



**Cutting Structure**

Type	Qty	Location	Diameter	Shape
Primary	21	FACE	13 mm	IMPACT
Primary	22	FACE	13 mm	3D IMPACT
Primary	14	GAGE	13 mm	CYLINDER
Primary	7	BACK-ANGLE	13 mm	CYLINDER
Secondary	21	FACE	13 mm	3D IMPACT

**Design Specifications**

Make up Length (ft):	.86
Shank Bore (ins):	2.250
Shank Diam (ins):	6.500
Connection std:	Y
Connection Size(ins):	4.5
Connection Type:	REG PIN SRG
Make up Torque (ft-lbs):	18000 - 20000
IADC Code:	M433
Diameter:(ins)	8 3/4"
Body Material:	MATRIX-TMS
JSA(in²):	14.120
Face Volume:(in³)	77.69
Normalised Face vol:	41.53%
Blade Qty:	7
Gauge Length:(ins)	3.000
Gauge Geometry:	Spiral-Trailing
Gauge Profile:	SmoothSteer
Bit Profile:	Medium Taper - Shallow Cone

**Recommended Operating Parameters**

Max Operating WOB (klbs):	39
Min TFA (in2):	0.3437
Max TFA (in2):	1.3741
Max Flow (gpm):	604
HSI:	2-7
Bit Breaker:	Thick 1 1/2"
Variant:	H1

**Nozzles & Ports**

Qty	Type	Size
7	C55	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

3D Shaped Cutters

SmoothSteer™ Gauges

DiamondBack™ cutters