



Design Specifications

Make up Length (ft):	1.09
Shank Bore (ins):	3.000
Shank Diam (ins):	8.000
Connection std:	Y
Connection Size(ins):	6.625
Connection Type:	REG PIN
Make up Torque (ft-lbs):	41000 - 45500
IADC Code:	M433
Diameter:(ins)	12 1/4"
Body Material:	MATRIX-TMS
JSA(in²):	32.540
Face Volume:(in³)	163.30
Normalised Face vol:	41.50%
Blade Qty:	6
Gauge Length:(ins)	4.000
Gauge Geometry:	Spiral-Trailing
Gauge Profile:	SmoothSteer
Bit Profile:	Medium Taper - Shallow Cone

Recommended Operating Parameters

Max Operating WOB (klbs):	55
Min TFA (in²):	0.4419
Max TFA (in²):	3.3408
Max Flow (gpm):	1402
HSI:	2-7
Bit Breaker:	Thick 1 1/2"
Variant:	A1A

Nozzles & Ports

Qty	Type	Size
9	TNZ	VARIABLE

Design Features

- Tektonic™ Drill Bits
- Polished PDC Cutters
- Forward Rake Blade Geometry
- Optimized Blade Spiral
- Dynamic Rotation Bit Modelling
- Advanced Fluid Flow Modelling
- Blade Front PDC Exposure
- Ballistic Waterway Profile
- ION™ PDC Cutters
- SmoothTorque™ Torque Control Components
- SmoothSteer™ Gauges
- DiamondBack™ cutters

Cutting Structure

Type	Qty	Location	Diameter	Shape
Primary	53	FACE	13 mm	IMPACT
Primary	14	GAGE	13 mm	CYLINDER
Primary	6	BACK-ANGLE	13 mm	CYLINDER
Secondary	24	FACE	13 mm	IMPACT
Hybrid	4	FACE	11 mm	FLAT TOPPED
Hybrid	12	FACE	11 mm	FLAT TOPPED
Hybrid	8	GAGE	11 mm	FLAT TOPPED