



Safety Alert

From the International Association of Drilling Contractors

ALERT 09 – 18

NEAR MISS – LOOSE CRANE RING BOLTS

WHAT HAPPENED:

A crane boom slew was jamming while lifting medium loads. The boom, counterweight, winch, pedestal, lift cylinders and lower pedestal plate were removed for inspection. The rig crew discovered 30 loose bolts with another 30% of the bolts sheared off from contact with the inspection hole as well as a grooved path cut into the top plate. Bolt holes were stressed and cracked on the thin walled sides and bearings and rails were badly worn.



Cracked Wall in Ring:

Outcome/Potential Outcome:

Possible fatality and major equipment damage if there had been a total failure of the pedestal system.

WHAT CAUSED IT:

1. The bolts may not have been properly torqued as per the crane OEM manual.
2. The Preventative Maintenance recommended by the manufacturer was not followed.

CORRECTIVE ACTIONS: To address this incident, this company did the following:

The problem was identified and investigated before a more serious situation developed. Lessons were shared within the company to prevent a similar occurrence elsewhere. A heightened awareness developed regarding the importance of Preventative Maintenance with this piece of equipment.

The crane manufacturer recommended that the base be taken apart and inspected every 600 operating hours. On this unit, pedestal bearing base bolts should have lock-tite placed on the threads then the bolts torqued to 460 ft-pounds when being assembled.

Rig Maintenance personnel were instructed to follow the crane manufacturer's recommended preventative maintenance schedule.

The Corrective Actions stated in this alert are one company's attempts to address the incident, and do not necessarily reflect the position of IADC or the IADC HSE Committee.

This material is presented for information purposes only. Managers & Supervisors should evaluate this information to determine if it can be applied to their own situations and practices

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