

Date Revised:	March 2021	Overall Task Risk Rating:	Before Controls	B	After Controls	C
Description:	Activities that require the use of equipment, tools, and machinery, for the purposes of hoisting and rigging various items.					
Location(s):	Shop, Asphalt Plant & Construction Projects					
Associated Documents: Working at Heights WTS, Overhead Hazards WTS, Hazardous Energy Control WTS						

RED FLAGS (HOLD WORK UNTIL CORRECTED):

Note:

- If you are not familiar with the safe use of the equipment, ask your foreman / superintendent for assistance prior to starting

PERSONAL PROTECTIVE EQUIPMENT (CSA APPROVED)

Head Protection	Foot Protection	High-Vis Protection	Hearing Protection	Hand Protection	Eye Protection	Respiratory Protection	Skin Protection	Face Protection	Fall Protection
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Note:

- When onsite one must adhere to the minimum site requirements (i.e. Safety Boots, Hard Hat & High Visibility Protection. Safety Glasses when necessary)

SAFE WORK PRACTICES (SWP)

General Hoisting and Rigging Practices:

- If you are not familiar with the safe use of any machinery or equipment, ask your foreman / superintendent for assistance prior to starting
- Do not exceed the rated load capacity or lifting limitations of equipment
- All loads must be secure during hoisting
- All hoisting and rigging hooks will be equipped with safety latches
- Ensure that all outriggers of the hoisting equipment are on a solid surface and that the hoisting equipment is level
- Keep clear of pinch points
- Maintain control of loads/equipment being raised/ lowered, use tag lines if necessary
- Do not attempt to make adjustments or clear jammed machinery without first shutting off power
- All equipment must be maintained and operated in a condition that does not endanger a worker

Cranes and Operations:

- All cranes must be erected and dismantled in accordance to the manufacturer's instructions
- Crane must be adequately anchored in accordance to the manufacturer's instructions
- Crane must be grounded and all electrical connections secured

Suspended Loads:

- Suspended loads are not to be passed over workers - it is the responsibility of both the operator and the workers
- Operators shall not leave any raised loads unattended

Signs and Barriers:

- Appropriate warning signage must be posted to indicate that overhead work is being performed in the area
- Hoisting areas must be secured with a barrier to prevent public access
- Ground spotters shall be used when loads are being raised

Housekeeping:

- Keep machines and equipment clean and report any leaks or other noticeable defects



Signal Person:

- Two-way communication must be established between the ground signaler and the crane operator
- Make sure all signals are understood and communicated clearly and concisely
- Full visibility must be obtained by the operator of the hoisting equipment at all times
- If communication is lost between the operator and the signal person, the operator must stop until communication is restored
- Signal persons must only perform signalling duties during hoisting

Powerline and Overhead Safety:

- Always check for overhead power lines and observe minimum distances from overhead power lines
- When unsure, always assume that electrical power lines are live
- Refer to Overhead Hazards WTS for more information

Environmental Considerations:

- Take weather conditions into account before attempting any hoisting and rigging operations
- All electrical connections must be sealed against rain

Inspection:

- Daily pre-operational inspection will be performed where required for specific pieces of equipment (i.e. on cranes and rigging gear)
- All hoisting and rigging equipment will be visually inspected for wear, cracks, severe corrosion, kinks, bird-caging, broken strands, burn marks, chemical damage, deformation or other signs of obvious damage
- Do not use defective equipment or machinery, inform your foreman / superintendent - they will arrange for the equipment to be serviced
- All exposed moving or rotating parts must be adequately guarded - no one is to make any protective guarding ineffective
- Ensure that all material and equipment is in good condition and will meet the requirements of the lift
- Ensure that any item of the rigging hardware that requires an engineered diagram has one
- The area of the lift will be assessed for possible hazards and all hazards will be removed or controlled before the lift occurs

Training:

- Employee Orientations (including roles, responsibilities, applicable workplace task standards, WHMIS, etc.)
- Only trained, authorized personnel are allowed to operate machinery or equipment (i.e. cranes & hoisting devices)
- Only trained, authorized personnel are allowed to perform maintenance / repairs

Personal Protective Equipment:

- Workers on construction projects must wear, at a minimum, head, foot and high visibility protection. Eye protection when necessary
- Eye protection is required when completing tasks that may cause debris / objects to dislodge or become airborne

JOB HAZARD AND RISK ANALYSIS		RISK RATING SYSTEM	
		A	High risk of injury or equipment / property damage.
		B	Medium risk of injury or equipment / property damage.
		C	Low risk of injury or equipment / property damage.
TASK HAZARDS	RATING BEFORE CONTROLS	TASK CONTROLS	RATING AFTER CONTROLS
• Lack of Inspection	C	<ul style="list-style-type: none"> • The operator shall perform & record a daily inspection of their hoist equipment prior to use • Equipment must not be used if any defects are identified - inform your superintendent / foreman 	C
• Equipment Failure, Improper Crane use	C	<ul style="list-style-type: none"> • Equipment must be used in accordance with manufacturer's instructions & related legislature 	C
• Equipment Overload	B	<ul style="list-style-type: none"> • Equipment must not be loaded in excess of their load ratings • Inspect chains, hooks and clamps for damage daily 	B
• Electrical Overhead Hazards	B	<ul style="list-style-type: none"> • Overhead electrical hazards must be identified and avoided • Implement Overhead Hazards WTS 	B
• Lack of Maintenance	B	<ul style="list-style-type: none"> • Equipment shall be operated and maintained as per the manufacturer's instructions 	B

<ul style="list-style-type: none"> Lack of Training 	C	<ul style="list-style-type: none"> Only trained, authorized personnel are allowed to operate machinery or equipment (i.e. cranes & hoisting devices) Only trained, authorized personnel are allowed to perform maintenance / repairs 	C
<ul style="list-style-type: none"> Lack of Planning 	C	<ul style="list-style-type: none"> Do not operate within legislated safe approach distances of energized overhead electrical hazards (wires) Remain aware of other workers in close proximity Make sure all signals are clear, concise and understood 	C
<ul style="list-style-type: none"> Falling Objects 	B	<ul style="list-style-type: none"> Have complete control of the load (use a tag line as needed) The load must be evenly balance when lifted Do not pass raised loads over workers 	B
<ul style="list-style-type: none"> Improper Setup 	B	<ul style="list-style-type: none"> Determine the weight of the load and ensure that it does not exceed the Safe Work Load of any of the components Take weather conditions into account 	B

SAFE JOB PROCEDURES (SJP)

<p><u>Pre-Task Commencement:</u></p> <ol style="list-style-type: none"> 1. Gather and wear the required PPE for the task - on construction sites, all must wear head, foot and high visibility protection. Eye protection when necessary 2. Ensure the site-specific workplace violence assessment is complete 3. Complete the Daily GAZZ Card and review with all workers the shift's tasks with any associated hazards and control strategies 4. Ensure all workers understand the GAZZ Card contents, and sign off in acknowledgement 5. Ensure controls are in place prior to commencing work so risks are mitigated / eliminated 6. Determine what equipment / machinery / tools and material, are required for the completion of the task 7. Inspect all equipment / machinery / tools prior to use and document the inspections on appropriate forms when required 8. Ensure preventative maintenance activities have been completed where required, prior to using equipment / machinery / tools 9. If equipment / machinery / tools are observed to be damaged, remove it from use and notify the Foreman / Superintendent 10. Post signage where needed 11. Select hoisting/rigging equipment based on manufacturer's specifications, rated load carrying capacity and site-specific conditions 12. Determine if hoisting and rigging equipment will require structural engineering drawings and the approval of a structural engineer 13. Ensure hoisting/rigging operator has appropriate training for relevant equipment in use 14. Develop a communication plan with a spotter 15. Implement Overhead Hazards WTS controls if applicable
<p><u>During Task:</u></p> <ol style="list-style-type: none"> 1. Setup hoisting and rigging equipment (must be a competent worker with appropriate training) 2. The operator shall perform and record a daily inspection of his or her hoisting and rigging equipment prior to use 3. Ensure hoisting and rigging components are capable of lifting the weight of the intended load 4. Rig material, and inspect connections/components prior to hoisting 5. Hoist and rig material 6. Hoisting operators who cannot maintain full visibility of the load and the intended path must have appropriate spotters 7. Contain work area, using appropriate barricading and danger (warning) signage. Loads being hoisted must not pass over anyone 8. Operate equipment machinery and/or tools as per manufacturer's instructions
<p><u>Task Completion:</u></p> <ol style="list-style-type: none"> 1. Ensure all equipment / machinery / tools are maintained and stored appropriately in the designated locations 2. Implement any housekeeping or maintenance as required