



HOIST SAFETY PROGRAM

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Summary of Changes

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<u>Section</u>	<u>Change</u>
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All	New program created
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A. SCOPE

The UNLV Hoist Safety Program is established in accordance with OSHA standard 1910.179, Overhead and Gantry Cranes and OSHA Standard 1910.184, Slings, which specify the requirements for the safe operation, inspection and maintenance of hoists and slings.

B. COMPLIANCE

This program applies to all UNLV employees and students who inspect and use hoists and slings at UNLV.

C. DUTIES AND RESPONSIBILITIES

(1) Risk Management and Safety (RMS)

- a. Establish a Hoist Safety Program for UNLV.
- b. Instruct on program requirements and provide training on lockout/tagout.
- c. Maintain records for employees attending lockout training.
- d. Provide templates for completing inspections.

(2) Department Managers and Supervisors

- a. Implement this program and have operators review pertinent equipment manuals before using equipment.
- b. Provide department specific instruction on the use of hoists and slings.
- c. Have operators demonstrate they can use hoists and slings safely.
- d. Ensure all hoists are inspected according to the requirements specified in Section D and unsafe conditions have been corrected before authorizing use.
- e. Identify “designated employees” with the knowledge and skills necessary to perform the inspections specified in Section D.

- f. Retain pre-use inspection reports until all issues have been resolved. Retain monthly certification, semi-annual and annual reports for the current year and two prior years.
- g. Retain all weight test certifications received and provide copies to the pertinent maintenance staff, when requested.

Note: Any modifications to hoists that change weight load capacity must be approved in writing by a qualified engineer or the equipment manufacturer.

(3) Operator

- a. Complete all required training and review equipment manuals prior to initial use.
- b. Complete pre-use inspection specified in Section D and document inspections using the pertinent checklist in Appendix A.
- c. Lockout unsafe equipment, turn in inspection checklists to your supervisor to report all conditions that require corrective action.
- d. Follow safe operational practices per operator's manual, if available, and those listed in Section E.
- e. Inspect personal protective equipment (PPE) prior to use and report defective equipment to your supervisor for replacement.

(4) Designated Employee

- a. Complete all inspections specified for the designated employee in Section D. Document inspections using the pertinent checklists in Appendix A.
- b. Lockout unsafe equipment, turn in inspection checklists to your supervisor to report all conditions that require corrective action.

D. HOIST & SLING INSPECTION REQUIREMENTS

(1) Inspection criteria for hoists are based on:

- a. Components of the hoist.

- b. Degree of exposure to wear, deterioration, or malfunction.
- c. Frequency of use.

Table 1
Initial Use and Recurring Inspections.

Type	When	By Whom	Source
Initial	After installation	Installing company	Hoist set up and use procedure
Pre-Use	Prior to first use of the day	Hoist operator	UNLV inspection checklist
Monthly	During the month in which the hoist was used	Designated employee	UNLV inspection checklist
Monthly Certification	During the month in which the hoist was used	Designated employee	UNLV inspection checklist
Annual	During the calendar month in which the previous inspection was conducted	Designated employee or outside agency	Manufacturer or inspection company checklist.

Table 2
Non-Recurring Inspections

Type	When	By Whom	Source
Less Frequent - Once every six months	Prior to use or once every six months	Designated employee	UNLV inspection checklist
Limited – Once greater than six months	Prior to use or one every six months	Designated employee	UNLV inspection checklist
Standby	Prior use or every six months	Designated employee	UNLV inspection checklist

- (2) An inspection checklist for slings is located at Appendix C. More detailed information covering usage requirements for various types of slings can be found on the RMS website at the Occupational Safety Tab.

E. SAFE OPERATIONAL PRACTICES

(1) Hoists

- a. Operators will not leave their positions at the controls while the load is suspended. Hoists will not be used to lift beyond its rated load.
- b. Hoist chains or hoist ropes shall be free of kinks or twists and shall not be wrapped around the load.
- c. Load shall be attached to the load block hook by means of slings or other approved devices. Check to make sure slings clear all obstacles in path of travel.
- d. Load shall be well secured and properly balanced in the sling or lifting device before lifting.
- e. Hoist rope shall not be kinked and multiple lines shall not be twisted around each other. Hook shall be brought over the load and attached to prevent swinging.
- f. There shall be no sudden acceleration or deceleration while moving the load. The load should not contact any obstructions.
- g. Hoists shall not be used for side pulls unless approved for this use by the manufacturer and all conditions specified by the manufacturer are followed.
- h. There shall be no raising, lowering or moving the load when employees are on top of the load. Loads shall not be moved over people.
- i. The operator should test the brakes each time a load approaching the weight limit is handled. This is done by raising the load a few inches and applying the brakes.
- j. The load shall not be lowered below the point where less than two full wraps of rope remain on the hoisting drum.

(2) Slings

- a. Employees must not load a sling in excess of its recommended safe working load as prescribed by the sling manufacturer on the identification markings permanently affixed to the sling.
- b. Slings that are damaged or defective shall not be used.
- c. Slings shall be used for their intended purpose without modification.
- d. Slings shall not be loaded in excess of their rated capacities.
- e. Employees will not place hands or fingers between the sling and its load while the sling is being tightened around the load.
- f. Slings shall be used with the loads balanced to prevent slippage.
- g. Slings shall be securely attached to their loads and have sharp edges padded or protected.
- h. Suspended loads shall be kept clear of all obstructions and employees kept clear of suspended loads and those to be lifted.
- i. Slings shall not be pulled from under a load when the load is resting on the sling.

F. TRAINING & INSTRUCTION

- (1) RMS Training: Lockout - "Authorized User" training.
- (2) Department instruction on specific hoist equipment.
 - a. How to safely operate each type of hoist used by the department.
 - b. How to conduct inspections, document results and report issues.

G. DEFINITIONS

- (1) Authorized Employee – A person who locks out defective machines or equipment in order to perform servicing or maintenance on assigned machines or equipment.

- (2) Designated (Competent) Employee – A person selected or assigned by the employer or the employer's representative as being qualified to perform specific duties (i.e. operation and inspections).
- (3) Equivalent Entity – A person or organization (including an employer) which, by possession of equipment, technical knowledge and skills, can perform with equal competence the same repairs and tests as the person or organization with which it is equated.

H. APPENDICES

Note: For copies of the following appendices, please contact RMS, OSH.

- (1) Appendix A – Hoist Inspection Checklist.
- (2) Appendix B – Hoist Monthly Certification Record.
- (3) Appendix C – Sling Inspection Requirements.