

Designed to do more than simply drill through composite bridge plugs (CBPs), the Vanguard™ plug drillout roller cone bit, from Baker Hughes consistently delivers a cleaner, more reliable drillout operation.

The unique cutting structure of the Vanguard plug drillout bit uses a higher tooth count and self-sharpening teeth to tackle the specific challenges of plug drillouts. This cutting structure directs the limited available weight on bit (WOB) to destroy cast iron and tungsten carbide CBPs, crushing them into smaller cuttings. Production is then allowed to flow more smoothly and cleanly with less debris.

Compared to traditional mill-type bits, the Vanguard bit drills with lower torque spikes, which protects the BHA from motor stalls. The bit's unique cutting structure and proven technologies allow it to drill faster and through more plugs per bit than competing roller cone products, saving bit trips over time.

A slimhole bit ranging in size between $4^{1}/8$ in. to $4^{5}/8$ in., the Vanguard plug drillout bit is especially effective in low WOB runs and can be run at rotation speeds ranging between 80 to 350 rpm.

To learn more about how the Vanguard plug drillout bit can support cleaner operations and save bit trips, contact a Baker Hughes representative today.



Applications

- · Bridge plug drillouts
- Fracturing ball and sleeve system drillouts
- · Coiled tubing
- · Motor, rotary, and directional drilling
- Low weight on bit; low available torque

Benefits

- High-performance cutting structure
 - Improves drilling efficiency in low WOB applications
- · Precision bearing with synthetic grease
 - Reduces wear in the bearing
 - Extends bearing life
- · Motor hardfacing
 - Protects the bearing and seal for increased durability and performance
- Updrill protection
 - Protects the compensator
 - Assists the drilling operation when backreaming is required
- High Aspect Ratio (HAR) elastomer seal on 45/8 in. size bit
 - Provides longer bit life in rotary, motor, and directional applications