Hammer Drop Incident

HSEQ-Department

Overview

- Incident: Dropped Sledge Hammer
- Date: 10.07.2011
- Actual outcome: Dropped Sledgehammer
- Potential outcome: Severe injury

Agenda

- Investigation Team Members
- Incident Report
- Background Info
- Sequence of Events
- Investigation Findings
- Corrective Actions

Investigation Team Members

- Head of Sevice Department
- Head of HSEQ Department
- Safety Engineer
- Head of Design
- Service BAT

Incident Report

During disassembly of the mount, the mast bolts where hydraulically loosened from their anchorage. A bolt had been jammed. The lifting force of the cylinder was not sufficient. As an immediate measure they decided that on the bottom of the Rigfloor an additional transportable lifting cylinder should be set for support. As an abutment a unit was used to mast underneath.

To set an additional hydraulic cylinder, 2 employees used a working platform, in order to reach the workstation in the approximate height of 8 m. (please refer to pictures) When applying the transportable lifting cylinder they noticed, that the lifting height is not adequate. In order to bypass the missing height a 5 kg hammer was used as a base. When the mast bolt detached from the anchorage the hammer fell on the floor (please refer to Picture)

The way of proceeding was reviewed before in a toolboxmeeting. As a further safety measure the danger area was closed off. Additionally a safety post was set up, to monitor the prohibition of the right to enter and for implementation. The toolboxmeeting is documented.

Incident Report

Background Info

- 3 of 4 bolts could be loosened without any problems
- The 4th bolt could not be loosened as planned
- Toolboxmeeting was performed
- Danger area was closed off
- Safety post was set up

Sequence of Events

- Deviation of the usual working method
- A transportable hydraulic cylinder was used
- Hammer was used as an abutment
- Hammer slides off
- Hammer falls down in blocked area

Investigation Findings

- Installed hydraulic aggregate could not loosen the 4th bolt;
  bolt was jammed
- Deviation of planned working method was necessary
- Toolboxmeeting to the changed situation was implemented

Investigation Findings

- The transportable hydraulic cylinder was not used according to the rules
- Abutment was not secured according to the rules (5 kg hammer)
- A sledgehammer (5 kg) was used as an abutment
- Hammer falls in blocked area, after bolt loosened itself suddenly out of the anchorage

Corrective Actions

	Action Description		Date
1	Incident passed on to the Design Department. Constructive possibilities were surveyed.		Calender week 32
2	Immediate measures for maintenance have to be implemented (grease of the bolts)		15.07.2011
3	File steps of procedure during Rig Move		Calender week 35-36
3	Verification of existing JRA, if necessary creation of missing JRA		Calender week 36
4	Check level of training of employees and if necessary resolving of training backlog with training measures		Calender week 32
5	Assignment of a Safety engineer from the HSEQ-Management Department in order to supervise the safety at work		Calender week 31