

 DALHOUSIE UNIVERSITY Facilities Management Mobile Overhead Cranes Safe Work Instructions	<i>Policy Sponsor:</i> Assistant Vice President Facilities Management	<i>Approval Date:</i> January 2010
	<i>Responsible Unit:</i> Facilities Management	<i>Revisions:</i>
Service: Trade Services	Shop: Mechanical & Welding	
Hazards Identified: Overloaded crane, malfunction controls, use of wrong control, failure of crane parts, unstable load, falling objects, load swinging, being struck by load, load striking other things or people, dust or other particles getting in eyes, erratic movement of crane, faulty slings or shackles,		
Personal Protective Equipment Required: Safety boots, hard hat, safety goggles or safety glasses, hearing protection, cut resistant safety gloves,		
Training Required: Before using this type of equipment employees must be properly trained and have acquired all required certification. The operator's manual, tool safety markings and instructions for manufacturer approved attachments must be reviewed regularly. Employees must also be trained in the proper use and maintenance of all required PPE before operating this equipment.		

These safe work practices must be followed at all times when using this equipment.

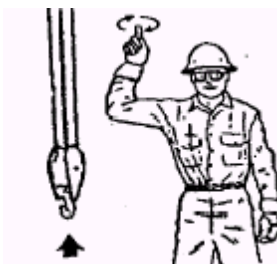

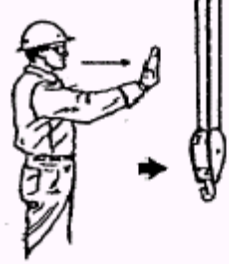

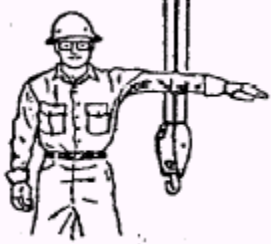
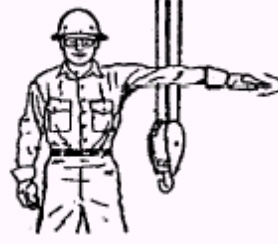

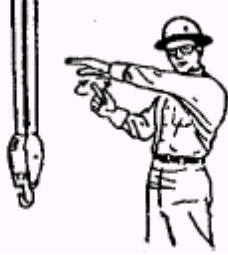
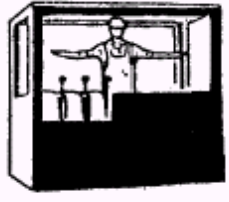
1. Always follow the manufacturer's instructions for proper use of this equipment.
2. Read and review the operator's manual on a regular basis.
3. Do not use this equipment for anything other than its intended / designed purpose.

4. Do not tamper with or attempt to modify this equipment in any way.
5. Always wear the required PPE.
6. Ensure that you are familiar with and apply all requirements of Part 7 of the Occupational safety General Regulations and of the Crane Operators Regulations.
7. Ensure that any load chart required by the manufacturer is available at the location of the crane.
8. Before using the crane ensure that it is suitable for the planned hoisting job; confirm it has appropriate travel, lift and capacity.
9. Inspect the crane both visually and physically before each use.
10. Always complete the FM Overhead Crane Pre-Use Inspection Checklist as part of each inspection.
11. Always check for damage and /or wear to the crane or any of its parts and that all functions operate properly.
12. Always confirm the weight of the load.
13. Check and confirm that the capacity of the crane, it must be posted on or near the crane.
14. Always check the load chain for damage or kinks and wire rope for kinks or any indication of fraying.
15. DO NOT EXCEED ANY SPECIFIED CAPACITIES.
16. Ensure that you have selected the right slings and rigging hardware for the lift.
17. Check the load limit indicated on each piece of rigging equipment.
18. Inspect the slings and hardware to be used during the lift for wear, fraying, stretch or any other damage.
19. Do not use slings if over 10% of the wires are broken in a rope lay or any length of the wire rope equal to 8 times the diameter of the rope.
20. Do not use damaged hardware.

21. Do not splice broken slings.
22. Remove damaged or defective slings, ropes or hardware from use immediately and tag them with at "Do NOT USE". Ensure they disposed of as soon as possible.
23. Use "softeners" on sharp corners or edges to protect slings, etc.
24. Always check the hook; DO NOT use a hook if its shape is distorted.
25. Never operate an overhead crane using a wired or remote control unless you are completely familiar with all control functions.
26. Ensure that the function and direction of each control switch and/or button is clearly marked.
27. Before a lift ensure that the crane moves freely and that the carriage moves freely on the bridge.
28. Ensure that all slings are completely in place of the load hock and that the safety catch is closed.
29. Never place a load on the tip of the hook or hammer a sling into place.
30. Ensure that slings or other rigging parts cannot move as strain is applied to the load.
31. Avoid sudden or jerking movements as the crane travels.
32. Always bring the load chain or wire to a taut vertical position above the load before lifting.
33. Ensure that the crane is centered over the load before starting the lift to help prevent the load from swinging.
34. Restrict access to the lift area during a lift.
35. Ensure that the area to which the load is being moved is large enough to accommodate the load and is clear of all obstructions.
36. The crane operator should only follow instructions / directions from one person – the designated signaller.
37. Ensure that the signaller and the operator know and understand the signals to be used.

38. Use some agreed upon signal to warn everyone in the lift area before starting the lift.
39. Ensure that the load is clear of any snag points before and during a lift.
40. Stop after the load clears its resting place to ensure it is balanced.
41. Always contain loose items in a caged container or solid box for lifting.
42. Do not lift loose items on an open pallet.
43. Do not use the load chain or wire rope as part of your sling.
44. Never lift a load over anyone.
45. Never lift a load any higher than is necessary to clear objects in your path of travel.
46. Do not, as an operator, get under the load.
47. Move any load smoothly.
48. Use a tag line to minimize motion of the load.
49. Do not let wire rope get out of the drum grooves and overlay itself.
50. Do not allow yourself to become distracted during a lift; concentrate on where you are going and what you are doing.
51. Always walk ahead of the load during travel
52. Do not under any circumstances leave a suspended load unattended.
53. Do not lift people with a crane.
54. Do not damage the hoisting equipment by exerting excessive side pulls.
55. Always set loads down on suitable blocking or support.
56. Do not put a load down on top of a sling.
57. Do not use the crane to pull a sling free of a load.
58. Do implement a lock out / tag out system if use of the crane must be restricted.

Standard Hand Signals For Controlling Overhead And Gantry Cranes

 <p>HOIST. With forearm vertical, forefinger pointing up, move hand in small horizontal circle</p>	 <p>LOWER. With arm extended downward, forefinger pointing down, move hand in small horizontal circle.</p>	 <p>BRIDGE TRAVEL. Arm extended forward, hand open and slightly raised, make pushing motion in direction of travel.</p>
 <p>TROLLEY TRAVEL. Palm up, fingers closed, thumb pointing in direction of motion, jerk hand horizontally.</p>	 <p>STOP. Arm extended, palm down, hold position rigidly.</p>	 <p>EMERGENCY STOP. Arm extended, palm down, move hand rapidly right and left.</p>
 <p>MULTIPLE TROLLEYS. Hold up one finger for block marked "1" and two fingers for block marked "2". Regular signals follow.</p>	 <p>MOVE SLOWLY. Use one hand to give any motion signal and place other hand motionless in front of hand giving the motion signal. (Hoist Slowly shown as an example.)</p>	 <p>MAGNET IS DISCONNECTED. Crane operator spreads both hands apart – palms up.</p>