engineering is a member of the Safety Assessment Federation, SAFed. Member companies have compiled for the guidance of their clients, a list of work equipment which, in their opinion, requires inspection.

#### Guidance

The scope of equipment requiring inspection, the type of person considered most appropriate for undertaking inspections and the recommended maximum periodicities for such inspections are detailed in the following tables:

Note 1 – The tables are non-exhaustive. They indicate where the inherent risks from the installation or use of the work equipment would normally be such to warrant inspection by an independent competent person (C), where inspection by an appropriately trained and qualified person would normally be adequate (T) and where normally only the result of a risk assessment would be able to determine which of the two inspection routes is appropriate (T/C).

Note 2 – Our clients are reminded that the inspection periodicities indicated in this list are for guidance only. The risks imposed by work equipment and its performance must be evaluated by the client or by an organisation competent to do so on their behalf.

Note 3 – 'Solutions for Compliance' excludes part IV of PUWER (NI) 99 which relates to mechanically driven presses or press brakes used wholly or partly for working metal.

Equipment Requiring Periodic Inspection	Competent or Trained Person	Recommended Maximum Periodicity (Months)
Agricultural Machinery, Equipment and Attachments	T/C	12
Axle Stands/Supports	С	12
Balancer for tools	T/C	12
Baling Machine/Press	T/C	12
Ball Mill	C	12
Bending/Folding Machine	С	12
Blow Moulding Machine	T	12
Body Straightening Machine	T	12
Bridge Maintenance Access Equipment (see also LOLER)	С	12
Bulldozers	T	12
Camera Boom	T	12
Capstan	T	12
Coal Cutter (Clause 38 Part IX of Mines & Quarries Order may apply)	С	12
Coffee Mill	T	12
Conveyors (Passenger/Goods only carrying)	T/C	6/12
Coremaking Machine	T	12
Crushing Plant	T	12
Die Casting Machine	T	12
Die Cutting Machine	T	12
Dock Leveller	С	12
Dough Mixer	T	12
Drilling Machines	T	12
Drilling Rig (see also LOLER)	T/C	12
Drop Hammer	T	12
Dumper Trucks	С	12
Escalators (PM45)	С	6
Extruding Machine	T	12
Eyebolts for fall arrest - (e.g. in window cleaning)	С	12
Fall Arrester/Retractable Lifeline	С	6
Flying Shear Press	С	12

Equipment Requiring Periodic Inspections	Competent or Trained Person	Recommended Maximum Periodicity (Months)
Food Processing Equipment	T	12
Food Slicers	T	12
Friction Screw Press	С	12
Gear Shaper	T	12
Grinding Machines	T	12
Guards and Safety Devices (moveable/fixed guarding)	С	6/12
Guillotine (moveable/fixed guarding)	С	6/12
Gymnasium equipment	С	6/12
Harness with Lanyard (including Safety Belts)	С	6
Haulage Systems (material only/man riding)	T/C	12/6
Horizontal Extrusion Press	С	12
Hydraulic Banding Machine	Т	12
Hydraulic Paddle Forming Machine	С	12
Injection Moulding Machines	С	12
Isostatic Press	T	12
Ladders/Steps	T	12
Lathe	T/C	12
Lighting Rigs	Т	12
Looms	С	12
Manual Press	T/C	12
Material Discharge/Loading Systems	T	12
Milling Machine	T/C	12
Mixing Machinery (industrial substances)	Т	12
Multi-Slide Machine	С	12
Pallet Racking	T/C	12
Pallet Trucks	Т	12
Paper Shredding Machine	С	12
Piercing Machine	Т	12
Pipe Cutting Machine	С	12
Pipe Laying Machine (see also LOLER)	С	12
Platten Machine	С	12
Pneumatic & Hydraulic Presses/Press Brake		6/12
(moveable/fixed guarding)	T	

Equipment Requiring Periodic Inspections	Competent or Trained Person	Recommended Maximum Periodicity (Months)
Pneumatic Drill	T	12
Polishing Machine	Т	12
Powder Compaction Machine	С	12
Power Press used for 'Non Metals' (moveable/fixed guarding)	С	6/12
Press Type Machines not listed in Schedule 2 of PUWER 98	С	6/12
Printing Machinery	T/C	12
Process Line Machines (used in the manufacture and production of items/substances)	T/C	12
PTO Guarding	T	12
Rail Tamping Machine	T/C	12
Ramps	С	12
Robotic Systems	T/C	12
Roll Former	С	12
Rolling Machines	С	12
Rolling Mill Cooling Beds	T	12
Rolling Road Brake Tester	С	12
Rotary Bakers Oven	T	12
Rotary Tablet Making Machine	T	12
Saws for metal, wood etc.	T	12
Scraper	T	12
Service Gate	T/C	12
Shearing Machine	С	12
Slicing Machines	С	12
Sole Moulding Machine	С	12
Spot Welding Machine, c/w Hydraulic Clamping	Т	12
Spotting Press	С	12
Stage Equipment (see also LOLER)	С	12
Steel Coil Slitting Lines	С	12
Steel Sheet Cut-to-Length Lines	С	12
Suspended Furnace/Process Plant Doors	T/C	12
Tow Truck	С	12

Equipment Requiring Periodic Inspections	Competent or Trained Person	Recommended Maximum Periodicity (Months)
Towed Mobile Equipment	T/C	12
Tractors	С	12
Tyre Moulding Machine	Т	12
Vacuum Moulding Machines	Т	12
Wagon Tipler	С	12
Waste Compactors	С	12
Waste Disposal Units	Т	12
Waste Skips	T	12
Weighbridge	Т	12
Winches (see also LOLER)	С	12
Woodworking Machinery	T/C	12

## PUWER 98 - Equipment Lists - (Industry Groupings:)

General

Agriculture Industry

Construction Industry

Entertainment & Leisure Industry

Extractive Industry

Food Processing Industry

Manufacturing/Workshop

Waste and Scrap Industry

Woodworking Industries

Equipment Requiring Periodic Inspections	Competent or Trained Person	Recommended Periodicity (Months)
General		
Ball Mill	С	12
Body Straightening Machine	T	12
Capstan	T	12
Conveyors (Passenger/Goods only carrying)	T/C	6/12
Escalators (PM45)	С	6
Eyebolts for fall arrest -	С	12
(e.g. in window cleaning)		
Fall Arrester/Retractable Lifeline	С	6
Guards and Safety Devices (Movable/Fixed guard)	С	6/12
Harness with Lanyard (including Safety Belts)	С	6
Haulage Systems (Material only/Man riding)	T/C	12/6
Ladders/Steps	T	12
Material Discharge/Loading systems	T/C	12
Polishing Machine	T	12
Printing Machinery	T/C	12
Ramps	С	12
Rolling Road Brake Tester	С	12
Service Gate	T/C	12
Slicing Machine	T	12
Tow Truck	С	12
Towed Mobile Equipment	T/C	12
Weighbridge	T	12
Winches (see also LOLER)	С	12
Agriculture Industry		
Agricultural Machinery, Equipment		
and attachments	T/C	12
PTO Guarding	Т	12
Tractors	С	12

Equipment Requiring Periodic Inspections	Competent or Trained Person	Recommended Periodicity (Months)
Construction Industry Bridge Maintenance Access Equipment (see also LOLER) Dumper Trucks Pipe Laying Machines (see also LOLER) Pneumatic Drill Rolling Machine	C C C T	12 12 12 12 12
Scraper	T	12
Entertainment/Leisure Industry Camera Boom Gymnasium Equipment Lighting Rigs Stage Equipment (see also LOLER)	T C T/C C	12 6/12 12 12
Extractive Industry Bulldozers Coal Cutter Crushing Plant Drilling Rig (see also LOLER)	T C T T/C	12 12 12 12
Food Processing Industry Coffee Mill Dough Mixer Food Processing Equipment Food Slicers Rotary Bakers Oven Saws	T T T T T	12 12 12 12 12 12
Manufacturing/Workshop Axle Stands/Supports Balancer for tools Bending/Folding Machine Blow Moulding Machine	C T/C C	12 12 12 12

Equipment Requiring Periodic Inspections	Competent or Trained Person	Recommended Periodicity (Months)
Manufacturing/Workshop Continued		
Conveyors, including passenger carrying	T/C	12
Coremaking Machine	Т	12
Die Casting Machine	Т	12
Die Cutting Machine	Т	12
Dock Leveller	С	12
Drilling Machines	Т	12
Drop Hammer	Т	12
Extruding Machine	T	12
Flying Shear Press	С	12
Gear Shaper	T	12
Grinding Machines	T	12
Guards and Safety Devices (moveable/ fixed guarding)	С	6/12
Guillotine (moveable/fixed guarding)	С	6/12
Hydraulic Banding Machine	T	12
Hydraulic Paddle Forming Machine	С	12
Lathe	T	12
Looms	Т	12
Milling Machine	T	12
Mixing Machinery (industrial substances)	T/C	12
Multi-Slide Machine	T	12
Pallet Trucks	T/C	12
Piercing Machine	С	12
Pipe Cutting Machine	T	12
Powder Compaction Machine	С	12
Process Line Machines (used in the mfg and prodn of items/substances)	T/C	12
Robotic Systems	T/C	12
Roll Former	С	12
Rolling Mill Cooling Beds	Т	12
Rotary Tablet Making Machine	Т	12
Saws	Т	12
Sole Moulding Machine	С	12

Equipment Requiring Periodic Inspections	Competent or Trained Person	Recommended Periodicity (Months)
Manufacturing/Workshop Continued		
Spot Welding Machine,	Т	12
c/w hydraulic clamping		
Steel Coil Slitting Lines	С	12
Steel Sheet cut-to-length Lines	С	12
Suspended Furnace/Process Plant Doors	T/C	12
Tyre Moulding Machine	T	12
Vacuum Moulding Machines	Т	12
Press Type machines not covered by section IV of PUWER 98		
Friction Screw Press	С	12
Horizontal Extrusion Press	С	12
Injection Moulding Machines	С	12
Isostatic Press	С	12
Manual Press	С	12
Pneumatic/Hydraulic Presses/Press Brake (moveable/fixed guarding)	С	6/12
Power Press used for non metals (moveable/fixed guarding)	С	6/12
Press Type Machines not listed in schedule 2 of PUWER 98	С	6/12
Spotting Press	С	12
Waste and Scrap Industry		
Baling Machine/Press	T/C	12
Paper Shredding Machine	T	12
Shearing Machine	С	12
Waste Compactors	С	12
Waste Disposal Units	Т	12
Waste Skips	Т	12
Woodworking Industry		
Saws for wood	Т	12
Woodworking Machinery	T/C	12

# Guidance List of Lifting Equipment Requiring Examination

#### Introduction

Regulation 9 of the Lifting Operations and Lifting Equipment Regulations 1999 (LOLER (NI) requires the thorough examination of lifting equipment at specified situations. Unlike previous sectoral Lifting legislation where the scope of lifting equipment requiring thorough examination was clearly defined, LOLER does not define what equipment needs to be thoroughly examined. In addition, the LOLER gives the owner of lifting equipment the option of adhering to a set of prescribed periodicities for thorough examination or to have in place or to follow a scheme of examination produced by a competent person.

Allianz Engineering is a member of the Safety Assessment Federation, SAFed. Member companies have compiled for the guidance of their clients, a list of lifting equipment which they recommend requires a thorough examination.

#### Guidance

The scope of lifting equipment requiring thorough examination by a competent person and the recommended maximum periodicities for those examinations are detailed in the following table. Where, in the opinion of SAFed members, the prescribed examination periodicities may not adequately protect persons at risk, an alternative recommended period is indicated by []. Our clients are reminded of the need to assess the risks imposed by lifting equipment and the operation performed by it. Examination periodicities indicated on the list must always be reviewed in light of actual risks imposed.

Main Item	Consider to Include	Recommended Periodicity (Months)
Cranes	Jib Cranes, Static & Rail Mounted Container Cranes Crawler Cranes Derrick Cranes Dockside Cranes Goliath & Semi-Goliath Cranes Lorry Loaders Overhead Cranes Pillar Jib Cranes Portable Jib Cranes Portal Cranes Shipbuilding Cranes Tower Cranes Transporter Cranes Wall Jib Cranes Telpher Cranes	12 12 12 12 12 12 12 12 12 12 12 12 12 1
Climbing Rig	Tower Crane Climbing Rig	6
Hoists and Lifts	Ash/Coke/Skip Hoist Builders Hoist, goods only Builders Hoist, passenger Passenger Hoist/Lift Goods only Hoist/Lift Passenger/Goods Hoist/Lift Inclined Material Hoist Service Lift Home Lift Man Hoist Paternoster Passenger Lift Paternoster goods only Scissor Lift Stair Lift Teagle Hoist Refuse Vehicle Lifting Arm	12 12 6 6 12 6 12 12 12 6 6 6 6 12 6 6 12
Patient Hoist	Patient Hoist	6
Pipe Laying Machine	Pipe Laying Machine, lifting functions	12

Main Item	Consider to Include	Recommended Periodicity (Months)
Pile Drivers	Pile drivers/Piling rigs	12
Winches	Winches/Winches used for lifting Persons Capstans/Capstans used for lifting Persons	12/6 12/6
Sheer Legs	Sheer Legs with Winch	12/6
Blocks	Rope Hoist Manual Powered Pulley Snatch Chain Ratchet Gin Wheels Hook Hoist	12 12 12 12 12 12 12 12 12 12 12
Safety and Rescue Equipment for Supporting, Raising and Lowering Persons	Arborealists Equipment Bosun's Chair Mountain Rescue Sets	6 6 6
Miscellaneous Items (Provided for the Support of Lifting Equipment)	Anchorage, Suspension Point, Fixing Bolts Tracks "A" - Frame Overhead Gantry Davits Gantry Jib Arms Overhead Crane Bridges Runway Tracks & Beams Trolleys	12 12 12 12 12 12 12 12 12 12 12
Lifting Accessories	Eyebolts Cradle Girder Clips Lifting Beams/Frames Plate Clamps	6 6 6 6

Main Item	Consider to Include	Recommended Periodicity (Months)
Lifting Accessories (continued)	Lifting Lug/Bar/Plate/Arm (when not fixed to load) Rigging Screws Running Out Block/Pole Carrier Shackles Slings	6 6 6 6
Interchangeable Equipment (Considered as Part of the Lifting Machine for the Purposes of Thorough Examination)	Fork Attachments Fork Lift Truck Attachments Work Platforms for Fork Lift Trucks Grabs Hooks Magnets Vacuum Lifting Devices Drum Clamp	12 12 6 12 12 12 12 12
Access Equipment, Suspended	Suspended Access Equipment Window Cleaning Rig	6
Work Platforms	Mobile Elevating Work Platforms Mast Climbers Mast Hoists Bridge Maintenance Access Equipment – with lifting function	6 6 6
Platform Stacker	Platform Stacker	12
Car Parking Systems	Car Parking Systems/(Person Carrying)	12/6
Vehicle Recovery Equipment	Vehicle Recovery Equipment "Spectacle" Frame	12 12
Tailboard Hoist/Lift	Tailboard Hoist or Lift/(Person Carrying)	12/6
Jacks	Jacks, Multistage Jacks, Trolley	12 12
Vehicle Lifts	Motorcycle Lifts Vehicle Lifts or Hoists	12 [6] 12

Main Item	Consider to Include	Recommended Periodicity (Months)
Vehicle Skip Hoists	Vehicle Skip Hoists	12
Road Vehicle Wheel Lifter	Road Vehicle Wheel Lifter	12
Drum, Coil, Roll, Lifting Device	Drum, Coil, Roll, Lifting Devices, including where fitted to process plant	12
Fork Lift Truck	Fork Lift Truck/(Person Carrying) /(On Hire)	12/6/[6]
Order Pickers	Order Pickers, All types/ (Non Person Carrying)	6/12
Load Handling Equipment	Loading Shovel used for lifting Earth Moving Machinery used for lifting Excavator used for lifting Telescopic Load Handler	12 12 12 12
Straddle Carriers	Straddle Carriers	12
Cable Drum Raising System	Cable Drum Lifters	12
Stage Equipment	Stage Equipment Hoist / (Non Person Carrying)	12/6
	Camera Boom/ (Non Person Carrying)	12/6
Palletiser	Palletiser, (Pallet raising Machine)	12
Drilling Rigs	Drilling Rig, Lifting functions	12