



## SMOKE POURING FROM A TOWER CRANE AND A SUDDEN FALL OF A PRECAST CONCRETE UNIT DURING LIFTING OPERATION

Two tower crane incidents were occurred recently. Smoke was pouring from the bottom of the cabin of a tower crane in a construction site at Chai Wan, in addition, a precast concrete unit suddenly fell to the ground during lifting by a tower crane in a construction site at Sheung Shui. The Construction Industry Council (CIC) would like to draw your attention to this safety message. It would be appreciated if you could distribute the message below to your fellow members, relevant personnel or other industry stakeholders where appropriate. Thank you very much.

### Common Accidents

1. Failure to follow the procedures and recommendations specified in the manufacturer's manual to carry out the erection, telescoping and climbing and dismantling works.
2. Failure to conduct regular inspections to the tower cranes (including critical parts) or insufficient checking time provided.
3. Failure to follow the manufacturer's instructions to carry out the required maintenance and repair works for the tower cranes.
4. Failure to ensure the lifting operation is carried out in accordance with the maximum safe working load (SWL).
5. The parts of tower crane are not complying with the manufacturer's specification.



### Critical Control Measures

1. Follow the CIC's "Guidelines on Safety of Tower Cranes" and operation manual during erection, telescoping and climbing and dismantling.
2. Ensure all parts of tower crane are complying with the manufacturer's specification.
3. Ensure the lifting operation is carried out in accordance with the maximum safe working load (SWL).
4. Ensure the tower crane is regularly tested, thoroughly examined and routinely inspected by a competent examiner and a competent person respectively.
5. Develop an inspection and maintenance schedule for the tower crane (including critical parts) and arrange maintenance technicians to carry out preventive maintenance works at least once a month.
6. Should the person carrying out an inspection or the operator find any defects (such as broken wires, twisted wires, limit switch out of order etc.) or abnormality in the tower crane, reported immediately to the person responsible for the safe use of the tower crane and stop the operation of tower crane.
7. Establish and implement an effective monitoring and management system to ensure the safety measures are strictly followed.



Follow the CIC's "Guidelines on Safety of Tower Cranes" and operation manual during erection, telescoping and climbing and dismantling

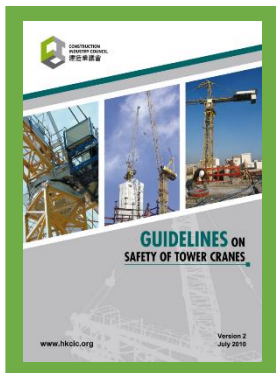


## SAFETY ROLES AND RESPONSIBILITIES OF KEY STAKEHOLDERS IN THE HONG KONG CONSTRUCTION INDUSTRY

What if all stakeholders can act together and take one step further to fulfill their roles and responsibilities, can similar accident be avoided?

- In the design stage, designers and engineers should consider the risks of working environment, space availability and suitability; and also consider and adopt the proper methods and selection of appropriate lifting appliances prior to the commencement of the tower crane erection, telescoping and climbing and dismantling.
- During the construction stage, the construction team should properly plan, manage and supervise the lifting and preventive maintenance works of the tower cranes, and ensure that the tower cranes are properly maintained in accordance with the manufacturer's instructions by persons who are suitably trained and competent for such work.
- The work team must ensure that the tower cranes have been inspected by a competent person prior to the commencement of the work to ensure that they are in good condition.
- Workers should comply with the developed safe working procedures. If any malfunctioning or suspected defect of the tower crane, report it to their supervisors and take action against it.

### Reference information for sharing



Guidelines on Safety of Tower Cranes



Reference Material on Safety Roles and Responsibilities of Key Stakeholders in the Hong Kong Construction Industry (Practical Reference Guidance On Lifting Operation)



Lifting Safety Handbook



Poster - Lifting Safety



### Disclaimer

This message is not intended to constitute any professional advice on these or any other subjects. The CIC (including its members and employees) will not accept responsibility for any consequences resulting from the use of or failure to use this message. For enquiries, please contact 2100 9000.