

Safe Work Practice (SWP)

Name of Task:	Hoisting/Rigging/Clamping
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Department/Unit: Trades

Personal Protective Equipment or other required equipment or other safety considerations:

- Safety glasses
- CSA approved work boots
- Protective Clothing
- Protective Gloves
- Hard Hat

Hazards:

- Awkward posture
- Pinch points
- Sprains/strains
- Falling equipment/objects
- Heavy Loads
- Crushing injuries
- Slip/Trip/Fall
- Back Strain

Required Training

- Successful completion of NBCC Safety Course (Work Safely or Workplace Safety Practices)
- Shop safety orientation
- Read and understand SWP
- For students, practical demonstration and Instructor supervision required

Pre-Operational Safety Checks

- Inspect required personal protective equipment and replace if required.
- Ensure no slip/trip hazards are present in workspaces and walkways.
- Make sure all cables, slings, ropes and chains are in proper working order and are tagged with the safe working load and CSA approved
- Make sure all hooks, latches and other mechanical rigging devices are inspected and in proper working order and CSA approved
- Faulty equipment must not be used. Immediately report suspect machinery, slings, ropes, chains immediately and take out of service.

Sling Safety

General

Workers involved in hoisting and rigging must exercise care when selecting and using slings. The selection of slings should be based upon the size and type of the load, and the environmental conditions of the workplace. Slings should be visually inspected before each use to ensure their effectiveness. Improper use of hoisting equipment, including slings, may result in overloading, excessive speed (e.g., taking up slack with a sudden jerk, shock loading), sudden acceleration or deceleration of equipment.

There are generally six types of slings: chain, wire rope, metal mesh, natural fiber rope, synthetic fiber rope, or synthetic web. Slings tend to be placed into three groups: chain, wire rope and mesh, and fiber rope web. Each type has its own particular advantages and disadvantages. Factors to consider when

	choosing the best sling for the job include size, weight, shape, temperature, and		
	sensitivity of the material being moved, and the environmental conditions under which the sling will be used.		
	Inspections		
	Initial, pre-use, frequent, and periodic inspections are required for all equipment. Requirements and procedures for various inspections vary with the type of equipment. Each type of inspection must be conducted and documented.		
	Only equipment bearing a CSA approved tag and load rating may be used; equipment without a current tag must not be used.		
	Steps to be taken to complete task safely:		
	Start-Up		
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1	Hoisting		
	Determine the weight of the object or load prior to a lift, to make sure that the lifting equipment can operate within its capabilities. Estimate the center of gravity or point of balance. The lifting device should be positioned immediately above the estimated center of gravity. Prepare a place to land the load, lower the load gently and make sure it is stable before slackening the sling or chain.		
2	NEVER exceed the working load limits of alloy chains or nylon lifting slings.		
3	Ensure that all lifting chains and slings have a tag listing the safe working load limits.		
4	Make sure the hoist or crane is directly over the load.		
5	Use slings of proper reach. Never shorten a sling by twisting or knotting. With chain		
6	slings, never use bolts or nuts. Never permit anyone to ride the lifting hook or the load.		
7	Make sure all personnel stand clear from the load being lifted.		
8	Never work under a suspended load, unless the load is properly supported.		
9	Never leave a load suspended when the hoist or crane is unattended.		
10	Inspect all slings thoroughly at specified intervals and maintain them in good condition.		
11	Inspect each chain or sling before each use for cuts, nicks, bent links, bent hooks etc. If in doubt, don't use it.		
12	Ensure that the safety latch on hooks is in good working condition.		
13	Ensure that the signaler is properly identified		
1	Rigging		
	Rigging looks like an easy operation that requires no particular skill or experience. But if you have an idea that just anybody can do it, you're on the wrong track. Too many workers have lost fingers or hands or have suffered more serious injuries because they thought. "Anybody		

lost fingers or hands or have suffered more serious injuries because they thought, "Anybody

can do that".

2	Name one member of the crew to act as a signalperson, and instruct the equipment operator to recognize signals from that person only. The signalperson must be careful not to order a move until he/she has received the "all ready" signal from each member of the crew.			
3	Each rigger must be sure he/she is in the clear before giving an "all ready" to the signalperson. When you have positioned the sling or choker you're using, release it, if possible, before you give the "all ready" signal.			
4	If you must hold it in position, be sure your hand is clear of pinch points. In fact, your hand should be far enough away so there's no possibility of a frayed wire catching your glove and jerking your hand into a pinch point.			
5	Watch out for the roll or swing of the load. Since it's almost impossible to position the hook exactly over the load center, there'll just about always be a swing or roll. Anticipate the direction of the swing or roll and work away from it.			
6	Never place yourself between material, equipment or other stationary objects and the load swing. Also, stay away from stacked material that may be knocked over by a swinging load.			
7	Never stand under the load and keep from under the boom as much as possible. Chances are that nothing will break, but something might.			
8	Look over the place where the load is to be set. Remove unnecessary blocks or other objects that might fly up if struck by the load.			
9	When lowering or setting the load, be sure your feet and all other parts of your body are out from under. Set the load down easily and slowly so that if it rolls on the blocking, it will be a slow shift that you can get away from.			
10	The designated signalperson is to be identified by the use of distinctive safety vests,			
11	To control the loads, tag lines are to be used. (when necessary)			
1	Attaching Cable Clips and Clamping Wire Rope			
2	Wire the thimble to the rope at the desired point, then bend the rope around the thimble and secure temporarily by wiring the rope members together.			
3	First attach the clip farthest from the thimble and tighten (be sure the base of the saddle rests upon the live end of the rope and the "U" bolts on the short end). All clips must be attached in this manner.			
4	The clip nearest the thimble goes on next. Do not tighten yet. If one or more additional clips are to be attached, place them at an equal distance apart between the clips already attached.			
5	Before tightening, it is advisable to place some stress on the rope to take up the slack and equalize the tension on both sides of the clip. (Do not apply too much stress or the clip attached in Step 1 will not hold). Tighten all clips.			
Responsibilities, Completion and Review				
Management and workers to ensure all duties performed in accordance to training, established health and safety regulations/guidelines, policies and procedures (e.g. utilizing personal, protective equipment as per SAFE Work Procedures). Notify Manager or designates (i.e. supervisors) of all occurrences, injuries illnesses or safety and health concerns which are likely to harm themselves, co-workers, or any others who enter the premises.				
Comple	eted by and Date: 2/20/2020	Approved by:		
Last Re	eviewed / Revised by and Date:	Note: This task will be monitored periodically to ensure compliance and effectiveness.		