



Systemic Safety Alert **Handling of Heavy Objects in Workplaces**

Major systemic safety problems

Handling of heavy objects are a common work process in various workplaces. The work carries a high level of risk that may cause serious injury or even fatality to employees. Employees handling/ working in the vicinity of the heavy objects are at risk of being crushed/ trapped by falling/ toppling of the objects unless the work is carried out in a safe manner. The following are major systemic safety problems attributed to the occurrence of the relevant accidents:

- failure to conduct task-specific risk assessments;
- failure to formulate or implement appropriate risk control measures;
- slack in control and monitoring to ensure that risk control measures stay effective; and
- failure to provide adequate safety information, instruction, training and supervision to employees concerned.

Accident prevention measures

Registered Safety Officers (RSOs) should advise their employers/ clients to:

- (i) appoint a competent person to conduct task-specific risk assessments to identify all potential hazards associated with the work, after taking into account the size, weight, shape and stability of heavy objects, the working environment, the nature of work, the workforce required and the necessary equipment for such handling work;
- (ii) formulate suitable precautionary measures for the work with due regard to the results of risk assessments by:
 - properly segregating and clearly demarcating storage zones which should be kept away from the main pedestrians of workplaces. Traffic of heavy vehicles should also be considered as they may cause vibration, resulting in instability of the objects;



- providing and using suitable mechanical aids where necessary, such as forklift trucks or trolley of sufficient capacity and personal protective equipment to ensure safe handling of the objects;
 - arranging sufficient number of employees to handle heavy objects after assessments and under the supervision of a competent person if it is not practicable to use mechanical aids for the work;
 - exercising due care on the movement speed and the centre of gravity of heavy objects in the course of handling to prevent them from overturning or displacing;
 - keeping sufficient clearance to prevent disturbing adjacent objects as well as keeping routes clear of people and other traffic during the handling of heavy objects;
 - properly storing and stacking heavy objects on a flat, level and rigid surface;
 - providing and using suitable storage racks/ support systems to prevent heavy objects, in particular those unbalanced ones, from overturning;
 - storing and stacking heavy objects in accordance with their size, weight, pattern, frequency of movements, etc. so as to prevent the objects from fall, movement or displacement. Narrow-base freestanding objects, e.g. strapped bundles, should be secured from slipping or toppling; and
 - storing objects of different types and sizes separately so far as practicable to simplify sorting process.
- (iii) provide all employees concerned with the necessary safety information, instruction and training, and ensure that they are familiar with the safe work procedures and safety measures;
- (iv) establish and implement an effective monitoring and control system to ensure all safety measures are strictly followed; and
- (v) review the system of work periodically to ensure its workability and effectiveness whenever there is a significant change in team composition, use of equipment, objects to be handled, work method, working environment, etc.

Registered Safety Auditors (RSAs) should take into account these systemic safety problems and accident prevention measures in executing safety audit functions.



DISCLAIMER

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