UTILITY AIR HOIST INCIDENT

WHAT HAPPENED:

Crews were using an air hoist located on the cellar deck to align a joint of 20” casing that was to be made up after retrieving a guide string. Upon taking tension, the air hoist broke off the stand and fell on the deck. No injury or property damage occurred. Potential for injury was high if anyone had been standing in the area where the air hoist fell.

WHAT CAUSED IT:

A pedestal mount had been fabricated using a 6” hammer union in the middle of the pipe upright to allow the angle of the air hoist to be altered. The pipe was cracked at the weld between the 6” hammer union and the air hoist foundation pedestal. The investigation found:

- The hammer union was made of a different type metal than the foundation pedestal, and the two should not have been welded together.
- The pedestal had not been load tested before putting into service.
- The investigation also found that the pipe material was not rated to be sufficient for the load the air hoist was rated to.
- The air hoist was improperly rigged up on the cellar deck.
- Hammer unions are not designed for vertical or lateral loading as intended in the pedestal design.
- Improper materials were used for the construction of the pedestal.
- A snatch block should have been rigged up to make the lateral pull.
- There was no engineering review of the design and construction of the air hoist pedestal.

CORRECTIVE ACTIONS:

- Air winch pedestals should be engineered and designed to the working load of the air hoist system.
- Engineering and design should lay out welding procedures for hoisting equipment attachment and on site personnel should ensure that proper welding procedures are followed.
- Newly installed Air hoists should be load tested to the safe working load (SWL) as per the rig’s preventative maintenance system.
- Hoist foundations and pad-eyes should be inspected along with other Lifting Gear based as per the rigs preventative maintenance program.
- Visually inspect all air hoist mountings prior to use.
- See the IADC Accident Prevention Reference Guide Section 3.7 regarding Air Hoist.

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.

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