

Case History: Hughes Specialty Tools for Apache Corp / Western Oklahoma ~ March, 2012

Target: Partial liner hanger setting tool (Q-125 hardened steel) and stuck aluminum plug...all with remnants of Kutrite and Diamond Mills on top

Q-125 unworked hardness = max 38 HRC...work hardened max 55 HRC

Mill: 3 5/8" MX, diamond-impreg made by Short Bit & Tool Co.

Operational Data: Run on jointed pipe and power swivel with light WOB (1000 to 2000 lbs and about 80 to 100 RPM).

Results: Cut 4-5" of loose carbide junk in about 4 hours, then Cut all 8" of Q-125 about 6 hours and enough of the Aluminum plug so that it released...mill wear about 15-20%

