

### WIRECO'S EXCLUSIVE CUT-OFF PROGRAM

While there are other cut-off programs available, contractors around the world consider the Union cut-off program as the best in the industry. Our cut-off program calculates, logs, and tracks the service life of your Union drilling line. More importantly, it provides the tools to assure that you receive the maximum service life from your drill line. While the Union Cut-Off Program was originally developed more than 30 years ago to help our drill line users obtain the maximum service, we continually update, improve, and look for ways to expand its functionality. **This cut-off program is exclusively for our customers.**



### A 10-STEP GUIDE TO A DRILL LINE CUT-OFF PROGRAM

1. Cutting on a consistent goal is the first step to achieving a successful cut-off program and maximizing the service life of your Union drilling line.
2. For the first few cuts, wrap the drill line at the point being cut with duct tape prior to making the cut. This will prevent any unlaying of the outer strands.
3. When making a cut and slipping new rope into the string-up, all of the wraps should be removed from the deadline anchor. The rope should never be pulled through a loosened clamp which can put a twist in the rope. The clamp should be completely removed and inspected. If worn or damaged, replace.
4. After making a cut, the dead wraps should be spooled on the drum with sufficient tension to prevent excessive drum crushing or "milking" of the bottom layer.
5. Take ton-miles for drag into account.
6. Drill ships and semis using a crown motion compensator or active heave drawworks may need to operate with a lower ton-mile goal due to additional bending fatigue cycles created during heave compensation.
7. Extended drilling between round trips may necessitate making a cut to avoid exceeding maximum allowable ton-miles.
8. Short, frequent cuts will shift critical wear points caused by excessive jarring.
9. Long cuts are necessary when the amount of rope to be cut doesn't remove all the rope that meets removal criteria. This can be caused by failure to follow the ton-mile goal, not taking all rig operations into consideration, improper calculation or recording of ton-miles. Damage at any point may require a long cut.
10. To prevent long cuts:
  - a. Find the optimal ton-mile goal for your drill line; experience may indicate you have to adjust your ton-mile goal. It's important to follow the cut-off program for a new rope. The first few cuts may seem excessive, but they are necessary to move rope through the system at the proper rate.
  - b. Ton-miles must be calculated and recorded accurately for each operation, including reaming, working pipe, and laying down pipe at the end of a well.
  - c. Inspect equipment to prevent conditions that adversely affect service life. Equipment problems such as bearing failure in a sheave can cause unusual wear leading to long cuts.