



05/2017

Date:

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OBJECT: CRANE FALLING FROM TRAILER DURING UNLOADING OPERATION

DESCRIPTION

A mobile crane model TEREX A450 arrived at project compound transported by the delivery company. After the completion of all paperwork reviewed (Sign in – Pre task briefing – RA), a team composed by a mechanic, a banksman and an assistant to derigging, started the operation to offload the crane from the truck. The mechanic started the crane and waited for the air pressure build up. Then he released the parking brake and began to reverse. As the crane began to move, the operator engaged the brakes. The trailer remained stable at this time; however, the braking operation caused the crane to rock/bounce on its own suspension, resulting in the crane alignment changing. The operator attempted to realign the cranes wheels by turning them. He began to reverse again and it was at this point the front right hand side wheel went over the edge of the trailer and the crane began to slide to the right. The rear right hand side wheel then comes off the edge and the crane dropped off the trailer. Whilst the crane was sliding, the operator made the decision to remove his seatbelt and vacate the cab and he fell between the cab and the pipes located nearby, hitting his head on either the jib or the crane wire.



View from the rear of the trailer



Final position of the crane with the boom on the pipe



View from the front of the trailer

CONSEQUENCES

- ✓ Worker sustained cut to left eyebrow and some bumps on his leg and hip;
- ✓ Crane damages to right hand side and counterweight area and broken cabin glass;
- ✓ Incident reported to the statutory body;
- ✓ Damage to one pipe.

CAUSES

- ✓ Operating equipment without authority: IP has no particular training for operating a crane;
- ✓ Inadequate risk perception/risk underestimated: after the crane's 1st movement and braking, where the crane shifted, the operator and the banksman should have stopped;
- ✓ Risk assessment not effective/adequate: no evidence to suggest that the risk assessment was carried out at the work location; furthermore, the method statement may not have covered the unloading of a crane;
- ✓ Inadequate personal skills (Stress management, communication skills, poor motivation, inadequate leadership/coordinator);
- ✓ Miscommunication: language barrier between workers.

CORRECTIVE ACTIONS

Measures adopted in order to prevent the recurrence of a similar incident:

Operational instructions:

- ✓ perform TBT training to all work force in relation to not commencing any activity without prior approval by a supervisor;
- ✓ perform TBT training on the role and responsibility of all persons to intervene in unsafe or non-compliant situations, whilst also emphasis that violations of site rules will not be tolerated;
- ✓ Promote the Safety Conversation & Agreements (handbook to notify good behaviour – unsafe acts/conditions) system by using coaching techniques;
- ✓ Hold session with supervisors to discuss the importance of carrying out the prestart briefings and communicating the plan of work, the hazards/risks and required control measures to all workers;

Documentation:

- ✓ Review and update the method statement for this activity including also the use of low loaders, access to plant/machinery, method of communication, use of competent operatives for unloading/loading, etc.