Cesar

Introducing Black Diamond's Cesar: Enhancing Efficiency, Minimizing Costs

Unlock unparalleled drilling performance with Black Diamond's Cesar - the cleaning, stabilizing, and concentric reaming powerhouse. Cesar boasts cutting-edge features that redefine borehole management and elevate your drilling operations. Positioned at the top of the BHA, Cesar incorporates unique airfoils, focused jets, cutters and gauge pads working together to deliver enhanced drilling performance and wellbore quality.

Features and Benefits

- Unparalleled Cuttings Suspension: Unique cambered airfoils and jets generate powerful turbulence, driving cuttings back into the fluid flow for effective borehole cleaning and reaming.
- **Borehole Conditioning**: Under gauged cutting section and reduced area, circumferentially offset gauge pads engage the borehole to minimize micro doglegs and ledges.
- Excellence When Rotating AND Sliding: Operates efficiently in all modes unlike conventional spiral stabilizers and bi-center reamers which require rotation.
- Reduced BHA Wear: Polycrystalline diamond compact (PDC) cutters on the gauge reduce friction, torque, and drag, reducing wear on drilling equipment.
- **Dogleg Removal**: Conditions mechanically induced doglegs for efficient energy transfer through the drill string to the bit and unhindered casing delivery.

- **Improved Drilling Efficiency**: Reduces mechanical specific energy, enhancing hole quality and increasing penetration rate (ROP).
- **Cost and Time Savings**: Wellbore quality reduces trip times and casing runs, delivering significant savings in drilling costs.
- **Reduced BHA Attrition**: Lower levels of friction and torque and drag reduce wear on drilling equipment.
- **Extended Lateral Performance**: Enhanced cuttings removal, and wellbore smoothing allows lateral drilling to reach new depths.
- **ECD Regulation**: Maintaining cuttings and LGS in suspension gives consistency to equivalent circulating density.
- **Stabilization Replacement**: Reduce cost by using multi-functional Cesar to replace traditional BHA stabilization.

| Cesar Specifications | | | | | | |
|------------------------|---------------------------|---------------------------|--------------------------|-------------------------|----------------|------------|
| Blade Size (in.) | Neck Diameter (in.) | Bore Diameter (in.) | Total Length (in.) | Blade Width (in.) | Weight (Ib) | Connection |
| 6 | 4 ¾ | 2 3⁄4 | 60 | 2 1⁄2 | 323 | 3 ½ IF |
| 6 1⁄8 | 4 ¾ | 2 ¾ | 60 | 2 1/2 | 323 | 3 ½ IF |
| 8 3⁄8 | 6 ¾ | 2 ¾ | 72 | 3 | 452 | 4 ½ IF |
| 8 % | 6 ¾ | 2 ¾ | 72 | 3 | 468 | 4 ½ IF |
| 11 ½ | 8 | 3 ¼ | 84 | 3 1/2 | 839 | 6 % REG |
| 12 1⁄8 | 8 | 3 ¼ | 84 | 3 1/2 | 925 | 6 % REG |
| 17 3⁄8 | 10 | 3 1/2 | 96 | 3 1/2 | 1,075 | 7 % REG |

Some dimensions are nominal and may vary slightly on finished tool. Cesar is ½ in. under actual hole size.

Connections and some dimensions can be customized to customer specifications.

Hole Cleaning & Mud Conditioning: Cesar ensures market leading suspension of low gravity solids [LGS] and cuttings. Coupled with Black Diamond's patented **SHURE-Shear RTAI** technology on surface delivers 25% increase in centrifuge efficiency driving optimal mud condition, minimizing LGS concentration, improving drilling performance and reducing damage in every aspect of the drilling process.

2418 North Frazier St. | Suite 100 Conroe, TX 77303, USA www.bdoilfield.com





USA

BLACK DIAMOND CORPORATE

7906 N. Houston Parkway W Suite 200 Houston , TX 77064 1.281.443.0062

BLACK DIAMOND BROUSSARD

1173 Old Spanish Trail, Hwy 182 N Broussard, LA 70518 1.337.359.1994

BLACK DIAMOND CONROE

4205 FM 1485 Conroe, TX 77306 1.936.441.1480

BLACK DIAMOND MWD

2418 N Frazier Street #100 Conroe, TX 77303 1.936.202.2889

BLACK DIAMOND WEST TEXAS

3510 N. County Rd 1148 Midland, TX 79705 1.432.689.0076

CANADA

BLACK DIAMOND EDMONTON

Wenzel Downhole Tools 3115 - 93 Street NW Edmonton, AB T6N 1LY 1.780.440.4220

GUYANA

BLACK DIAMOND GEORGETOWN

Plantation "A" Houston District East Bank Demerara Georgetown, Guyana

MEXICO

BLACK DIAMOND VILLAHERMOSA

Avenida San Lucas Manzana 2 Bodega 3 y 4 Parque Logistico Industrial Tabasco Rancheria Anacleto Canabal 4ta. Seccion. Centrol, Tabasco C.P. 86287 +52 993 688 8579

BLACK DIAMOND TAMPICO

Carretera federal 20 de Noviembre km 18.7 Congregacion Anahuac Pueblo Viejo, Ver., C.P. 92035 +52 993 688 8579

MIDDLE EAST

BLACK DIAMOND ABU DHABI

Wenzel Downhole Tools Al Markaz Industrial Area Waha Land, LT01 B25-32 Abu Dhabi, U.A.E. +971 2 585 2800