RIGGING RESOURCE CENTRE

LEVER HOIST COMPETENCY ASSESSMENT

WORKER BEING EVALUATED:_____

EVALUATOR:_____

LOCATION:_____ **DATE:**_____

This evaluation form can be used as a demonstration or knowledge-based competency of a worker's understanding of a Lever Hoist. It can be used by either Workers or Employers to assess their knowledge.

The ASME B30.21 Standard has been used for reference when compiling this evaluation. ASME B30.21 states that the Lever Hoist Manufacturer specifications must also be referenced to provide specific information required for the Selection, Inspection, Limitations and Use.

EMPLOYER READ THE CAPITALIZED WORDS, can the Employer successfully explain and complete the following.	**YES**	**NO**
1) **<u>COMPLIANCE TO STANDARDS</u>** THE EMPLOYER TO VERIFY THE LEVER HOIST IS COMPLIANT TO A STANDARD. Compliance to a standard should be confirmed in the manufacturer's specifications, *generally the ASME B30.21 standard in North America.*		
2) **<u>DESIGN FACTORS</u>** DOES THE EMPLOYER KNOW THE DESIGN FACTOR ASSOCIATED WITH THE LEVER HOIST BEING USED? This is the point it will break above its rated load. *ASME B30.21 states 4:1 minimum.*		
3) **<u>MANUFACTURERS SPECIFICATIONS</u>** THE EMPLOYER MUST HAVE THE MANUFACTURERS SPECIFICATIONS READILY AVAILABLE. The only way a worker can be assessed is if they have been given the manufactures specification for the product being evaluated on, as manufactures specifications differ. *This information will provide the worker its limitations, use and inspection requirements*.		
4) **<u>PERIODIC INSPECTIONS</u>** THE EMPLOYER IS RESPONSIBLE TO ENSURE THAT THE LEVER HOIST HAS HAD A PERIODIC INSPECTION**.** These are the inspections required by the ASME B30.21 standard that the employer must ensure are completed*. At a minimum annually*		
5) **<u>STORAGE</u>** THE EMPLOYER IS RESPONSIBLE TO ENSURE PROPER LEVER HOIST STORAGE WHEN NOT IN USE. Storage is important to stop or reduce possible damage to the sling whether it be mechanical, chemical or temperature related. *What is your company's storage policy?*		

LEVER HOIST KNOWLEDGE Evaluator to READ THE CAPITALIZED WORDS and see if the worker can successfully explain the following.	**COMPETENT**	**NEEDS COACHING**
6) **MANUFACTURERS SPECIFICATIONS** DOES THE WORKER HAVE ACCESS TO THE MANUFACTURERS SPECIFICATIONS? The worker knows that manufacturers specification are available, where they are located, and why they have to be used.		
7) **DESIGN FACTORS** DOES THE WORKER KNOW THE DESIGN FACTOR ASSOCIATED WITH THE LEVER HOIST BEING USED? The worker states the minimum required design factor of lever hoists*, ASME B30.21 states 4:1 minimum.*		
8) **PERIODIC INSPECTIONS** CAN THE WORKER VERIFY THAT THE LEVER HOIST HAS HAD A PERIODIC INSPECTION? These are the annual inspections required by the employer to complete. As stated in the ASME B30.21 standard*. An external coded mark on the hoist is an acceptable identification in lieu of records.*		
9) **MARKINGS - MANUFACTURER** SHOW ME THE MANUFACTURERS NAME MARKING ON THE LEVER HOIST. The manufacturer's name must be marked on the lever hoist. *This may be an actual name, but in some cases is a trademark or abbreviation.*		
10) **MARKINGS – MODEL OR SERIAL NUMBER)** SHOW ME THE MANUFACTURERS MODEL OR SERIAL NUMBER MARKING ON THE LEVER HOIST. The manufacturer's model or serial number must be marked on the lever hoist. *It gives the hoist its own unique unit identifie*r.		
11) **MARKINGS – RATED LOAD)** SHOW ME THE RATED LOAD MARKING ON THE LEVER HOIST. The rated load must be marked on the hoist or its load block. Usually marked with WLL "working load limit" followed by a number and unit that can be US or Metric *E.g. 1 Ton, 2000 lbs. or maybe 1Tonne, 1000 kg.*		
12) **MARKINGS – PRODUCT SAFETY LABEL** SHOW ME THE PRODUCT SAFETY LABEL ON THE LEVER HOIST. The lever hoist must have fixed to it a product safety label concerning the operating procedures, cautionary language identifying hazards, and methods for accident prevention. *The worker must refer to instruction manuals for additional information.*		
13) **TEMPERATURES** ASK THE WORKER WHAT THE TEMPERATURE RANGE OF THE LEVER HOIST IS FROM THE MANUFACTURER. AND HOW CAN THE WORKER VERIFY THIS? The worker knows extreme temperatures can affect the lever hoist. ASME states not below -18 C or above 54 C. *The worker must confirm with the manufacturer as they may differ.*		

LEVER HOIST APPLICATION Evaluator to READ THE CAPITALIZED WORDS and see if the worker can successfully explain the following.	**COMPETENT**	**NEEDS COACHING**
14) **REMOVAL CRITERIA** HAVE THE WORKER INSPECT THE LEVER HOIST AND TELL YOU REASONS TO REMOVE THE LEVER HOIST FROM SERVICE. 1. Operating mechanisms for proper operation, proper adjustment, and unusual sounds, 2. Hooks, including latches, 3. Load chain for gross damage, 4. Load chain reeving, 5. Overtravel restraint for proper attachment, 6. Hoist body and lever for deformation, cracks, and other damage, 7. Supporting structure or trolley, if used, for evidence of damage, 8. Label or labels, for legibility and replacement, 9. Fasteners such as rivets and bolts for evidence of loosening. *Manufacturer may give specific criteria and must be referenced.*		

15) **<u>OPERATOR POSITIONING</u>** IF A LEVER HOIST IS BEING USED TO LIFT OR LOWER A LOAD HAVE THE WORKER TELL YOU WHERE THE OPERATOR SHOULD BE POSITIONED. The worker knows that they must be free of the load, have firm footing, and adequate access to the hoists lever. *The operator should not be below the load, should be able to operate the hoist comfortably, and have clear access to the lever and controls.*		
16) **<u>PRE-LIFT CHECKS</u>** IF A LOAD IS BEING LIFTED HAVE THE WORKER TELL YOU THE PROCEDURE THEY WOULD FOLLOW TO ASSURE SAFE OPERATION. The worker knows when first operating the hoist they should take up slack load chain or rope carefully, lift the load a few inches (centimeters) to check the hoist operation, and verify that the load is secured, balanced, and positioned on the hook and in the sling or lifting device. *The worker must also listen for unusual noises and correct brake operation.*		
17) **<u>LEVER FORCE)</u>** IF A LEVER HOIST IS BEING USED TO LIFT OR LOWER A LOAD HAVE THE WORKER TELL YOU HOW MUCH FORCE CAN BE PLACED ON THE OPERATING LEVER. The worker knows that hoist can only be operated with the hand power of one operator and cannot be operated with an extension on the lever. *Under no circumstances should more than one person operate the hoist.*		
18) **<u>LOAD ATTACHMENT</u>** IF A LEVER HOIST IS BEING USED TO LIFT OR LOWER A LOAD HAVE THE WORKER TELL YOU HOW THE LEVER HOIST MUST BE ATTACHED TO THE LOAD. The worker knows that lever hoist must be attached to the load by suitable means such as slings, shackles or eyebolts, must be seated in the base of the hook to avoid tip loading. *The load chain must not be wrapped around the load.*		
19) **<u>LOAD HANDLING</u>** IF A LEVER HOIST IS BEING USED TO LIFT OR LOWER A LOAD HAVE THE WORKER TELL YOU HOW THE LEVER HOIST MUST BE OPERATED SAFELY. The worker knows that the load must clear any obstacles, be balanced during movement, and not be left unattended.		
20) **<u>HOIST ALIGNMENT</u>** IF THE LEVER HOIST IS BEING USED TO LIFT OR LOWER A LOAD HAVE THE WORKER TELL YOU HOW THE LEVER HOIST MUST BE ALIGNED. The worker knows that the hoist body, load block, and load chain must be directly in line with the direction of loading to avoid side pulling. *The hoist body must not bear against any object.*		
21) **<u>SIDE LOADING</u>** IF A LEVER HOIST IS BEING USED TO LIFT OR LOWER A LOAD CAUSING SIDE LOADING HAVE THE WORKER TELL YOU HOW THE LEVER CHAIN HOIST MUST BE OPERATED SAFELY. The worker knows that lever hoists shall be used to lift loads vertically without side pull except when specifically authorized by the manufacturer. *The side pull must not cause damage to the hoist.*		
22) **<u>STORAGE</u>** HAVE THE WORKER TELL YOU WHERE THE LEVER HOIST IS KEPT WHEN NOT IN USE storage is important to stop or reduce possible damage to the lever hoist, *whether it be mechanical, corrosive or temperature related.*		

COMMENTS:

SIGNATURE OF WORKER BEING EVALUATED:

X_____

SIGNATURE OF EVALUATOR:

X_____