

CIC Safety Message No. 19/25



SAFETY SUGGESTIONS FOR TRANSPORTING CRANES AND ITS COMPONENTS

Unsafe transportation of the cranes and its components on construction sites or roads, whether by reason of being improperly secured or transported by unsuitable vehicle constitutes a potential danger to all workers nearby and the road users. Loose material falling from a vehicle can cause serious or fatal injury to workers or the road users. The Construction Industry Council (CIC) would like to deliver this safety message for your attention. 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. Transport the cranes and its components by unsuitable vehicles.
- 2. Failure to check and ensure that the cranes and their components are properly secured and stabilised before transportation.
- 3. Imbalance load distribution of crane components on the vehicle.
- 4. If the vehicle platform is wet or greasy, the crane components slide on the platform when the vehicle accelerate or decelerate.
- 5. Failure to conduct dynamic risk assessments and take appropriate safety measures in response to changes in the environment and procedures.

Critical Control Measures

- 1. The manufacturer's instructions or recommendations for crane transportation should be followed regarding the restriction in jib length, jib suspension and counterweights.
- 2. Employ transportation team with adequate competence and experience to transport the cranes and its components.
- 3. Appoint a competent supervisor to oversee the loading and unloading operation, including assessing the stability of the cranes and its components before transportation.
- 4. The crane should be securely lashed to the vehicle and fully chocked, to prevent the crane from tipping or sliding off the bed.
- 5. Hook block and any other loose components should be securely lashed to prevent any movement during transportation.
- 6. If the vehicle platform is wet or greasy, the friction between the components and the platform will be considerably reduced and therefore the vehicle platform should be kept clean and free from mud and oil.
- 7. Strictly follow the requirements stated in the "Code of Practice for the Loading of Vehicles" published by the Transport Department during transport of cranes and its components on the road, including:
 - The loads (e.g. the crane and its components) with the vehicle should not higher than the specified overall height of the vehicle (e.g. light goods vehicle: 3.5m, medium/ heavy goods vehicle: 4.6m).
 - A load may only extend up to 1.4 metres over the rear of the vehicle. Further, in daylight, a red flag of an area not less than 1 square metre must be attached to the rear extremity of the extended load, and during the hours of darkness or in poor visibility conditions, a red light showing to the rear must be displayed at the rear extremity of this extended load.
 - Loads carried on the vehicle platform should be secured by lashings, preferably of the chain or suitable
 webbing type, which should in turn be attached to the vehicle by load anchorage points provided for
 this purpose.



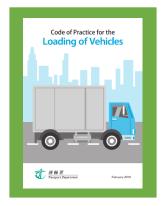
SAFETY ROLES AND RESPONSIBILITIES OF KEY STAKEHOLDERS IN THE HONG KONG CONSTRUCTION INDUSTRY



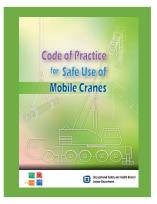
What if all stakeholders can act together and take one step further to fulfill their roles and responsibilities, can similar accidents be avoided?

- In the design stage, designers and engineers should consider the size, weight and stability of the cranes and its components being transported; and select suitable vehicles and adopt suitable methods for securing the loads.
- During the construction stage, construction team should establish and implement an effective management system; and strengthen the coordination with transportation team to ensure that the loading and unloading operation (e.g. the crane and its components) on site is carried out under effective supervision.
- Before a vehicle is loaded, it should be inspected by the driver to ensure that the legal requirements
 are complied with, and the loading platform, bodywork, anchorage points, twist locks, and other
 relevant parts are in a satisfactory condition.
- If any potential risks of falling material from a vehicle is identified, report it to their supervisors immediately.

Reference Information for Sharing



Code of Practice for the Loading of Vehicles (Source: Transport Department)



Code of Practice for Safe Use of Mobile Cranes (Source: Labour Department)



Code of Practice for Safe Use of Tower Cranes (Source: Labour Department)



Guidelines on Safety of Site Vehicles and Mobile Plant



