



CRANE PREPARATION & DEMobilISATION SAFETY ALERT

Fatal accident – worker caught between outrigger and chassis of crane

What happened?

On 28th June 2008 a group of six workers was preparing a truck-mounted crane for relocation in a lay-down area on a construction site. During outrigger retraction, one of the workers reached across an extended outrigger beam – probably in order to retrieve a water bottle stored in a recessed area of the chassis. As the outrigger was retracted into the sleeve, the worker was trapped between the chassis and the outrigger stabilizer cylinder. The worker was severely injured and transported by the workers to a nearby hospital. Unfortunately on arrival the worker was pronounced dead. **This alert is targeted at line managers and supervisors who are accountable for this type of activity.**

Key findings of the incident

The incident investigation revealed the following key factors that contributed to the causation of the incident:

- Human errors. The deceased placed himself between the crane chassis and the outrigger stabilized cylinder. The crane operator had no visual contact with the deceased as he operated the controls for the outrigger on the opposite side of the crane, instead of using the controls on the other side of the crane. The deceased was not directly involved in the demobilisation activity and the work area was not properly barricade off to restrict access to the crane area.
- Inadequate risk awareness. There was no evidence that a toolbox talk was conducted and that the specific risks associated with this activity were acknowledged and properly explained to the workers involved. The work group was assembled ad-hoc for this activity comprising workers from different background and nationalities; hence language barriers may have hampered communication.
- Inadequate supervision. The supervisor left the work area before the task was completed as he considered this activity not being part of his work scope.
- Inadequate procedures and work instructions. There was no adequate method statement and Job Safety Analysis (JSA) for this activity available as crane set up and breakdown activities were not properly addressed in the documentation provided for this job (eg lift plan, permit to work, JSA, etc)

Lessons learned

Several fatalities have occurred in the Group in the past involving crane operation. In general risk management of those activities is focused on the actual hoisting and lifting operations at the site of work. This incident demonstrated that crane preparation or demobilisation activities involve significant safety risks as well and hence require rigorous HSE management controls.

What to do

Assure yourself that similar activities are adequately managed in your area of operational control and that key controls are effectively implemented when performing this activities:

- Do you used similar type of equipment in your area of operation?
- Are preparation and demobilisation activities treated as being part of your lifting & hosting plan?
- Have you developed clear procedures and work instructions for these activities?
- Do you conduct a toolbox talk prior to commencing the work? How do you deal with language problems?
- Is the work area barricaded off the prevent access to the crane area for those not involved in the crane operation?
- Do you supervise these activities permanently?
- How well are your workers training in executing the emergency response plan?