SHAREATE

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SHAREATE



Water Well Drill Bit

Shareate Tools Ltd.











About Us

Shareate Tools Ltd., located in Suzhou Industrial Park,is a company engaged in the R&D and manufacturing of cemented carbide products and rock drilling tools. It has two major manufacturing bases in Qianjiang and Suzhou, fitted with advanced producing and testing equipment, It is a research and development and manufacturing base of cemented carbide and rock drilling tools with leading technology level and continuously increasing scale in China. Shareate was officially listed on the Sci-tech Innovation Board of the Shanghai Stock Exchange (stock code "688257").

Shareate has strong scientific and technological innovation capabilities, and has formed a system of independent intellectual property rights and technologies. Up to now, Shareate has obtained 57 invention patents and 230 utility model patents. The company has passed the double certification of API and ISO9001. At present, it has won the "National High-tech Enterprise", "National Specialized Special New Little Giant", "Jiangsu Enterprise Technology Center", "Jiangsu Province High-efficiency Rock Drilling Tool Engineering Technology Research Center", "Jiangsu Province Postdoctoral Innovation Practice Base", "Jiangsu Province Enterprise Graduate Workstation", "Jiangsu Province Specialized, Special and New Little Giant", "Jiangsu Province Integration of Industrialization and Industrialization Demonstration Enterprise", "Jiangsu Boutique Brand Certification Enterprise", "Jiangsu Private Technology Enterprise", "Suzhou Industrial Design Center", "Suzhou Gazelle Enterprise", "Suzhou Manufacturing Brand Certification Enterprise", "Suzhou Industrial Park Technology Leading Talent Enterprise", "Suzhou Industrial Park Demonstration Intelligent Workshop"... The products have obtained the titles of "Jiangsu High-tech Products", "Jiangsu High-quality Products", "Suzhou Famous Brand Products", "Made in Suzhou" and the certificates of "National Standard Qualified Unit, Quality Tracking Key Protection Product".

The company adopts advanced flexible manufacturing system and builds a flexible production line with CNC machining center as the main body, laying a solid foundation for manufacturing first-class quality products.

The company's main products include: cemented carbide products such as cemented carbide for oil drilling, cemented carbide for mining, matrix for diamond composite chip, nozzle for oil drilling bit, and rock drilling products such as tricone bits, single roller bits, trenchless drilling bits, roller cutters, DTH hammer, hammer bits, etc. Our products are exported to South Korea, the United States, Canada, Australia, South America, Russia and more than 60 countries and regions, highly liked and praised by the customers at home and abroad.

www.shareate.com
SHAREATE TOOLS LTD.

STAR TORNADO

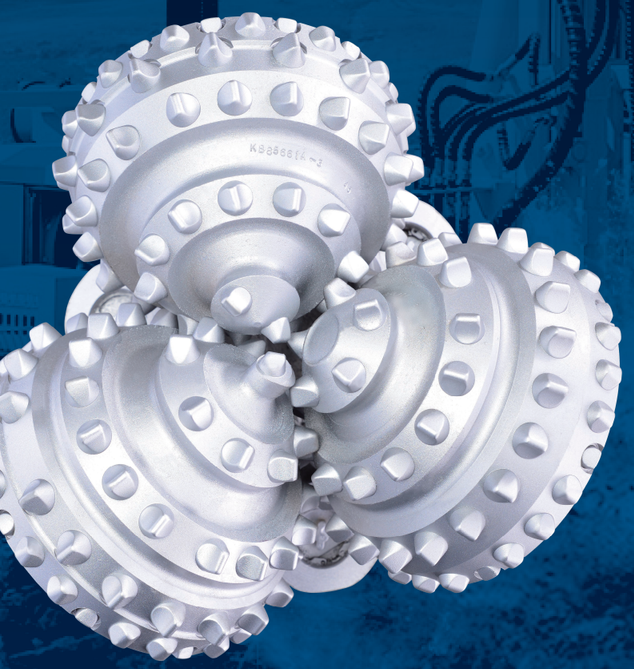


▶ 01

Star Tornado is a brand of customized oil bits under Shareate Tools Ltd. It is committed to providing our customers with the most professional, diversified and cost-effective customized oil bits

▶ 02

" " echoes the meaning of "Tornado", showing the flexible mechanism of Tornado™, as well as the powerful energy contained in the drill bits like a hurricaneto take water from drilling rocks and crushing stones.



▶ 03

Star Tornado brand oil bits can provide different bearing , sealing , cutting structure and lug back protection structures according to customer needs, as well as other additional features to choose from. With the flexible product characteristics, plus Shareate's strong support of profound design, manufacturing and service capabilities, we can truly tailor our products to customers, solve their pain points to the greatest extent, and provide customers with the most suitable oil bits.

▶ 04

Star Tornado drill bits feature a recognizable matte silver finish and are provided in a safe and stable wooden box to ensure that the drill bits will not be bumped or overturned during transportation.

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Product Introduction

Star Tornado oil bits are mainly used in drilling engineering of liquid circulation systems. Star Tornado oil bits' technology comes from the advanced oil roller bit manufacturer in the United States. Based on Shareate's existing advantages in the design and manufacture of mining roller cone bits, Star Tornado is designed and manufactured in accordance with the standard of oil roller cone bits, which has a longer lifespan and higher drilling efficiency.

Star Tornado covers sizes from 4 1/2" to 17 1/2", and has more than 100 varieties of TCI and steel tooth roller cone bits, which are suitable for extremely soft to extremely hard formations, and are also suitable for conventional drilling and other different drilling techniques.

▶ 01 Basic structure

Star Tornado oil bits are assembled by three cones and three segments, and some necessary functional structures. According to the structure, it can be divided into bearing structure, cutting structure, shirttail and lug back reinforcement structure, flow channel system, injection system, oil storage pressure balance system and connecting thread.



▶ 02 Nomenclature

The name of the Tornado oil bits consists four parts: diameter code, series code, IADC classification code, and additional feature code.

For example 12 1/4 DHA547XT :

12 1/4	DHA	547	XT
Diameter	Series	IADC code	Additional feature code

2.1 Diameter Code

The diameter of tricone bit is expressed by inch, and 12 1/4 means the diameter of drill bit is 12.25 inch (311mm).

2.2 Series code: in 2~3 letters

The first letter “D” represents customization available.

The second letter indicates the bearing structure, G for roller bearing and H for journal bearing.

The third letter indicates the seal type, A represents O-shaped rubber seal, V represents flat rubber seal, J represents metal seal, and no third letter indicates non sealing.

2.3 IADC classification code

It is composed of three digits, the first digit represents the type of bit cutting structure and formation hardness, the second digit is the formation classification number, and the third digit is the bearing and sealing feature code.

The first digit: 1,2,3 (MT Tricone bit), 4,5,6,7,8 (TCI Tricone bit). The bigger the number is, the higher the hardness of corresponding formation.

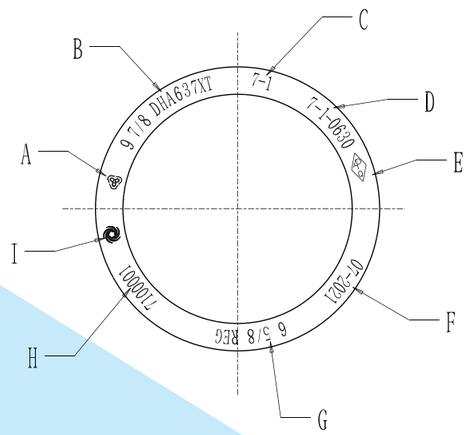
The second digit: 1,2,3,4 (fromation classification, the bigger the number is, the higher the hardness of corresponding formation);

The third digit: 1-7 stands for the meaning shown in the table below. 2,5 and 7 are commonly used by Shareate Rotary bits.

Code	Bearing and seal features
1	Open roller bearing
2	Air cleaning, cooling and open roller bearings
3	Roller bearing, diameter protection
4	Sealed roller bearing
5	Sealed roller bearing, diameter protection
6	Sealed journal bearing
7	Sealed journal bearing, diameter protection

▶ 03 Steel stamp of thread end face

Tornado oil bits are stamped with the basic information on the threaded end face of each drill bit (see the figure below), including the drill bit specification, serial number, production date, API 7-1 logo, thread type, Shareate and Tornado logo. Customers can learn about the relevant information here, which is convenient for them to store and record data.



2.4 Additional feature code

The additional feature code reflects the special structure of oil bits. The common additional feature codes are shown in the following table:

Code	Additional feature
B	Inserts and welding at lug back
C	Centre nozzle port
F	Cone auxiliary carbide protection
G	Special enhancement of lug back
H	Diamond composite insert
K	Cutting structure of hard plastic formation
L	Lug back centralizing
T	Trimming insert
W	Welding at shirttail lip
X	Wedge-shaped insert
Y	Conical insert

Example:	9 7/8 DHA637XT	7-1	7-1-0630	07-2021	6 5/8 REG	7100001
	A	B	C	D	E	F	G

Code	Content	Example
A	Company logo	
B	Bit model	9 7/8 DHA637XT
C	API standard	7-1
D	API license number	7-1-0630
E	API emblem	
F	Production date	07-2021
G	Connecting thread model	6 5/8 REG
H	Serial number	7100001
I	Brand logo	



Structural Features

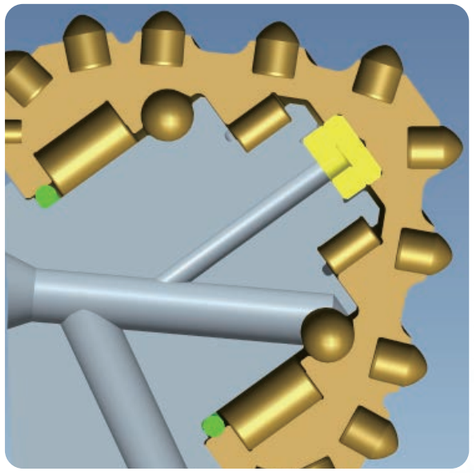
Tornado oil bits can be divided by structure into bearing structure, cutting structure, lug back strengthening structure, flow channel injection system, oil storage pressure balance system and connecting thread.

▶ 01 Bearing structure

According to the structure, the bearing can be divided into roller bearing and journal bearing.

◎Roller bearing

The roller bearing is composed of cone shaft hole, cone journal, thrust block, small roller, steel ball, large roller and sealing structure (see the figure below). The roller bearing has low friction coefficient and is suitable for high speed. It is mainly used for oil bits size larger than 14 3/4”.



◎Journal bearing

The journal bearing is composed of cone shaft hole, cone journal, steel ball and sealing structure (see the figure below). The journal bearing has stable structure, excellent bearing performance and strong adaptability. It is mainly used for oil bits size smaller than 14 3/4”.



The roller and journal bearings of Tornado oil bits are both rubber sealing structure. The rubber sealing ring with high temperature resistance and strong wear resistance can ensure the lubricating environment inside the bearing and greatly prolong the bearing life of the oil bit. It is suitable for most oil drilling conditions and coal bed methane drilling.

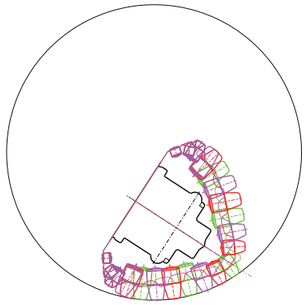


02 Cutting structure

The cutting structure of oil bit is supported by advanced software and hardware. The cutting structure design and the performance of carbide inserts has been well received by the market. It can deal with the formation with different hardness and different lithology, and provide the drilling scheme with high efficiency for customers.

2.1 Software

Through the computer simulation system, Shareate simulate the rock breaking situation of the bit at the bottom of the well, making the most reasonable distribution of the carbide buttons on the cone, balancing the working load of each insert, and selecting buttons of the most suitable shape and material, so as to reduce the break and wear of the carbide inserts, improving the service life and drilling efficiency, and saving the drilling cost.





2.2 Hardware

Shareate has its own R&D team and production line of cemented carbide inserts, and has the domestic leading sintering and pressing molding technology and equipment. We also have advanced QC equipment for cemented carbide inserts to ensure its quality stability. Our cemented carbide buttons provide our customers with different grades and shapes to ensure best performance and the most stable quality for the oil bits

Tornado’s cutting structure is suitable for formations from very soft to very hard , which can deal with the formation with different compressive strength and drillability. According to the formation hardness from soft to hard, it can be divided into grades from 1 to 8, in which Grade 1-3 is mill tooth bit and grade 4-8 is tungsten carbide insert bit.

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Mill tooth(MT) tricone bit: it is suitable for very soft formation with high drilling efficiency and excellent diameter protection ability. According to different formation hardness and drill ability, the mill tooth bit can machine different height and width teeth on the outer line of the cone, and weld a layer of WC wear-resistant material on the surface of the teeth to enhance wear resistance.





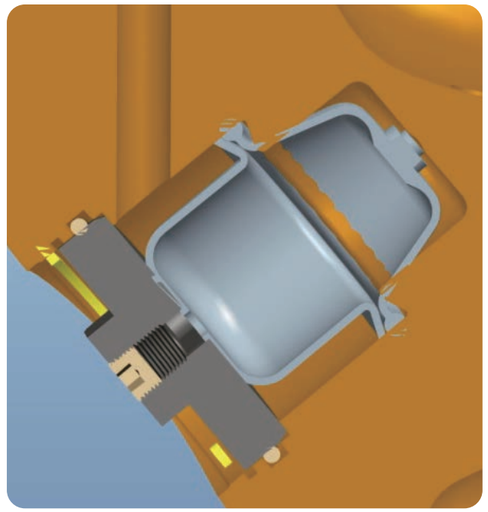


Tungsten carbide insert (TCI) bit: It has strong adaptability and is suitable for medium soft formation to hard formation, high rock breaking efficiency and strong diameter keeping ability. TCI bits use carbide teeth of different heights, shapes and materials to deal with formations of varying hardness and rock properties.



▶ 03
Lubricant oil storage pressure compensation system

Tornado oil bits have lubricant oil storage pressure compensation system, which can balance the pressure difference between inside and outside of the sealed bearing, improve the working environment of the bearing, prolong its service life, and thus prolong the life and stability of the bit.



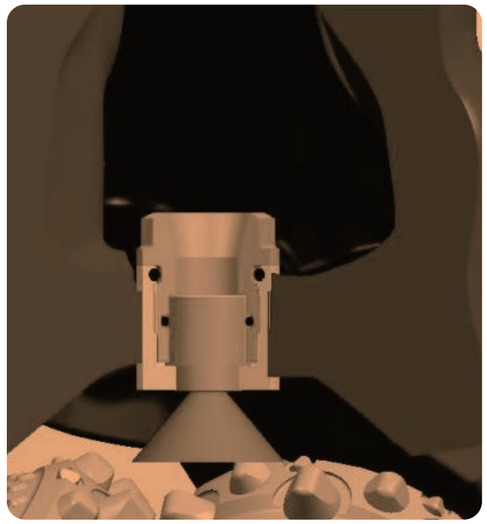
▶ 04 Connection thread

The connection threads of Tornado oil bits are manufactured and tested in strict accordance with the requirements of API to ensure the quality and stability of the connection threads. We can turn thread into the size range of 2 3/8” to7 5/8” REG, and can provide other types of threads such as FH type and BECO type.

▶ 05 Additional features

For some special formations or working conditions, Tornado oil bit has diversified additional features to choose from, providing excellent solutions for drilling construction.

◎ Feature C: Center nozzle



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Additional features of the lug

◎ Feature G: lug back reinforcement

Strengthening of lug back can effectively reduce the wear issue on the lug, improve the diameter performance of the bit and prolong the service life in the highly abrasive formation or directional drilling.



▲ **Feature G:** lug back reinforcement

▼ **Feature W:** Shirttail lip radial welding

◎ Feature W: Shirttail lip radial welding

Radial application of WC wear-resistant material on the shirttail lip can effectively delay the wear condition, protect the sealing structure and extend the service life.



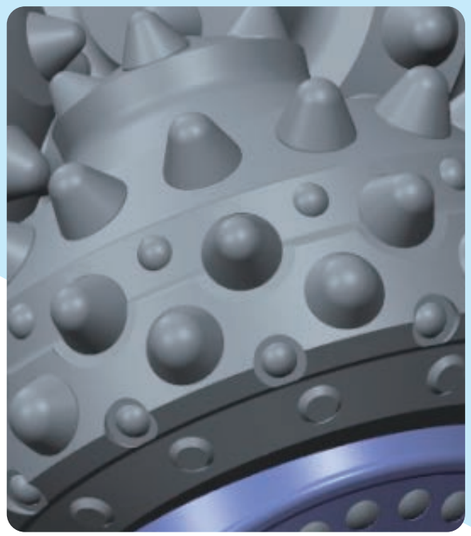
Additional features of the cone

◎ Feature T: edge enhancement to protect the diameter

A row of carbide inserts between the outer rows and the back cone rows, which can protect the roller body and trim the protruding part of the hole wall at the same time, and improve the diameter keeping ability of the drill bit.



Feature T:
edge enhancement to protect the diameter



◎ Feature F: insert protection of the cone body

Auxiliary carbide inserted between the main cutting rows or the outer rows can effectively protect the cone body against wear and improve the service life in the strong abrasive formation.

Feature F:
insert protection of the cone body

Configuration Table

Item	Steel type	Bearing structure		Oil storage system		Alloy nozzle	Central nozzle	Dia. Protection	Lug back protection	Cone welding strengthening	Auxiliary tooth strengthening	Packaging			Painting		
		V shape	O-ring	Oil storage bag	Simple equipped							Standard wooden packaging	Blank wooden packaging	Cardboard packaging	Yellow	Silver	Customize
Standard			√		√							√				√	
Customized		√		√		√	√	√	√	√	√		√	√	√		√

Shareate Water Well Drill Bit:

We provide a complete series of water well bit solutions. Whether you face soft soil, hard rock, or complex and variable geological formations, there's always one that can be your efficient penetration tool.

Features of the Full Series Water Well Drill Bit

1. The full series offers comprehensive coverage of size ranges and includes various types of milled tooth (MT) and tungsten carbide insert (TCI) bits.
2. All products in the series adopt a new sealing and journal bearing structure, effectively increasing bearing life and reliability under high weight-on-bit (WOB) or high rotary speed drilling conditions.
3. All products in the series feature a new lubricant reservoir system with optimized grease channels, enhancing lubrication effectiveness and significantly reducing the risk of bearing failure due to grease failure.
4. The series includes designs such as reinforced hard facing on the shirttail, strengthened teeth layout on the lug, and heel row teeth on the cone, improving the bit's Rate of Penetration (ROP) and gauge holding capability.

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Cost-Effective Type:
W Series Water Well Drill Bit

Positioning
Tailored for shallow, soft to medium-hard formations and budget-sensitive projects, pursuing ultimate cost-effectiveness.

▶ Product Features:

1. The cones and lugs of this series are made from conventional alloy structural steel, meeting the operational requirements for soft to medium-hard formations.
2. This series incorporates reinforced hardfacing on the shirttail, alloy tooth protection on the cutter lug, and heel row teeth on the cone, enhancing the bit's ROP and gauge holding capability.

▶ Product Advantages:

1. **Wide Applicability:**
   Covers most common conditions for shallow water wells.
2. **High Cost-Effectiveness:**
   Achieves the job with a low cost per meter drilled within the target formations.

▶ Application Scenarios:

1. Agricultural irrigation wells, rural drinking water wells.
2. Shallow holes for geological exploration, dewatering wells for construction.
3. Fast drilling in homogeneous medium-hard formations.

Selection Table

Bit Size		API Thread	Bit model
in	mm	in	
5 1/8	130.2	2 7/8	WHA517
5 1/2	139.7	3 1/2	WHA117、WHA537、WHA637
5 5/8	142.9	3 1/2	WHA417、WHA517、WHA537、WHA617
5 7/8	149.2	3 1/2	WHA117、WHV517、WHV537
6	152.4	3 1/2	WHV117、WHV417、WHV517、WHV537、WHV617
6 1/8	155.6	3 1/2	WHA117、WHV117、WHV417、WHV517、WHV537、WHV617
6 1/4	158.8	3 1/2	WHA117
6 1/2	165.1	3 1/2	WHA117、WHA417、WHA437、WHV517、WHV537、WHV617、WHV637
6 3/4	171.5	3 1/2	WHA117、WHA537、WHV437、WHV517、WHV537、WHV617、WHV637
7 1/2	190.5	4 1/2	WHV117、WHV217、WHV417、WHV437、WHV517、WHV537、WHV617
7 7/8	200	4 1/2	WHV117、WHV217、WHV417、WHV437、WHV517、WHV527、WHV537、WHV617、WHV637
8 1/2	215.9	4 1/2	WHA517、WHV117、WHV137、WHV217、WHV417、WHV437、WHV537、WHV617、WHV637
8 3/4	222.3	4 1/2	WHA117、WHV517
9 7/8	250.8	6 5/8	WHA117、WHA517、WHA527、WHA537、WHA617、WHV117、WHV217、WHV417、WHV437、WHV637
10 5/8	269.9	6 5/8	WHV117、WHV217、WHV417、WHV437、WHV517、WHV527、WHV537、WHV617、WHV637
11	279.4	6 5/8	WHV417、WHV437、WHV517、WHV537、WHV617、WHV637、WHV837
11 5/8	295.3	6 5/8	WHA117、WHA437、WHA517、WHA527、WHA537、WHA617
11 7/8	301.6	6 5/8	WHA437、WHA517、WHA527、WHA537、WHA617
12 1/4	311.2	6 5/8	WHV117、WHV217、WHV417、WHV437、WHA517、WHA527、WHA537、WHA617、WHA637、WHA737
13 3/8	339.7	6 5/8	WHV437、WHV517、WHV647
13 5/8	346.1	6 5/8	WHA437、WHA517、WHA537、WHA617
13 3/4	349.3	6 5/8	WHA117、WHA417、WHA437、WHV517、WHV537、WHV617
14 3/4	374.7	7 5/8	WGA115、WGA415、WGA515、WGA535
15	381	7 5/8	WGA435、WGA535、WGA635
16	406.4	7 5/8	WGA515、WGA535
17 1/2	444.5	7 5/8	WGA115、WGA415、WGA535、WGA615、WGA625

Note: Tricone bits can be designed and produced according to the customer's requirements should no bit model found in the above selection table

Pioneering type:

S Series Water Well Drill Bit

Positioning

Engineered for the most extreme and severe conditions, pursuing ultimate penetration capability and ultra-long service life. It represents the culmination of technology for tackling high drilling depths and difficulties.

▶ Product Features:

1. This series utilizes high-strength alloy structural steel, further enhanced by customized heat treatment plans to improve the cones' and lugs' adaptability to extreme conditions.
2. The bearing surfaces in this series are specially strengthened to withstand high-impact and high-load conditions.
3. This series features comprehensive protection on the back of the lugs, improving lug stabilization and further reinforcing gauge holding capability.

▶ Product Advantages:

1. **Unparalleled Rock-Breaking Ability:**
Maintains efficient crushing rates even when facing the hardest rock.
2. **Ultra-Long Service Life:**
Top-tier materials and manufacturing processes ensure maximum single-run working time, making it particularly suitable for ultra-deep well operations.
3. **Extreme Reliability:**
Delivers stable performance under high-temperature, high-pressure conditions, providing you with the most dependable assurance.

▶ Application Scenarios:

1. Ultra-deep water wells.
2. Geothermal wells, hot dry rock drilling.
3. Extremely hard, highly abrasive, or severely fractured complex formations.

Selection Table

Bit Size		API Thread	Bit model
in	mm	in	
5 1/8	130.2	2 7/8	SHA517、SHA537、SHA617
5 1/4	133.4	3 1/2	SHA517、SHA537、SHA617、SHA637
5 1/2	139.7	3 1/2	SHA117、SHA417、SHA437、SHA517、SHA537、SHA617、SHA637
5 5/8	142.9	3 1/2	SHA517、SHA537、SHA617
5 7/8	149.2	3 1/2	SHA117、SHA517、SHA537、SHA617、SHJ537
6	152.4	3 1/2	SHA517、SHA537、SHA617、SHA637、SHV117、SHV417、SHV437、SHV517、SHV537、SHV617、SHV637、SHJ537、SHJ617、SHJ637
6 1/8	155.6	3 1/2	SHA517、SHV117、SHV417、SHV437、SHV517、SHV537、 SHV617、 SHV637
6 1/4	158.8	3 1/2	SHA517、SHA537、SHA617、SHV117
6 1/2	165.1	3 1/2	SHA437、SHA537、SHA617、SHA637、SHV117、SHV517、SHV537、SHV617、SHV637、SHJ537、SHJ617、SHJ637
6 3/4	171.5	3 1/2	SHA517、SHA537、SHA617、SHA637、SHV117、SHV417、SHV437、SHV517、SHV537、SHV617、SHV637、SHJ537
7 1/2	190.5	4 1/2	SHV117、SHV437、SHV517、SHV537、SHV617
7 5/8	193.7	4 1/2	SHV537、SHV617
7 7/8	200	4 1/2	SHV117、SHV417、SHV437、SHV517、SHV527、SHV537、SHV617、SHV637、SHJ527、SHJ637
8 1/2	215.9	4 1/2	SHA437、SHA517、SHV117、SHV437、SHV517、SHV527、SHV537、SHV617、SHV637、SHJ517、SHJ537、SHJ617、SHJ637
8 3/4	222.3	4 1/2	SHA447、SHJ537、SHJ637、SHV117、SHV437、SHV517、SHV527、SHV537、SHV617、SHV637
9 1/2	241.3	6 5/8	SHA127、SHV117、SHV127、SHV437、SHV517、SHV537、SHV617、SHV637
9 5/8	244.5	6 5/8	SHV117、SHV437、SHV537、SHV547、SHV637
9 7/8	250.8	6 5/8	SHV117、SHV417、SHV437、SHV447、SHV517、SHV527、SHV537、SHV617、SHV637、SHJ617
10 5/8	269.9	6 5/8	SHV117、SHV417、SHV437、SHV517、SHV527、SHV537、SHV617、SHJ537、SHJ637
11 5/8	295.3	6 5/8	SHA117、SHA127、SHA437、SHA517、SHA527、SHA537、SHA617、SHA637、SHJ637
11 7/8	301.6	6 5/8	SHA117、SHA527、SHA617、SHA637
12 1/4	311.2	6 5/8	SHA117、SHA127、SHA217、SHA417、SHA437、SHA517、SHA537、SHA547、SHA617、SHA637、SHJ537、SHJ637、SHV517、SHV537、 SHV617
13 3/8	339.7	6 5/8	SGA545

Note: Tricone bits can be designed and produced according to the customer's requirements should no bit model found in the above selection table

Bit Size		API Thread	Bit model
in	mm	in	
13 5/8	346.1	6 5/8	SHA517、SHA537
13 3/4	349.3	6 5/8	SHA517、SHA617
14 3/4	374.7	7 5/8	SGA115、SGA415、SGA435、SGA515、SGA535、SGA615、SGA735、SGA835、SHA417
15	381	7 5/8	SGA415、SGA435、SGA535、SGA635
15 1/2	393.7	7 5/8	SGA425、SGA515、SGA535、SGA635
15 3/4	400.05	7 5/8	SGA415、SGA435、SGA515、SGA535
16	406.4	7 5/8	SGA515、SGA535
17 1/2	444.5	7 5/8	SGA115、SGA415、SGA425、SGA515、SGA535、SGA615、SGA625、SGA735

Note: Tricone bits can be designed and produced according to the customer's requirements should no bit model found in the above selection table



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Why Choose Us?

Professional Matching

We don't just sell drill bits; we provide you with the optimal drilling solution.

Quality Commitment

Strict adherence to the ISO quality management system from raw materials to finished products.

Technical Suppor

A team of experienced engineers provides round-the-clock on-site technical support and product selection advice.

Recommendations for tricone bit parameters

Bit Type	IADC	Recommend parameter		Apply formation
		Pulldown (kN/mm)	Rotation speed (r/min)	
Rubber sealed	117	0.35~0.90	150~80	Extremely soft formations with low compressive strength and high drillability, such as soft shale, clay, salt rock, etc.
	127	0.35~1.00	150~70	Low compressive strength, high drillability soft formation, such as shale, clay, salt rock, soft limestone, etc.
	417	0.35~0.90	140~70	Extremely soft formations with low compressive strength and high drillability, such as shale, clay, sandstone, conglomerate, etc.
	437	0.35~0.95	140~60	Extremely soft formations with low compressive strength and high drillability, such as shale, clay, sandstone, conglomerate, etc.
	447	0.35~1.00	140~60	Soft formations with low compressive strength and high drillability, such as shale, clay, salt rock, sandstone, soft limestone, gypsum, etc.
	517	0.35~1.05	120~50	Soft formations with low compressive strength and high drillability, such as shale, clay, sandstone, soft limestone, etc.
	527	0.35~1.05	120~50	Soft formations of compressive strength, such as shale, clay, sandstone, soft limestone, salt rock, anhydrite, etc.
	537 547	0.35~1.05	110~40	Compressive strength, medium soft, with hard abrasive interlayer, such as hard shale, anhydrite, soft limestone, sandstone, etc
	617 627	0.35~1.05	80~40	High compressive strength, medium to hard, with thick hard intercalations, such as hard shale, limestone, dolomite, sandstone, etc.
	637 647	0.70~1.20	70~40	High compressive strength, high abrasive and medium hard formations such as limestone, dolomite, sandstone, flint, etc.

Note: The maximum pull down and rotation speed in the table is not recommended to be used at the same time.



Selection of nozzles

Nozzle of the Tornado oil bit is made of cemented carbide. The name of the nozzle includes three parts: nozzle type, size code and outlet diameter.

Example S3-12 is as follows:



Nozzle type. S stands for standard type



The nozzle size code is 3



The nozzle outlet diameter is 12mm

Nozzle selection table

Nozzle size code	Bit Size		Nozzle diameter	Nozzle assembly length	Nozzle outlet diameter
	(in)	(mm)	(mm)	(mm)	(mm)
1	3 1/2~5 1/2	88.9~139.7	20.3	17.48	4~14
2	5 5/8~7 3/8	142.9~187.3	23.5	19.05	5~17
3	7 1/2~8 1/4	190.5~209.6	29.74	20.62	6~22
4	8 3/8~15 5/8	212.7~396.9	32.89	26.97	6~26
5	15 3/4~26	400.1~660.4	40.84	26.97	6~26

Note: Special nozzles of medium length, micro length and diamond can be provided

Standard nozzle



Medium Long nozzle



Micro Long



Diamond nozzle

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Tricone bit image



Lug back
protection structure



Production

Shareate adopts advanced flexible manufacturing system to build production line with CNC machining center as the main body. The company has advanced heat treatment, , welding and painting robot , as well as three coordinate detector, projector, electron microscope scanner, grating detector and other high-precision testing equipment.All of those provide Shareate with a solid foundation of roller cone bit manufacturing.

