RIGGING RESOURCE CENTRE

SPREADER BEAM 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 Spreader Beam. It can be used by either Workers or Employers to assess their knowledge.

The ASME B30.20 Standard has been used for reference when compiling this evaluation. ASME B30.20 states that the Spreader Beam 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) **COMPLIANCE TO STANDARDS** THE EMPLOYER TO VERIFY THE SPREADER BEAM IS COMPLIANT TO A STANDARD. Compliance to a standard should be confirmed in the manufacturer's specifications, *generally the ASME B30.20 standard in North America.*		
2) **DESIGN FACTORS** DOES THE EMPLOYER KNOW THE DESIGN FACTOR ASSOCIATED WITH THE SPREADER BEAM BEING USED? This is the point it will break above its rated load. The minimum required design factor of spreader beams is based on the service class. *The manufacturer must be consulted.*		
3) **MANUFACTURERS SPECIFICATIONS** 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) **PERIODIC INSPECTIONS** THE EMPLOYER IS RESPONSIBLE TO ENSURE THAT THE SPREADER BEAM HAS HAD A PERIODIC INSPECTION**.** These are the inspections required by the ASME B30.20 standard that the employer must ensure are completed*. At a minimum annually.*		
5) **STORAGE** THE EMPLOYER IS RESPONSIBLE TO ENSURE PROPER SPREADER BEAM STORAGE WHEN NOT IN USE. Storage is important to stop or reduce possible damage to the spreader beam whether it be mechanical, chemical or temperature related. *What is your company's storage policy?*		

SPREADER BEAM 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 SPREADER BEAM BEING USED? The worker states the minimum required design factor of spreader beams is based on the service class. *The manufacturer must be consulted.*		
8) **PERIODIC INSPECTIONS** CAN THE WORKER VERIFY THAT THE SPREADER BEAM HAS HAD A PERIODIC INSPECTION? These are the annual inspections required by the employer to complete. As stated in the ASME B30.20 standard. *An external coded mark on the spreader beam is an acceptable identification in lieu of records.*		
9) **MARKINGS - MANUFACTURER** SHOW ME THE MANUFACTURERS NAME MARKING ON THE SPREADER BEAM. The manufacturer's name and contact information must be marked on the spreader beam. *This may be an actual name, but in some cases is a trademark or abbreviation, the contact information may be an address, telephone number or website.*		
10) **MARKINGS – SERIAL NUMBER** SHOW ME THE SERIAL NUMBER MARKING ON THE SPREADER BEAM. the serial number must be marked on the spreader beam. *It gives the spreader beam its own unique unit identifie*r.		
11) **MARKINGS – BEAM WEIGHT** SHOW ME THE BEAM WEIGHT MARKING ON THE SPREADER BEAM. The spreader beams own weight must be marked on the spreader beam. *If it weights over 100lbs.*		
12) **MARKINGS – COLD CURRENT** SHOW ME THE COLD CURRENT (AMPS) MARKING ON THE SPREADER BEAM. The cold current must be marked on the spreader beam, if applicable. *This would be applicable if the spreader beam has powered movement.*		
13) **MARKINGS - VOLTAGE** SHOW ME THE RATED VOLTAGE MARKING ON THE SPREADER BEAM. The voltage must be marked on the spreader beam, if applicable. *This would be applicable if the spreader beam has powered movement.*		
14) **MARKINGS – RATED LOAD** SHOW ME THE RATED LOAD MARKING ON THE SPREADER BEAM. The rated load must be marked on the spreader beam. 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.*		
15) **MARKINGS – DESIGN CATEGORY** SHOW ME THE DESIGN CATEGORY MARKING ON THE SPREADER BEAM. The design category must be marked on the spreader beam. *Design Category refers to the spreader beam static strength criteria.*		
16) **MARKINGS – SERVICE CLASS** SHOW ME THE SERVICE CLASS MARKING ON THE SPREADER BEAM. The service class must be marked on the spreader beam. *Service Class refers to the spreader beam fatigue life criteria.*		
17) **MARKINGS – PRODUCT SAFETY LABEL** SHOW ME THE PRODUCT SAFETY LABEL ON THE SPREADER BEAM. The spreader beam 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.*		

18) **<u>TEMPERATURES</u>** ASK THE WORKER WHAT IS THE TEMPERATURE RANGE OF THE SPREADER BEAM FROM THE MANUFACTURER? AND HOW CAN THE WORKER VERIFY THIS. The worker knows temperatures exceeding normal ambient temperatures can affect the spreader beam. *The worker must confirm with the manufacturer as they may differ.*		

SPREADER BEAM APPLICATION Evaluator to READ THE CAPITALIZED WORDS and see if the worker can successfully explain the following.	**COMPETENT**	**NEEDS COACHING**
19) **<u>REMOVAL CRITERIA</u>** HAVE THE WORKER TELL YOU REASONS TO REMOVE THE SPREADER BEAM FROM SERVICE. 1. Structural members if deformed, cracked or worn, 2. Loose or missing, guards, fasteners, covers, stops or nameplates, 3. Operating mechanisms for mis-adjustments interfering with operation, 4. Missing or illegible operating control markings, 5. Loose bolts or fasteners, 6. Cracked or worn gears, pulleys, sheaves, sprockets, bearings, drive chains, and belts, 7. Excessive wear of friction pads, linkages, and other mechanical parts, 8. Excessive wear at hoist hooking points and load support clevises or pins, 9. Missing or illegible product safety labels required, *Manufacturer may give specific criteria and must be referenced.*		
20) **<u>LOAD DISTRIBUTION – FIXED SPREADER BEAM</u>** IF A LOAD IS ATTACHED TO A SPREADER BEAM HAVE THE WORKER TELL YOU HOW THE LOAD MUST BE DISTRIBUTED? The worker knows that the spreader beam must be positioned above the loads center of gravity to achieve balance.		
21) **<u>LOAD DISTRIBUTION – ADJUSTABLE SPREADER BEAM</u>** IF A LOAD IS ATTACHED TO AN ADJUSTABLE SPREADER BEAM HAVE THE WORKER TELL YOU HOW THE LOAD MUST BE DISTRIBUTED? The worker knows that if the spreader beam has adjustable or multiple suspension points that the rated load of the spreader beam will change depending on which suspension points are used. *Manufacturers will give specific criteria and must be referenced.*		
22) **<u>LOAD SECURITY</u>** IF THE SPREADER BEAM IS BEING USED TO LIFT A LOAD HAVE THE WORKER TELL YOU WHAT COULD AFFECT LOAD SECURITY. The worker knows that load size, balance, surface cleanliness, flatness, bending and thickness can affect the spreader beams load securement capabilities, and that multiple plates must not be lifted simultaneously. *Manufacturer may give specific criteria and must be referenced.*		
23) **<u>SIDE LOADING</u>** IF THE SPREADER BEAM IS BEING USED TO SIDE PULL OR SLIDE A LOAD HAVE THE WORKER TELL YOU HOW THIS AFFECTS THE SPREADER BEAM. The worker knows that not all spreader beams can be side loaded, and those that can have a rated load reduction when side loading. *Manufacturers may give specific criteria and must be referenced.*		
24) **<u>STORAGE</u>** HAVE THE WORKER TELL YOU WHERE THE SPREADER BEAM IS KEPT WHEN NOT IN USE. The worker must land any attached load and store the spreader beam before leaving the device. Storage is important to stop or reduce possible damage to the spreader beam whether it be mechanical, corrosive or temperature related. *Manufacturer may give specific criteria and must be referenced.*		

COMMENTS:

SIGNATURE OF WORKER BEING EVALUATED:

X_____

SIGNATURE OF EVALUATOR:

X_____