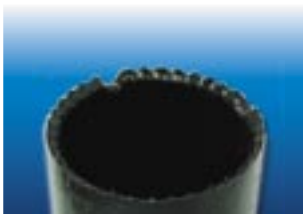


# CASED HOLE PIPE RECOVERY TOOLS & SERVICES

Maximize your results with Lonkar pipe recovery tools and services. Tubing and casing cutters are available in a wide range of capabilities and options to ensure that we have the right tool for your situation. Highly qualified Lonkar crews utilize this wide range of tools to provide timely and cost-effective results for all your tubing and casing recovery needs.



Radial Torch Cut



Chemical Cutter



Spectra Cutter

- > **Radial cutting torches** don't use high explosives or dangerous chemicals to achieve a cut; the reaction can be described as a burn with an effect like an oxy-acetylene cutting torch. This torch can cut pipe in dry pipe conditions, can operate in temperatures above 260°C, and makes cuts ranging from 1 1/2" (38.1mm) tubing to 7 5/8" (193.7mm) casing pipe size.
- > **Chemical cutters** are mechanical/chemical pressure actuated devices that are based on the oxidation/reduction process. They do not damage adjacent pipe or casing, do not cause flaring or enlargement to cut pipe, and makes cuts ranging from 1" (25.40mm) tubing to 8 5/8" (219.10mm) casing pipe size. The chemical cutters cut up to 3/4" (19.05mm) pipe thickness and can cut plastic coated pipe.
- > **Spectra cutters** are jet cutters with an electronically ignited, shaped charge. The jet stream is more focused than conventional jet cutters and can be run through restrictions to cut larger interior diameter tubing. Spectra cutters are very versatile, with the ability to cut dry pipe and be used in close-contact situations. This cutter is effective for 2 3/8" (60.3mm), 2 7/8" (73.0mm) and 3 1/2" (88.9mm) tubing.
- > **Split Shot® cutters** have a small diameter, allowing ease of movement past well obstacles. Wells that have been abandoned due to obstructions unmovable with conventional techniques can now be easily re-worked and brought back on production or injection with a Split Shot® cutter. Effective for 1.315" (33.4mm) to 16" (406.4mm) collars, with a tool size of 7/8" 1.00 and 1 3/8" 2.00.
- > **Other cutting tools** are available for a wide variety of applications:
  - > Coil, ceramic or super tubing
  - > Tubing / drill pipe
- > **Free Point indicators** can determine stuck pipe with pipe stretch and torque depending on your wellbore situation and make cuts ranging from 1" (25.40mm) coil tubing to 9 5/8" (244.5mm) casing.

When running the Free Point tools, an upward pull or torsion force is applied to the string of pipe at the surface. The elongation of torque between the two sets of springs is measured by the micro cell and transmitted to the surface panel for interpretation, locating the lowest point from which a string of pipe can be successfully recovered.

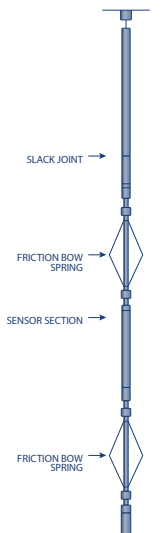
A collar locator is also run in conjunction with the Free Point tool, making it possible to run a string shot simultaneously and "back-off" the pipe string in a single run.



Chemical Cutter



String/Back Off Shot



Free Point Tool



*Great People. Great Results.*