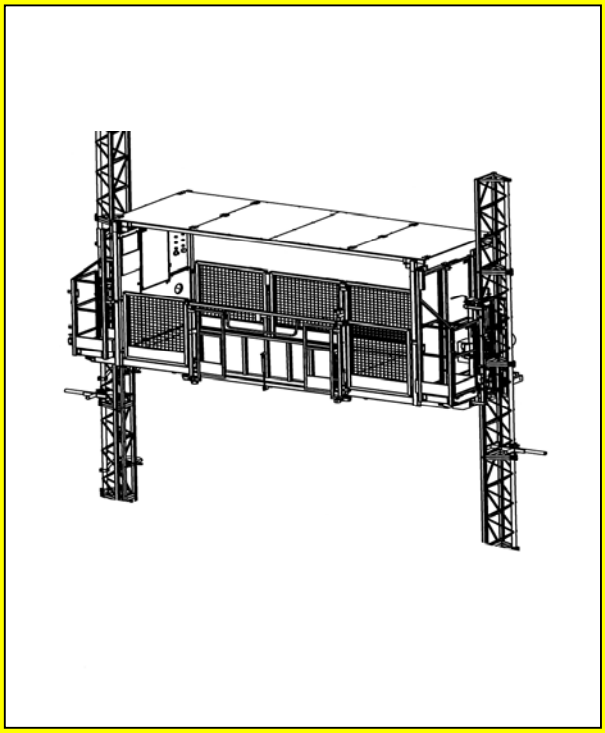
Transport Platforms



Installation, Use, Maintenance, Inspection, Examination and Testing

Best Practice Guide

Transport Platforms

Installation, Use, Maintenance, Inspection, Examination and Testing

Best Practice Guide

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Contents

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The illustration on the front of a HEK transport platform is reproduced with the kind permission of Intervect UK Ltd

Foreword

The Construction Plant-hire Association (CPA) has, for many years, been in the vanguard of plant safety. This CPA Best Practice Guide on the Installation, Use, Maintenance, Inspection, Examination and Testing of Transport Platforms confirms the Association's continued and dedicated commitment to safety and training.

Transport Platforms were first introduced into this country in about 1993 but were not favoured at that time by the vast majority of plant hirers and contractors who were unhappy with some of the safety aspects of their design.

By 1999, a significant number of these machines were being used on sites all over the country. The Construction Hoist Interest Group (CHIG) of the CPA expressed their serious concerns about this situation to the Health and Safety Executive (HSE), suggesting that they probably did not meet the requirements of Regulations 5(1) and 6(1) of LOLER.

Subsequently, CHIG took the initiative to write this Best Practice Guide to enable hoist hirer companies to purchase these very versatile machines in the knowledge that they would be able to provide a machine with guidance on how they should be used safely. This was drafted with the manufacturers taking a leading role in the project.

The CHIG guidance was submitted for comment and endorsement to the HSE. After lengthy discussions, the manufacturers have made modifications to the design of their machines that satisfy both CHIG and the HSE.

On behalf of the members, the Association wishes to express its thanks to the CHIG Transport Platform Working Party (see the Appendix) for their hard work and expertise.

W H Law
President
Construction Plant-hire Association

HSE Endorsement

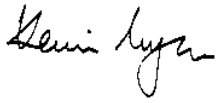
TRANSPORT PLATFORMS - INSTALLATION, USE MAINTENANCE, INSPECTION, EXAMINATION AND TESTING BEST PRACTICE GUIDE

The transfer of people and materials to places of work, which are at height, is an important part of construction work. Having correctly installed, adequately maintained and thoroughly examined lifting equipment and for it to be used correctly is vital to ensure the safety of those being transported and to those who may be working in the vicinity. Without this the use of such lifting equipment can be dangerous.

This industry guidance offers practical information to both suppliers and users of transport platforms and, when followed, should reduce the risks associated with the use of this equipment.

HSE welcomes the strong lead given by the Construction Hoist Interest Group of the Construction Plant-hire Association and the challenge now is for all those involved in supplying and using transport platforms to put this guidance into practice in the workplace.

I thank those responsible for producing the guidance and commend it to all those who use such equipment in the construction industry. It represents a real step forward by the plant hire industry to raise health and safety standards.



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1. Introduction

The purpose of this document is to provide best practice guidance for those involved with, and responsible for, the planning, safe installation, use, maintenance, inspection, thorough examination and testing of transport platforms.

Transport platforms are temporary lifting machines used on sites of engineering maintenance or construction. With their restricted speed, transport platforms are not replacements for the fast moving building hoist for the carriage of persons and materials. They primarily enable the safe transportation of materials and/or a restricted number of persons.

Transport platforms are currently designed, constructed and CE marked to meet the essential health and safety requirements of the Supply of Machinery (Safety) Regulations 1992, which implement the European Machinery Directive.

This CPA guidance is intended to provide two things:

- information that gives clarity on the use for which the platforms are designed;
- guidance on the need for risk assessments to be conducted by the user.

2. Scope

This best practice guide deals with power operated temporarily installed transport platforms intended for use by persons who are permitted to enter sites of engineering maintenance and construction having a platform:

- designed for the transportation of materials and/or persons, controlled only by an appointed operator travelling on the platform;
- upon which the number of persons travelling on the platform, (including the appointed operator,) is restricted. The total weight of persons shall not exceed the manufacturer's stated limitation, this is typically 50% of the rated load of the platform, based on 100Kg per person;
- guided by and moving along the supporting mast(s) where the mast may or may not require lateral restraint from separate supporting structures;
- serving landings;
- travelling vertically or along a path within15 degrees maximum from the vertical;
- driven by rack and pinion;
- motion initiated by 'hold to run' controls;
- limited in speed to 0.2 metres per second (12 metres per minute).

This guide is <u>not</u> applicable to:

- builders hoists used only for materials, typically operated by remote control from the ground or landings;
- builders hoists for persons and materials;
- mast climbing work platforms;
- mobile elevating work platforms;
- permanent lifts.

3. Legal Commentary

The Law Relating to the Use of a Transport Platforms

Employers who provide work equipment for use at work, (this includes hire companies and user organisations), have duties under health and safety legislation. The principal legislation applying to the use of transport platforms is:

- the Health and Safety at Work etc Act 1974 (HSW Act),
- the Provision and Use of Work Equipment Regulations 1998 (PUWER),
- the Lifting Operations and Lifting Equipment Regulations 1998 (LOLER), and
- the Management of Health and Safety at Work Regulations 1999 (MHSWR).

The Health and Safety at Work etc Act 1974 sets out general duties which employers have towards their employees and members of the public. Duty holders have to ensure, so far as is reasonably practicable, the health, safety and welfare of:

- their employees - section 2(2)(a) in particular places a duty on employers to provide and maintain "plant and systems of work that are, so far as is reasonably practicable, safe and without risks to health";
- other people who may be affected by their work activities such as members of the public (section 3);
- of any other people who may use, or have access to, the workplace (section 4).

Duty holders also have to ensure that, if they design, manufacture, import or supply any article for use at work, that it is designed and constructed to be safe and without risks to health (section 6).

In practice this means that employers need to assess the risks to health and safety and take effective measures to tackle or minimise them.

PUWER places requirements on duty holders, such as employers and the self-employed, to ensure that equipment provided for use at work is:

- suitable for the intended use;
- maintained in a safe condition;
- used only by people who have received adequate information, instruction and training;
- accompanied by suitable safety measures, e.g. protective devices, markings, warnings.

Details of PUWER, and its accompanying Approved Code of Practice and guidance is given in *"Safe use of work equipment"*, ISBN 0-7176-1626-6, available from HSE Books.

LOLER implements the lifting provisions of the Use of Work Equipment Directive, 95/63/EC and builds upon the requirements of PUWER. LOLER applies to all premises and work situations subject to the HSW Act. It includes requirements to ensure that lifting equipment is:

- strong and stable enough for the particular use;
- marked to indicate the rated load;

- installed to minimise risk;
- positioned and used safely, i.e. the work is planned, organised and performed by competent people;
- thoroughly examined by competent people.

The LOLER regulations, and their accompanying Approved Code of Practice and guidance are given in *"Safe use of lifting equipment"*, ISBN 0-7176-1628-2, available from HSE Books.

MHSWR introduce general provisions for health and safety management. These include risk assessment and co-operation and co-ordination with other employers sharing the same workplace. For example the supplier who installs a transport platform will need to liase closely with the user to establish the intended use of the machine. The user must assess the risks at each particular installation on a site. The user must take appropriate precautions to eliminate or control risks identified by the assessment and the supplier must provide information to enable him to do this, see Section 5 of this guide. The nature and extent of the risk will dictate what steps need to be taken to control the risk.

4. Definitions

4.1 Landing: A position where the transport platform can be stopped at a specific level to gain direct access to and from the building/structure and where guards have to be opened on the platform and the structure to allow the access.

4.2 Rated Load: the maximum load that the transport platform configuration has been designed to carry in service. (Previously referred to as the Safe Working Load – SWL).

4.3 Rated Speed: the speed that the platform has been designed to travel when being used as a transport platform.

4.4 Dual Function: some transport platforms can also be used as materials hoists and as such have a dual function. In this case a key operated changeover switch is provided to enable the appropriate function to be selected. In materials mode the transport platform controls must be isolated on the platform.

4.5 Mast: structure that supports and guides the transport platform.

4.6 Mast Tie: a connection system between the mast and the structure that provides lateral support for the mast.

4.7 Over-speed Safety Device: a mechanical device for stopping and maintaining stationary the platform in the event of an over-speed**.**

4.8 Safety Distance: a minimum acceptable distance between any moving part of the transport platform and any point of access.

4.9 Normal Operation: the usual operating conditions for the equipment when in use for carrying persons and materials or persons, but excluding routine maintenance, erection, dismantling etc.

4.10 In Service: a condition during use of the load-carrying platform in any position, laden or unladen, moving or stationary.

4.11 Out of Service: an installed condition when the load-carrying platform is positioned such that it is provided with the most shelter from the wind. This is normally, but not necessarily, ground level. The platform is unladen.

4.12 Base Protection: a barrier to prevent the unauthorised entry of persons to the area below the transport platform**.**

4.13 Platform (load carrying device): the vertical travelling part of the installation upon which the person, equipment and materials are carried. This is as opposed to “transport platform”, which refers to the whole of the installation, including the

platform, mast, mast ties, base and chassis. The platform includes the load carrying platform and any extending erection platform.

4.14 Appointed persons

Appointed person (supplier): the person appointed by the transport platform supplier who is responsible for planning the installation, risk assessments and method statements for the erection, safe operation, inspection, maintenance, thorough examination and dismantling of the transport platform.

Appointed person (user/user organisation): the person appointed by the management/user organisation who is responsible for providing the risk assessments, devising safe systems of work and other aspects of use of the transport platform.

5. Pre-installation

5.1 Management of the Specification, Installation, Planning, Erection & Dismantling

The appointed person (supplier) should be appointed to act on behalf of the supplier to have overall control of the specification, installation planning, erection and dismantling of the transport platform. This appointment does not remove any legal responsibility from the management but enables them to use that person's expertise to fulfil their responsibilities. The person appointed may have other duties and need not be an employee of the supplier organisation but should have adequate training and experience to enable these duties to be carried out competently.

The appointed person (supplier) should establish and follow a safe system of work for every installation of transport platform.

The safe system of work should include the following:

a) risk assessments;
b) planning the installation and providing a suitable transport platform. Close co-operation will be required between interested parties, particularly with regard to the installation of landing gates and mast ties;
c) planning of the transport, erection and dismantling;
d) provision of instructions for the operation and maintenance procedures for the transport platform;
e) preparation of a method statement by the appointed person (supplier) to include the requirements for:
    - any necessary preparation of the site;
    - erection;
    - thorough examination and where necessary testing;
    - provision of the parameters and instructions for operation;
    - dismantling.
f) provision of properly trained and competent personnel for the installation and demonstration of the transport platform, who have been made aware of their statutory responsibilities;
g) ensuring that all necessary instructions, manuals, test certificates, load charts and other documents are available;
h) effective liaison with the appointed person (user/user organisation).

The safe systems of work should be effectively communicated to all parties concerned.

5.2 Management and Control of the Transport Platform Operation

The appointed person (user organisation) should be appointed to act on behalf of the user organisation to have overall control of the operation of the transport platform.

This appointment does not remove any legal responsibility from the management but enables them to use that person's expertise to fulfil their responsibilities. The person appointed may have other duties and need not be an employee of the user organisation but should have adequate training and experience to enable these duties to be carried out competently.

The appointed person (user organisation) should establish and follow a safe system of work for the transport platform. The safe system of work should include:

a) risk assessments;
b) provision of properly trained and competent operators;
c) the provision of familarisation training at hand-over;
d) the inspection and maintenance of the transport platform in line with the suppliers instructions;
e) provide for adequate supervision by properly trained and competent personnel having the necessary authority;
f) prevent unauthorised use or movement of the transport platform at all times;
g) consideration for the safety of persons not involved in the transport platform operation;
h) arrangements for the effective monitoring of wind speed;
i) effective liaison with the appointed person (supplier);

The safe systems of work should be effectively communicated to all parties concerned.

5.3 Site Specific Risk Assessment

Although the manufacturer addresses the intrinsic hazards associated with the use of these platforms, there is a requirement for site specific risk assessments to be undertaken by the user. This assessment may take note of the following hazards:

- type of load being lifted, its weight, shape and what it consists of;
- loading and unloading of the platform;
- falling objects;
- the platform striking a person or some other object;
- the transport platform falling over while in use;
- failure of any supporting structures;
- electrical hazards;
- persons falling from a height.

This list is not exhaustive.

Risk assessment must also cover the loading and unloading, installation, examination, operation, maintenance and dismantling. It should be noted that site conditions, and hence the hazards to be considered, may change during the period on site.

As a result of such a risk assessment, it might be found necessary to introduce additional measures over and above those supplied with the machine or introduce an alteration to the way the machine is installed, examined, operated, maintained or dismantled.

Hence there is an implicit need for planning in order to fulfil the requirements highlighted by the Risk Assessment.

The outcome of this planning should be communicated to all parties involved in the erection/dismantling process, including the management of the site on which the activity is to take place.

5.4 Planning the Installation

Before work commences on the installation of a transport platform, an assessment of the work to be carried out should be undertaken and a method statement produced to determine how the safe installation and subsequent removal of the platform will proceed. Whilst the following is not exhaustive, the items listed should be included in any pre-installation assessment:

- delivery access to installation position;
- off-loading the equipment from the delivery vehicle;
- power supply and power safety including protective bonding;
- suitability and stability of ground conditions;
- strength and stability of the structure to which the mast will be secured;
- public access to the area or the closed site;
- a check on the likely loads which must be within the platform's Rated Load.

Due to the weight and size of many of the component parts that will need to be installed by the erectors of this equipment, the method statement should take into account and detail how such parts will be handled. For instance, is there any form of lifting equipment available to assist the erector in the positioning of the mast sections or other components?

5.5 Base Requirements

Many factors may affect the overall stability of a transport platform, the base requirements being one of the most critical. Note should be taken of all aspects of the erection, examination, operation, maintenance and dismantling of the transport platform as well as the following factors:

- ground conditions – no mud or debris under the machine/mast base;
- ground conditions must be stable;
- ground/base must be suitable for all foreseeable imposed loads – check allowable ground pressures or support structure integrity;
- different requirements for single/twin masted units and possibly different mast heights;
- different requirements for pedestal or mobile bases;
- preparation of unit prior to installation with respect to any transport specific items i.e. supports, link bars etc;
- possible requirements for bolting the bases down or counter weighting them to give stability;
- proximity of underground services.

This list is not exhaustive.

5.6 Protection

The type and style of protection from the moving parts of the transport platform at adjacent areas surrounding the base, landings and other accessible areas must be ascertained from the risk assessment.

The distance that the platform is set from the building or any accessible point determines the requirements for landing equipment. Due account should be taken of the manufacturer's instructions.

5.6.1 Base Protection

In order to reduce the risk of persons at ground level being crushed and / or trapped by the descending platform:

- the base of the machine shall be surrounded with 2 metre high fencing;
- the base enclosure access gate(s) shall be electrically interlocked such that it shall not be possible under operating conditions to start and keep in motion the carrier unless all base enclosure gates are in the closed position;
- the gate interlocking device, together with any associated actuating mechanism and electrical contacts, shall be so situated or protected as to be inaccessible to unauthorised persons;
- measures to prevent the possibility of a shear trap between the descending carrier and the base enclosure must be adopted, since the carrier is not fully enclosed;
- it shall be possible to open the base enclosure gate(s) from the inside.

5.6.2 Landing Protection.

Each and every landing must be fitted with reduced height gates that comply with the requirements of clause 5.5 of BS EN 12159 "*Builders hoists for persons and materials with vertically guided cages".* These gates should be interlocked in accordance with the manufacturer's instructions.

Reduced height gates should be constructed in such a way as to provide when closed, similar edge protection to that provided by a typical working scaffold, that is, top guard rail, intermediate guard rail and toe board. The clearance between the landing side of the gate and the platform should be a minimum of 0.5 metre. Similarly, to protect persons in the platform, at least 0.5 metre clearance must be maintained between any person on the platform and any part of the fixed structure.

All gates should be clearly signed with "GATES TO BE KEPT CLOSED" and the Rated Load Capacity of the platform and maximum number of persons or the appropriate combination.

5.6.3 Platform Roof

To reduce the risk of persons inside the carrier being struck by falling objects and items that protrude into the hoist way, the following measures shall be taken:

- the carrier shall be fitted with a roof with a minimum interior free height of 2.0 metres;
- if the rated speed of the carrier exceeds 12m/min (0.2 m/s), then the carrier shall be fully enclosed.

5.6.4 Platform Gates

The platform is provided with gates on the outboard side to facilitate loading at ground level and gates on the inboard side to permit transfer of persons and goods to a landing. The doors open outwards, as on a builders hoist for goods, to achieve maximum capacity and convenience when loading and unloading materials. Inadvertent opening of an outward opening door leads to the risk of persons or goods falling from the platform.

The following safeguards are provided: either (A + B), or (A + C).

A Electrically interlocked platform gates. It shall not be possible under operating conditions to start and keep in motion the platform unless all platform gates are in the closed position. The gate interlocking device, together with any associated actuating mechanism and electrical contacts, shall be so situated or protected as to be inaccessible to unauthorised persons from within the platform.

B Outward opening platform gates shall be mechanically locked in such a way that two separate and distinct manual actions are required to open the gate.

C Platform gate(s) on the building side shall be fitted with a mechanical lock such that, under operating conditions, it shall not be possible to open that gate unless the platform floor is within 0.25 m of a landing. Platform gate(s) on the outboard side shall be fitted with a mechanical lock such that, under operating conditions, it shall not be possible to open that gate unless the platform floor is at ground level.

5.7 Tie Requirements

The mast or masts must be securely tied to the building or other structure unless the unit is being used in a designated freestanding fashion. These ties must be configured and installed according to the manufacturer's instructions.

All ties must be fixed to a sound structural member, normally a concrete or steel building element or scaffold. All loads imposed by the ties must be checked to ensure they do not overload such an element. All tie fixings, bolts or expansion fixings etc. that connect the tie itself to the building must be selected for adequate strength.

All tie loads on the building must be checked with the appropriate wind loadings for both in and out-of-service conditions, together with due allowance for any site-

specific loadings. The scaffolding or building should be assessed so as to ensure it can support the horizontal and vertical loads that the transport platform will impose.

The erectors and users of the transport platform must have at least the following information available to them:

- maximum permissible vertical spacing of mast ties;
- maximum vertical length of mast allowable above last tie position;
- the loads imposed at each tie position.

5.8 Electrical Supply

The electrical supply to the unit must comply with the manufacturer's requirements in terms of current, voltage and phase. Due account must be taken of voltage drop from the supply point or the supply generator to the platform itself. The power output of any generator must be sufficient for the heavy start up current. The supply cable to the machine may require mechanical protection.

The power supply, suitably fused, isolated and earthed, in accordance with the relevant Regulations, must be provided adjacent to the working position on or before the start of the installation, since the transport platform requires a power supply during the erection and dismantle phases.

5.9 Access, Component Storage and Erection Area

Suitable access to the erection/dismantle area for the delivery vehicle and lifting equipment must be agreed and provided by the site management. This area should give adequate room for component storage and the erection of the unit.

Site personnel should be advised of the intended installation and warned of the hazards that may result.

6. Erection & Dismantling

6.1 Personnel

No persons should erect or dismantle a transport platform unless they are properly trained, assessed and authorised to do so, or are undergoing formal training under supervision.

When selecting personnel to erect and dismantle transport platforms, it should be borne in mind that for the tasks to be undertaken safely, a reasonable degree of physical and mental fitness is required.

6.2 Information

Before erecting or dismantling a transport platform, adequate information required for these tasks should be made available to the personnel involved. This should include as a minimum:

- the manufacturer's recommended methods of erection/dismantling;
- the operating procedures;
- a site specific method statement resulting from the planning process and risk assessment;
- the post-installation inspection and testing report.

6.3 Equipment

Personnel carrying out the erection /dismantling should be provided with suitable equipment and tools as specified by the manufacturer and the planning process.

6.4 Dismantling

Before dismantling commences, it is essential that a re-assessment of changing site conditions etc. is carried out (see section 5.1).

7. Inspection, Thorough Examination and Testing

This section deals with the inspection, thorough examination and testing of platforms in three different situations:

- at each erection on site;
- periodically;
- after any major alteration, incident or repair.

Note: The CPA Best Practice Guide on the Inspection, Thorough Examination and Maintenance of Hoists (CHIG 0301 Rev1) covers the detail of these topics and includes transport platforms.

7.1 Periodic Checks (Daily, Weekly and Monthly Inspections)

7.1.1 General

Periodic checks should be carried out according to the manufacturer's instructions. The employer or duty holder responsible for the transport platform should ensure that the checks have been carried out.

NOTE: The designated operator may be authorised to carry out periodic checks to the extent that he is considered to be competent.

7.1.2 Daily (Pre-use) Checks

The following checks, as a minimum, should be carried out daily or before the start of each shift:

- warning signs must be in place;
- condition and security of power supply cable;
- condition and security of machine supply cable;
- peripheral damage to the machine, gates and base protection;
- for fluid leaks;
- the platform travel path must be clear;
- operation of emergency stop button(s);
- alignment of cable guides;
- operation of upper and lower travel limit switches;
- operation of descent alarm and auto-stop;
- operation of gate interlock switching.

7.1.3 Weekly Checks

Weekly checks should be carried out in addition to the daily checks and, at the very least, these must include an inspection of the following:

- security of ground frame support including drainage;
- condition of all gate devices;
- condition of the rack and pinion.

7.1.4 Monthly Checks

Monthly checks must, at the very least, include an inspection of the following, in addition to the weekly items as above:

- security of ties;
- security of mast bolts;
- security of rack mounting devices.

7.2 Thorough examination following installation

LOLER requires that once the transport platform has been installed at a new site, it must be thoroughly examined to ensure that it is correctly installed and safe to operate. The scope and nature of that thorough examination should be the same as for the periodic thorough examination and testing described in sections 7.3 and 7.4.

7.3 Periodic Thorough Examinations

A thorough examination is a critical scrutiny, using suitable techniques, such as visual inspection, functional testing and load testing where appropriate, to assess the actual condition of the transport platform. The aim is to detect deterioration in sufficient time to take remedial action before the equipment becomes dangerous. Typically, such deterioration will arise from corrosion, abrasion and fatigue.

LOLER requires that any equipment used for the lifting of persons is thoroughly examined at intervals not exceeding six months. This should be carried out by a competent person who will specify when the next thorough examination is to be carried out, which may be less than but not more than six months.

LOLER also permits a competent person to draw up a “written examination scheme” to cover the period of use on site. The scheme must be available for inspection and must specify the intervals between thorough examinations. The intervals may be longer than six months and must take account of the number of lifting operations, condition and the environment in which the transport platform is being used. However, the scheme of examination approach is not recommended for transport platforms due to their modular construction. Not every component (e.g. mast sections, etc) will be used on each installation and the stresses imposed on each component will vary from installation to installation depending on where it is positioned.

7.3.1 Competent Persons

It is essential that the competent person is sufficiently independent and impartial to allow objective decisions to be made. <u>This does not mean that competent persons must necessarily be from an external organisation such as an insurance company.</u> If employers and others within their own organisations have the necessary competence, then they may carry out the thorough examination. However, if they do, they must ensure that they also have the genuine authority and independence to

ensure that examinations are properly carried out and that the necessary recommendations arising from them are made without fear or favour.

7.3.2 Responsibility for the Rectification of Defects

Where the competent person identifies defects affecting the continued safe use of the platform, the responsibility for the rectification of these defects rests with the employer of the person using the platform.

The competent person making a thorough examination must notify his employer of any defect which, in his opinion, is or could become a danger to persons. If the defect needs to be rectified quickly, he should specify the time-scale and submit this report promptly.

Where a defect poses an imminent risk of serious personal injury, the competent person should forward the report to the Health and Safety Executive as soon as practicable.

On a construction site where transport platforms are often hired in, any rectification of defects is normally carried out by the transport platform owner, however the employer / duty holder is responsible for ensuring that the work has been done. If a transport platform is owned by the using employer or has been hired under a 'bare lease' agreement the employer will need to make arrangements for the work to be done.

In all cases, the employer/duty holder responsible for the lifting operations on site will need to ensure that all defects in the competent person's report have been rectified and that the transport platform is safe before it is used.

7.4 Testing

7.4.1 At Installation

After each installation the platform will be subjected to the following tests, conducted by a competent person:

7.4.1.1 Proof Load Test

The magnitude and application of the test load shall be in accordance with the manufacturer's instructions.

During the proof test, the brakes shall be capable of stopping and sustaining the test loads. After removing the test load the machine shall show no permanent deformation.

7.4.1.2 Overload Device Test

The magnitude and application of the test load shall be in accordance with the manufacturer's instructions.

The test load shall establish that the overload cut-out operates within the limits set by the manufacturer. Once triggered, the overload device shall continuously isolate the controls concerned until the overload has been removed.

7.4.1.3 Drop Test

The magnitude and application of the test load shall be in accordance with the manufacturer's instructions.

The test establishes that the platform is prevented from falling in the event of any failure in the drive system. The over-speed safety device shall automatically arrest and sustain the platform with the test load.

7.4.2 Periodic Tests

The tests as described above must be carried out either at intervals specified by the manufacturer or the competent person, typically at a maximum of six-monthly intervals.

7.4.3 Major Repair or Modification

Platforms should be tested, as described above, after every major repair or modification that is liable to jeopardise the safety of the transport platform. The competent person will decide the need for such testing.

7.5 Thorough examination following alteration

If the configuration of the transport platform is changed; e.g. increasing the height of the mast or by adding to the number of landings served, the installation will need to be thoroughly examined and tested before being put back into use. The scope and nature of that thorough examination and testing will be at discretion of the competent person and would normally be restricted to ensuring the integrity of those parts changed. Further advice will be found in the CPA Best Practice Guide on the Inspection, Thorough Examination and Maintenance of Construction Hoists.

7.6 Records

Records of all inspections, tests, thorough examinations, maintenance and repair work carried out on each machine should be kept, both for planning future maintenance schedules and providing evidence of these activities should the need arise.

7.6.1 Inspection and Maintenance Records

The keeping and retention of inspection and maintenance records, is essential as a key tool in improving safety standards as well as possibly enhancing the residual value of equipment. In many business sectors, established good business practice

seeks to establish “lifetime records” for each machine and this practice is to be commended.

7.6.2 Thorough Examination Records

LOLER (Regulation 11) requires that records of inspection and thorough examination must be kept, and the retention period depends on the circumstances in which the relevant inspection/thorough examination were conducted:

- thorough examination of the transport platform before it is first put into service - keep report until the equipment is taken out of use;
- thorough examination of transport platform after assembly and before use on a new site - keep report until the equipment is no longer used on that site.
- thorough examination of an accessory for lifting, (lifting tackle), before it is first put into service - keep report for two years;
- subsequent thorough examinations of the lifting accessories used with the transport platform - keep records until the next report is made or for two years, whichever is later;
- Inspections at intervals between thorough examinations - keep report until next report is made.

8. Operation

A risk assessment shall be carried out on all lifting operations, which must, at the very least, take into account the following:

- the intended use;
- risks to persons;
- possibility of a dual function machine being operated in the incorrect function;
- the loading of the platform;
- environmental factors.

8.1 Operator

The transport platform shall only be operated by a person who has been authorised by the appointed person (user) and has been assessed as competent.

8.2 Risk to Persons

The operator shall at all times consider the safety of all persons travelling on the transport platform taking into account at least:

- the risk of persons falling from height;
- the risk of objects falling onto the platform;
- the risk of being struck by protrusions extending from the structure towards the platform;
- the risk of objects falling from the platform, including loading and unloading.

8.3 Dual Function

Some machines have a dual function capability either operation from the platform in "Transport Platform" mode or operation from the base station in "Builders Hoist" mode.

When being operated from the base station (in hoist mode), the equipment is subject to the conditions as laid down by LOLER and EN12158-1 (Builders Hoists for Goods). <u>This mode expressly excludes the carrying of persons on the platform except during erection and dismantling.</u>

Should the platform be required to be operated in both modes, the employer / duty holder must make provision for both these modes of operation to be controlled by a suitably trained and appointed person(s). The employer/duty holder must control the change from one mode to the other.

<u>It is essential that both modes of operation must be assessed for all possible risks.</u>

8.4 Loading of Platform

When loading the platform:

- the rated load shall not be exceeded;
- the weight of the operator shall be included with all loads;
- the weight of any tools carried shall also be included;
- any restriction regarding load position and concentration as indicated by the manufacturer must be adhered to;
- the load must be secure and must not overhang the platform.

All load chart signs must be maintained in good condition.

8.5 Environmental Conditions

The manufacturer's recommendation of maximum in-service wind speeds shall be adhered to at all time and some method of assessing this wind speed shall be made available to the operator.

The possible need to protect the operator from the elements should be considered without affecting the wind load area.

9. Operating Personnel

9.1 Selection

Safe working depends on the selection of suitable persons who are competent to carry out the required duties. They should:

- be physically fit to operate the transport platform safely, with particular regard to eyesight, hearing and reflexes;
- have the ability to judge distance and clearances, and be able to work confidently and safely at height;
- be 18 years or over unless undergoing supervised training.

9.2 Training

Operators should have received adequate training to carry out their duties in a safe way.
They should:

- be made aware of their responsibilities under the law (civil and criminal), for personal safety and that of others;
- be trained in the safe operation of transport platforms;
- be trained in the function of transport platform safety devices and procedures to follow in the event of their operation.

9.3 Machine Familiarisation

Operators should receive product familiarisation on the specific machine type that they are to operate and of the specific location and function of its safety devices.

10. Maintenance

10.1 Maintenance Personnel

Only those persons who are both familiar with the equipment and competent should carry out maintenance activities.

The health and safety of these maintenance personnel must be ensured, consequently they should be provided with such training, instruction, time and facilities to enable them to carry out the work in a safe manner at all times.

10.2 Frequency

The frequency of the maintenance activities that are carried out shall take into account the intensity of use, the operating environment, the nature of the work and the risks to health and safety from possible malfunction or failure. The maintenance programme should be based on both the manufacturer's recommendations and the owner's/user's risk assessment, and should address those parts of the equipment, that are likely to deteriorate and lead to health and safety risks.

10.3 Information

The persons involved in maintaining the equipment must be provided with the manufacturer's maintenance instructions together with copies of the most recent inspection and thorough examination reports. This will ensure that they are made aware of defects and have the information required to rectify them.

10.4 Records of Maintenance

Records of all maintenance should be kept and must be kept up-to-date. The records should detail all maintenance activities and should be kept by the owner. This will provide evidence of maintenance and be useful in planning future maintenance schedules.

11. Appendix

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