



## Work Safety Alert

### Collapse of a Tower Crane

1. **Date of Accident :** June 2017
2. **Place of Accident :** A building construction site
3. **Summary :**

The luffing jib of a tower crane collapsed during a lifting operation at a construction site.

#### 4. **Work Safety Alert for Proprietors/ Contractors:**

To ensure the safe use of tower crane for lifting operation, the proprietor/ contractor 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 account the size and weight of the loads, the configuration and capacity of the tower crane 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 implementation of a lifting plan covering the selection of suitable crane/ equipment as well as the competency of the personnel involved;
- appointing a competent supervisor for overseeing the lifting operations;
- ensuring that the tower crane 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;



- inspecting all lifting parts of the tower crane to ensure that they are free from any abnormal wear and tear, visual cracks, elongation or slackening, etc.;
- developing and maintaining an effective maintenance programme to ensure the mechanical integrity of all parts of the crane, in particular the critical components thereof and ensuring that any repairs or replacement components are in accordance with the manufacturer's recommendations or specifications;
- further to the weekly full inspection of the tower crane by a competent person, ensuring that every tower crane erected is inspected and maintained at least once a month by inspection and maintenance technician(s) holding the “Training Certificate of Routine Inspection and Maintenance of Tower Cranes” issued by the Construction Industry Council Training Academy;
- before a tower crane is taken into use after exposure to weather conditions likely to have affected the stability of the tower crane, ensuring that the crane's anchorage or ballast is tested by a competent examiner and has been certified to be in safe working order;
- 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 tower crane is fitted with an effective automatic safe load indicator that functions properly to avoid overloading of the crane;
- ensuring that the tower crane is not used in excess of its safe working load;
- ensuring that the tower 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](#)<sup>1</sup>
- [Five Steps to Risk Assessment](#)<sup>1</sup>
- [Five Steps to Information, Instruction and Training](#)<sup>1</sup>
- [Code of Practice for Safe Use of Tower Cranes](#)<sup>1</sup>
- [Guidance Notes on Inspection, Thorough Examination and Testing of Lifting Appliances and Lifting Gear](#)<sup>1</sup>

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### 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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<sup>1</sup> Click to view document