

Safety & Health Circular No. 10/2009

Alert on Safe Handling of Tower-Crane Lifting Operations

Date: 9 July 2009

Our Ref. : HD(C)TS 4/49/26

Tower cranes are very widely used for lifting operations on site and statistics show that accidents arising from lifting operations can result in serious injuries and physical damage to property if the process is not properly managed. A series of accidents/incidents involving lifting operations by tower cranes on Housing Authority construction sites has raised concern on this subject. Your role in ensuring construction workplace safety is critical and operations on site must be properly supervised and carefully managed at all levels to prevent accidents.

Specific 'regulatory' and 'code of practice' requirements are stipulated in respect of tower-crane lifting operations together with related duties and responsibilities of the owners, contractors, operators, competent persons and relevant personnel concerned including, but not limited to, the following:

1. Observing relevant regulations, codes of practice and guidelines including: *Factories and Industrial Undertakings (Lifting Appliance and Lifting Gear) Regulations, Codes of Practice for Safe Use of Tower Cranes* and *Guidelines on Safety of Tower Cranes* published by the Construction Industry Council.
2. Conducting risk assessment and guarding against common accidents during operation such as collapse of cranes, falling objects, object strikes on persons, collision with obstacles, breaking of lifting gears and catching on obstructions.
3. Developing and enforcing safe working procedures.
4. Ensuring crane operators operate the crane in a smooth, controlled and safe manner, with particular attention to the following:
 - Maintaining communication with the designated signaler and being alert of stop signals from whatsoever source.
 - Keeping hoist lines vertical at all times.

- Reducing hoisting, booming, swinging and travel speeds when working near any place/power lines where there is a risk of striking persons, collision with obstacles and/or catching on obstructions.
5. Ensuring the slinger/signaler carefully inspect the tower crane and coordinate with its operator—ensuring that:
 - the load is securely slung before lifting.
 - the crane hook is centrally placed over the load to prevent it from swinging when the load is raised.
 - the load is safely secured and balanced with a slight pause after initial lifting.
 6. Ensuring that the lifting appliances and lifting gears used are fit for the purpose and in good working condition. Conducting proper maintenance, inspection and testing of such lifting equipment.
 7. Providing site staff with sufficient information, training and supervision to ensure the safety and health of all persons employed.
 8. Engaging competent and adequately-trained personnel for the works. Personnel related to lifting operations should include: a competent mechanical engineer, a supervising engineer, a competent examiner, a competent person, a crane operator, a slinger, a signaler and trained workers among others.

Surveillance checks on tower crane lifting operations are now mandatory under safety audits of the Housing Authority Safety Auditing System (HASAS) Version 1.4.

If you have any further queries, please call:

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