TIN 301 Thorough Examination of Hoists to be Used for Transporting Scaffolding Materials

Regulation 9 of the Lifting Operations and Lifting Equipment Regulations 1998 (LOLER) requires that before lifting equipment is used it is thoroughly examined by a competent person to ensure that it is safe to use.

It is recommended that the hoist or transport platform installed specifically for the transportation of scaffolding materials is designated as a lifting platform and thoroughly examined as such, taking account of the specific risks associated with the transportation of scaffolding materials. This will include the provision of racks or carriers for securing the material being transported (See **Annex C**).

NOTE: *A lifting platform is defined within this document as a construction hoist or transport platform that has been specifically adapted by the hoist supplier for transporting scaffolding materials during scaffolding operations.*

A thorough examination of the hoist as a lifting platform should be undertaken before the machine is first used for transporting scaffolding and after each subsequent alteration, e.g. where the height of travel is increased.

Annex A gives an example of a scope of thorough examination for a construction hoist (designated as a lifting platform) and used solely for the transportation of scaffolding materials as part of a safe system of work.

LOLER requires that the competent person carrying out a thorough examination of a lifting platform makes a report of that thorough examination in writing to the user of the lifting platform and to the person from whom the lifting platform has been hired. It is essential that:

- The description of the lifting platform in the report clearly states that it is a lifting platform to be used for transporting scaffolding materials;
- The report is authenticated by the competent person, or on his behalf;
- The report contains the information specified in Schedule 1 to LOLER (See **Annex B**);
- The interval between thorough examinations for use as a lifting platform is limited to the duration of the projected period of the current phase of scaffold installation or the occurrence of lifting platform alteration or dismantle.

After each phase of utilization of the lifting platform has been completed, consideration should be given to the merits of the retention or removal of any modifications carried out on the lifting platform for the purpose of adapting it for transporting scaffolding materials.

On completion of the specific use as a lifting platform for transporting scaffolding materials and before the machine is handed over for normal use as a hoist or transport platform, the remaining gates and hoistway protection necessary for normal use must be fitted and a new thorough examination carried out.

It is the responsibility of the user to organise this, although the thorough examination is normally carried out by the supplier. The report of thorough examination must be issued to the user and, if the hoist is safe to use, it is ready for handover to the user for normal hoist operations.

Detailed advice on the thorough examination of lifting platforms, including competent persons, independence and reporting requirements, is given in the *Best Practice Guide on the Maintenance, Inspection and Thorough Examination of Construction Hoists* published by the Construction Plant-hire Association and available as a free download from: https://www.cpa.uk.net/safety-and-technical-publications/construction-hoists-guidance

Technical Information Note

Annex A - Scope of Thorough Examination

Scope of Thorough Examination of a Lifting Platform to be Used for Transporting Scaffolding Materials

Machine Owner		Site		
Date	**Lifting Platform Model**	**Serial No.**	**Hour Clock**	**O/S No.**

KEY: A – in good order B – requires early attention C – requires immediate action D - Not applicable

ENCLOSURE	A	B	C	D
1. Side-panels				
2. Cable basket(s) & trailing cable(s)				
3. Electrical panel				
4. Ultimate limit ramps				
5. Isolators				
6. Gate/door				
7. Foundation fixing				
8. Buffer springs				
9.				
PLATFORM / CAGE				
10. Gate, door entrance				
11. Gate, door exit				
12. Side panels, roof and floor				
13. Ladder and fixing				
14. Limit switches for gates/doors				
15. Limit switch for trap door				
16. Ultimate limit switch				
17. Up limit switch				
18. Down limit switch				
19. Control switch/buttons				
20. Electrical equipment				
21. Counterweight, rope anchorage				
22. Safety notices/signs				
23. SWL taking account of any derating				
24. Lighting				
25. Gate counterweight and ropes				
26. Gate mechanical interlocks				
27.				
MACHINERY				
28. Guide roller, hook assemblies				
29. Guide roller adjustment				
30. Guide roller wear				
31. Safety device unit				
32. Safety device resetting tool				
33. Drive motors				
34. Brakes				
35. Brake adjustment				
36. Gearboxes				
37. Gearbox oil levels				
38. Drive pinions				
39. Drive pinion wear				
40. Drive pinion adjustment				
41. Safety pinion				
42. Safety pinion wear				
43. Safety pinion adjustments				
44. Centrifugal weights				
45.				

STRUCTURE	A	B	C	D
46. Mast sections				
47. Mast bolts and nuts				
48. Mast racks and bolts				
49. Rack lubrication				
50. Cable guides standard				
51. Cable guide device & trolley				
52. Landing beams				
53. Pipe supports				
54. Wall ties and fixings				
55. Vertical pipes				
56. Limit cams top				
57. Limit cams bottom				
58. Cable anchorages				
59. Erection crane and accessories				
60.				
HOISTWAY PROTECTION on completed landings				
61. Landing gates door				
62. Mechanical interlocks				
63. Gate cam & switch assembly				
64. Hoistway protection				
65.				
COUNTER-WEIGHTS				
66. Counterweight assembly				
67. Rope anchorages				
68. Cathead sheaves				
69. Guide rollers				
70. Buffer springs				
71. Support ropes				
72.				
SPECIAL EQUIPMENT				
73. Emergency stop control				
74. Alarm system				
75. Stop next landing				
76. Load sensing (where applicable)				
77. Scaffold rack or frame				
78. Emergency lowering				
79. No undue noises				
80. Guards replaced & secure				
81.				
TESTS and Records				
81. Load control test				
82. Load test				
83. Drop test				
84. Written safe system of work in place for use as a lifting platform				
85.				

Comments

Name of Competent Person	Signature	Employer
Date of TE	**Date of next TE**	**TE report reference**

Technical Information Note

Annex B – Information to be contained in a report of a thorough examination

The following is an extract from the Lifting Operations and Lifting Equipment Regulations. Schedule 1 of Regulation 10 is quoted here in full. It details information to be contained in a report of a thorough examination.

1) The name and address of the employer for whom the thorough examination was made.
2) The address of the premises at which the thorough examination was made.
3) Particulars sufficient to identify the equipment including where known its date of manufacture.
4) The date of the last thorough examination.
5) The safe working load of the lifting equipment or (where its safe working load depends on the configuration of the lifting equipment) its safe working load for the last configuration in which it was thoroughly examined.
6) In relation to the first thorough examination of lifting equipment after installation or after assembly at a new site or in a new location:
   a) that it is the first thorough examination after installation or after assembly at a new site or in a new location;
   b) (if such be the case) that it has been installed correctly and is safe to operate.
7) In relation to a thorough examination of lifting equipment other than a thorough examination to which paragraph 6 relates -
   a) whether it is a thorough examination:
      i) within an interval of 6 months;
      ii) within an interval of 12 months;
      iii) in accordance with an examination scheme;
      iv) after the occurrence of exceptional circumstances.
   b) (if such be the case) that the lifting equipment is safe to operate.
8) In relation to every thorough examination of lifting equipment:
   a) identification of any part found to have a defect which is or could become a danger to persons, and a description of the defect;
   b) particulars of any repair, renewal or alteration required to remedy a defect found to be a danger to persons;
   c) in the case of a defect which is not yet but could become a danger to persons –
      i) the time by which it could become such a danger;
      ii) particulars of any repair, renewal or alteration required to remedy it;
   d) the latest date by which the next thorough examination must be carried out;
   e) Where the thorough examination included testing, particulars of any test;
   f) The date of the thorough examination.
9) The name, address and qualifications of the person making the report; that he is self-employed or, if employed, the name and address of his employer.
10) The name and address of a person signing or authenticating the report on behalf of its author.
11) The date of the report.

Annex C – Adaption of the Lifting Platform to Carry Scaffolding Materials

In order to transport materials in an upright position in a hoist, it may be necessary to adapt the hoist by having a rack or framework secured to an appropriate point on the hoist. The purpose of this device is to secure the load or partial load to prevent it from falling, slipping, rotating or from entanglement with the mast or other hoistway obstacles.

During loading and unloading, the device must be capable of preventing any individual piece of the scaffolding material from falling or sliding in an uncontrolled manner.

C.1 *Design of the Device*

The design of the device must be fit for purpose and must be carried out by a person who is able to understand loadings on the hoist platform/cage and the integration with its operation. It should take into consideration the number, length and weight of the materials being transported. It may result in the de-rating of the rated load of the machine due to point loading on the floor, the raised centre of gravity of the load and the possible eccentricity of the load within the platform/cage area. It may be necessary to reinforce the floor of the cage when using the device.

The weight of the device must also be taken into consideration when de-rating the rated load. A sign must be installed on the device or in the platform area showing any possible restrictions on the length of the scaffolding materials and the de-rated capacity of the hoist.

The carriage of long and/or broad scaffolding components may place an increased wind load on the hoist. This may occur at a higher level than normally expected. Consideration should therefore be given to limiting the additional wind area incurred by the scaffold components, or limiting the allowable in-service wind speed. This should be included in the consideration of the de-rating of the hoist.

The supplier, usually the hire company, is responsible for approving the design and the installation of the device on the platform/cage of the hoist. This should be undertaken in consultation with the hoist manufacturer.

C.2 Information for Use

The supplier must ensure that the user is provided with adequate information to enable them to use the adapted hoist safely. As a minimum, the following information should be supplied:

- Rated capacity;
- Maximum in-service wind speed;
- Restrictions on point loads;
- Requirements for securing of materials;
- Inspection requirements.

C.3 CE Marking Issues

Adapting a hoist to transport scaffolding materials safely may require an additional conformity assessment to ensure conformity with the Essential Health and Safety Requirements of the Machinery Directive.

C.4 Use of the Device

The scaffolding contractor is responsible for the correct use of the device. Since the load capacity might have been de-rated, it is important to ensure that overloading does not occur.

Furthermore, special consideration must be given to ensuring that overloading does not occur when scaffolding is being dismantled and transported to the ground.