



Safety Alert

From the International Association of Drilling Contractors

ALERT 02 – 29

USE OF SLIP TYPE ELEVATORS RESULTS IN A FOOT INJURY

WHAT HAPPENED:

The rig was tripping in the hole with 3-1/2 inch PH-6 pipe using slip type elevators. While tripping in the hole, the slip type elevators were latched onto a stand of pipe. The slips bit prematurely, pulling the stand off the floor. Moments later the slips released their grip allowing the stand to slide downwards landing on an employee's foot.

WHAT CAUSED IT:

During the process of latching stands of pipe, they are naturally leaning toward the well bore and are not completely vertical. In the case of 3-1/2 inch, PH-6 pipe, the bow can be pronounced. The pipe, not being vertical, may cause the slip type elevators to tip away from level allowing segments of the slips to come in contact with the pipe prior to the elevators sliding up to the upset area. If this occurs, it is possible for the slips to take a partial "bite" resulting in a pull on the stand of pipe as the block is raised. When the stand moves toward the well bore and returns to a more vertical position, contact between the pipe and the slips may be lost allowing the stand to slide downwards through the slip type elevators until contacted by the upset area. So, premature "biting" of the slips can result from various combinations of the following;

- Distance of pipe stands from well bore creating "bow" in the pipe.
- Newness and sharpness of slip segments in the slip type elevators.
- Upward movement of the blocks at the time the stand is latched or too fast movement thereafter.
- Cleanliness and lubrications of elevator slip inserts

CORRECTIVE ACTIONS: To address this incident, this company issued the following instructions to rig personnel:

- As with any equipment, it is important to ensure that slip-type elevators are properly serviced and functioning correctly.
- All operating units are directed to review their JSA's involving tripping pipe in or out of the well bore. The following cautionary statement is to be added.

WARNING: Whenever operations call for the use of slip-type elevators, the Toolpusher must verify with Operator Personnel and company management that it is not possible to utilize any other type of elevators such as a bottleneck type elevators. If it is possible to use another type of elevator, then that equipment is to be used.

Whenever use of slip-type elevators is required, the blocks shall be completely stopped prior to latching the elevators on the pipe. The blocks must be raised in a slow, deliberate fashion to allow the elevators to slide up to the pipe upset area. Pipe subject to pickup by slip-type elevators must be stood back in the derrick no further than necessary, eliminating as much "bowing" as possible. Personnel responsible for "tailing" pipe must keep the pipe at arms length at all times and are not to let the pipe get next to their body in case of slippage. Consideration should be given to the use of a tail rope allowing employees to stand well away from the pipe at initial pick-up. Employees are to be instructed to never position themselves directly under stands or joints of the drilling string. **Extra caution needs to be exercised with slip type elevators.**

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.
