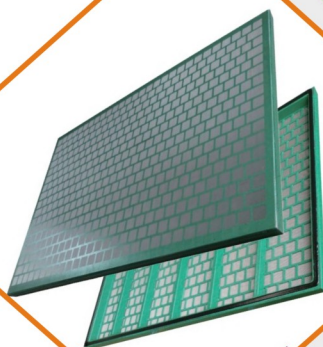




TentandaEnergies

Exploratie en Productie Compagnie



Tentanda Energies Ltd, a leading integrated energy company engaged in the manufacturing and deployment of Cone Drill Bits, PDC Bits, Assembly of Bits, Coal Mining Bits and Marketing of Drilling Accessories etc. Tentanda Energies Ltd also provides Drilling and Completion Turnkey Services, Financial and Technical Support and Oil and Gas Field Development Advisory to selected Marginal Field operators in Sub-Sahara Region of Africa.

Tentanda Energies products are engineered and manufactured in accordance with international standard and the manufacturing facilities available to Tentanda Energies are highly advanced and has state of Art Equipment. Tentanda Energies partners flag ship industrial complex that manufactures our drill bits covers about 20,000 square meters. Tentanda Energies has also forged strategic alliance with major Oil and Gas Companies around the world and can deliver from our supply chain distribution hubs located strategically in six continent.

Our product have been supplied to companies all over the world and constantly used by E&P and Drilling companies.

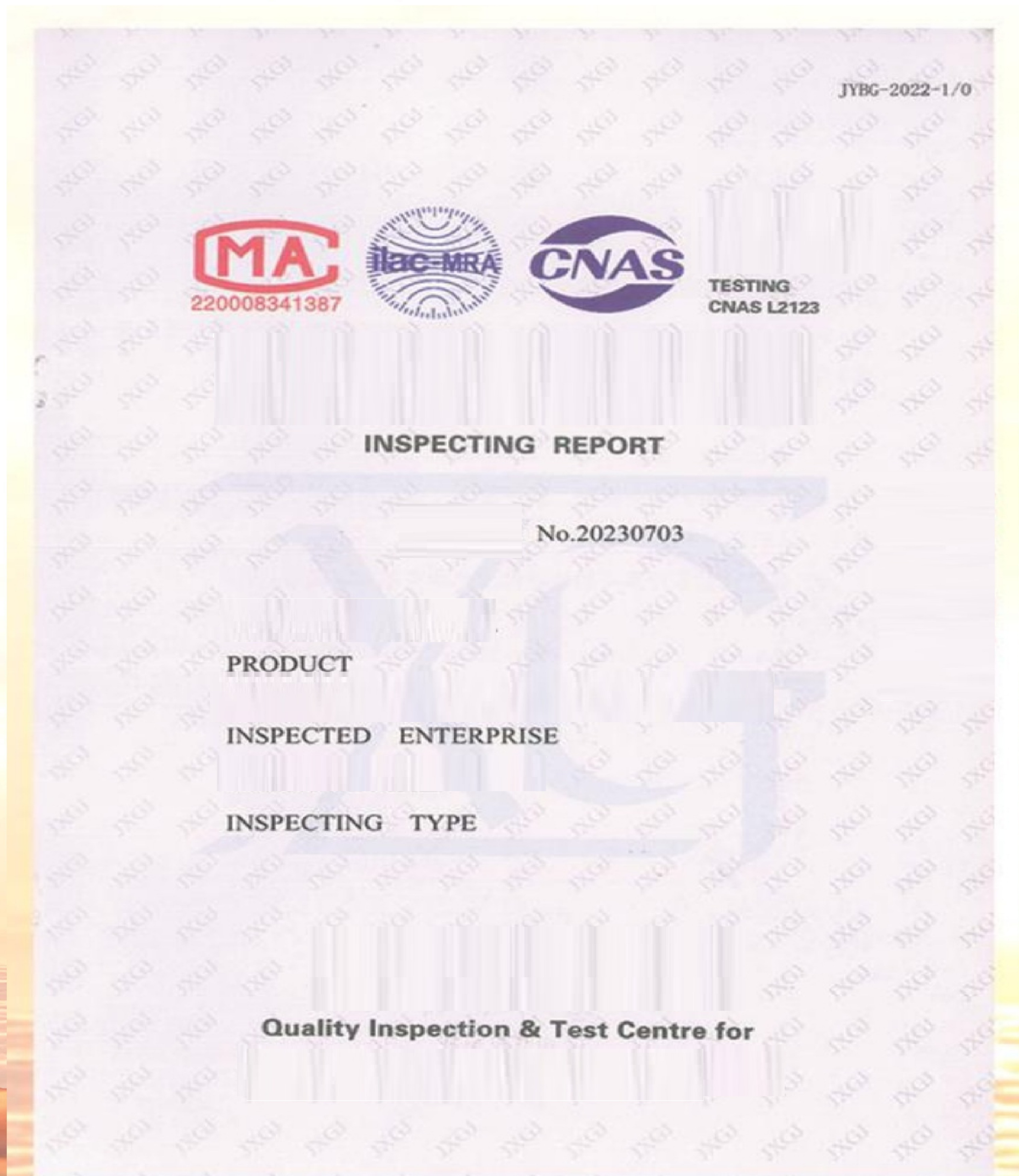
Tentanda Energies looks forward finding and solving energy problems in a sustainable way, our Motto "The Tentanda Way" is the driver that pushes Tentanda Energies Ltd to constantly over deliver.

Tentanda Energies is committed in making outstanding contribution to the energy world and playing a major role in global energy Transition.





Enterprise qualification



Sales Network





Product introduction

OIL WELL TCI TRICONE BIT SERIES



IADC	WOB (KN/mm)	RPM (r/min)	Applicable Formations
517	0.35–1.0	140–60	Soft formations with low compressive strength and high drillability, such as mudstone、 gypsum、 salt、 soft limestone, etc.
537	0.45–1.0	120–50	Soft to medium formations with low compressive strength, such as medium、 soft shale、 medium soft limestone, medium soft sandstone, medium formation with harder and abrasive interbeds, etc.
617	0.45–1.1	90–50	Medium hard formation with high compress strength, such as hard shale、 limestone、 sandstone、 dolomite.Etc.
637	0.5–1.2	80–40	Hard formations with high compressive strength, such as sandstone、 limestone、 dolomite、 hard gypsum、 marble, etc.

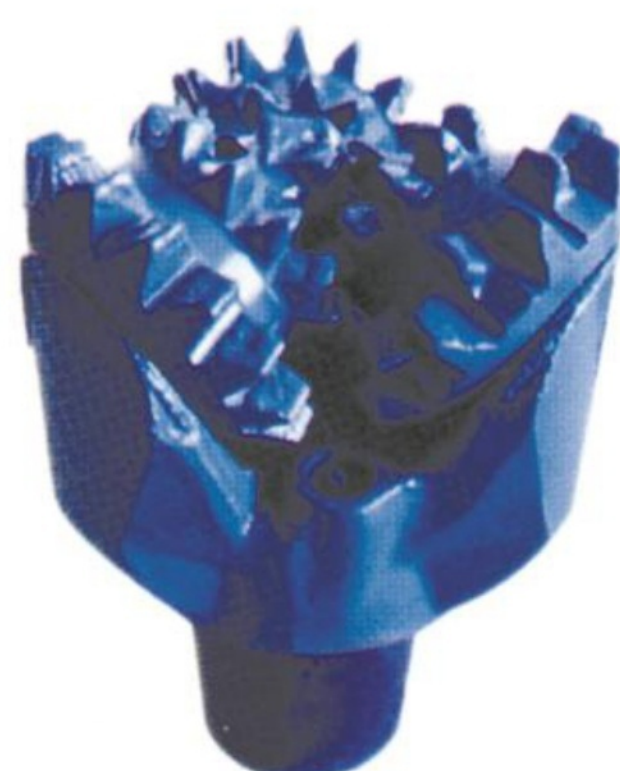
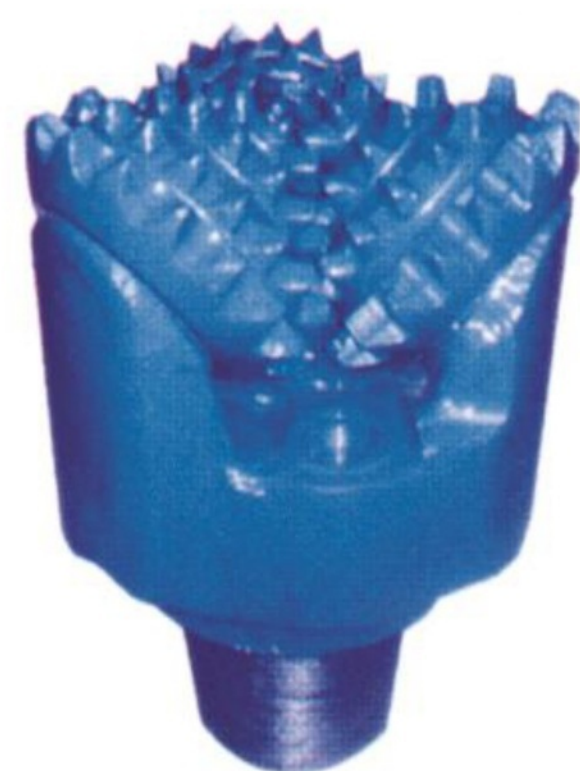
OIL WELL MILLED TOOTH TRICONE BIT SERIES



IADC	WOB (KN/mm)	RPM (r/min)	Applicable Formations
117	0.3–0.75	180–60	Very soft formations with low compressive strength and high drillability, such as clay、 mudstone、 chalk, etc.
127	0.3–0.85	180–60	Soft formations with low compressive strength and high drillability, such as mudstone、 gypsum、 salt、 soft limestone, etc.
217	0.35–0.95	150–60	Medium formations with high compress strength, such as medium soft shale、 hard gypsum、 medium soft limestone、 medium soft sandstone、 soft formation with harder interbed, etc.
114	0.35–0.75	180–60	Very soft formations with low compressive strength and high drillability, such as clay、 mudstone、 chalk, etc.

Product introduction

GUIDANCE OF TRICONE BIT PURCHASE



ROLLER CONE BITS(IADC)	ROLLER CONE(m/h)		FORMATION HARDNESS	FORMATION	ROCK TYPE	COMPRESS STRENGTH
	WEM	OBM				
111/124	15-30	18-33	Very soft	Soft formation with sticky layers and low compressive strength	Clay Silts Sands	<25MPa
116/137 437	9-15	12-18	soft	Soft formation with low compressive strength and high drill ability	Claystone Marl lignite Sangstone Tuff	25-50MPa
126/139 517/527	4.5-9	6-12	Medium soft	Soft to medium formation with low compressive strength interb added with hard layers	Claystone Marl lignite Sangstone Silts Anhydrites Tuff	50-75MPa
211/217 517/537	2.5-6	3-6	Medium	Medium to hard formation with high compressive strength and small abrasive layers	Mudstone Limestone Anhydrites Sandstone (Calcareous)	75-100MPa
211/236 537/617	1.5-2.5	1.5-3	Medium Hard	Hard and dense formation with very high compressive strength but non abrasive	Limestone Anhydrites Dolomite	100-120MPa
311/347 627/637	1-1.5	1-1.5	Hard	Hard and dense formation with very high compressive strength and some abrasive layer	Shale(Calcareous) Sandstone (Siliceous) Siltstone	100-200MPa
637,737,837	1	1	Very Hard	Extremely hard and abrasive formations	Quartzite Lgneous rocks	>200MPa

MINERAL TRICONE BIT SERIES



IADC	WOB (KN/mm)	RPM (r/min)	Applicable Formations
512	0.5–0.8	110–65	Soft formations with low compressive strength and high drillability, such as mudstone、gypsum、salt、soft limestone, etc.
532	0.5–0.8	110–65	Soft formations with low compressive strength and high drillability, such as mudstone、gypsum、salt、soft limestone, etc.
632	0.5–0.9	100–60	Hard formation, well-compacted rockssuch as: hard silica limestones,quarzite streaks、pyrite ores、hematiteores、magnetite ores、chromium ores、phosphorite ores、and granites, etc.

Product introduction

MATRIX BODY PDC BIT



Deep blade and long parabolic configuration, ensure optimal bottom hole flow pattern and antiballing.

Arc blade and spiral gauge enhance the cutting capability and the drilling stabilization.

Anti-whirl design improves ROP and enhances the drilling stability.

Medial cutter density design is suitable for soft to medial formations.

BIT	SPECIFICATIONS					RECOMMENDED OPERATION PARAMETERS		
Size	Number of Blade	Primary Cutter Size	Nozzle Qty	Gauge Length	Connection	Rotary Speed(rpm)	Weight on Bit(KN)	Flow Rate(lps)
6	5	Φ 16mm	5	1.5"-2"	3-1/2"APIREG	80-300	10-80	20-35
8-1/2	5	Φ 16mm	5	2"-3.5"	4-1/2"APIREG	60-250	10-100	25-36
8-1/2	6	Φ 16mm	6	2"-3.5"	4-1/2"APIREG	60-250	10-100	25-36
8-1/2	6	Φ 13.44mm	6	2"-3.5"	4-1/2"APIREG	60-250	10-100	25-36
8-1/2	7	Φ 16mm	7	2"-3.5"	4-1/2"APIREG	60-250	10-100	25-36
8-1/2	4	Φ 19.05mm	4	2"-3.5"	4-1/2"APIREG	60-250	10-100	25-36

STEEL BODY PDC BIT



Deep blade and long parabolic configuration, ensure optimal bottom hole flow pattern and antiballing.

Arc blade and spiral gauge enhance the cutting capability and the drilling stabilization.

Anti-whirl design improves ROP and enhances the drilling stability.

Medial cutter density design is suitable for soft to medial formations.

BIT	SPECIFCATIONS					RECOMMENDED OPERATION PARAMETERS		
Size	Namber or Blade	Primary Cutter Size	Nozzle Qty	Gauge Length	Connection	Rotary Speed(rpm)	Weight on Bit(KN)	Flow Rate(lps)
12-1/4	5	Φ 19.05mm	7	2.5"-4"	6-5/8"APIREG	60-250	30-150	40-55
13-5/8	5	Φ 19.05mm	7	2.5"-3.5"	6-5/8"APIREG	60-250	20-110	45-60
14-3/4	5	Φ 19.05mm	7	2.5"-3.5"	7-5/8"APIREG	60-250	20-110	45-60
16	6	Φ 16mm	9	2.5"-4"	7-5/8"APIREG	60-250	30-180	45-70
17-1/2	6	Φ 16mm	9	2.5"-4"	7-5/8"APIREG	60-250	30-180	45-80
16	5	Φ 19.05mm	7	2.5"-4"	7-5/8"APIREG	60-250	30-180	45-70
17-1/2	5	Φ19.05mm	7	3.5"-5"	7-5/8"APIREG	60-250	30-200	45-80
22"	9	Φ 19.05mm	12	2.5"-3.5"	7-5/8"APIREG	60-250	30-200	45-80

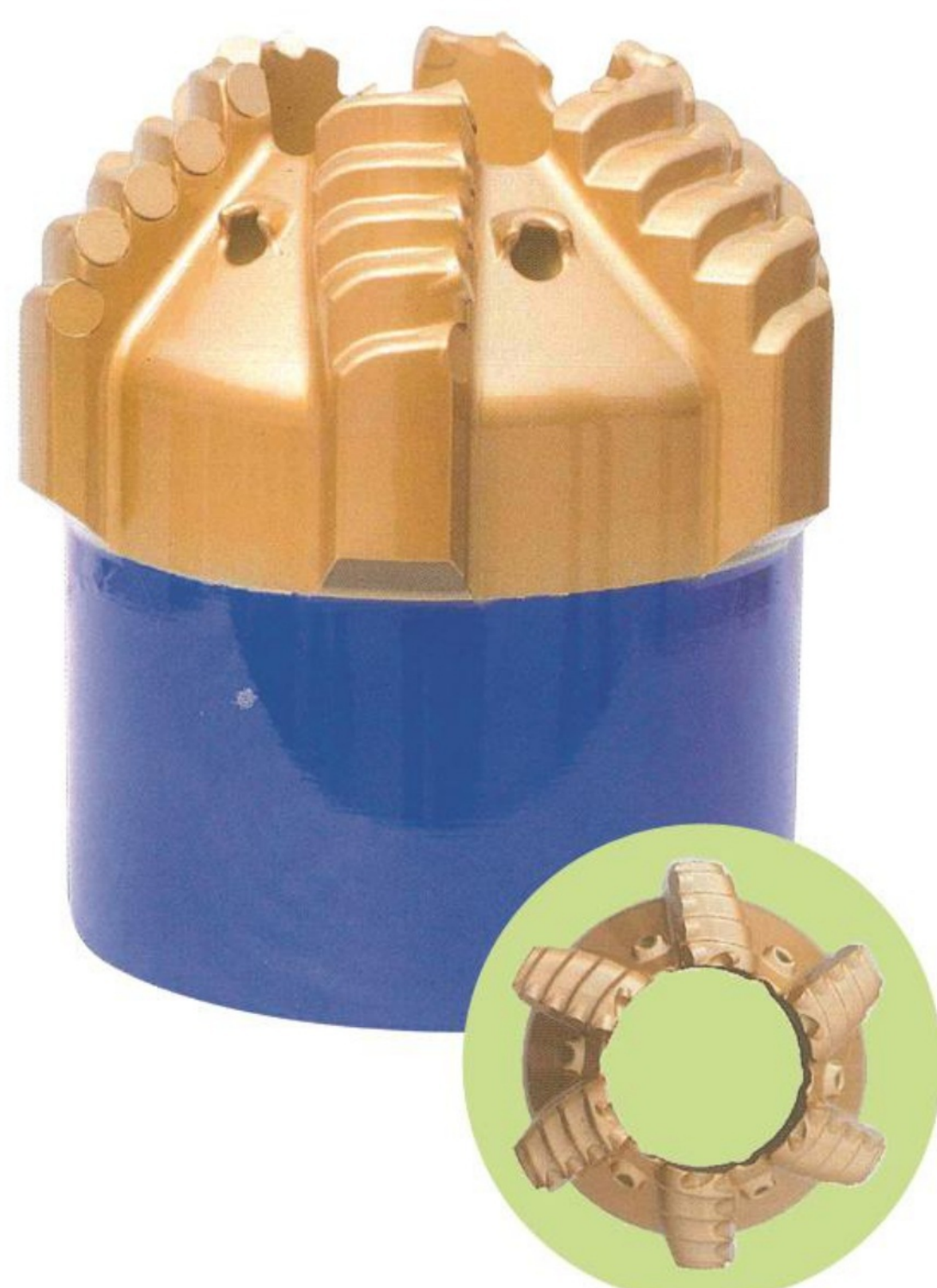
Product introduction

PDC CORE BIT



Deep blade and long parabolic configuration, ensure optimal bottom hole flow pattern and antiballing.
Arc blade and spiral gauge enhance the cutting capability and the drilling stabilization.
Anti-whirl design improves ROP and enhances the drilling stability.
Medial cutter density design is suitable for soft to medial formations.

BIT	SPECIFICATIONS				RECOMMENDED OPERATION PARAMETERS		
Size	Primary Cutter Size	Nozzle Qty	Gauge Length	Connection	Rotary Speed(rpm)	Weight on Bit(KN)	Flow Rate(lps)
φ 215- φ 105	6PCS/CT	0.20-1.5	1.5"	///8-3CBS ///8-4CBS	40-80	20-100	10-25
φ 215- φ 105	φ 13.44mm	0.2-1.20	1.5"	///8-3CBS ///8-4CBS	40-150	23-70	11-20



Features of FMH/FSH Series: Six blades of stepped steel body core bit adopts the unique stepped structure design to enhance the bit's stability and core recovery rate. Unique stepped profile greatly broadens the free surface of the rock ridge, thus facilitating easier drilling and improving the drilling efficiency. Ballistic junk slot coupled with optimized nozzle layout improves efficiency of cutting removal. Rear gauge design reduces the contact area between the bit and the core, making the core get into the coring tools easily. Enhanced inner gauge design ensures the core recovery rate amid highly efficient drilling. High performance PDC cutting element. Varied inner structure is available, based on varied coring methods.

HYBRID DRILL BIT OF PDC AND CONE



FPY series bit is exactly designed for complex and hard drilling formations, having longer working life. Especially suitable for drilling the formation like abnormal tight mud, conglomeratic formation, bedrock and non-homogeneous formation.

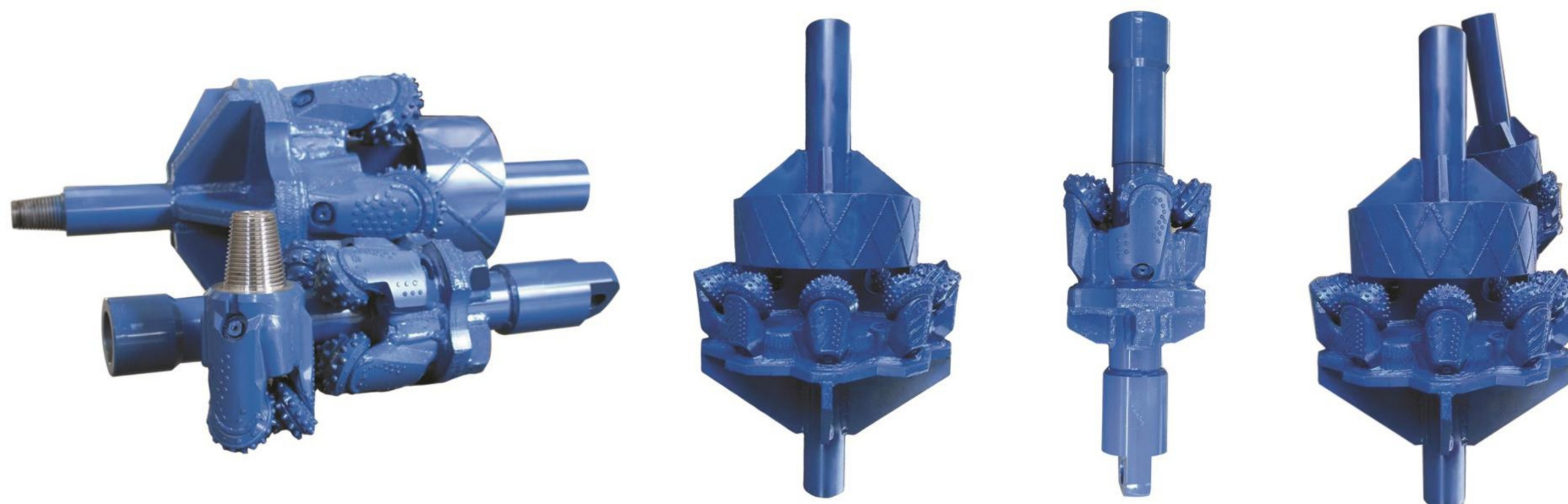
Optimized PDC blade profile and cutting structure of roller cone design ensure the force equilibrium and better cutting efficiency of the bit. Long gauge structure effectively promotes the wellbore quality.

The application of different functional cutting elements promotes the using effect of bits in complex and hard drilling formation.

Dynamic flow simulation technology and optimized hydraulic structure improve the bits cooling and cleaning ability and avoid the bit balling.

Product introduction

ROLLER CONE HOLE OPENER



IADC	WOB (KN/mm)	RPM (r/min)	Applicable Formations
517/537	0.4–1.0	120–60	Soft to medium formations with low compressive strength and high drillability, such as mudstone、gypsum、 salt、 limestone, etc.
617	0.45–1.1	90–50	Medium hard formation with high compress strength,such as hard shale、 limestone、 sandstone、 dolomite.Etc.
637	0.5–1.2	80–40	Hard formations with high compressive strength, such as sandstone、 limestone、 dolomite、 hard gypsum、 mar-ble, etc.
117/127	0.35–0.9	150–70	Soft formations with low compressive strength, such as soft shale、 hard gypsum、 soft limestone、 soft sandstone、 soft formation with harder interbed, etc.

Note:The upper limits of WOB and RPM in above table should not be used simultaneously.

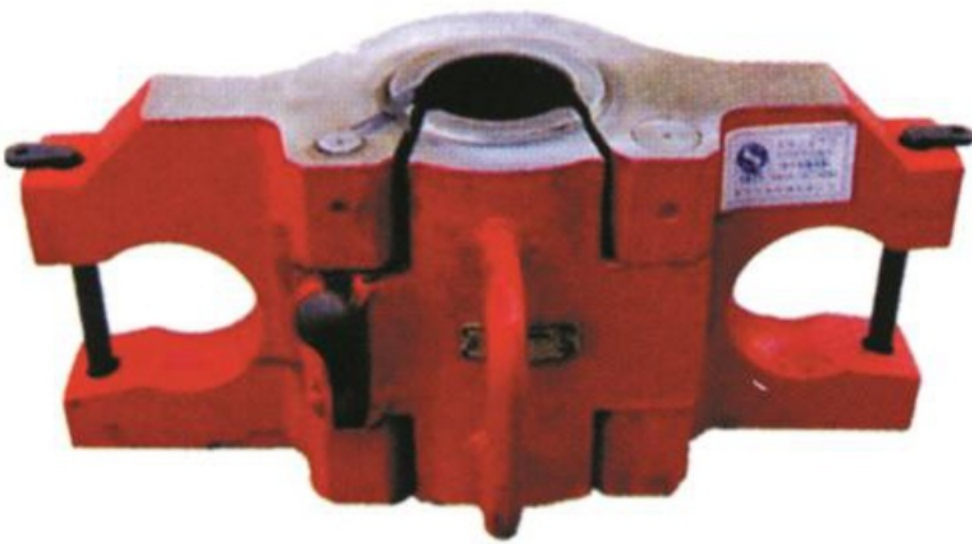
THE DRILLING TOOL

elevator link



- The lifting ring is one of the main hanging tools for lifting and lowering drill string in the process of oil and gas drilling and downhole workover operation. Its lower end is hung in the lifting lugs on both sides of the crane, and the upper end is hung in the earrings on both sides of the hook, which is mainly used to hang the crane.
- According to the structure, the lifting ring can be divided into single-arm lifting ring and double-arm lifting ring.

Elevator



- In drilling engineering, the crane is a tool used to lift pipes such as drill pipe, tubing and casing. It is suspended in the lifting rings on both sides of the hook of the lifting system in order to lift or lower the drilling tools, tubing and casing in the wellbore. The crane has different specifications corresponding to the drill string.

hanging tong



- Lifting pliers are used to tighten or unscrew drill string, casing, tubing and other connecting threads in oil and gas drilling and workover operations. In general, internal and external pliers are used at the same time.
- According to the structure, the lifting pliers can be divided into two types: multi-buckle pliers and single-buckle pliers. According to the function, it can be divided into drill pipe lifting pliers, casing lifting pliers and tubing lifting pliers. According to the performance, it can be divided into B-type lifting pliers and hydraulic large (lifting) pliers. Type B lifting pliers are multi-buckle clamp.

Product introduction

THE DRILLING TOOL

Male cone,female cone



- The male cone has a higher salvage success rate for pipe falling objects with coupling. Different salvage techniques can be realized when male cones are used in conjunction with positive and reverse drill pipes and other tools.
- The master cone is specially used to make buckle and salvage from the outer wall of tubing, drill pipe and other tubular objects, which can be used to salvage the falling objects of the cylinder without inner hole or blocked by inner hole.

Variable diameter joint



High efficiency grinding shoes



- The utility model relates to a kind of workover tool for grinding high efficiency shoes. It is composed of the body hard segment body soft segment and the cemented carbide column, the lower end of the body hard segment is connected with the upper end of the body soft segment, and the cemented carbide column is alternately embedded at the bottom of the body soft segment. It has the advantage of high grinding efficiency.

THE DRILLING TOOL

Centralizer



- The centralizer belongs to the cementing tool, which has the advantages of simple manufacture, beautiful structure, firm and durable, and large centralization force, which overcomes the deficiency that the original welded centralizer is easy to be de-welded, and is a kind of centralizer which can ensure the quality of drilling and cementing.
- There are many kinds of centralizers, which can be divided into roller type, slider type, automatic reversing type and so on. Centralizers of different structures and materials are suitable for different types of eccentric wear oil wells. The key technology of using centralizer to prevent eccentric wear is the position distance and quantity of centralizer installation.

Slips



- In the process of drilling, slips are a tool for clamping drill pipes, drill collars or tubing on the turntable to connect and unload the drill string. The inside of the slips is equipped with fine-toothed slips, which are specially used to hold the pipe. Its outer surface has a certain inclination so that it can be placed in the filling heart of the turntable. In addition, for the safety of work when raising and lowering the drill collar.

Oil casing



- Oil casing is a steel pipe used to support the sidewall of oil and gas wells to ensure the normal operation of the whole oil well during drilling and after completion. Several layers of casing should be used in each well according to different drilling depth and geological conditions. Cement cementing should be used after casing is downhole, which is different from tubing and drill pipe and can not be reused. It belongs to disposable consumption material. Therefore, the consumption of casing accounts for more than 70% of all oil well pipes. According to the usage, casing can be divided into conduit, surface casing, technical casing and reservoir casing.

Product introduction

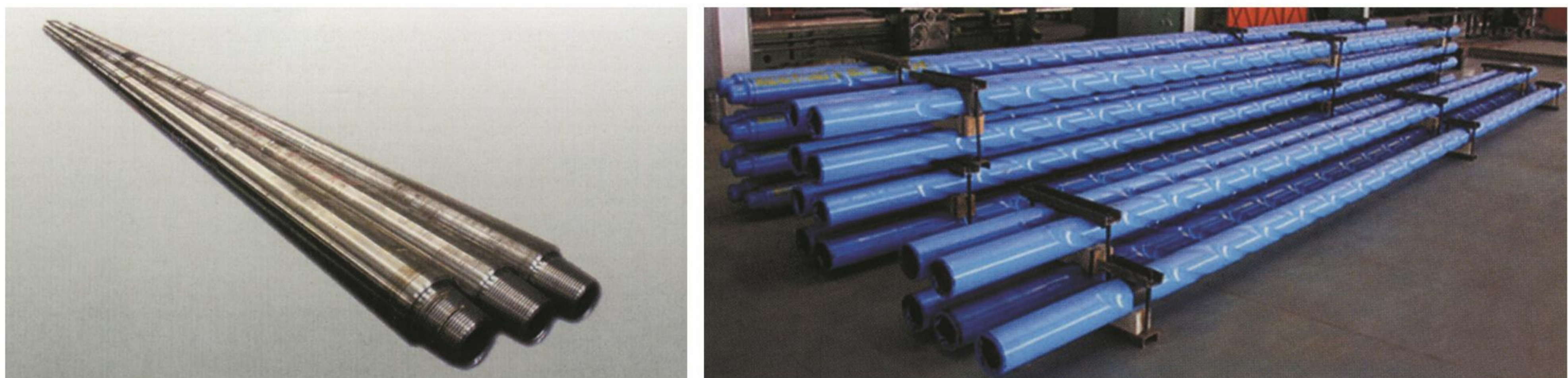
THE DRILLING TOOL

Oil drill pipe



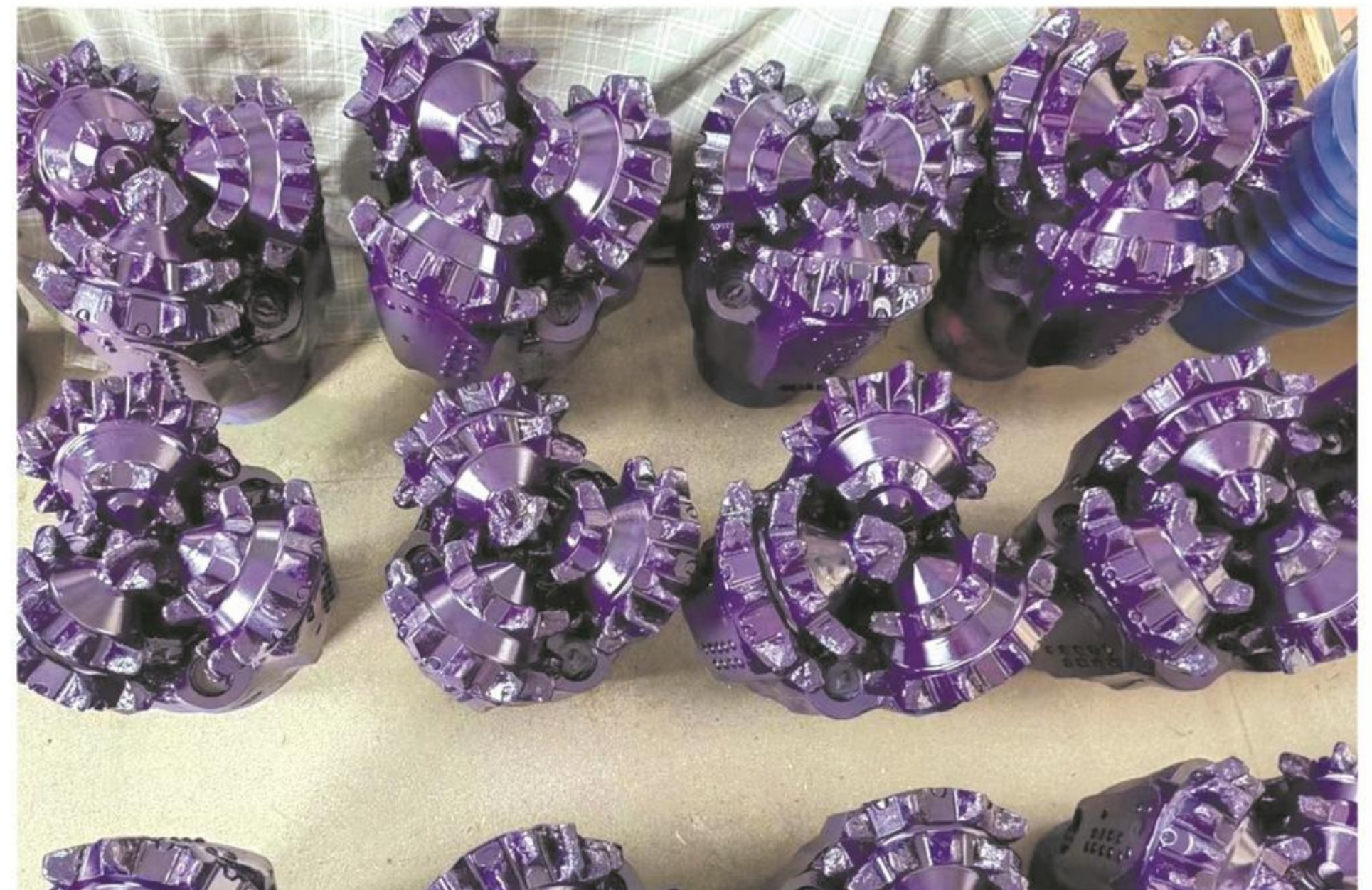
- Drill pipe is a rod used to connect drill bit and transmit power in drilling tools. Drill string is usually composed of drill bit、drill collar、drill pipe、stabilizer、special joint and square drill pipe.
- The basic functions of drill pipe are: (1) lifting down bit; (2) applying drilling pressure; (3) transferring power; (4) conveying drilling fluid; (5) carrying out special operations: squeezing cement, dealing with downhole accidents and so on.
- optional model: $\Phi 88.9$ $\Phi 101.6$ $\Phi 114.3$ $\Phi 127$ $\Phi 139.7$ $\Phi 168.3$

Drill collar



- The drill collar is located at the bottom of the drill string and is an important part of the lower BHA, which plays the following roles in drilling: (1) applying drilling pressure to the bit (2) ensuring the necessary strength under compression conditions; (3) reducing the vibration, swing and runout of the bit, etc. make the bit work smoothly (4) controlling the deviation.
- Optional model: $\Phi 79.4$ $\Phi 88.9$ $\Phi 104.8$ $\Phi 120.7$ $\Phi 127$ $\Phi 152.4$ $\Phi 177.8$ $\Phi 203.2$ $\Phi 241.3$

PRODUCT DISPLAY



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