Fatalities in the Oil and Gas Industry

Crew stays clear of runaway spool

What happened:
A drill crew was in the process of slipping and cutting a 1-3/8 drill line. Two floormen were assigned to un-spool wire rope until there was approximately a 40-foot loop below the storage reel.

As the drill line reached the desired slack, the spool continued to rotate due to its momentum. An attempt was made to stop the rotation by using a wooden board as a brake lever.

When it became evident that it wasn’t possible to stop the spool from rotating, all personnel were instructed to vacate the area and stay clear.

The drill line eventually became entangled, which stopped the rotation of the spool. Fortunately, there were no injuries.

Investigation results:
It was determined the incident was caused by the following:

- Manually un-spooling the drill line from the spool prior to slipping the drill line.
- The drill line spool was not driven by a powered device.
- The drill line spool was not equipped with a mechanical braking device.
- A relatively full spool of drill line was in use and the momentum of the rotating spool was too great to be stopped manually.

What’s it to you:
To address the incident, the company developed a standard drill line spool drive and braking system.

All rigs should ensure appropriate safeguards are in place to prevent a similar incident. These safeguards include:

- Reviewing and revising the job safety analysis for the task of slipping and cutting drill line
- Ensuring the drill line spool is equipped with a mechanical braking device
- Confirming the mechanical braking device is maintained and working properly

Ignoring lockout procedure injures motorman

What happened:
Work requiring disconnection and removal of a mud mixing pump assembly commenced without a lockout/tagout procedure.

A motorman was asked to operate the chain fall assembly by pulling the control chain to raise the motor. While pulling on the chain, an on-off switch was activated for the electric pump. This energized the motor and caused it to go out of control. It swung upward and struck the motorman, who was seriously injured.

Investigation results:
It was determined the accident was caused by no pre-job planning, no lockout/tagout procedure, no job safety analysis and no permit to work.

What's it to you:
The company took the following corrective actions:

- Revised the job safety analysis to eliminate the hazards and include lockout procedures
- Provided refresher training for lockout/tagout, job safety analysis and permit to work
- Recommended a different type of electric switch that is guarded on the start button
- Installed safety signs on equipment that starts automatically
- Recommended a lifting frame to eliminate chain falls from piping