# Crane Safety Quiz



### **QUESTION**

What are the common interests of owners of a project development, the workers performing the labour, and regulatory bodies'

#### **ANSWER**

Their common interests are:

- Complete the work or project on schedule.
- Do not incur extra costs or exceed the budget projections.
- Avoid serious injury or fatalities.

### WHY IS IT RIGHT'

### **HEAVY LIFTING**

Cranes do the heavy lifting in industrial and construction workspaces 'literally. They're some of the most essential equipment found in any production facility, job site or logistics hub.

Cranes are a constant presence in most industrial or construction contexts. This means the right safety measures must be in place. Without a focus on safe operation, any type of heavy equipment can become more of a liability than a benefit.

#### PREVENT CRANE ACCIDENTS

Crane accidents can be catastrophic, but they can also be prevented. From initial training to pre-operation inspections, employers are responsible for implementing preventive measures and arming employees with the knowledge and equipment they need to stay safe on the job. It is important to first understand the kind of crane that is being operated, this might have an effect on the hazards taken into account. The employer can then go on to **conduct training** sessions, purchase personal protective equipment (PPE), and post crane safety signs.

Scrupulous adherence to safety must be demanded at all times in crane operations. If safety protocol is not strictly followed, death in the workplace will occur. You cannot take anything for granted or in other words be sloppy or flippant in administering the appropriate safety protocols relating to crane operations.

### THE TRIFECTA

Successful crane operations are dependent on a true partnership of owners of the project, workers and regulatory bodies. Each of the above have common interests.

- Complete the project or work on schedule.
- Do not incur additional costs.
- Serious injury or death is avoided.

Safety must be considered at every step in the value chain and designing safety. One of the key steps is choosing contractors with proven safety records to be partners. Choosing the right partners is the first step in the value chain.

The contractors have extensive safety manuals that include for example 100% Fall Protection where all employees working above 6 feet required tie off, and if there is no place to tie off safety then the rules state that no one is allowed to work until lifelines have been extended.

To be able to improve safety, it is important to measure leading indicators in additional to traditional lagging indicators.

Constructions sites should be documenting leading indicators such as near-misses to learn what went wrong and safety perception surveys to determine how safer worker's feel on a project.

### **CRANE SAFETY TIPS**

### **PREVENTION**

There have been strides to improve crane operational safety in past decade. The improvement has been incremental but noticeable.

Yet even though they're a constant presence in the workplace and we may take them for granted, that doesn't mean we can ignore the dangers they pose. When operated with a focus on safety, cranes are vital pieces of equipment. When they're used carelessly, they can be a serious hazard to people and property. The majority of accidents in the workplace could have been prevented. With that in mind, here are the top five crane safety tips to help you avoid disastrous incidents in your workplace.

1. Ensure crane equipment is only operated by qualified workers with the proper certifications and hours training on the equipment.

Complex, heavy machinery requires specialized knowledge to operate safely. That's why an important element of crane lifting safety is confirming that employees who use it have the right expertise.

Operators not only must know the equipment inside and out, but they also need to be well-versed in all of the proper safety procedures. These include knowing the appropriate hand signals.

# 2. Inspect both the equipment and the load before operation of lifting equipment.

Operators must take a close look at their equipment before lifting. For example, visually checking cables and booms for any cracks or other signs of wear. If equipment appears to be damaged or worn, it must be taken out of service and repaired. Additionally, the loads should be inspected to guarantee they are properly secured. Confirming that the load does not exceed the limits of the equipment also is crucial for crane operation safety.

3. Ensure ground workers are clear of the crane operation area and are nowhere beneath the load while the equipment is being operated.

A safe worksite is everyone's responsibility. Workers on the ground should be reminded frequently to keep a safe perimeter around cranes at all times. This is one precaution that needs to be reinforced at daily safety briefings. Planning lifting operations well in advance also means the area will be clear of people at the designated time.

4. Ensure adequate time has been allocated for use of the crane to avoid rushing the task/project.

A common cause of accidents is carelessness. This frequently stems from workers who are trying to cut corners and rush through their tasks. It is critical to plan operations so operators will have enough time to thoroughly inspect equipment and follow proper safety procedures.

5. Review safety checklists or cards before operating the crane.

Because cranes can be so complicated, it's easy for certain procedures to be forgotten. That is why it is necessary to provide all employees with cards or checklists detailing

safety protocols. This is imperative not only for crane operators, but also for all other workers on the job site. Employees should be encouraged to review the safety cards before they begin every shift. These checklists should be posted in prominent locations around the job site, as well as provided to everyone there.

### WHY ANYTHING ELSE IS WRONG

### **SAFETY ISSUES**

Manufacturing and construction industries move large, heavy loads. Careful training and extensive workplace precautions and improving technologies have been developed for those operations. There are significant safety issues to be considered for both operators of cranes including workers in close proximity.

Construction sites are among the most dangerous sites in all industry. Records are replete with injuries and fatalities. OSHA says that approximately 75% of struck 'by fatalities involve heavy equipment such as cranes and trucks.

## **COMPETENT / QUALIFIED**

The massive cranes that transcend our skylines are imposing devices. Questions range... are the operators competent and qualified to operate'... how are operators trained'... who evaluates them' ... is there re-training and refresher courses'... How is the safety of operators and workers in proximity ensured and monitored'

### 4 OPTIONS

Issues of crane safety for operators and workers have dominated the construction safety dialogue. In 2010, OSHA formulated 4 options for employers to ensure their operators were qualified to operate cranes, the same can/is applicable in Canada.

- If the employers operated in a state or locality that had specific crane operator licensing laws, then they were required to follow those laws (assuming the laws met certain criteria).
- Operators could be certified by passing an examination administered by an accredited testing organization.
- Operators could be qualified through the employer's inhouse, but independently audited, testing program.
- Operators could be qualified by the United States military.