
Near Miss – Eye bolt failure – Incorrect rigging of a compressor.

When: 24th January 2017

Where: C&P Doncaster

No: 16/037

Potential Injury Description:

Lost time accident or damage to the customer equipment **if under different circumstances.**

Incident Details:

A McQuay HSA 204 compressor was lifted by a 2 ton pedestal crane from a workbench to a pallet at floor level. 2x M16 eye bolts were screwed into the compressor lifting points and a set of two legged chains attached to the eyebolts and crane. The compressor was lowered and when it was around 3-4 inches above the pallet, one of the eyebolts parted and the compressor dropped on the pallet.

Nobody was hurt/injured and there was no damage to the compressor.

McQuay HSA204 weight – 795 kg

Crane rating – 2 tons

2 legged chain rating – 2 tons

Eyebolt rating - 0.7 tons each

Causal Factors:

Causal factor 1.

The angle of the two chains on the lift of around 120 degrees was too much strain on the eye bolt. (The eye bolt may have been damaged from previous usage that was not visual to the eye when inspected before use and during 6 monthly inspection.)

Causal factor 2.

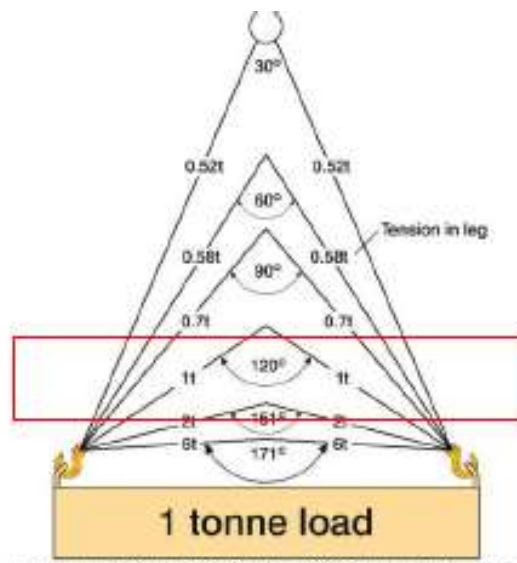
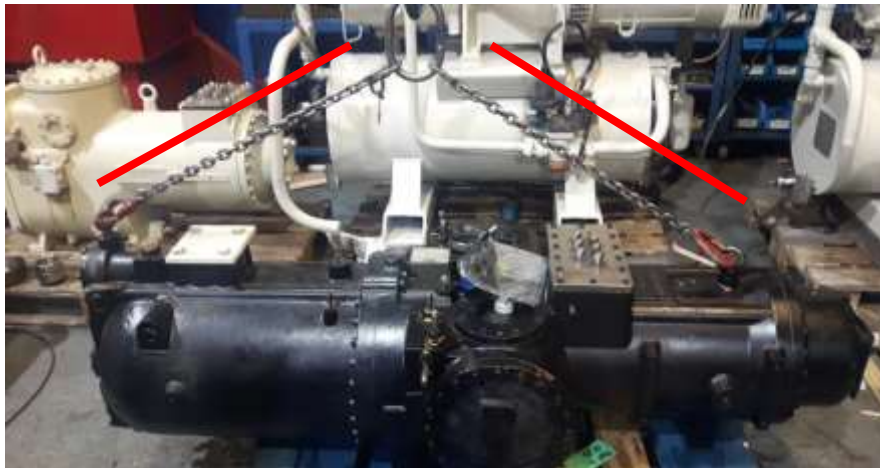
Person involved with the rigging and lifting had had no recent training on rigging & lifting.

Causal factor 3.

No lifting plans or risk assessments in place/used.

Causal factor 4.

Training not identified on a matrix to those involved with Rigging & lifting.



Root Causes:

1. Management system – No admin controls – No lifting plans or risk assessments.
2. Training - No training was identified on the training matrix for the position regarding Rigging & Slings. (Person carrying out task has had no recent training. Last training approx. 10 yrs. ago when interviewed.)
3. See root cause #1 above.
4. Training – Task not analysed – The need for training on a particular skill not identified. Rigging & lifting.

Corrective Actions:

- 1) Order lifting equipment required to reduce the lifting angle. (Longer legged chains with the ability to shorten or lengthen as required.) . Responsible Eimear Hanley.
- 2) Those involved with Rigging and lifting to be trained by an outside company. Responsible Eimear Hanley.
- 3) Generic lifting plans/risk assessments will be generated as required by the LOLAR 1998 & MHASAW 1999 regulations. Provide internal RA training. Responsible HSQE Dept.
- 4) C&P to generate a training matrix with assistance from HSQE & HR of training requirements of personnel. Responsible Eimear Hanley, HSQE & HR.
- 5) Send out an H&S bulletin to all managers/departments for distribution of the Near Miss. Responsible C Edwards. Completed 13/02/17
- 6) Carry out a Tool Box Talk / Safety Stand Down with those who use Rigging & Slings to move equipment. Completed 3/2/17. Responsible C Edwards.

Key Learnings:

- Reducing the angle of a lift reduces the safe working load of the sling or chain. Correct lifting ancillaries (slings, shackles, eye bolts) should be readily available and visually inspected for wear/damage before use. A plan should be in place and risk assessed. (Any damaged equipment should be scrapped)
- When using eye bolts, the angle of the lift should not be less than 45°.
- Managers/Supervisors. It is recommended to have a short discussion within your teams to remind all of the hazards and control measures in place, and as an opportunity to raise any concerns.

References:

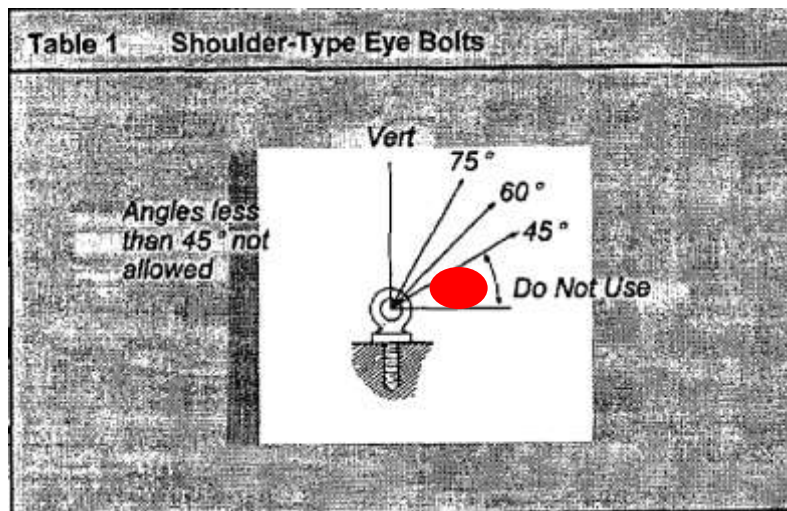
Lifting Operations and Lifting Equipment Regulations 1998 (LOLER)

The Management of Health and Safety at Work Regulations 1999 (Section 3) Risk Assessment.

J&E Hall

SAFE WORK INSTRUCTION

CRANE DRIVING AND SLINGING



This document is available on the J&E Hall web site/My J&E Hall/HSQE area/Health & Safety/Safety bulletin

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