

Safety Alert

From the International Association of Drilling Contractors

ALERT 00-37

BLOCK HANGING LINE LOAD PATH

WHAT HAPPENED:

While performing the annual MPI inspection of critical equipment, it was discovered that the rig's 500 ton traveling block top clevis hanging weight limitations were being exceeded. A rating plate identified the maximum weight to be hung from the clevis as 13 tons. The combined block and top drive weight is 17.5 tons, exceeding the maximum weight by 4.5 tons.

WHAT CAUSED IT:

As various types of Top Drive Assemblies are added to different types of drilling rigs, failure to consider the added weight and re-evaluation of the traveling blocks hang off system, can lead to this type of situation.

CORRECTIVE ACTIONS:

- All components in the block hang-off load path should be evaluated for their support capacities.
- Once the components have been evaluated, they should be stamped or certified with a Safe Working Load (SWL) that meets or exceeds the combined assembly, block, hook, swivel and Top Drive System (TDS) (if the TDS is supported by the same hanging assembly), must include a 4:1 safety factor.
- Some Top Drive Systems are supported on clamps, pins or rail stops during the hang-off process.
 - There must be assurance that this additional load cannot be transferred to the hang-off line. Spacing in this kind of configuration is critical.
- When installing a Top Drive System it is critical that all components in the hang-off load path are carefully evaluated by Engineering to verify that they support the weights in the new combined system with a 4:1 safety factor.
 - o Contact your Engineering Department with any questions you might have about your block/top drive hang-off load path.

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.