

# Rotary bit - 13,900m life reaches in Pilbara

**Pilbara** is one of the richest iron ore regions in the world, the 40% of iron ore in the world come from mines here operated by Rio Tinto, BHP, FMG, RH, MRL eta.

**Black Diamond** has been supplying and supporting the exploration and production activities here for over 15 years, rotary bits are part of BD products portfolio, and **our rotary bits just set a record of 13,900m** and averaged over **8,000m**.



## **Site & Drilling Information**

MINE	MINERAL	DRILL RIG	BD PRODUCT	BEARING TYPE	CUTTING STRUCTURE
IRON VALLEY/ MINERAL RESOURCES	IRON ORE - HEMATITE/BIF	DEECD/DV/22E	220 64E DOTABY BIT	SEALED DEADING	IADC 64E

#### **Product Information**

IADC: 645 - TCI sealed roller bearing bit with gauge protection for medium hard formations with high compressive strength.

## Compressive Strength:

- 85-100 MPA
- 12,000-14,500 PSI
- Granite
  Sandy
  Sandstone
- Limestone

  Dolomite







## **Ground Description:**

Hard, well-compacted rocks such as: hard silica limestones, quarzite streaks, pyrite ores, hematite ores, magnetite ores, chromium ores, phosphorite ores, magnetite and granites

Product Specification	Technical		
Bearing Type	Operating Suggestions		
Roller-Ball-Roller-Thrust Button/Sealed Bearing	Weight on Bit:19,750-49,380		
Circulation Type	Rotary Speed:80 - 110RPM		
Jet Air	Air Back Pressure: 0.2 - 0.4		
Cutting Structure			
Inner and Nose Rows; Conical	Gage Row: Conical		
Gage Level Protection: Conical	Hardmetal on lug; Wear resistant carbide on shirttail lip and lug		

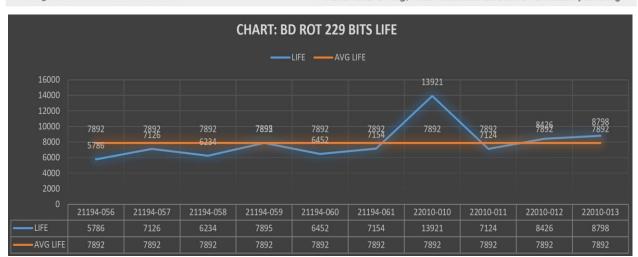


Chart: Customer verified data collected from BD rotary bits used in FY2122

Case study was draft by BD TSM Grant Rees.