Tri-cone bit

Bit Bearing:

• Our precision bearings are made with the tightest tolerances in the industry! The bearing materials used have extremely low friction and high load capacity.
• We use one of the most chemically resistant, heat tolerant HNBR materials for our bearing seal and pressure compensator. This material is very compatible with oil based muds.
• Seal wear is extremely low with the combination of our proprietary Synthetic grease.

Lubrication System:.

• Our bearing system runs at a lower temperature and pressure than our competition, with our proprietary Synthetic base oil grease.
• The Synthetic grease effectively pulls heat away from the bearings, and can operate at much higher temperatures than conventional base oil greases.

Reaming Gage Feature:

• Our Reaming gage technology allows us to put more active cutting elements on gage than anyone in the industry!
• This feature is perfect for directional applications. Its gage holding ability is superior for maintaining gage on lateral or extreme build angles.
• We can offer diamond in this feature for the most abrasive applications as well.
• Bearing and seal life are extended by keeping the cone from rubbing the hole-wall and generating additional heat.

Enhanced Hydraulics

• Design flexibility offers customers the ability to effectively clean the cutting structure, while minimizing cone erosion.
• Premium nozzles are used for consistency and reliability.

IADC CODE	TS415
Bearing type	Roller -steel ball-thrust block-ring
Circulating medium	Compressed ai
Threaded Connection	6 5/8″ API
DIM	10 5/8″ (270mm)
Weight	74KG
Drill pressure	10630-212501b
Rotation speed	100-60rpm
Wind pressure	0.2-0.4MPa

Applicable Formation :

For low-compressive strength, high-drillability very soft formations, such as: shale, soft limestone, soft sand, gravel clay, soft dolomite, rock salt, coal, etc.

IADC CODE	TS715
Bearing type	Roller －steel ball-thrust block-ring
Circulating medium	Compressed ai
Threaded Connection	6 5/8″ API
DIM	10 5/8″ (270mm)
Weight	74KG
Drill pressure	42500-637501b
Rotation speed	90-60rpm
Wind pressure	0.2-0.4MPa

Applicable Formation :

For high compressive strength, hard and highly abrasive formations such as: granite, limestone, sandy shale, dolomite, chert, etc

IADC CODE	TS645
Bearing type	Roller -steel ball-thrust block-ring
Circulating medium	Compressed ai
Threaded Connection	6 5/8″ API
DIM	10 5/8″ (270mm)
Weight	74KG
Drill pressure	42500-637501b
Rotation speed	90-60rpm
Wind pressure	0.2-0.4MPa

Applicable Formation :

For high compressive strength, hard and highly abrasive formations such as: granite, limestone, sandy shale, dolomite, chert, etc.

IADC CODE	TS535
Bearing type	Roller －steel ball-thrust block-ring
Circulating medium	Compressed ai
Threaded Connection	6 5/8″ API
DIM	10 5/8″ (270mm)
Weight	74KG
Drill pressure	21250-531251b-24t
Rotation speed	100-60rpm
Wind pressure	0.2-0.4MPa

Applicable Formation :

For high compressive strength, hard and highly abrasive formations such as: granite, limestone, sandy shale, dolomite, chert, etc.

IADC CODE	TS425
Bearing type	Roller -steel ball-thrust block-ring
Circulating medium	Compressed ai
Threaded Connection	6 5/8″ API
DIM	10 5/8″ (270mm)
Weight	74KG
Drill pressure	10630-212501b
Rotation speed	100-60rpm
Wind pressure	0.2-0.4MPa

Applicable Formation :

Arrived in compressive strength for high drillability soft formation, such as: shale, soft limestone, soft sand, gravel clay, soft dolomite, rock salt, coal, etc

IADC CODE	TS422
Bearing type	Roller －steel ball-thrust block-ring
Circulating medium	Compressed ai
Threaded Connection	6 5/8″ API
DIM	10 5/8″ (270mm)
Weight	74KG
Drill pressure	10625-212501b
Rotation speed	100-60rpm
Wind pressure	0.2-0.4MPa
Applicable Formation :	

Arrived in compressive strength for high drillability very soft ground, such as: shale, soft limestone, soft sand, gravel clay, soft dolomite, rock salt, coal, etc

IADC CODE	TS422
Bearing type	Roller －steel ball-thrust block-ring
Circulating medium	Compressed ai
Threaded Connection	6 5/8″ API
DIM	10 5/8″ (270mm)
Weight	74KG
Drill pressure	10625-212501b
Rotation speed	100-60rpm
Wind pressure	0.2-0.4MPa

Applicable Formation :

Arrived in compressive strength for high drillability very soft ground, such as: shale, soft limestone, soft sand, gravel clay, soft dolomite, rock salt, coal, etc

IADC CODE	TS635
Bearing type	Roller －steel ball-thrust block-ring
Circulating medium	Compressed ai
Threaded Connection	6 5/8″ API
DIM	10 5/8″ (270mm)
Weight	65KG
Drill pressure	29630-592501b
Rotation speed	100-60rpm
Wind pressure	0.2-0.4MPa

Applicable Formation :

For high-pitched intensity, the hard and highly abrasive nature of the strata, such as: limestone, sandstone, dolomite, chert, etc

IADC CODE	TS545
Bearing type	Roller -steel ball-thrust block-ring
Circulating medium	Compressed ai
Threaded Connection	4 1/2″ API
DIM	9″ (229mm)
Weight	50KG
Drill pressure	18000-450001b
Rotation speed	100-60rpm
Wind pressure	0.2-0.4MPa
Applicable Formation :	

Used to offset the compressive strength in soft formations, such as: shale, soft limestone, with laminated dolomite, coal, etc.

IADC CODE	TS435
Bearing type	Roller -steel ball-thrust block-ring
Circulating medium	Compressed ai
Threaded Connection	4 1/2″ API
DIM	9″ (229mm)
Weight	50KG
Drill pressure	9000-360001b
Rotation speed	100-60rpm
Wind pressure	0.2-0.4MPa

Applicable Formation :

Arrived in compressive strength for high drillability soft formation, such as: shale, soft limestone, sandstone, conglomerate, soft dolomite, coal, etc

IADC CODE	TS415
Bearing type	Roller －steel ball-thrust block-ring
Circulating medium	Compressed ai
Threaded Connection	4 1/2″ API
DIM	9″ (229mm)
Weight	50KG
Drill pressure	9000-180001b
Rotation speed	100-60rpm
Wind pressure	0.2-0.4MPa
Applicable Formation :	

For low-compressive strength, high-drillability soft formations, such as: shale, soft limestone, soft sand, gravel clay, soft dolomite, rock salt, coal, etc

IADC CODE	TS415
Bearing type	Roller －steel ball-thrust block-ring
Circulating medium	Compressed ai
Threaded Connection	6 5/8″ API
DIM	6 5/8″ API(250mm)
Weight	65KG
Drill pressure	9880-197501b
Rotation speed	100-60rpm
Wind pressure	0.2-0.4MPa

Applicable Formation :

For low-compressive strength, high-drillability soft formations, such as: shale, soft limestone, soft sand, gravel clay, soft dolomite, rock salt, coal, etc

IADC CODE	TS435
Bearing type	Roller －steel ball-thrust block-ring
Circulating medium	Compressed ai
Threaded Connection	6 5/8″ API
DIM	6 5/8″ API(270mm)
Weight	65KG
Drill pressure	9880-395001b
Rotation speed	100-60rpm
Wind pressure	0.2-0.4MPa

Applicable Formation :

For low-compressive strength, high-drillability soft formations, such as: shale, soft limestone, soft sand, gravel clay, soft dolomite, rock salt, coal, etc

IADC CODE	TS715
Bearing type	Roller －steel ball-thrust block-ring
Circulating medium	Compressed ai
Threaded Connection	6 5/8″ API
DIM	6 5/8″ API(270mm)
Weight	65KG
Drill pressure	39500-592501b
Rotation speed	90-60rpm
Wind pressure	0.2-0.4MPa

Applicable Formation :

For high compressive strength, and high in hard abrasive formations. Such as: limestone, sandstone, dolomite, chert, etc.

IADC CODE	TS632
Bearing type	Roller －steel ball-thrust block-ring
Circulating medium	Water
Threaded Connection	3 1/2″ API
DIM	6 3／4″ API(171mm)
Weight	21KG
Drill pressure	9-18t
Rotation speed	100-60rpm

Applicable Formation :

For high compressive strength, and high in hard abrasive formations. Such as: limestone, sandstone, dolomite, chert, etc.

IADC CODE	TS635
Bearing type	Roller －steel ball-thrust block-ring
Circulating medium	Water
Threaded Connection	6 5/8″ API
DIM	9 7／8″ (250mm)
Weight	65KG
Drill pressure	13-27t
Rotation speed	100-60rpm

Applicable Formation :

For high compressive strength, and high in hard abrasive formations. Such as: limestone, sandstone, dolomite, chert, etc.

IADC CODE	TS735
Bearing type	Roller －steel ball-thrust block-ring
Circulating medium	Water
Threaded Connection	6 5/8″ API
DIM	12 1／4″ (311mm)
Weight	98KG
Drill pressure	22-39t
Rotation speed	90-60rpm

Applicable Formation :

Compressive strength for the high-pitched, hard and abrasive formations, such as: granite, limestone, sandy shale, dolomite, chert, etc

IADC CODE	TS845
Bearing type	Roller －steel ball-thrust block-ring
Circulating medium	Water
Threaded Connection	6 5/8″ API
DIM	9 7／8″ (250mm)
Weight	65KG
Drill pressure	22-36t
Rotation speed	90-60rpm

Applicable Formation :

For high compressive strength, high hardness and high abrasive formations, such as: magnetite-quartzite, quartzite, granite, etc.

IADC CODE	TS635
Bearing type	Roller －steel ball-thrust block-ring
Circulating medium	Water
Threaded Connection	6 5/8″ API
DIM	11″(279mm)
Weight	76KG
Drill pressure	15-30t
Rotation speed	100-60rpm

Applicable Formation :

For high compressive strength, and high in hard abrasive formations, such as: limestone, sandstone, dolomite, chert, etc

IADC CODE	TS735
Bearing type	Roller －steel ball-thrust block-ring
Circulating medium	Water
Threaded Connection	6 5/8″ API
DIM	13 3／4″ (349mm)
Weight	126KG
Drill pressure	25-44t
Rotation speed	90-60rpm

Applicable Formation :

For high compressive strength, and high in hard abrasive formations, such as: limestone, sandstone, dolomite, chert, etc

Tricone bit use means of things to note

1. Select bits of different models, shaft pressure and rotational speed according to hardness of rock in operations to different rock strata.

2. Must confirm to boring three factors (air pressure, shaft pressure, and rotational speed) and principles matched with recommended parameters of a bit sample when a drilling rig bores a hole.

3. Before the bit is down to the hole, please check appearance of all parts, whether the manufacturing numbers of bit screw thread end surface, bit packaging box and certificate of quality are uniform; whether the appearance of bit palm does have trademark of Shareate in order to avoid counterfeiting.

4. Reasonably put the bit on the drilling rig to prevent foreign matters such as dust from entering the inside of the bit.

5. When the bit is replaced, should ensure the inside of the drilling tool does not have dust, the air outlet is smooth, the screw threads are well connected by lifting and rotating after oiling, then the bit can be used.

6. Before changing a new bit, should check whether the three cones are flexible to rotate, the screw threads and teeth are intact.

7. When the new bit runs in the hole, it should run at low shaft pressure and low rotational speed for 20-30min. and then to enlarge normal shaft pressure.

8. When the new bit is newly tapped, should notice cleaning the impurities (free stone, waste metal, etc.) around the hole, slowly put down in rotation close to the ground, for preventing percussion drilling and damages to the bits.

9. When the bits are replaced midway the operation of soft rock strata, should strictly check whether alloy inserts on the palm back and cones fall off the hole, it is forbidden using newly-replaced bit in the original hole if there are residues of the old bit in there.

10. When the drilling rig stops, the drilling tool can not be put into a hole with water, so as to

prevent rock debris and water from flowing back and entering the inside of bearing to damage the bit.

11. When the bits are used in rocks with cracks, rock cracks generated by blasting, or gobs, should reduce shaft pressure and rotational speed for protecting inserts from being broken.

12. When the drilling tool is in the hole, it is forbidden reversing, so as to protect the bit from falling into the hole.

13. When the bit is in the hole, and the air compressor suddenly stops, rock debris is very easy to enter the bit, therefore, it is forbidden rotating for long time, or causing bearing abrasion, repeated breaking of rock debris (or bit blocking), and acceleration of bit abrasion.

14. In normal boring, the main air trunk of the air compressor should be kept airtight, to ensure enough air quantity and air pressure, and prolong the service life of the bit.

15. The stabilizer should be replaced periodically for ensuring stability of drill stem and making the bit work normally.

16. It is forbidden using bending drill stem, in order to avoid uneven force to three palms and acceleration of damages of the bits.

17. Should store the bit in a dry and ventilating place, and forbidden knocking against cones and screw threads in transportation.

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