

# DiamondBack Reamer Shoe

Guides casing and liners to total depth in hard, abrasive formations with horizontal or deviated wellbores

## Applications

- Hard and abrasive formations
- Horizontal and highly deviated wells
- Re-entry wells
- Large-diameter casing- or liner-running with little or no rotation

## Features and Benefits

- The chunky tungsten-carbide cutting structure provides full-bore coverage in both rotating and reciprocating applications, which enables easy passage to total depth (TD).
- The diamond-shaped cutting structures provide a 360° cutting radius that overcomes openhole bridges and well sloughing.
- The shoe enables both rotating and reciprocating reaming action while running casing and liners.
- Large flow-directed ports provide full-bore coverage while rotating and reaming, and prevent channeling while pumping cement.
- The standard aluminum-alloy nose withstands impact loading and high set-down weight, yet still enables fast drill-out with a polycrystalline diamond (PDC) or tri-cone bit.
- Most models incorporate chip breaker holes in the nose assembly that avoid the bird-nesting effect during drill-out.
- The tool is compatible with all casing- and liner-running systems.
- The tool can be customized with specialty noses, valves, or threads to meet specific operational requirements.

## Tool Description

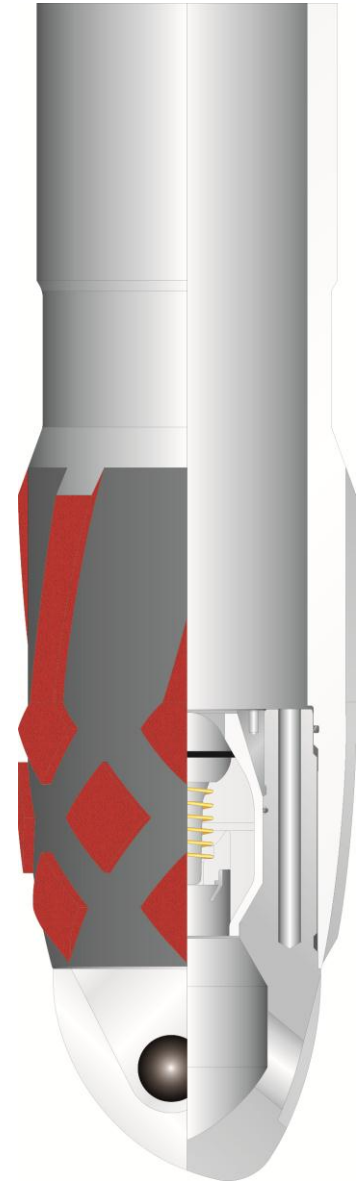
The DiamondBack reamer shoe overcomes wellbore restrictions and the cutting structure reams out tight spots, which enables the tubular string to reach TD. The cutting structure provides full-bore coverage in both rotating and reciprocating applications while rigid standoff stabilizer blades clear a path for the casing or liner string and most types of rigid centralizers installed above the reamer.

The nose assembly is available in eccentric aluminum (standard) or eccentric composite. Float valve options—all rated to API RP 10F IIIC standards—include single valve, dual valves, cemented single valve, cemented dual valves, no valve. A baffle plate can be added to facilitate plug landing.

## Specifications

Standard casing sizes	3 1/2 to 20 in.
Cutter hardness rating	~89 HRc
Total cutting pads	6 to 18
Total stabilizer blades	3 to 6
Average stabilizer blade length	7 in. (177.8 mm)

*\*Larger sizes can be customized*



*The DiamondBack reamer shoe features a diamond-shaped tungsten-carbide cutting structure that provides full-bore coverage in both rotating and reciprocating applications.*

