

# PNJ INTERNATIONAL CO., LTD

YOUR GO-TO FOR TOP-NOTCH DRILLING TOOLS



# PDC BIT

#### **PDC Steel Bit**

PDC Steel Bit is mainly used for drilling water wells, geothermal wells, hot spring holes, coal mines and coal fields. PDC Steel Bits also have good self-cleaning performance, which reduces the frequency of drilling interruptions and improves work efficiency.





### **Material**

The drill bit body is made of high-quality steel with grade 4145H. The surface of the blade is overlaid with high-performance wear-resistant material to prevent erosion of the drill bit body.

#### **Benefit**

PDC steel bits have high drilling speed and stable performance, which can improve drilling production efficiency and reduce maintenance costs and the frequency of drilling interruptions, improving work efficiency.



Blade	Inch	Diameter	Thread
4/5wings	3 7/8"	98.4mm	2 3/8'API REG PIN'
4/5wings	4 3/4"	120.7mm	2 7/8"API REG PIN
4/5wings	5 2/3"	143.9 mm	3 1/2"API REG PIN
4/5wings	6"	152.4mm	3 1/2"API REG PIN
4/5wings	6 1/2"	165.1mm	3 1/2"API REG PIN
4/5wings	7 1/2"	190.5mm	4 1/2'API REG PIN'
4/5wings	8 1/2"	215.9mm	4 1/2"API REG PIN

# PDC BIT

### **PDC Matrix Bit**

PDC Matrix Bit is widely used in oil and gas well drilling. It can withstand higher temperatures than steel PDC bits and are more resistant to erosion. Longer life of carcass PDC in large displacement environment.



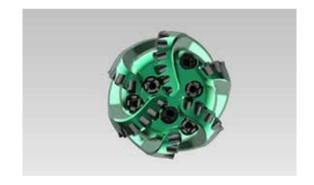


### **Material**

The matrix drill bit is made by making a graphite mold, assembling tungsten powder and carbide and placing it into the mold for high temperature sintering.

## **Benefit**

PDC Matrix Bits have efficient cutting performance, strong corrosion resistance, long service life and stable operation. Not easily affected by the environment and are suitable for various geological conditions to meet the continuous needs of drilling.



Blade	Inch	Diameter	Thread
4/5wings	3 7/8"	98.4mm	2 3/8"API REG PIN
4/5wings	4 3/4"	120.7mm	2 7/8"API REG PIN
4/5wings	5 2/3"	143.9 mm	3 1/2"API REG PIN
4/5wings	6"	152.4mm	3 1/2"API REG PIN
4/5wings	6 1/2"	165.1mm	3 1/2"API REG PIN
4/5wings	7 1/2"	190.5mm	4 1/2"API REG PIN
4/5wings	8 1/2"	215.9mm	4 1/2"API REG PIN

# DRAG BIT

## **PDC Drag Bit**

PDC Drag Bit is mainly used for drilling in water wells, various types of loose to soft soil layers, and plastic and brittle formations.





# The Different Style of PDC Drag Bit

- 1: Stepped
- 2: Grooved
- 3: Crewcut
- 4: Rounded









#### **Benefit**

Benefit: PDC Drag Bit has a variety of styles to choose from, can be customized. Compared with TC Drag Bit, it has longer life and faster drilling speed. The drilling dynamic balance design and hydraulic balance design make the drilling process smoother.



Blade	Inch	Diameter	Thread
4/5wings	4 1/2"	114.3mm	2 3/8"API REG PIN
4/5wings	4 7/8"	123.8mm	2 7/8"API REG PIN
4/5wings	5 1/2"	139.7mm	2 3/8"API REG PIN
4/5wings	6"	152.4mm	3 1/2"API REG PIN
4/5wings	7 7/8"	200.1mm	4 1/2"API REG PIN
4/5wings	8 1/2"	215.9mm	4 1/2"API REG PIN
4/5wings	9 1/2"	241.3mm	4 1/2"API REG PIN

# DRAG BIT

# TC Drag Bit

TC Drag Bit is suitable for deep hard rock formations in drilling, blast hole drilling in mines, and hard rock coring in geological exploration.





# The Production Process of TC Drag Bit

Casting
Welding





## **Benefit**

TC Drag Bits are more affordable and more suitable for geology with hard interlayers. The casting process has a great price advantage in large quantities; The welding type can be customized and has higher flexibility.

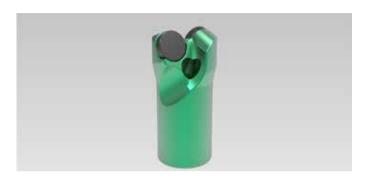


Blade	Inch	Diameter	Thread
4/5wings	3 5/8"	92.08mm	2 3/8"API REG PIN
4/5wings	5 7/8"	149.2mm	2 3/8"API REG PIN
4/5wings	6 3/4"	171.4mm	3 1/2"API REG PIN
4/5wings	7 3/8"	187.3mm	3 1/2"API REG PIN
4/5wings	8 1/2"	215.9mm	4 1/2"API REG PIN
4/5wings	9 1/2"	241.3mm	4 1/2"API REG PIN
4/5wings	9 7/8"	250.8mm	4 1/2"API REG PIN

# **ANCHOR BIT**

#### **PDC Anchor Bit**

PDC Anchor Bit is mainly used for tunnel support in coal mines, and for reinforcing slopes, tunnels, and dams.





# The Different Style of PDC Anchor Bit

Whole PDC Cutters
Half PDC Cutters





## **Benefit**

PDC Anchor Bit has both the high wear resistance of diamond and the high impact toughness of carbide. Have long service life and high efficiency in soft to medium hard rock formations. Diverse types can be customized.



Diameter	Cutters	Thread	Thread	Thread
27mm	1304 cutters	M14*1.5	M16*2	R17/R18/R20/R22
28mm	1304 cutters	M14*1.5	M16*2	R17/R18/R20/R22
30mm	1304 cutters	M14*1.5	M16*2	R17/R18/R20/R22
32mm	1304 cutters	M14*1.5	M16*2	R17/R18/R20/R22
36mm	1304 cutters	M14*1.5	M16*2	R17/R18/R20/R22
42mm	1304 cutters	M14*1.5	M16*2	R17/R18/R20/R22
45mm	1304 cutters	M14*1.5	M16*2	R17/R18/R20/R22

# **CONCAVE BIT**

#### **PDC Concave Bit**

PDC Concave Bit is mainly used in geological coal mines, coal fields, water wells, geothermal wells, and the drilling depth is usually tens of meters to dozens of meters.





# The Different Style of PDC Concave Bit

Whole PDC Cutters
Half PDC Cutters





## **Benefit**

PDC Concave Bit is excellent in efficiency, high stability, durability and adaptability. It can be mixed and matched with composite pieces, which is cost-effective.



Blade	Inch	Diameter	Thread
4/5wings	3 7/8"	98.4mm	2 3/8"API REG PIN
4/5wings	4 3/4"	149.2mm	2 7/8"API REG PIN
4/5wings	5 1/2"	139.7mm	3 1/2"API REG PIN
4/5wings	5 3/4"	187.3mm	3 1/2"API REG PIN
4/5wings	6 1/4"	158.8mm	3 1/2"API REG PIN
4/5wings	7 1/2"	190.5 mm	4 1/2"API REG PIN
4/5wings	7 7/8"	200 mm	4 1/2"API REG PIN



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