



A WORKER CRUSHED TO DEATH BY GANTRY CRANE

Common Cause of Accident

The recent incident involving a road repair worker who was crushed to death by a tire-type gantry crane at a Container Terminal highlights the potential dangers of working with heavy machinery and equipment in the construction industry. A common cause of accident involving heavy machinery and equipment is insufficient awareness of the hazards and risks involved. Workers may not be aware of the potential dangers or may not follow proper safety procedures when operating or working near heavy machinery and equipment.

Critical Control Measures

To prevent such incidents, it is essential to have proper safety measures in place. The following are critical control measures that should be implemented and followed:

- 1. Proper Training:** All workers who operate or work near heavy machinery and equipment should receive proper training on how to use them safely. For example, operators should know how to check for defects, how to operate the machinery, and how to respond to emergencies. Workers who work near heavy machinery and equipment should also be aware of the associated risks and strictly adhere to related safety measures.
- 2. Risk Assessment:** A thorough dynamic risk assessment should be conducted before the commencement of works involving heavy machinery and equipment. "Fatal zone" with physical barriers should be set up to ensure no one shall enter during the operation.
- 3. Communication:** Effective communication between workers is essential to ensure that everyone is aware of potential hazards and can take appropriate measures to avoid incidents. A banksman should be employed to ensure no unauthorised entrance, and give signals to plant operators during the operation.
- 4. Set up a permit to Work System:** Set up the said system as necessary to ensure no heavy machineries or plants shall be operating near the work team, and make good use of innovation technologies such as AI camera or sensor to prevent similar incidents.





FATAL ZONE MANAGEMENT IN HONG KONG CONSTRUCTION INDUSTRY

What if we have implemented the fatal zone management?

In this reference material, the procedures of managing the fatal zone are given, followed by examples of good practices of barricading the fatal zone, and the technologies applicable to the fatal zone management.



Reference Material on Fatal Zone Management