

21
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WSH ALERT

SERIOUS ACCIDENT/ INCIDENT

Mobile Crane Overturned

A crane operator suffered minor injuries when the mobile crane he was slewing started to tip and then overturned. He was operating the mobile crane to lift a rebar mesh.

Investigations revealed that the crane exceeded its Safe Working Load (SWL), and its safety devices were likely to be faulty and hence did not activate when the crane was loaded beyond its SWL.



Overturned mobile crane

Overview of accident scene.

Recommendations

- Unsafe lifting operations can result in catastrophic outcomes involving multiple fatalities. To prevent similar incidents, consider the following measures:
- Lifting Plan:** Always establish and implement a lifting plan before starting lifting operations. A lifting plan should include the SWL, load characteristics, lifting equipment details, rigging points, lifting method and information on the lifting team (non-exhaustive).
 - Ground condition:** Ensure that the ground where the mobile crane is to be set up is level and can support the weight of the crane and its load. Steel plates of adequate strength and size may be used to provide firm ground support to prevent toppling. Fully extend all crane outriggers.
 - Pre-use check:** Conduct a pre-use check of all lifting equipment and lifting gears to identify any faults in the equipment. Such checks should be carried out daily at the start of each shift. Do not use any equipment found to be faulty.
 - Safe Working Load:** Ensure that crane operators read and understand the load capacity chart as it is important to know the crane's SWL relative to the load radius in order to prevent crane overloading.
 - Crane safety devices:** Test all crane safety devices (e.g. limit switches, sensors) installed to verify that they are in good working condition. The use of a load radius indicator with overload cutoff and warning alarm is recommended.

For more information, please refer to WSH (Operation of Cranes) Regulations 2011, WSH Council's [Code of Practice on Safe Lifting Operations in the Workplaces](#), and SS 536: 2008 Code of Practice for the Safe Use of Mobile Cranes.

* Please note that the recommendations provided here are not exhaustive and they are meant to enhance workplace safety and health so that a recurrence may be prevented. The information and recommendations provided are not to be construed as implying liability on any party nor should it be taken to encapsulate all the responsibilities and obligations under the law.

Workplace injuries tend to rise around this time of the year. Remain vigilant against risks and prevent accidents.

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