



Work Safety Alert

Collapse of a Derrick Crane

1. **Date of Accident :** March 2018
2. **Place of Accident :** A commercial building
3. **Summary :**

In the course of lifting, a derrick crane erected on the roof of a commercial building collapsed as a supporting bracket for mounting the crane to the external wall of the building suddenly detached. As a result, the load fell, hit against the canopy at 1/F and landed onto the street.

4. **Work Safety Alert for the Owner/ Contractors/ Employers:**

To ensure the safe use of a derrick crane for lifting operation, the crane owner/ 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 lifting operation taking into consideration of the capacity of the crane, the weight of the loads, the security of the supporting structure and the working environment;
- formulating appropriate safe work methods and procedures for the lifting operation with due regard to the results of risk assessments, including the selection of suitable crane/ equipment, siting and erection of the crane, the slinging/ rigging method, as well as the competency of the personnel involved;
- appointing a Registered Professional Engineer to design and certify the conditions of the crane and the supporting structure before the crane is erected;



- ensuring that pre-delivery checking of critical parts of the crane has been carried out and certified by a Registered Professional Engineer prior to the erection of the crane;
- ensuring that the crane is erected in strict conformity with the design drawings, the manufacturer's specifications and method statements, in particular its main components and critical parts such as the anchors for mounting the appliance;
- ensuring that the crane and every chain, rope or other lifting gear to be used for lifting has been certified in safe working order through tests and thorough examinations by a competent examiner and regular inspections by a competent person prior to operation;
- ensuring the provision of a log-book for the competent examiner/competent person/mechanic to enter the details of testing, examination, inspection, maintenance/repair works which have been carried out for the crane;
- ensuring that the crane is fitted with an effective automatic safe load indicator that functions properly to avoid overloading of the crane;
- taking care of the safety of all workers involved and other persons who may be affected by the lifting operation, including the proper fencing off of all lifting zones with suitable warning notices displayed as far as reasonably practicable;
- where it is not reasonably practicable to fence off the lifting zones, taking effective measures, such as appointment of sufficient watch-out personnel, to ensure that no unauthorised entry into the zones;
- appointing a competent lifting supervisor for overseeing the lifting operations;
- ensuring that the crane is not used when the load is in excess of the crane's safe working load;
- ensuring that the crane is only operated by a person who holds a valid certificate relevant to the type of the crane;



- providing crane operators and workers/ employees involved with adequate information, instruction and training in respect of the safe system of work for lifting operations; and
- establishing and implementing an effective monitoring and control system to ensure strict compliance with all the above safety measures.

5. Reference :

- [Safe Systems of Work](#)¹
- [Five Steps to Risk Assessment](#)¹
- [Five Steps to Information, Instruction and Training](#)¹
- [Code of Practice for Safe Use of Tower Cranes](#)¹
- [Guidance Notes on Inspection, Thorough Examination and Testing of Lifting Appliances and Lifting Gear](#)¹

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.

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