

Safety Alert

From the International Association of Drilling Contractors

ALERT 00-24

PROPER SAFETY CLAMP LOCATION REDUCES DAMAGE FROM HIGH PRESSURE HOSE FAILURES

WHAT HAPPENED:

There have been a number of high-pressure hose failures. Fortunately, on the two shown here, safety lines were properly attached to the hoses, keeping them from falling or striking employees. Without these safety clamps attached to the hose as per manufacturer's recommendations, there could have been serious consequences

WHAT CAUSED IT:

Both of these hoses failed shortly after the high-pressure mud system including the hoses was pressure-tested to rated working capacity. Failure to high-pressure hoses most often occurs at the transition point from the rigid steel coupling to the flexible hose.

CORRECTIVE ACTIONS:

- Pressure testing alone does not necessarily ensure that the high-pressure hose will not fail. External and internal visual inspection should also be part of the process.
- The date the hose was manufactured and when it was put into service should be documented so its service life can be tracked.
- The *IADC Drilling Manual* states that the placement of safety clamps should be as follows: Rotary hose 6"-18" inboard of the coupling; vibrator hose 6"-10" inboard of the coupling. Refer to the manual for additional information.
- Many manufacturers place bands on the hoses indicating the proper location of the safety clamps. Check with your hose manufacturer to ensure proper placement.
- Do not attach the safety line to the lifting eye that some manufacturers place on the steel coupler.
- Share the attached pictures of failed hoses with all personnel to show the importance of attaching the safety line six to ten inches inboard of the end of the coupling sleeve.

End of coupler sleeve where the transition from stiff pipe/hose to flexiblehose occurs. **High stress area on the hose**.





Location of safety clamp on the band approximately 6 to 10 inches inboard from the end of the coupler sleeve.

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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