



Significant Incident Report No. 227

Subject: Grid mesh falls from drill mast

Date: 06 October 2015

Summary of incident

A rotary blast-hole drill rig was trammed from the workshop to the drill site to start work. The driller stabilised the drill rig using the jacks and raised the mast into position. After raising the jacks, he trammed the rig forward about ten metres to drill the first hole in the blast pattern.

When the driller stopped moving the drill rig forward, he heard a loud bang. An object had landed on the drill deck next to the operator's cabin he was occupying. It was a 41 kg piece of grid mesh from the mast's walkway that had detached and fallen to the drill deck 18 metres below.

Direct causes

- The fastening mechanisms holding the grid mesh to the drill mast failed.

Contributory causes

- There were worn washers and non-locking type nuts fitted to the six bolts retaining the grid mesh to the walkway structure.
- Inspections were inadequate and did not identify structural defects in the drill rig.

Actions required

The following actions are recommended to help ensure the structural integrity of plant.

Employers

Implement safe systems of work such that:

- a competent person
 - identifies areas of plant requiring periodic inspection (e.g. areas prone to wear, corrosion or fatigue)
 - defines daily and scheduled inspections
 - carries out inspections at required intervals
 - reports defects for assessment
- when a defect is identified on plant, a competent person
 - assesses the defect and potential for workers to be exposed to hazards, and specifies the necessary repairs

- repairs the defect as specified by the competent person who assessed the defect
- inspects and tests the plant before it is returned to service to verify it is repaired in accordance with the specifications of the original equipment manufacturer (OEM) or the competent person who assessed the defect.

Managers and supervisors

- Obtain information from equipment suppliers or OEMs relating to any known design flaws or updated inspection requirements, and make this information available to the competent persons involved in inspecting, assessing and repairing plant.
- Arrange daily inspections that cover each area or item of plant as specified by a competent person following a risk assessment.
- Verify persons as competent to undertake the plant inspections, assessments and repairs required.
- Do not allow plant to be used until it is deemed fit for use by a competent person.

Workers

- Follow the approved safe system of work when performing a task, and do not operate or use defective plant.
- Do not operate or use plant before it is inspected and cleared for use.
- Report damaged plant (e.g. missing or worn parts) to the supervisor.

Further information

Visit www.dmp.wa.gov.au/ResourcesSafety for information on occupational safety and health in the resources sector.

This Significant Incident Report was approved for release by the State Mining Engineer on 06 October 2015