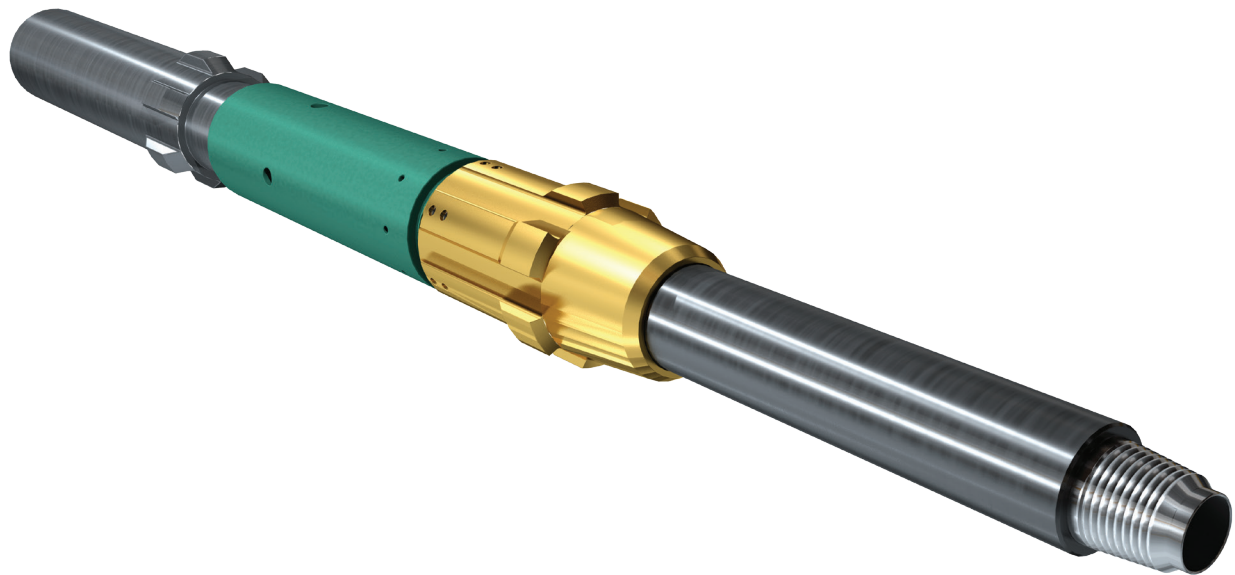


LCT-Liner Top Circulating Tool



The **LCT- Liner Top Circulating Tool** is a robust and simple circulating tool which can be opened and closed by string manipulation. It is landed onto a Liner Top or similar restriction to allow circulation of the casing above. The LCT- Liner Top Circulating Tool is available to suite common casing and liner combinations.

FEATURES

- Functioned by manipulating string weight with out the use of darts or balls
- Can be opened and closed multiple times without limitation
- Shear ring is available with several shear ratings to suit requirements
- Can be used when milling or drilling before activation
- Reverse circulation capability before and after shearing
- Robust splined drive system for torque transmittal
- Robust assembly method with back-ups
- Compatible with other ArmRdillo™ wellbore clean-up tools

BENEFITS

Cost savings

- The LCT- Liner Top Circulating Tool significantly reduces the time to displace wells by allowing the large casing above a liner to be displaced separately
- Reduces chemical consumption and brine filtration when used in combination with a well-engineered chemical displacement
- The LCT- Liner Top Circulating Tool can be opened and closed at exactly the right moment to accurately spot pills reducing waste volumes

Increases Well Productivity

- A properly executed wellbore clean-up reduces fine debris which can block screens and pore throats reducing well productivity

Reducing Non-Productive Time

- A robust wellbore clean-up is proven to reduce non-productive time during the completion of the well

APPLICATIONS

- Pre-completion wellbore clean-up operations which include a larger diameter casing and a smaller diameter liner

OPERATIONAL

- The LCT- Liner Top Circulating Tool can be run independently or as part of a comprehensive wellbore clean-up string
- The LCT- Liner Top Circulating Tool has an integral landing sleeve which engages a Liner Top in the wellbore. A smaller diameter drill string hangs below the tool which extends close to the bottom of the well
- While running in the hole, the string can be reciprocated and circulated to allow the scrapers and other tools to clean the critical depths
- When required the tool is sheared open by applying and maintaining string weight to allow circulation of the casing
- Chemical pills can be pumped to displace the liner and casing separately and more accurately than using conventional ball activated tools