



Work Safety Alert Trapped between a Crane Boom under Repair and a Foundation Plant

1. Date of Accident: January 2022

2. Place of Accident : A foundation site

3. Summary:

A rigger while assisting in the repair of the boom of a crawler-mounted crane that was lowered to a nearly horizontal position, was trapped to death between the boom which suddenly moved and a bored pile casing in the vicinity.

4. Work Safety Alert for Owners/ Contractors/ Employers:

To ensure the safety and health of workers/ employees engaged in inspection, maintenance or repair work of a crane, the owner of the crane/ contractor/ employer should provide and maintain a safe system of work which should include, but not limited to, the following:

- appointing a competent person to conduct task-specific risk assessments to identify all potential hazards associated with the work involved, taking into account the nature of work to be carried out and the working environment, particularly for the work near the lowered boom of the crane if necessary;
- formulating safe work methods and procedures for the work with due regard to the results of risk assessments, the manufacturer's specifications/ instructions, and following the requirements of safety legislation and related safety guidelines to minimise the risks exposed to the workers/ employees;
- where the inspection, maintenance or repair work is required to be done with the crane boom lowered, among others,
 - > ensuring that sufficient clearance is allowed between the crane





boom and other plant/ structure in the vicinity if the boom is to be lowered to its horizontal position, or otherwise lowering the boom completely to the ground to avoid its undue movement;

- ensuring that suitable support equipment of sufficient capacity is used to withstand the lowered crane boom to prevent accidental slip or displacement leading to any movement of the boom while the work is being performed;
- ➤ ensuring that the design, construction and installation of the support equipment is in line with the relevant international standards and in conformity with the manufacturer's specifications/instructions;
- ➤ demarcating and properly barricading an operating zone for the work near the lowered boom of the crane and exercising strict access control with suitable warning notices displayed at prominent positions to prohibit unauthorised entry into the zone;
- ensuring that every lever, handle or similar device for controlling the movement of the crane boom is suitably constructed and positioned to avoid accidental actuation and clearly marked to indicate its purpose and mode of operation, and prohibiting unauthorised access to these control devices when work is being carried out near the lowered boom;
- ensuring the work are performed by trained and competent workmen, and under the direct supervision of an engineer/ a person who is competent by virtue of his knowledge and practical experience;
- ensuring that all workmen involved have access to the machine manufacturer's operation manual or relevant literature, possess adequate working knowledge of the crane operation, and are fully aware of the hazards involved in the process;
- ensuring effective communication among all workmen involved throughout the work;
- providing the workers/ employees involved with the necessary safety information, instruction and training to ensure that they are familiar with the safe work procedures and safety measures for the work; and





• establishing and implementing an effective monitoring and control system to ensure the above safety measures are strictly followed.

5. Reference:

- Safe Systems of Work¹
- Five Steps to Risk Assessment¹
- Five Steps to Information, Instruction and Training¹
- Code of Practice for Safe Use of Mobile Cranes¹

DISCLAIMER

This Work Safety Alert ("the Alert") is issued at the earliest possible opportunity after a serious accident with a view to drawing the attention of interested parties to the general safety precautionary measures necessary to protect people engaging in similar work activities. The material contained in the Alert constitutes general guidance only. It does not reduce, limit, or replace, any legal obligations upon any person to comply with any statutory duties under relevant legislation. Users such as Managers and Supervisors should make their own evaluation of the information contained in the Alert to determine if it can be applied to their own situations and practices. The Labour Department does NOT accept any responsibilities for any loss or damage resulting from the use of or failure to use of the information on the Alert.

Note: The material contained in the Alert is not exhaustive, and will be supplemented/ adjusted where necessary if more relevant information comes to light.

_

¹ Click to view document