

installing and operating drill lines

INSTALLATION

1. Use a rope connector grip (snake) with a swivel to connect the new drill line to the old drill line. This will relieve twist that may be put in the rope during spooling and handling.
2. Never weld the new drill line to the old drill line.
3. Try to install the new drill line at a point in the drilling operation when there is a considerable amount of weight available to help seat (break in) the new drill line and assist spooling.
4. Remove and inspect the brass inserts on the dead line anchor for proper size and if worn, replace. Rope must be seated properly in the clamp to avoid damage when torqued down. Torque the nuts on the dead line anchor clamp to the clamp manufacturer's specifications. Torque should be rechecked after one to two hours of operation.

OPERATION/SETTING CASING

1. The optimum service is received when the drill line operates with a design factor ranging from 5 to 7. A high design factor (over 7) wears the drill line out from bending fatigue because ton-miles do not accumulate as fast as at lower design factors.
2. The upper layer of the drill line can pull down through lower layers on the drum when setting heavy loads. This occurs because the block goes up empty with very little load. The drill line is not spooled tightly on the drum. The load is then applied to the drill line on the top layer which forces the wraps on the next lower layer apart allowing the top wrap to pull down. Using a heavier block or by adding "cheek" plates to the block will lessen the problem.

3. Rope service increases with fewer parts of lines. The fewer the number, the less rope is spooled on the drum. Less rope is subjected to damaging crossover points on the drum. This also provides more rope available to cut. As an example, on a 7500' reel, if 12 lines are strung there is approximately 2200' of rope in the string-up or 5300' of rope available to cut. For 10 lines, there is 1900' of rope in the string-up, or 5600' of rope available to cut. This would increase rope available to cut by 5%, therefore providing 5% more ton-miles.

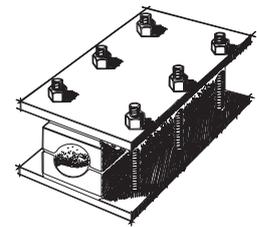
4. Always make a cut based on ton-miles accumulated prior to and after setting a heavy load of casing.

5. If the design factor for setting the casing is approximately 3.0, cut a minimum of 200' from the string-up. Inspect the remaining rope and make another cut if necessary.

6. If the design factor is down to 2.0 (the lowest allowed by API), cut a minimum of 600' from the string-up. After inspection, make another cut if necessary.

7. For design factors between 2.0 and 3.0, cut between 200' and 600'. Make another cut if needed after inspection.

8. Try not to install a new drill line (or slip all new rope into the system) just before setting a heavy load of casing. New or unused rope is more susceptible to crushing than a rope that has been in service.



BRASS INSERTS ON DEAD LINE ANCHOR

- > Remove and inspect the brass inserts on the dead line anchor for proper size and, if worn, replace.

Rope must be seated properly in the clamp to avoid damage when torqued down.