

Safety Alert

From the International Association of Drilling Contractors

ALERT 99-10

MANUAL TONG SAFETY

The IADC Health, Safety and Environment Committee's Safety Engineering by Design Sub-committee has identified the following concerns and recommendations for manual tong usage.

Problems Relating To Rig Tong Slippage:

- 1. Worn Dies -Recommend daily inspections visually inspect for teeth sharpness, rollover on teeth, chipped teeth, uneven die wear.
- 2. Improperly Leveled Tongs --Recommend tongs to be hung level as per manufacturers' specifications.
- 3. New Tongs -- Recommend that all personnel be made aware of initial stiffness of unit due to new paint, grease and tightness of new unit. Pre-bite all units prior to pull with cathead make up line.
- 4. Latch Lug Jaws-Recommend the correct size be used for the tong. Training of rig personnel in recognition of tong components from the different types of tongs needs to be implemented.
- 5. Hard Banding on Drill Pipe -Recognition of hard banding on pipe by floor personnel is necessary. Floormen need to ensure that tongs do not contact hard banding area. When doing a re-cut on drill pipe, ensure (RP7G) adequate space is available to allow full engagement of tong dies. Recommend the use of extended tool joints. The use of blank dies may be an option to ensure hard banding is not contacted. Recommend the use of flush hard banding-±1/32". The use of raised hard banding may contribute to tong slippage.
- 6. Stress Cracks-Recommend regular maintenance programs be implemented. MPI schedules should be set to maintain OEMS. Inspections should be carried out by certified inspectors (API 7K). Regular pipe inspectors, in certain cases, may not be qualified to inspect tongs.
- 7. Drawworks Line Pull Level Make up line angle to tongs needs to be level to apply level pull to tong. Normal height of cathead is 4.5' and the stub of the pipe is approx. 22". Line pull should be level with tong to eliminate the potential hazard from this operation.

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.