

Record-Breaking Section Milling in a Single Run with K-Mill and TruEdge™ Inserts in Algeria

Efficient 88.5 m (290ft) section milled in record time using 11700 Series K-Mill with TruEdge™ inserts during a Sustained Casing Pressure (SCP) related P&A operation in Algeria.

Regional Record for Longest Milled Window Achieved

As part of a plug and abandonment (P&A) operation for a major customer in Algeria, the Wellbore Integrity Solutions team successfully milled an 88.5 m window in 13³/₈ inch 68 lb/ft L80 casing—setting a global single-run record for this casing size and weight.

The operation, which required an extended length plug in poorly cemented casing, demanded precise planning and execution. Key challenges included poor cement behind casing, swarf management, high-pressure zones, and the extended milling length. Success was driven by the robust 11700 Series K-Mill with TruEdge™ inserts, an optimized BHA, hydraulic modeling, and a detailed parameter roadmap.

Post-run analysis confirmed tool performance met expectations, enabling the customer to proceed with the P&A program.

CHALLENGE

Section mill an extended length window in a 133/8 inch 68 lb/ft L80 casing for a P&A operation of a well presenting Sustained Casing Pressure (SCP) issues.

SOLUTION

- Used the 11700 Series K-Mill with TruEdge™ inserts.
- Performed hydraulic analysis with HART simulation software to optimize cut-out and milling.
- Ensured effective hole cleaning and tool performance.
- Followed a detailed operational parameters roadmap for planning and execution.

RESULTS

- Successfully section milled a 88.5m (290 ft) window in a single run setting a global record in terms of footage milled.
- The operation was highly efficient and recognized by the customer.
- Enabled subsequent abandonment and remedial operations.



K-Mill tool, and TruEdge inserts after POOH during milling operation.

