

# Secoroc Rotary Products

## Waterwell Steel Tooth Bits

### 4 1/2" F33

Adding value through performance



- **Cutting Structure**

Web Shape tooth on gage and straight tooth on inner rows. Hardmetal on heel and inner rows for better wear resistance and sustained penetration rates.

Designed for hard shale formations, lime stones, sandstones, soft iron ores and dolomite formations.

- **Shirrtail Protection**

Regular

- **Application**

8,000 – 16,000 PSI / 55 – 110 MPa

### Product Specifications:

IADC Code:	3-3-2
Bearing Type:	Roller – Ball – Friction / Air Cooled
Circulation Type:	Center Flush Air
Cutting Structure:	Steel Tooth
-Inner and Nose Rows	- Straight Tooth
- Gage Rows	- Web Gage Tooth
-Gage Bevel Protection	- Hardmetal
Lug/Shirrtail Protection:	Regular / Hardmetal
Pin Connection:	2 3/8" API Regular
Metric Bit Diameter:	114 mm
Product Weight:	11.02 lbs / 5 kgs
Product Number/Code:	93002098 / 110-0114-33-FW-5R-02

#### Operating Suggestions:

Weight on Bit:	4,500 – 7,500 lbs per inch of diameter
Rotary Speed:	50 to 100 RPM
Air Back Pressure:	35 psi, minimum

Actual drilling parameters must be determined for specific applications.