Lifting and Rigging Meeting Kit



Lifting and rigging work tasks are considered a high hazard task by many companies. There are a lot of associated hazards that accompany lifting any loads with cranes or equipment.

THE PURPOSE OF CRANE LIFTING AND RIGGING

The primary function of lifting and rigging is to transport essential equipment and materials into locations where they are easily accessible for workers. This process helps eliminate the risks of having to manually transport equipment and materials up scaffolding, which can be difficult and dangerous.

LIFTING AND RIGGING HAZARDS

The first type of incident that often comes to mind regarding lifting and rigging is breakage of a sling, wire rope, or chain resulting in a dropped load. There are many types of less severe incidents that cause the majority of injuries or property damage. Some of the other injuries and incidents that occur are sprains, falls, crush injuries, electrocutions, and struck-by incidents just to name a few. Hazards such as swinging loads, manual handling of heavy rigging, holding on to tag lines, moving equipment, pinch points, working on elevated surfaces, trip hazards, slippery surfaces, etc. can all be present during lifting operations.

CRANE LIFTING & RIGGING SAFETY TIPS FOR WORKERS

It is imperative that regular maintenance is conducted to ensure all components, including the lifting mechanism, are in proper working order.

Once a crane is on the job site the next safety precaution is to verify it is set up correctly before lifting anything. Mobile crane trucks must be supported properly to prevent them from tipping over due to changes in the center of gravity as materials and equipment are lifted and moved.

The supports are often part of the crane truck and can be extended and lowered into place. Before deploying supports, called out-riggers, the crane should be parked on a level and solid surface. The out-riggers also must be on solid ground to prevent the crane from tipping over or sinking into the soft ground.

RIGGING METHOD

After verifying the crane is properly parked, supported, and configured, the next safety precaution is to determine the most appropriate **rigging method** to use.

Once the **rigging method** is determined, the next thing the operator will need to know is the weight of the materials or equipment to be lifted. Slings have maximum weight stress limits. Exceeding these could cause the slings to snap.

RIGGING PLAN EXECUTION

Once the plan has been established, it is important to:

- Verify all equipment, fixtures, and accessories before starting
- Verify that all equipment has been properly inspected and that such inspections are valid.
- Identify a load manager or a rigging leader. It can be your safety professional or ordinary lifts, assign a designated leader; for critical lifts, assign a person-in-charge (PIC)
- Conduct a pre-use inspection and verify that all components are in good condition.
- Conduct a dummy rigging process following the pre-established rigging plan.
- Be sure to identify and train all workers participating in the process.
- Clear or prepare the area where the load is being placed or moved
- Survey the lift site for hazardous or unsafe conditions
- Clear lift path of obstructions
- Identify the crane operator
- Follow procedures for attachment of the rigging gear to the load. Use proper rigging techniques.
- Stop the job when any potentially unsafe condition is recognized

SAFE LIFTING AND RIGGING PRACTICES FOR ALL WORKERS

- Anyone in a work area where a lift is being performed should be properly trained on the work scope, hazards.
- Have a written lift plan. A lift plan ensures the desired rigging, angles of equipment, lifting capacities, etc. are thought about prior to the start of the lift.
- Plan the travel area and potential lines of fire prior to the lift. This helps to avoid striking other objects or having to move objects or equipment after the load is already is in the air.
- Inspect all rigging prior to using it for a lift. Continuously check the integrity of the equipment throughout the day if there are multiple lifts.
- All rigging should be properly stored after lifting operations are complete.
- Keep away from the load. Always strive to use tag lines or push sticks to ensure space from the load.

SAFETY TAKEAWAYS FOR RIGGERS

- Qualified trained for all procedures.
- Familiar with rigging techniques and equipment.
- Able to anticipate issues before they happen: Able to stop a job immediately if unsafe conditions exist.

- Aware of the weight of the load and the capacities of the crane and any rigging gear.
- Riggers should keep their hands, fingers and feet clear of pinch points.
- Be aware of stacked material when lifting to avoid knocking it over with a swinging load.
- Use a designated spotter during lifting to ensure proper clearances are maintained.
- Warn nearby workers before raising, lowering or swinging a load.
- When setting a load down, check that the landing area is clear and set it down slowly.

FINAL WORD

Proper planning and forethought is important to eliminate hazards and avoid incidents. Be aware of the hazards that affect you and your coworkers on each unique lift that is completed.