

StrataBlade concave diamond element bit

Reduce rig time and costs by achieving faster instantaneous ROP

Applications

- Vertical, curve, and lateral sections
- Any BHA configuration
- Interbedded layers of medium-strength formations with unconfined compressive strengths (UCS) ranging from 5,000 psi to 20,000 psi [35 MPa to 140 MPa]

How it improves wells

The StrataBlade* concave diamond element bit saves rig time and costs by delivering faster instantaneous ROP. It withstands impact damage in interbedded drilling through medium-strength formations with UCS ranging up to 20,000 psi.

How it works

The StrataBlade bit increases ROP by up to 35% in medium-strength formations as compared with flat PDC bits, benefitting from the unique geometry of the Strata* concave diamond cutting element. Its distinctive concave feature decreases the cutter back-rake angle to cut deeper into rock. It also forms into a tapered geometry with a thicker diamond table that significantly improves cutting efficiency and sustains a higher instantaneous ROP with the same input energy. For deep lateral wells where weight transfer to the bit is a challenge, the StrataBlade bit delivers better torque response at the bit for superior steerability and conformance to directional plans.

What it replaces

Traditional flat PDC cutters.



The StrataBlade concave diamond element bit features Strata elements strategically placed along the bit face.