



Our Workshops
我们的车间》



Our Products 《我们的产品》



Our Company 我们公司》

我们的办公楼
our office building

机加工车间1
mechanical
workshop1

钻孔车间
drilling
workshop

机加工车间2
mechanical
workshop2



有尼龙管高风压潜孔冲击器的特点

The Characteristics of High Air Pressure DTH Hammers with Foot Valve

装配带尼龙管钻头的高风压潜孔冲击器是我公司自行设计的无阀高风压冲击器。

其主要特点如下：

1. 采用无阀方式配气，配气可靠。
2. 活塞构造简单，不易损坏。
3. 能量传递理想，钻进速度快，耗气量小，油耗低。
4. 所用部件少，结构简单，加上各部件均硬化处理，因此，工作寿命长，故障少，维修方便。
5. 接头和卡钎套采用多头螺纹与外缸联接，拆卸容易。

It is a kind of valveless high air pressure DTH hammer with foot valve. It has the following advantages:

The main features are as following:

1. Valveless air distribution. More reliable.
2. Simple design of the piston. Long life span.
3. More efficient energy transfer, faster drilling speed, lower air consumption and lower oil consumption.
4. Fewer internal parts, simple structure, long life span, less failure and easier to maintain because all the parts are heat treated.
5. Easy to disassemble because the top sub, the drive chuck and the external cylinder are connected by multiple steps thread.



有尼龙管高风压潜孔冲击器系列

High Air Pressure DTH Hammers with Foot Valve

ND系列潜孔冲击器

ND SERIES DTH HAMMER



零件名称 Item Description	重量Weight (kg)						
	ND35	ND45	ND55	ND55C	ND65	ND85	ND1120
1. 接头 Top Sub	4.20	6.50	15.00	13.70	20.00	41.00	70.00
2. 接头O形圈 "O" Ring Of Top Sub	0.01	0.01	0.01	0.01	0.02	0.02	0.04
3. 接头垫片 Breakout Ring	0.01					0.20	0.80
4. 逆止阀 Check Valve	0.20	0.42	1.00	1.00	1.00	1.50	3.00
5. 弹簧 Spring	0.02	0.04	0.04	0.04	0.04	0.10	0.10
6. 承压垫 Compression Buffer	0.04	0.04	0.08	0.08	0.08	0.42	1.00
7. 配气座 Air Distributor	1.40	2.20	3.70	3.50	5.00	12.5	20.00
8. 内缸 Internal Cylinder	1.60	2.30	4.50	4.20	5.00	8.60	23.00
9. 活塞 Piston	5.40	9.00	15.50	17.20	23.60	41.00	125.00
10. 外缸 External Cylinder	9.50	15.0	30.00	26.50	36.80	62.00	170.00
11. 衬套 Guided Sleeve				1.20	2.40	9.60	16.00
12. 卡环O形圈 "O" Ring Of Stop Ring	0.01	0.01	0.01	0.02	0.02	0.02	0.04
13. 卡环 Stop Ring	0.20	0.20	0.30	0.50	0.60	1.20	4.50
14. 卡钎套垫片 Breakout Ring	0.01					0.20	0.80
15. 卡钎套 Drive Chuck	1.95	3.50	6.40	4.50	6.00	17.50	48.00
16. 钻头 Drill Bit	5.00	9.00	16.00	15.60	26.00	40.00	120.00
17. 抗磨合金 Carbide Button	0.12						

	技术参数 Technical Data						
	ND35	ND45	ND55	ND55C	ND65	ND85	ND1120
总长 (不含钻头) Length (Without Bit)	930mm	1030mm	1214mm	1160mm	1248mm	1492mm	1900mm
总重 (不含钻头) Weight (Without Bit)	25.00 kg	39.00 kg	76.50 kg	72.50 kg	100.00 kg	188.00 kg	480.00 kg
冲击器外径 External Diameter	Φ82mm	Φ99mm	Φ125mm	Φ125mm	Φ142mm Φ146mm	Φ144mm Φ148mm	Φ180mm Φ275mm
可配钻头钎柄 Bit Shank	DHD3.5	COP44/DHD340	COP54/DHD350R	ND55C/DHD350Q	COP64/DHD360	COP84/DHD380	DHD1120
钻孔范围 Hole Range	Φ90-Φ110 mm	Φ110-Φ135 mm	Φ135-Φ155 mm	Φ135-Φ155 mm	Φ155-Φ190 mm	Φ195-Φ254 mm	Φ305-Φ445 mm
后接头螺纹 Connection Thread	API 2 3/8" Reg	API 2 3/8" Reg	API 2 3/8" Reg API 3 1/2" Reg	API 2 3/8" Reg API 3 1/2" Reg	API 3 1/2" Reg	API 4 1/2" Reg	API 6 5/8" Reg
可用工作压力 Working Pressure	1.0-1.5 Mpa	1.2-2.0 Mpa	1.3-2.3Mpa	1.3-2.3 Mpa	1.5-2.5 Mpa	1.5-3.0Mpa	2.0-3.5Mpa
在17bar时的 冲击频率 Impact Rate at 17 Bar	28HZ	27HZ	25HZ	25HZ	23HZ	27HZ	16HZ
推荐转速 Recommended Rotation Speed	25-40 r/min	25-40 r/min	20-35 r/min	20-35 r/min	20-30 r/min	20-30 r/min	15-25 r/min
耗风量 Air Consumption	1.0Mpa :4.5 m³/min	1.0Mpa :6 m³/min	1.0Mpa :9 m³/min	1.0Mpa :9 m³/min	1.0Mpa :10 m³/min	1.0Mpa :15 m³/min	1.0Mpa :30 m³/min
	1.5Mpa :9.0 m³/min	1.8Mpa :10 m³/min	1.8Mpa :15 m³/min	1.8Mpa :15 m³/min	1.8Mpa :20 m³/min	1.8Mpa :26 m³/min	1.8Mpa :56 m³/min
		2.4Mpa :15 m³/min	2.4Mpa :23 m³/min	2.4Mpa :23 m³/min	2.4Mpa :28.5 m³/min	2.4Mpa :34 m³/min	2.4Mpa :78 m³/min

有尼龙管高压潜孔冲击器系列
High Air Pressure DTH Hammers with Foot Valve

NSD系列潜孔冲击器
NSD SERIES DTH HAMMER

有尼龙管高压潜孔冲击器系列
High Air Pressure DTH Hammers with Foot Valve

NQL系列潜孔冲击器
NQL SERIES DTH HAMMER



零部件名称 Item Description	重量Weight (kg)					
	NSD4	NSD5	NSD6	NSD8	NSD10	NSD12
1. 接头 Top Sub	6.50	15.00	20.00	41.00	59.00	70.00
2. 接头O形圈 "O" Ring Of Top Sub	0.01	0.01	0.01	0.02	0.03	0.04
3. 接头垫片 Breakout Ring	0.01			0.20	0.30	0.80
4. 逆止阀 Check Valve	0.42	1.00	1.00	1.50	1.40	3.00
5. 弹簧 Spring	0.04	0.10	0.05	0.10	0.30	0.10
6. 承压垫 Compression Buffer	0.04	0.05	0.10	0.42	0.60	1.00
7. 配气座 Air Distributor	2.20	3.50	5.00	12.50	11.50	20.00
8. 内缸 Internal Cylinder	2.50	4.20	5.00	8.60	11.00	23.00
9. 活塞 Piston	9.00	15.50	24.00	42.00	62.00	125.00
10. 外缸 External Cylinder	15.60	25.00	35.00	65.00	110.00	170.00
11. 卡环O形圈 "O" Ring Of Stop Ring	0.02	0.01	0.01	0.05	0.03	0.04
12. 卡环 Stop Ring	0.20	0.50	0.50	1.20	0.60	4.80
13. 衬套 Guided Sleeve			1.50	3.40	4.50	18.00
14. 卡钎套垫片 Breakout Ring	0.01				0.30	0.80
15. 卡钎套 Drive Chuck	4.00	7.50	7.50	15.50	24.00	51.00
16. 钻头 Drill Bit	9.60	15.60	25.80	37.00	115.00	120.00



零部件名称 Item Description	重量Weight (kg)			
	NQL4	NQL5	NQL6	NQL8
1. 接头 Top Sub	6.50	15.00	20.00	41.00
2. 接头O形圈 "O" Ring Of Top Sub	0.01	0.015	0.02	0.02
3. 接头垫片 Breakout Ring				0.30
4. 逆止阀 Check Valve	0.42	1.00	1.00	1.50
5. 弹簧 Spring	0.04	0.10	0.10	0.10
6. 承压垫 Compression Buffer	0.04	0.10	0.10	0.42
7. 配气座 Air Distributor	2.20	3.50	6.00	13.00
8. 内缸 Internal Cylinder	2.30	4.20	5.00	8.60
9. 活塞 Piston	9.00	19.00	23.50	41.00
10. 外缸 External Cylinder	16.5	24.60	31.00	60.00
11. 衬套 Guided Sleeve		0.90	1.00	2.20
12. 卡环O形圈 "O" Ring Of Stop Ring	0.01	0.01	0.02	0.02
13. 卡环 Stop Ring	0.30	0.40	0.60	1.20
14. 卡钎套垫片 Breakout Ring				0.30
15. 卡钎套 Drive Chuck	3.00	4.60	5.40	12.00
16. 钻头 Drill Bit	9.50	15.50	24.60	35.00

技术参数 Technical Data

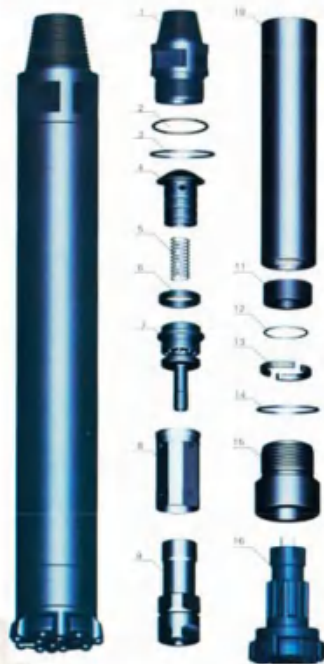
	NSD4	NSD5	NSD6	NSD8	NSD10	NSD12
总长 (不含钻头) Length (Without Bit)	1084mm	1175mm	1261mm	1463mm	1502mm	1880mm
总重 (不含钻头) Weight (Without Bit)	40.50 kg	72.50 kg	100.00 kg	192.00 kg	290.00 kg	487.00 kg
冲击器外径 External Diameter	Φ99mm	Φ125mm	Φ142mm Φ144mm Φ146mm Φ148mm	Φ180mm	Φ226mm	Φ275mm
可配钻头钎柄 Bit Shank	SD4	SD5	SD6	SD8	SD10	SD12
钻孔范围 Hole Range	Φ110-Φ135 mm	Φ135-Φ155 mm	Φ155-Φ190 mm	Φ195-Φ254 mm	Φ254-Φ311 mm	Φ305-Φ445 mm
后接头螺纹 Connection Thread	API 2 3/8" Reg	API 3 1/2" Reg API 7/8" Reg	API 3 1/2" Reg	API 4 1/2" Reg	API 4 1/2" Reg API 6 5/8" Reg	API 6 5/8" Reg
可用工作风压 Working Pressure	1.2-2.0 Mpa	1.3-2.3Mpa	1.5-2.5 Mpa	1.5-3.0 Mpa	2.0-3.5 Mpa	2.0-3.5 Mpa
在17bar时的 冲击频率 Impact Rate at 17 Bar	27HZ	25HZ	23HZ	20HZ	18HZ	16HZ
推荐转速 Recommended Rotation Speed	25-40 r/min	20-35 r/min	20-30 r/min	5-25 r/min	20-30 r/min	15-25 r/min
耗风量 Air Consumption	1.0Mpa :6 m³/min	1.0Mpa :9 m³/min	1.0Mpa :10 m³/min	1.0Mpa :15 m³/min	1.0Mpa :22 m³/min	1.0Mpa :30 m³/min
	1.8Mpa :10 m³/min	1.8Mpa :15 m³/min	1.8Mpa :20 m³/min	1.8Mpa :26 m³/min	1.8Mpa :40 m³/min	1.8Mpa :56 m³/min
	2.4Mpa :15 m³/min	2.4Mpa :23 m³/min	2.4Mpa :28.5 m³/min	2.4Mpa :34 m³/min	2.4Mpa :55 m³/min	2.4Mpa :78 m³/min

技术参数 Technical Data

	NQL4	NQL5	NQL6	NQL8
总长 (不含钻头) Length (Without Bit)	1097mm	1156mm	1212mm	1465mm
总重 (不含钻头) Weight (Without Bit)	41.00 kg	73.00 kg	95.00 kg	182.00 kg
冲击器外径 External Diameter	Φ99mm	Φ125mm	Φ142mm Φ144mm Φ146mm Φ148mm	Φ180mm
可配钻头钎柄 Bit Shank	QI40	QI50	QI60	QI80
钻孔范围 Hole Range	Φ110-Φ135 mm	Φ135-Φ155 mm	Φ155-Φ190 mm	Φ195-Φ254 mm
后接头螺纹 Connection Thread	API 2 3/8" Reg	API 3 1/2" Reg API 7/8" Reg	API 3 1/2" Reg API 7/8" Reg 2 7/8" JF	API 4 1/2" Reg
可用工作风压 Working Pressure	1.2-2.0 Mpa	1.3-2.3 Mpa	1.5-2.5 Mpa	1.5-3.0 Mpa
在17bar时的 冲击频率 Impact Rate at 17 Bar	27HZ	25HZ	23HZ	20HZ
推荐转速 Recommended Rotation Speed	25-40 r/min	25-40 r/min	20-30 r/min	15-25 r/min
耗风量 Air Consumption	1.0Mpa :6 m³/min	1.0Mpa :9 m³/min	1.0Mpa :10 m³/min	1.0Mpa :15 m³/min
	1.8Mpa :10 m³/min	1.8Mpa :15 m³/min	1.8Mpa :20 m³/min	1.8Mpa :26 m³/min
	2.4Mpa :15 m³/min	2.4Mpa :23 m³/min	2.4Mpa :28.5 m³/min	2.4Mpa :34 m³/min

有尼龙管高压潜孔冲击器系列
High Air Pressure DTH Hammers with Foot Valve

N系列潜孔冲击器
N SERIES DTH HAMMER



零部件名称 Item Description	重量 (kg)		
	N100	N120	N125
1. 接头 Top Sub	59.00	70.00	70.00
2. 接头O形圈 O' Ring Of Top Sub	0.03	0.04	0.04
3. 接头垫片 Breakout Ring	0.40	0.80	0.80
4. 逆止阀 Check Valve	1.60	3.00	3.00
5. 弹簧 Spring	0.30	0.10	0.10
6. 承压垫 Compression Buffer	0.60	1.00	1.00
7. 配气座 Air Distributor	11.50	20.00	20.00
8. 内缸 Internal Cylinder	11.00	23.00	23.00
9. 活塞 Piston	62.00	125.00	125.00
10. 外缸 External Cylinder	112.00	170.00	170.00
11. 衬套 Guided Sleeve		18.00	
12. 卡环O形圈 "O" Ring Of Stop Ring	0.03	0.04	0.01
13. 卡环 Stop Ring	1.50	4.50	4.00
14. 卡钎套垫片 Breakout Ring	0.40	0.80	0.80
15. 卡钎套 Drive Chuck	26.00	49.00	45.00
16. 钻头 Drill Bit	115.00	120.0	175.00

技术参数 Technical Data

	N100	N120	N125
总长 (不含钻头) Length (Without Bit)	1510mm	1900mm	1900mm
总重 (不含钻头) Weight (Without Bit)	288.00 kg	485.00 kg	480.00 kg
冲击器外径 External Diameter	Φ226mm	Φ275mm	Φ275mm
可配钻头钎柄 Bit Shank	NUMA100	NUMA120	NUMA125
钻孔范围 Hole Range	Φ254 - Φ311 mm	Φ305 - Φ445 mm	Φ305 - Φ445 mm
后接头螺纹 Connection Thread	API 4 1/2" Reg API 6 5/8" Reg	API 6 5/8" Reg	API 6 5/8" Reg
可用工作风压 Working Pressure	2.0 - 3.5 Mpa	2.0 - 3.5 Mpa	2.0 - 3.5 Mpa
在17bar时的 冲击频率 Impact Rate at 17 Bar	18HZ	16HZ	16HZ
推荐转速 Recommended Rotation Speed	15-25 r/min	15-25 r/min	15-25 r/min
	1.0Mpa :22 m ³ /min	1.0Mpa :30 m ³ /min	1.0Mpa :30 m ³ /min
耗风量 Air Consumption	1.8Mpa :45 m ³ /min	1.8Mpa :56 m ³ /min	1.8Mpa :56 m ³ /min
	2.4Mpa :60 m ³ /min	2.4Mpa :78 m ³ /min	2.4Mpa :78 m ³ /min

无尼龙管高压潜孔冲击器的特点

The Characteristics of High Air Pressure DTH Hammers Without Foot Valve

所配钻头无尼龙管的高风压潜孔冲击器是我公司最新设计的冲击器，是目前世界上最先进的冲击器之一。

其主要特点如下：

1. 钻头不需要尼龙管，因而省去了尼龙管断裂、破损和热胀冷缩而引起的麻烦。
2. 冲击能量损耗低，冲击频率高，钻进速度比同类型带尼龙管冲击器快15%-30%。
3. 结构非常简单，部件可靠性好，冲击器寿命长，维修保养简单，费用低。
4. 耗风量低，省风省油，比同类型有尼龙管冲击器省油10%以上。

It is a kind of high air pressure DTH hammer without foot valve, and it is our newest design. It is also one of the most advanced DTH hammers in the world.

It has the following advantages:

1. Out of the trouble of foot valve fracture and expansion and contraction.
2. Lower energy consumption and higher impact frequency. The drilling speed is 15%-30% higher than the one with foot valve.
3. Simple structure, reliable parts, long life span, easy and cheap maintenance.
4. Lower air and oil consumption. The oil consumption is about 10% lower than the one with foot valve.



无尼龙管高压潜孔冲击器系列
High Air Pressure DTH Hammers Without Foot Valve

ND系列潜孔冲击器
ND SERIES DTH HAMMER



零部件名称 (Item Description)	重量Weight (kg)					
	ND25A	ND35A	ND45A	ND45S	ND55A	ND55S
1. 接头 Top Sub	3.10	4.20	6.50	6.00	13.70	13.30
2. 接头O形圈 "O" Ring Of Top Sub		0.01	0.01	0.01	0.015	0.015
3. 接头垫片 Breakout Ring						
4. 逆止阀 Check Valve	0.10	0.20	0.35	0.30	0.70	0.70
5. 弹簧 Spring	0.05	0.02	0.05	0.05	0.10	0.10
6. 承压垫 Compression Buffer						
7. 配气座 Air Distributor	0.60	0.80	1.50	1.30	2.00	1.90
8. 内缸 Internal Cylinder	0.80	1.30	2.10	1.90	2.80	2.70
9. 活塞 Piston	3.80	5.50	8.50	7.80	15.00	14.50
10. 外缸 External Cylinder	4.50	9.50	15.20	14.60	24.00	23.00
11. 衬套 Guided Sleeve	0.60	1.00	1.30	1.20	2.60	2.50
12. 卡环O形圈 "O" Ring Of Stop Ring	0.005	0.05	0.01	0.005	0.01	0.01
13. 卡环 Stop Ring	0.10	0.15	0.30	0.20	0.50	0.50
14. 卡钎套垫片 Breakout Ring						
15. 卡钎套 Drive Chuck	1.40	1.90	3.40	3.40	6.50	6.20
16. 钻头 Drill Bit	3.20	5.00	9.00	8.50	16.00	15.50

无尼龙管高压潜孔冲击器系列
High Air Pressure DTH Hammers without Foot Valve

ND系列潜孔冲击器
ND SERIES DTH HAMMER



零部件名称 (Item Description)	重量Weight (kg)				
	ND55C(A)	ND65A	ND75A	ND85A	ND1120A
1. 接头 Top Sub	13.70	20.00	23.00	34.00	70.00
2. 接头O形圈 "O" Ring Of Top Sub	0.015	0.02	0.015	0.015	0.04
3. 接头垫片 Breakout Ring				0.30	0.80
4. 逆止阀 Check Valve	0.70	0.70	0.70	1.20	2.00
5. 弹簧 Spring	0.10	0.10	0.10	0.10	0.10
6. 承压垫 Compression Buffer					
7. 配气座 Air Distributor	2.00	3.50	4.50	6.00	16.00
8. 内缸 Internal Cylinder	2.80	4.20	6.50	6.50	25.00
9. 活塞 Piston	15.00	23.00	28.00	42.50	113.00
10. 外缸 External Cylinder	25.00	31.50	40.00	60.00	173.00
11. 衬套 Guided Sleeve	3.20	6.50	7.50	5.30	24.00
12. 卡环O形圈 "O" Ring Of Stop Ring	0.01	0.01	0.01	0.01	0.01
13. 卡环 Stop Ring	0.50	0.60	0.80	1.20	4.00
14. 卡钎套垫片 Breakout Ring				0.30	0.80
15. 卡钎套 Drive Chuck	4.00	6.00	8.00	17.50	46.00
16. 钻头 Drill Bit	15.90	26.00	28.50	40.00	140.00

	技术参数 Technical Data					
	ND25A	ND35A	ND45A	ND45S	ND55A	ND55S
总长 (不含钻头) Length(Without Bit)	872mm	888mm	1011mm	966mm	1110mm	1110mm
总重 (不含钻头) Weight(Without Bit)	16.00 kg	25.00 kg	43.20 kg	37.00 kg	69.00 kg	66.00 kg
冲击器外径 External Diameter	Φ71mm	Φ82mm	Φ99mm	Φ92mm	Φ125mm	Φ116mm
可配钻头钎柄 Bit Shank	ND25	IR3.5	COP44/DHD340	COP44/DHD340	COP54/DHD350R	COP54/DHD350R
钻孔范围 Hole Range	Φ76 -Φ90 mm	Φ90 -Φ115 mm	Φ110 -Φ135 mm	Φ105 -Φ120 mm	Φ135 -Φ155 mm	Φ127 -Φ145 mm
后接头螺纹 Connection Thread	T42*10*1.5	API 2 3/8" Reg	API 2 3/8" Reg	API 2 3/8" Reg	API 2 3/8" Reg API 3 1/2" Reg API 2 3/8" Reg 2 1/2" IF	API 2 3/8" Reg API 3 1/2" Reg API 2 3/8" Reg
可用工作压力 Working Pressure	1.0 - 1.5 Mpa	1.0 - 1.5 Mpa	1.2 - 2.0 Mpa	1.2 - 2.0 Mpa	1.3 - 2.3 Mpa	1.3 - 2.3 Mpa
在17bar时的 冲击频率 Impact Rate at 17 Bar	25HZ	25HZ	30HZ	30HZ	28HZ	28HZ
推荐转速 Recommended Rotation Speed	22 - 35 r/min	25-40 r/min	22-35 r/min	25-40 r/min	20 - 35 r/min	20-35 r/min
耗风量 Air Consumption	1.0Mpa :4 m³/min	1.0Mpa :3.8 m³/min	1.0Mpa :6 m³/min	1.8Mpa :8 m³/min	1.0Mpa :7 m³/min	1.0Mpa :7 m³/min
	1.5Mpa :6 m³/min	1.5Mpa :7.5 m³/min	1.8Mpa :10 m³/min	2.4Mpa :13 m³/min	1.8Mpa :14 m³/min	1.8Mpa :13.5 m³/min
			2.4Mpa :15 m³/min		2.4Mpa :19 m³/min	2.4Mpa :18 m³/min

	技术参数 Technical Data				
	ND55C(A)	ND65A	ND75A	ND85A	ND1120A
总长 (不含钻头) Length(Without Bit)	1102mm	1238mm	1258mm	1359mm	1880mm
总重 (不含钻头) Weight(Without Bit)	68.00 kg	98.00 kg	120.00 kg	175.00 kg	474.00 kg
冲击器外径 External Diameter	Φ125mm	Φ142mm	Φ165mm	Φ180mm	Φ275mm
可配钻头钎柄 Bit Shank	ND55C/DHD350Q	COP64/DHD360	COP64/DHD360	COP84/DHD380	DHD1120
钻孔范围 Hole Range	Φ135 -Φ155 mm	Φ155 -Φ203 mm	Φ175 -Φ216 mm	Φ195 -Φ254 mm	Φ305 -Φ445 mm
后接头螺纹 Connection Thread	API 2 3/8" Reg API 3 1/2" Reg API 2 3/8" Reg	API 3 1/2" Reg	API 3 1/2" Reg	API 4 1/2" Reg	API 6 5/8" Reg
可用工作压力 Working Pressure	1.3 - 2.3 Mpa	1.5 - 3.0 Mpa	1.5 - 3.0 Mpa	1.5 - 3.0 Mpa	2.0 - 3.5 Mpa
在17bar时的 冲击频率 Impact Rate at 17 Bar	28HZ	25HZ	23HZ	22HZ	20HZ
推荐转速 Recommended Rotation Speed	20 - 35 r/min	20 - 30 r/min	20 - 30 r/min	15 - 25 r/min	15 - 25 r/min
耗风量 Air Consumption	1.0Mpa :8 m³/min	1.0Mpa :9 m³/min	1.0Mpa :11 m³/min	1.0Mpa :12 m³/min	1.0Mpa :28 m³/min
	8Mpa :14 m³/min	1.8Mpa :18 m³/min	1.8Mpa :20 m³/min	1.8Mpa :22 m³/min	1.8Mpa :50 m³/min
	2.4Mpa :19 m³/min	2.4Mpa :26 m³/min	2.4Mpa :28 m³/min	2.4Mpa :28m³/min	2.4Mpa :71 m³/min

无尼龙管高压潜孔冲击器系列
High Air Pressure DTH Hammers Without Foot Valve

NSD系列潜孔冲击器
NSD SERIES DTH HAMMER



零部件名称 Item Description	重量和Weight (kg)					
	NSD4A	NSD5A	NSD6A	NSD8A	NSD10A	NSD12A
1. 接头 Top Sub	6.50	13.70	20.00	34.00	59.00	70.00
2. 接头O形圈 "O" Ring of Top Sub	0.10	0.015	0.015	0.015	0.03	0.04
3. 接头垫片 Breakout Ring				0.30	0.50	0.80
4. 逆止阀 Check Valve	0.35	0.70	0.70	1.20	1.40	2.00
5. 弹簧 Spring	0.05	0.10	0.10	0.10	0.30	0.10
6. 配气座 Air Distributor	1.50	2.00	3.50	6.00	10.50	16.00
7. 内缸 Internal Cylinder	2.10	2.80	4.20	6.50	12.50	25.00
8. 活塞 Piston	8.50	15.00	23.00	42.50	77.00	113.00
9. 外缸 External Cylinder	15.30	24.00	28.00	59.00	110.00	175.00
10. 衬套 Guided Sleeve	1.30	2.60	2.50	6.00	11.50	25.00
11. 卡环O形圈 "O" Ring Of Stop Ring	0.005	0.01	0.01	0.01	0.01	0.01
12. 卡环 Stop Ring	0.20	0.50	0.50	1.20	1.50	4.50
13. 卡钎套垫片 Breakout Ring				0.30	0.50	0.80
14. 卡钎套 Drive Chuck	4.00	7.50	7.50	16.00	31.50	48.00
15. 钻头 Drill Bit	9.80	16.00	27.00	37.00	108.00	165.00

无尼龙管高压潜孔冲击器系列
High Air Pressure DTH Hammers without Foot Valve

NQL系列潜孔冲击器
NQL SERIES DTH HAMMER



零部件名称 Item Description	重量和Weight (kg)				
	NQL4A	NQL5A	NQL6A	NQL8A	NQL95A
1. 接头 Top Sub	6.50	13.70	20.0	34.00	35.00
2. 接头O形圈 "O" Ring of Top Sub	0.01	0.015	0.015	0.015	0.01
3. 接头垫片 Breakout Ring				0.30	0.04
4. 逆止阀 Check Valve	0.35	0.70	0.70	1.20	1.20
5. 弹簧 Spring	0.05	0.10	0.10	0.10	0.10
6. 配气座 Air Distributor	1.50	2.00	3.50	6.00	7.00
7. 内缸 Internal Cylinder	2.10	2.70	4.20	6.50	7.50
8. 活塞 Piston	8.50	15.00	23.00	42.50	48.00
9. 外缸 External Cylinder	15.20	24.00	30.00	59.00	75.00
10. 衬套 Guided Sleeve	1.80	3.00	4.00	6.30	12.00
11. 卡环O形圈 "O" Ring Of Stop Ring	0.005	0.01	0.01	0.01	0.01
12. 卡环 Stop Ring	0.20	0.40	0.60	1.40	1.70
13. 卡钎套垫片 Breakout Ring				0.30	0.40
14. 卡钎套 Drive Chuck	3.20	4.50	5.50	13.00	15.00
15. 钻头 Drill Bit	9.00	16.00	25.00	35.00	50.00

	技术参数 Technical Data					
	NSD4A	NSD5A	NSD6A	NSD8A	NSD10A	NSD12A
总长 (不含钻头) Length (without Bit)	1012mm	1090mm	1182mm	1330mm	1525mm	1860mm
总重 (不含钻头) Weight (without Bit)	40.00 kg	70.00 kg	90.00 kg	174.00 kg	316.00 kg	480.00 kg
冲击器外径 External Diameter	Φ99mm	Φ125mm	Φ146mm	Φ180mm	Φ226mm	Φ275mm
可配钻头钎柄 Bit Shank	SD4	SD5	SD6	SD8	SD10	SD12
钻孔范围 Hole Range	Φ110-Φ135 mm	Φ155-Φ190 mm	Φ155-Φ203 mm	Φ195-Φ254 mm	Φ254-Φ311 mm	Φ305-Φ445 mm
后接头螺纹 Connection Thread	API 2 3/8" Reg	API 2 3/8" Reg API 3 1/2" Reg API 2 1/2" Reg	API 3 1/2" Reg	API 4 1/2" Reg	API 6 5/8" Reg	API 6 5/8" Reg
可用工作风压 Working Pressure	1.2-2.0 Mpa	1.3-2.3 Mpa	1.5-2.5 Mpa	1.5-3.0 Mpa	2.0-3.5 Mpa	2.0-3.5 Mpa
在17bar时的 冲击频率 Impact Rate at 17 Bar	30HZ	28HZ	25HZ	22HZ	20HZ	20HZ
推荐转速 Recommended Rotation Speed	25-40 r/min	20-35 r/min	20-30 r/min	15-25 r/min	20-35 r/min	15-25 r/min
	1.0Mpa :6 m³/min	1.0Mpa :7 m³/min	1.0Mpa :9 m³/min	1.0Mpa :12 m³/min	15-25 r/min	1.0Mpa :28 m³/min
耗风量 Air Consumption	1.8Mpa :9 m³/min	1.8Mpa :14 m³/min	1.8Mpa :18 m³/min	1.8Mpa :22 m³/min	1.8Mpa :40 m³/min	1.8Mpa :50 m³/min
	2.4Mpa :14 m³/min	2.4Mpa :19 m³/min	2.4Mpa :26 m³/min	2.4Mpa :28m³/min	2.4Mpa :65 m³/min	2.4Mpa :71 m³/min

	技术参数 Technical Data				
	NQL4A	NQL5A	NQL6A	NQL8A	NQL95A
总长 (不含钻头) Length (without Bit)	1070mm	1090mm	1183mm	1330mm	1340mm
总重 (不含钻头) Weight (without Bit)	40.00 kg	67.00 kg	92.00 kg	171.00 kg	203.00 kg
冲击器外径 External Diameter	Φ99mm	Φ125mm	Φ146mm	Φ180mm	Φ203mm
可配钻头钎柄 Bit Shank	QL40	QL50	QL60	QL80	QL80
钻孔范围 Hole Range	Φ110-Φ135 mm	Φ135-Φ155 mm	Φ155-Φ203 mm	Φ195-Φ254 mm	Φ216-Φ254 mm
后接头螺纹 Connection Thread	API 2 3/8" Reg	API 2 3/8" Reg API 3 1/2" Reg API 2 1/2" Reg	API 3 1/2" Reg	API 4 1/2" Reg	API 4 1/2" Reg
可用工作风压 Working Pressure	1.2-2.0 Mpa	1.3-2.3 Mpa	1.5-2.5 Mpa	1.5-3.0 Mpa	1.8-3.0 Mpa
在17bar时的 冲击频率 Impact Rate at 17 Bar	30HZ	28HZ	25HZ	22HZ	22HZ
推荐转速 Recommended Rotation Speed	20-30 r/min	20-35 r/min	20-30 r/min	15-25 r/min	15-25 r/min
	1.0Mpa :5 m³/min	1.0Mpa :7 m³/min	1.0Mpa :9 m³/min	1.0Mpa :12 m³/min	1.0Mpa :16 m³/min
耗风量 Air Consumption	1.8Mpa :9 m³/min	1.8Mpa :14 m³/min	1.8Mpa :18 m³/min	1.8Mpa :22 m³/min	1.8Mpa :28 m³/min
	2.4Mpa :14 m³/min	2.4Mpa :19 m³/min	2.4Mpa :26 m³/min	2.4Mpa :28m³/min	2.4Mpa :39m³/min

无尼龙管高压潜孔冲击器系列
High Air Pressure DTH Hammers Without Foot Valve

NM系列潜孔冲击器
NM SERIES DTH HAMMER

无尼龙管高压潜孔冲击器系列
High Air Pressure DTH Hammers Without Foot Valve

N系列潜孔冲击器
N SERIES DTH HAMMER



零部件名称 Item Description	重量Weight (kg)			
	NM4A	NM5A	NM6A	NM8A
1. 接头 Top Sub	6.50	13.70	20.00	34.00
2. 接头O形圈 "O" Ring of Top Sub	0.10	0.015	0.015	0.015
3. 接头垫片 Breakout Ring				0.30
4. 逆止阀 Check Valve	0.35	0.70	0.70	1.20
5. 弹簧 Spring	0.05	0.10	0.10	0.10
6. 配气座 Air Distributor	1.50	2.00	3.50	6.00
7. 内缸 Internal Cylinder	2.10	2.80	4.20	6.50
8. 活塞 Piston	8.50	15.00	23.00	42.50
9. 外缸 External Cylinder	14.80	24.00	26.00	61.00
10. 衬套 Guided Sleeve	1.80	2.60	4.80	5.30
11. 卡环O形圈 "O" Ring Of Stop Ring	0.005	0.01	0.01	0.01
12. 卡环 Stop Ring	0.30	0.70	0.80	1.50
13. 卡钎套垫片 Breakout Ring				0.30
14. 卡钎套 Drive Chuck	3.80	6.50	4.20	17.30
15. 钻头 Drill Bit	6.60	13.50	23.00	31.00



零部件名称 Item Description	重量Weight (kg)		
	N100A	N120A	N125A
1. 接头 Top Sub	59.00	70.00	70.00
2. 接头O形圈 "O" Ring of Top Sub	0.03	0.04	0.04
3. 接头垫片 Breakout Ring	0.50	0.80	0.80
4. 逆止阀 Check Valve	1.40	2.00	2.00
5. 弹簧 Spring	0.30	0.10	0.10
6. 配气座 Air Distributor	10.50	16.00	16.00
7. 内缸 Internal Cylinder	12.50	25.00	25.00
8. 活塞 Piston	77.00	113.00	113.00
9. 外缸 External Cylinder	110.00	170.00	170.00
10. 衬套 Guided Sleeve	4.50	25.00	23.00
11. 卡环O形圈 "O" Ring Of Stop Ring	0.02	0.01	0.01
12. 卡环 Stop Ring	1.90	4.50	4.00
13. 卡钎套垫片 Breakout Ring	0.50	0.80	0.80
14. 卡钎套 Drive Chuck	25.50	48.00	45.00
15. 钻头 Drill Bit	106.00	164.00	175.00

	技术参数 Technical Data			
	NM4A	NM5A	NM6A	NM8A
总长 (不含钻头) Length (Without Bit)	1005mm	1110mm	1161mm	1338mm
总重 (不含钻头) Weight (Without Bit)	40.00 kg	68.50 kg	90.00 kg	176kg
冲击器外径 External Diameter	Φ99mm	Φ126mm	Φ142mm Φ144mm Φ146mm Φ148mm	Φ180mm
可配钻头钎柄 Bit Shank	NM4	NM5	NM6	NM8
钻孔范围 Hole Range	Φ110 - Φ135 mm	Φ155 - Φ190 mm	Φ155 - Φ203 mm	Φ195 - Φ254 mm
后接头螺纹 Connection Thread	API 2 3/8" Reg	API 2 3/8" Reg API 3 1/2" Reg API 2 1/2" Reg	API 2 3/8" Reg API 3 1/2" Reg 2 1/2" Reg	API 4 1/2" Reg
可用工作风压 Working Pressure	1.2 - 2.0 Mpa	1.3 - 2.3 Mpa	1.5 - 2.5 Mpa	1.5 - 3.0 Mpa
在17bar时的 冲击频率 Impact Rate at 17 Bar	30HZ	28HZ	25HZ	22HZ
推荐转速 Recommended Rotation Speed	25 - 40 r/min	20 - 35 r/min	20 - 30 r/min	15 - 25 r/min
耗风量 Air Consumption	1.0Mpa : 5 m³/min	1.0Mpa : 7 m³/min	1.0Mpa : 9 m³/min	1.0Mpa : 12 m³/min
	1.8Mpa : 9 m³/min	1.8Mpa : 14 m³/min	1.8Mpa : 18 m³/min	1.8Mpa : 22 m³/min
	2.4Mpa : 14 m³/min	2.4Mpa : 19 m³/min	2.4Mpa : 26 m³/min	2.4Mpa : 28 m³/min

	技术参数 Technical Data		
	N100A	N120A	N125A
总长 (不含钻头) Length (Without Bit)	1545mm	1880mm	1880mm
总重 (不含钻头) Weight (Without Bit)	305.00 kg	475.0 kg	470.00 kg
冲击器外径 External Diameter	Φ226mm	Φ275mm	Φ275mm
可配钻头钎柄 Bit Shank	NUMA100	NUMA120	NUMA125
钻孔范围 Hole Range	Φ254 - Φ311mm	Φ305 - Φ445 mm	Φ305 - Φ445 mm
后接头螺纹 Connection Thread	API 6 5/8" Reg	API 6 5/8" Reg	API 6 5/8" Reg
可用工作风压 Working Pressure	2.0 - 3.5 Mpa	2.0 - 3.5 Mpa	2.0 - 3.5 Mpa
在17bar时的 冲击频率 Impact Rate at 17 Bar	20HZ	20HZ	20HZ
推荐转速 Recommended Rotation Speed	15 - 25 r/min	15 - 25 r/min	15 - 25 r/min
耗风量 Air Consumption	1.0Mpa : 22m³/min	1.0Mpa : 28 m³/min	1.0Mpa : 28 m³/min
	1.8Mpa : 40 m³/min	1.8Mpa : 50 m³/min	1.8Mpa : 50 m³/min
	2.4Mpa : 65 m³/min	2.4Mpa : 71 m³/min	2.4Mpa : 71 m³/min

特点

NBR1A、NBR2A和NBR3A潜孔冲击器是一种可和BR系列钻头相配的中低风压冲击器。

其主要特点如下：

1. 适应工作压力为0.7 – 1.75Mpa。
2. 该冲击器为无阀冲击器。
3. 结构简单、拆卸容易、寿命长。
4. 冲击功率大，钻进速度快。
5. 耗风量小，能耗低。当需要加大排渣时，可在逆止阀上钻孔。
6. 特别适应于石材开采。

Features

NBR1A, NBR2A and NBR3A series DTH hammers are designed to operate efficiently at low air pressures and medium air pressures, using BR series bits.

The main features are as following:

1. The operating air pressure are between 0.7 Mpa and 1.75 MPa.
2. Valveless hammers.
3. Simple structure, easy to assemble and to disassemble, long life span.
4. Higher impact frequency and faster drilling speed.
5. Lower air consumption and lower oil consumption. A hole can be drilled on the check valve to provide more efficient cuttings discharge.
6. Especially suitable for quarrying.



零件名称 Item Description	重量Weight (kg)		
	NBR1A	NBR2A	NBR3A
1. 接头 Top Sub	1.70	2.60	5.20
2. 逆止阀 Check Valve	0.10	0.10	0.10
3. 弹簧 Spring	0.05	0.05	0.20
4. 配气座 Air Distributor	0.80	0.60	0.80
5. 内缸 Internal Cylinder	0.80	0.80	1.30
6. 活塞 Piston	1.20	3.80	5.50
7. 外缸 External Cylinder	4.00	4.50	9.50
8. 衬套 Guided Sleeve	0.15	0.60	1.00
9. 卡环O型圈 "O" Ring Of Stop Ring	0.005	0.005	0.05
10. 卡环 Stop Ring	0.10	0.10	0.15
11. 卡钎套 Drive Chuck	0.80	1.20	2.00
12. 钻头 Drill Bit	1.70	2.50	4.00



技术参数 Technical Data

	NBR1A	NBR2A	NBR3A
总长 (不含钻头) Length (without Bit)	760mm	880mm	889mm
总重 (不含钻头) Weight (without Bit)	10.00 kg	14.50 kg	26.00 kg
冲击器外径 External Diameter	Φ54mm	Φ62mm	Φ82mm
可配钻头钎柄 Bit Shank	BR1	BR2	BR3
钻孔范围 Hole Range	Φ64 – Φ76 mm	Φ70 – Φ90 mm	Φ90 – Φ110 mm
后接头螺纹 Connection Thread	Br40, BOX	Rd50, BOX	API 2 ³ / ₈ " Reg
可用工作压力 Working Pressure	1.0 – 1.5 Mpa	1.0 – 1.5 Mpa	1.0 – 1.5 Mpa
在14bar时的 冲击频率 Impact Rate at 14 Bar	27HZ	25HZ	25HZ
推荐转速 Recommended Rotation Speed	25 – 40 r/min	25 – 40 r/min	25 – 40 r/min
耗风量 Air Consumption	0.7Mpa :1.5 m ³ /min	0.7Mpa :2.5 m ³ /min	0.7Mpa :4m ³ /min
	1.0Mpa :2.5 m ³ /min	1.0Mpa :4 m ³ /min	1.0Mpa :6 m ³ /min
	1.4Mpa :3 m ³ /min	1.4Mpa :5 m ³ /min	1.4Mpa :8 m ³ /min

NRC反循环系列潜孔冲击器是我公司最新研制的反循环冲击器，主要用于深孔勘探钻进和获取岩心样品。

主要具有以下优点：

- 1.根据以往普通冲击器的经验，结合反循环冲击器的试用特点，最优化内部结构，使能力传递理想，从而保证该系列冲击器钻速快，能平稳连续取样。
- 2.内部结构非常简单，部件刚性好，从而保证冲击器寿命长，维护简单方便。
- 3.采集管采用一体式，无需拆卸冲击器即可更换。采集管经过渗碳处理，因此耐磨性好。
- 4.配用钻头采用专利设计，只需要更换钻头，同一冲击器即可钻不同尺寸的孔，并且能保证样本不受污染。
- 5.在松散土质、硬岩和有大量水等各种困难的条件下，都能很好地完成取样工作。

NRC series reverse circulation DTH hammer is the latest developed product of our company. It is mainly used for deep exploration drilling and core sampling.

It has the following characteristics:

1. Based on previous experience of ordinary hammer, combined with feature of reverse circulation hammer, optimized internal structure and ideal energy transfer, thus ensuring the series of hammers drilling with fast, smooth and continuous sampling.
2. The internal structure is very simple with components of high rigidity, thus ensuring long life and easy maintenance of the hammer.
3. The collection tube adopts an integrative design and can be replaced without disassembling the hammer with carburizing treatment, it has good abrasive resistance.
4. Equipment with bits designed with patent. Simply by replacing the drill bit, the same hammer can drill holes of different sizes ensuring that the sample is not contaminated.
5. In difficult conditions such as loose soil, hard rock and plenty of water exist, sampling can be done well.



零件名称 Item Description	重量Weight (kg)			
	NRC45	NRC55	NRC65	NRC52
1. 卡簧Internal Circlip	0.03	0.04	0.05	0.04
2. 透气筛 Air Screen	0.35	0.44	0.65	0.44
3. 接头Top Sub	6.50	9.65	20.00	9.65
4. 0形圈 "O" Ring	0.01	0.02	0.02	0.02
5. 采集管Sample Tube	5.10	6.72	12.50	6.75
6. 逆止阀Check Valve	0.25	0.68	0.85	0.68
7. 弹簧Spring	0.04	0.12	0.10	0.12
8. 0形圈 "O" Ring	0.01	0.02	0.02	0.02
9. 配气座Air Distributor	0.85	1.48	3.50	1.48
10. 形圈 "O" Ring	0.02	0.01	0.02	0.01
11. 内缸Internal Cylinder	2.20	4.12	4.20	4.12
12. 活塞Piston	8.50	16.90	24.00	16.90
13. 外缸External Cylinder	14.50	19.50	32.00	21.50
14. 衬套Guided Sleeve	1.20	0.90	5.50	1.90
15. 0形圈 "O" Ring				0.02
16. 0形圈 "O" Ring				0.01
17. 卡环Stop Ring				0.32
18. 耐磨套Shroud				1.86
19. 卡钎套Drive Chuck	3.20	5.65	6.50	4.17
20. 钻头Drill Bit	10.50	15.80	31.00	11.05
21. 挡珠Bit Retaining Pin	0.01	0.15	0.30	

	技术参数 Technical Data			
	NRC45	NRC55	NRC65	NRC52
总长 (不含钻头) Length(Without Bit)	1020mm	1111mm	1250mm	1208mm
总重 (不含钻头) Weight(Without Bit)	94.00 kg	66.50 kg	110.00 kg	70.00kg
冲击器外径 External Diameter	Φ99mm	Φ126mm	Φ146mm	Φ126mm
可配钻头钎钎 Bit Shank	NRC45	NRC55	NRC65	PR52
钻孔范围 Hole Range	Φ114-Φ127 mm	Φ133-Φ152 mm	Φ155-Φ190 mm	Φ133-Φ146mm
后接头螺纹 Connection Thread	根据客户钻管螺纹确定	根据客户钻管螺纹确定	根据客户钻管螺纹确定	根据客户钻管螺纹确定
可用工作压力 Working Pressure	1.0-3.0 Mpa	1.5-3.5 Mpa	1.5-3.5 Mpa	1.5-3.5 Mpa
在17bar时的 冲击频率 Impact Rate at 17 Bar	30HZ	35HZ	28HZ	35HZ
推荐转速 Recommended Rotation Speed	25-40 r/min	25-40 r/min	25-40 r/min	25-40 r/min
耗风量 Air Consumption	1.0Mpa :8m³/min	1.7Mpa :16 m³/min	1.7Mpa :20 m³/min	1.7Mpa :16m³/min
	2.4Mpa :12 m³/min	3.0Mpa :28 m³/min	3.0Mpa :35m³/min	3.0Mpa :28 m³/min

水井、建筑桩和油气钻井用大口径潜孔冲击器的特点

The Characteristics of Big Size DTH Hammers Using in Water Well, Oil, Gas and Construction Drilling Without Foot Valve

水井、基桩、石油钻井用大口径潜孔冲击器

Big Hole High Air Pressure DTH Hammers

这种类型的大口径潜孔冲击器是我公司针对水井、建筑桩和油气钻井的特点，自行设计开发和制造的高风压潜孔冲击器。

其主要特点如下：

1. 采用最新凿岩理论，优化内部结构和配气尺寸，使冲击器获得最理想的能源传递，因此，钻进速度快，耗风量低。
2. 针对此类工程钻头断裂打捞十分困难的情况，专门设计了安全可靠的钻头防脱落装置。
3. 使用中如需加强排渣，可更换不同尺寸调气孔的逆止阀达到目的。
4. 接头和卡钎套采用特殊牙型的螺纹可使拆卸容易。

Features

Based on the characteristics of the wells, oil, gas and construction drilling, our company self-designed, developed and manufactured this kind of high air pressure DTH hammer.

The main features are as following:

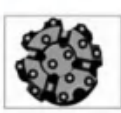
1. Using the latest rock drilling theory, optimizing the inside structure and the size of the air distribution, to make the DTH hammer obtain the optimal energy transfer and make it achieve faster drilling speed and lower air consumption.
2. For such projects as the drill bit break, retrieving very difficult, we specially designed a safe and reliable anti-shedding device for the bit.
3. The check valve can be replaced to the one with bigger air controlling hole to provide more efficient cutting discharge.
4. The top sub and the drive chuck have special thread, which can achieve an easier disassemble.



零件名称 Item Description	重量Weight (kg)						
	ND142A	ND180A	ND225A	ND275A	ND330A	ND475A	ND525A
1. 接头 Top Sub	20.00	34.00	59.00	230.00	320.00	800.00	960.00
2. 接头O形圈 "O" Ring of Top Sub	0.02	0.015	0.03	0.04	0.10	0.02	0.03
3. 垫片 Breakout Ring		0.60	0.80	1.00	2.00	3.55	5.00
4. 逆止阀 Check Valve	0.70	1.20	1.40	2.00	5.00	13.50	18.00
5. 弹簧 Spring	0.10	0.10	0.30	0.50	0.80	0.35	0.45
6. 配气座 Air Distributor	3.50	6.00	10.50	16.00	35.00	58.90	79.50
7. 内缸 Internal Cylinder	4.20	6.50	12.50	25.00	30.00	101.60	137.00
8. 活塞 Piston	23.00	42.50	77.00	113.00	190.00	517.00	698.00
9. 外缸 External Cylinder	31.50	60.00	110.00	170.00	316.00	952.00	1285.00
10. 衬套 Guided Sleeve	6.50	6.30	4.50	23.00	38.00	98.00	132.00
11. 卡环O形圈 "O" Ring Of Stop Ring	0.01	0.01	0.02	0.03	0.05	0.02	0.02
12. 卡环 Stop Ring	0.60	1.40	1.90	4.00	6.00	14.25	19.50
13. 垫片 Breakout Ring	0.20	0.60	0.80	1.00	2.00	3.55	5.00
14. 卡钎套 Drive Chuck	5.00	12.00	21.00	34.00	64.00	162.00	219.00
15. 防脱套 Retainer	3.50	6.50	9.00	30.00	42.00	50.00	67.50
16. 钻头 Drill Bit	27.00	37.00	68.00	185.00	240.00	528.00	1328.00



	技术参数 Technical Data						
	ND142A	ND180A	ND225A	ND275A	ND330A	ND475A	ND525A
总长 (不含钻头) Length (Without Bit)	1388mm	1520mm	1745mm	2626mm	3870mm	4080mm	4260mm
总重 (不含钻头) Weight (Without Bit)	102.00 kg	178.00 kg	315.00kg	650.00 kg	1050.00 kg	2775.00 kg	3626.00 kg
冲击器外径 External Diameter	Φ142mm	Φ180mm	Φ225mm	Φ275mm	Φ330mm	Φ475mm	Φ525mm
可配钻头钎柄 Bit Shank	DHD360	QL80	NUMA100	NUMA125	ND330	ND475	ND525
钻孔范围 Hole Range	Φ155-Φ195mm	Φ195-Φ254mm	Φ254-Φ311mm	Φ305-Φ445mm	Φ350-Φ660mm	Φ508-Φ706 mm	Φ610-Φ800 mm
后接头螺纹 Connection Thread	API 3 1/2" Reg	API 4 1/2" Reg	API 4 1/2" Reg API 5 5/8" Reg	API 5 5/8" Reg API 7 5/8" Reg	API 7 5/8" Reg	API 8 5/8" Reg	API 8 5/8" Reg
可用工作风压 Working Pressure	1.0-2.5Mpa	1.8-3.0 Mpa	1.8-3.0 Mpa	1.8-3.0 Mpa	1.8-3.0 Mpa	2.0-3.0 Mpa	2.0-3.0 Mpa
在17bar时的 冲击频率 Impact Rate at 17 Bar	25HZ	20HZ	20HZ	20HZ	20HZ	20HZ	20HZ
推荐转速 Recommended Rotation Speed	20-30r/min	15-25r/min	15-25r/min	15-25r/min	15-25r/min	15-25r/min	15-25 r/min
耗风量 Air Consumption	1.0Mpa :9m³/min	1.0Mpa :12m³/min	1.0Mpa :22m³/min	1.0Mpa :28m³/min	1.0Mpa :32m³/min	1.0Mpa :56m³/min	1.0Mpa :50m³/min
	1.8Mpa :18m³/min	1.8Mpa :22m³/min	1.8Mpa :40m³/min	1.8Mpa :50m³/min	1.8Mpa :58m³/min	1.8Mpa :75m³/min	1.8Mpa :80m³/min
	2.4Mpa :26m³/min	2.4Mpa :28m³/min	2.4Mpa :65m³/min	2.4Mpa :71m³/min	2.4Mpa :85m³/min	2.4Mpa :85m³/min	2.4Mpa :99m³/min



中心下陷型:
采用低-中风压钻齿软-中硬以及有裂缝的岩层时, 为了获得很快的凿岩速度和较少地孔偏斜率, 通常采用这种头部形状。
Center Drop Bit
For high penetration rates in soft to medium hard and fissured rock formations. Low to medium air pressure.
Maximum hole deviation control.



凹面型:
这种头部形状适用于所有岩层, 特别是在中硬和岩性均匀的岩层中使用效果最好。地孔偏差度小, 排渣效果好。
Concave Face
The all-around application bit face specifically for medium hard and homogeneous rock formations.
Good hole deviation control and good flushing capacity.



凸面型:
这种形状适用于低-中风压钻齿软-中硬岩层, 钻头钢体不易磨蚀。其特点是边齿承载较低, 磨损不严重, 钻齿速度快, 但地孔偏差难以控制。
Convex Face
For high penetration rates in soft to medium-hard with low to medium air pressure. It is the most resistance to steel wash, and may reduce the load and wear on gauge buttons, but poor hole deviation control.

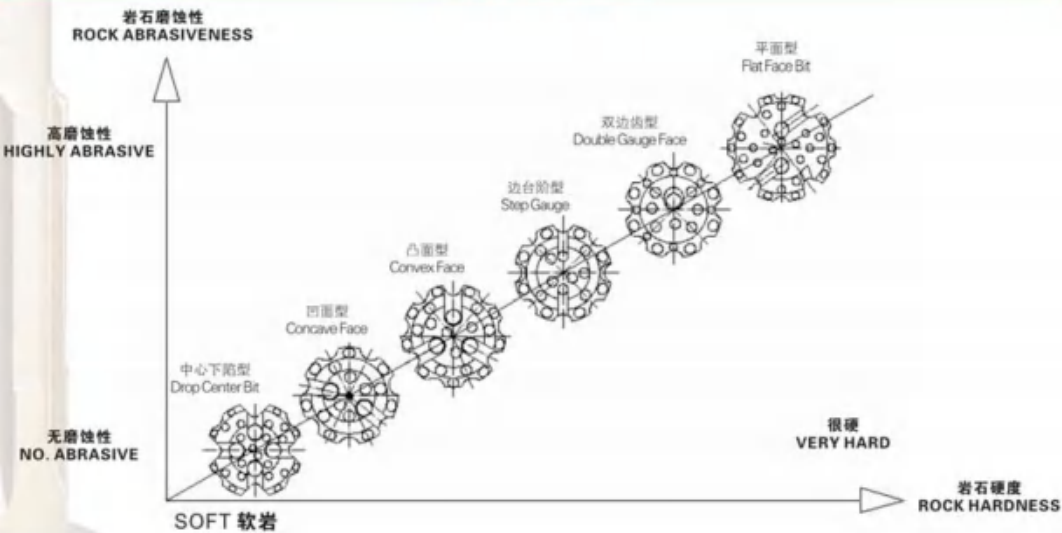


双边齿型:
这种双边齿型头部适应于高压时钻齿很坚硬的岩层。此时钻速快, 钻头体磨损较少。
Double Gauge Face
This kind of face shape is suitable for fast penetration rates in medium to hard rock formations. Designed for high air pressures and good resistance to steel wash step gauge bit.



平面型:
这种平面型头部适应于高压时钻齿很坚硬岩层以及磨蚀性强的岩层。此时, 钻速越快, 钻体磨损较少。
Flat Face Bit
This kind of face shape is suitable for hard to very hard and abrasive rock formations in applications with high air pressures. Good penetration rates an resistance to steel wash.

技术参数 Technical Data



球齿:
主要用作潜孔钻头边齿, 适用于磨蚀性强、非常坚硬的岩石。
Domed/Round Button
Domed/round buttons are usually used as gauge buttons of DTH bits, suitable for very abrasive and very hard formations.



抛物线齿:
主要用作潜孔钻头的边齿和中齿, 适用于磨蚀性中等、比较硬的岩石。
Parabolic/ Semi-Ballistic Button
Parabolic buttons are usually used as gauge buttons and front buttons of DTH bits, suitable for medium abrasive and hard formations.



弹头齿:
主要用作潜孔钻头的中齿, 适用于磨蚀性中等、硬度中等的岩石。岩石比较软的情况下也可以做边齿。
Ballistic Button
Ballistic buttons are usually used as front buttons of DTH bits, suitable for medium abrasive and medium hard formations. They can also be used as gauge buttons if the rock is soft.



尖齿:
主要用作潜孔钻头的中齿, 适用于高转速、低断齿率的软岩层。
Sharp Buttons
Sharp buttons are usually used as front buttons of DTH bits for soft formations, suitable for high rotation speed and low bit broken rate soft rock.



平头齿:
主要用作潜孔钻头的边保护齿, 减少钻头体表面的磨损。
Flat Buttons
Flat buttons are usually used as protection buttons to reduce wear on rubbing surface of DTH bits.

潜孔钻头系列
DTH Bits series

1-2英寸中风压潜孔钻/3英寸高压潜孔钻头
1-2" Middle Air Pressure DTH Bits/3" High Air Pressure DTH Bits

钻头系列Drill Bit	钻头直径Bit Dia. (mm)	排气孔数量NO. Air Holes	边齿Gauge Buttons	中齿Front Buttons	重量Weight(kg)	
BR1 	64	2	6*φ10	3*φ10	2.6	1-2英寸中风压潜孔钻头 1"-2" Middle Air Pressure DTH Bits
	70	2	6*φ12	4*φ9	2.8	
	76	2	6*φ13	5*φ10	3.2	
BR2 	76	2	6*φ13	5*φ10	3.6	我们可根据客户对钻头直径大小, 排气孔数量, 合金齿形状和钻头头部形状的不同要求分别设计制造。 We can design and manufacture according to customers' requirement of the bit diameter, the NO. of air holes, carbide buttons and the face shape.
	80	2	6*φ13	5*φ11	4.0	
	90	2	6*φ14	5*φ12	4.2	
ND25 	76	2	6*φ13	5*φ10	3.6	我们可根据客户对钻头直径大小, 排气孔数量, 合金齿形状和钻头头部形状的不同要求分别设计制造。 We can design and manufacture according to customers' requirement of the bit diameter, the NO. of air holes, carbide buttons and the face shape.
	82	2	6*φ14	4*φ11	4.0	
	90	2	8*φ12	5*φ12	4.2	
COP32 	85	2	6*φ13	4*φ12	4.2	3英寸高压潜孔钻头 3" High Air Pressure DTH Bits
	90	2	6*φ14	4*φ12	4.5	
	95	2	6*φ14	5*φ12	4.7	
	100	2	8*φ12	6*φ12	5.0	
	105	2	8*φ13	6*φ12	5.3	
BR3 	85	2	6*φ13	4*φ12	3.8	我们可根据客户对钻头直径大小, 排气孔数量, 合金齿形状和钻头头部形状的不同要求分别设计制造。 We can design and manufacture according to customers' requirement of the bit diameter, the NO. of air holes, carbide buttons and the face shape.
	90	2	6*φ14	4*φ12	4.0	
	95	2	6*φ14	5*φ12	4.3	
	100	2	6*φ14	6*φ12	4.8	
	105	2	8*φ13	6*φ12	5.2	
ND35(IR3.5, COP34) 	85	2	6*φ13	4*φ12	4.2	我们可根据客户对钻头直径大小, 排气孔数量, 合金齿形状和钻头头部形状的不同要求分别设计制造。 We can design and manufacture according to customers' requirement of the bit diameter, the NO. of air holes, carbide buttons and the face shape.
	90	2	6*φ14	4*φ12	4.5	
	95	2	6*φ14	5*φ12	4.8	
	100	2	6*φ14	6*φ12	5.0	
	105	2	8*φ13	6*φ12	5.5	
NQL30(COP34) 	85	2	6*φ13	4*φ12	4.5	我们可根据客户对钻头直径大小, 排气孔数量, 合金齿形状和钻头头部形状的不同要求分别设计制造。 We can design and manufacture according to customers' requirement of the bit diameter, the NO. of air holes, carbide buttons and the face shape.
	90	2	6*φ14	4*φ12	4.7	
	95	2	6*φ14	5*φ12	4.9	
	100	2	8*φ13	6*φ12	5.0	
	105	2	8*φ13	6*φ12	5.5	

潜孔钻头系列
DTH Bits series

4-5英寸高压潜孔钻头
4-5" High Air Pressure DTH Bits

钻头系列Drill Bit	钻头直径Bit Dia. (mm)	排气孔数量NO. Air Holes	边齿Gauge Buttons	中齿Front Buttons	重量Weight(kg)	
ND45(DHD340A, COP44) 	105	2	6*φ14	5*φ13	8.5	4英寸高压潜孔钻头 4" High Air Pressure DTH Bits
	110	2	7*φ14	6*φ13	8.8	
	115	2	7*φ14	7*φ13	9.0	
	120	2	8*φ14	7*φ13	9.8	
	127	2	8*φ14	7*φ14	11.0	
NSD4 	105	2	6*φ14	5*φ13	9.0	我们可根据客户对钻头直径大小, 排气孔数量, 合金齿形状和钻头头部形状的不同要求分别设计制造。 We can design and manufacture according to customers' requirement of the bit diameter, the NO. of air holes, carbide buttons and the face shape.
	110	2	7*φ14	6*φ13	9.5	
	115	2	7*φ14	7*φ13	9.8	
	120	2	8*φ14	7*φ13	11.5	
	127	2	8*φ14	7*φ14	12.3	
NQL40 	105	2	6*φ14	5*φ13	9.0	我们可根据客户对钻头直径大小, 排气孔数量, 合金齿形状和钻头头部形状的不同要求分别设计制造。 We can design and manufacture according to customers' requirement of the bit diameter, the NO. of air holes, carbide buttons and the face shape.
	110	2	7*φ14	6*φ13	9.2	
	115	2	7*φ14	7*φ13	9.5	
	120	2	8*φ14	7*φ14	10.3	
	127	2	8*φ14	7*φ14	11.5	
NM4 	105	2	6*φ14	5*φ13	6.0	我们可根据客户对钻头直径大小, 排气孔数量, 合金齿形状和钻头头部形状的不同要求分别设计制造。 We can design and manufacture according to customers' requirement of the bit diameter, the NO. of air holes, carbide buttons and the face shape.
	110	2	7*φ14	6*φ13	6.2	
	115	2	7*φ14	7*φ13	6.6	
	120	2	8*φ14	7*φ14	7.0	
	127	2	8*φ14	7*φ14	7.4	
ND55(DHD350R, COP54) 	133	2	7*φ16	7*φ14	15.0	5英寸高压潜孔钻头 5" High Air Pressure DTH Bits
	140	2	7*φ18	7*φ14	16.0	
	146	2	8*φ18	7*φ14	17.0	
	152	2	8*φ18	8*φ14	17.5	
	165	2	8*φ18	8*φ16	18.5	
NSD5 	133	2	7*φ16	7*φ14	15.5	我们可根据客户对钻头直径大小, 排气孔数量, 合金齿形状和钻头头部形状的不同要求分别设计制造。 We can design and manufacture according to customers' requirement of the bit diameter, the NO. of air holes, carbide buttons and the face shape.
	140	2	7*φ18	7*φ14	16.0	
	146	2	8*φ18	7*φ14	16.5	
	152	2	8*φ18	8*φ14	17.0	
	165	2	8*φ18	8*φ16	18.0	
NQL50 	133	2	7*φ16	7*φ14	15.5	我们可根据客户对钻头直径大小, 排气孔数量, 合金齿形状和钻头头部形状的不同要求分别设计制造。 We can design and manufacture according to customers' requirement of the bit diameter, the NO. of air holes, carbide buttons and the face shape.
	140	2	7*φ18	7*φ14	16.0	
	146	2	8*φ18	7*φ14	16.5	
	152	2	8*φ18	8*φ14	17.0	
	165	2	8*φ18	8*φ16	18.0	
NM5 	135	2	7*φ18	7*φ14	12.5	我们可根据客户对钻头直径大小, 排气孔数量, 合金齿形状和钻头头部形状的不同要求分别设计制造。 We can design and manufacture according to customers' requirement of the bit diameter, the NO. of air holes, carbide buttons and the face shape.
	140	2	7*φ18	7*φ14	13.5	
	146	2	8*φ18	7*φ14	14.0	
	152	2	8*φ18	8*φ14	14.4	
	165	2	8*φ18	8*φ16	15.0	

潜孔钻头系列
DTH Bits series

6-8英寸高压潜孔钻头
6-8" High Air Pressure DTH Bits

潜孔钻头系列
DTH Bits series

10-12英寸高压潜孔钻头
10-12" High Air Pressure DTH Bits








钻头系列Drill Bit	钻头直径Bit Dia. (mm)	排气孔数量NO Air Holes	边齿Gauge Buttons	中齿Front Buttons	重量Weight(kg)		
 ND65 (DHD360/COP64)	152	2	8*Φ18	7*Φ16	22.0	6英寸高压潜孔钻头 6" High Air Pressure DTH Bits	
	165	2	8*Φ18	8*Φ16	26.0		
	175	2	8*Φ18	10*Φ16	27.0		
	190	2	10*Φ18	12*Φ16	28.5		
	203	2	10*Φ18	13*Φ16	29.5		
 NSD6	152	2	8*Φ16	7*Φ16	26.0		
	165	2	8*Φ18	8*Φ16	27.0		
	175	2	8*Φ18	8*Φ16	29.0		
	190	2	10*Φ18	12*Φ16	32.0		
	203	2	10*Φ18	14*Φ16	34.0		
 NQL60	152	2	8*Φ18	7*Φ16	24.0		我们可根据客户对钻头直径大小、排气孔数量、合金齿形状和钻头头部形状的不同要求分别设计制造。 We can design and manufacture according to customers' requirement of the bit diameter, the NO. of air holes, carbide buttons and the face shape.
	165	2	8*Φ18	8*Φ16	25.0		
	175	2	8*Φ18	8*Φ16	27.0		
	190	2	10*Φ18	12*Φ16	29.0		
 NM6	152	2	8*Φ18	8*Φ16	22.0		
	165	2	8*Φ18	10*Φ16	23.0		
	171	2	8*Φ18	10*Φ16	24.0		
	190	2	10*Φ18	12*Φ16	25.0		
 ND85 (DHD380/COP84)	195	3	9*Φ18	9*Φ16	33.0	8英寸高压潜孔钻头 8" High Air Pressure DTH Bits	
	203	2	10*Φ18	13*Φ16	40.0		
	216	2	10*Φ18	14*Φ16	49.0		
	254	3	12*Φ18	17*Φ16	71.0		
	305	4	12*Φ18	29*Φ16	95.0		
 NSD8	195	3	9*Φ18	9*Φ16	32.0		
	203	2	10*Φ18	12*Φ16	37.0		
	216	2	10*Φ18	14*Φ16	48.0		
	254	2	12*Φ18	21*Φ16	70.0		
	305	4	12*Φ18	29*Φ16	94.0		
 NQL80	195	3	9*Φ18	9*Φ16	32.0		我们可根据客户对钻头直径大小、排气孔数量、合金齿形状和钻头头部形状的不同要求分别设计制造。 We can design and manufacture according to customers' requirement of the bit diameter, the NO. of air holes, carbide buttons and the face shape.
	203	2	10*Φ18	13*Φ16	35.0		
	216	2	10*Φ18	14*Φ16	49.0		
	254	2	12*Φ18	21*Φ16	71.0		
 NM8	203	2	10*Φ18	13*Φ16	35.0		
	216	2	10*Φ18	14*Φ18	40.0		
	241	2	12*Φ18	18*Φ16	54.0		
	254	2	12*Φ18	21*Φ16	57.0		
	305	4	12*Φ18	29*Φ16	77.0		

钻头系列Drill Bit	钻头直径Bit Dia. (mm)	排气孔数量NO Air Holes	边齿Gauge Buttons	中齿Front Buttons	重量Weight(kg)			
 NSD10	254	2	12*Φ18	21*Φ16	108.0	10英寸高压潜孔钻头 10" High Air Pressure DTH Bits		
	305	4	12*Φ18	36*Φ16	125.0			
	311	4	12*Φ18	36*Φ16	130.0			
	318	4	12*Φ18	38*Φ16	142.0			
	330	4	16*Φ18	42*Φ16	155.0			
 Numa100	254	2	12*Φ18	21*Φ16	90.0		我们可根据客户对钻头直径大小、排气孔数量、合金齿形状和钻头头部形状的不同要求分别设计制造。 We can design and manufacture according to customers' requirement of the bit diameter, the NO. of air holes, carbide buttons and the face shape.	
	305	4	12*Φ18	36*Φ16	102.0			
	311	4	12*Φ18	36*Φ16	104.0			
	318	4	12*Φ18	38*Φ16	106.0			
	330	4	14*Φ18	42*Φ16	112.0			
 DHD1120	305	4	12*Φ18	36*Φ16	152.0			12英寸高压潜孔钻头 12" High Air Pressure DTH Bits
	311	4	12*Φ18	36*Φ16	157.0			
	330	4	16*Φ18	42*Φ16	165.0			
	346	4	16*Φ19	48*Φ16	178.0			
	381	4	16*Φ19	48*Φ16	198.0			
 NSD12	305	4	12*Φ18	36*Φ16	156.0	我们可根据客户对钻头直径大小、排气孔数量、合金齿形状和钻头头部形状的不同要求分别设计制造。 We can design and manufacture according to customers' requirement of the bit diameter, the NO. of air holes, carbide buttons and the face shape.		
	311	4	12*Φ18	36*Φ16	168.0			
	330	4	16*Φ18	42*Φ16	180.0			
	356	4	16*Φ19	48*Φ16	191.0			
	381	4	16*Φ19	48*Φ16	200.0			
 NUMA120	305	4	12*Φ18	36*Φ16	152.0			
	311	4	12*Φ18	36*Φ16	158.0			
	330	4	16*Φ18	42*Φ16	165.0			
	356	4	16*Φ19	48*Φ16	178.0			
 NUMA125	381	4	16*Φ19	48*Φ16	195.0			
	305	4	12*Φ18	36*Φ16	170.0			
	311	4	12*Φ18	36*Φ16	173.0			
	330	4	16*Φ18	42*Φ16	182.0			
	356	4	16*Φ19	48*Φ16	191.0			
	381	4	16*Φ19	48*Φ16	200.0			

潜孔钻头系列
DTH Bits series

水井、建筑桩、油气钻井用大孔径钻头/反循环钻头

Big Size Bits Using in Water Wells, Oil, Gas and Construction Drilling/Reverse Circulation Drill Bits

钻头系列Drill Bit	钻头直径Oril Bit (mm)	排气孔数量NO. AirHoles	边齿Gauge Buttons	中齿Front Buttons	重量Weight(kg)			
	311	3	15*φ18	36*φ16	205.0	水井、建筑桩、油气钻井用大孔径钻头 Big Size Bits Using in Water Wells, Oil, Gas and Construction Drilling		
	334	3	18*φ19	44*φ18	216.0			
	356	3	18*φ19	48*φ18	225.0			
	368	4	20*φ19	50*φ18	230.0			
	381	4	20*φ19	54*φ19	236.0			
	381	4	20*φ19	54*φ18	297.0		我们可根据客户对钻头直径大小、排气孔数量、合金齿形状和钻头头部形状的不同要求分别设计制造。 We can design and manufacture according to customers' requirement of the bit diameter, the NO. of air holes, carbide buttons and the face shape.	
	406	4	20*φ19	58*φ18	311.0			
	431	4	20*φ19	64*φ18	324.0			
	445	4	24*φ20	72*φ18	334.0			
	470	4	24*φ20	80*φ18	347.0			
	495	4	24*φ20	88*φ18	710.0			我们可根据客户对钻头直径大小、排气孔数量、合金齿形状和钻头头部形状的不同要求分别设计制造。 We can design and manufacture according to customers' requirement of the bit diameter, the NO. of air holes, carbide buttons and the face shape.
	525	4	24*φ20	100*φ18	760.0			
	580	4	24*φ20	116*φ18	855.0			
	660	4	28*φ20	140*φ19	950.0			
	680	4	28*φ20	144*φ19	968.0			
	711	4	28*φ20	154*φ19	1455.0	我们可根据客户对钻头直径大小、排气孔数量、合金齿形状和钻头头部形状的不同要求分别设计制造。 We can design and manufacture according to customers' requirement of the bit diameter, the NO. of air holes, carbide buttons and the face shape.		
	762	4	32*φ20	172*φ19	1539.0			
	780	4	32*φ20	180*φ19	1564.0			
	825	4	36*φ20	216*φ19	1625.0			
	998	4	40*φ20	348*φ19	1980.0			
	115	2	8*φ14	8*φ13	14.00		反循环钻头 Reverse Circulation Drill Bits	
	140	2	8*φ16	8*φ16	16.50			
	165	2	8*φ18	8*φ16	24.85			
	133	2	8*φ16	8*φ16	17.50			
	140	2	8*φ16	8*φ14	18.00			
	146	2	8*φ18	8*φ14	20.00			我们可根据客户对钻头直径大小、排气孔数量、合金齿形状和钻头头部形状的不同要求分别设计制造。 We can design and manufacture according to customers' requirement of the bit diameter, the NO. of air holes, carbide buttons and the face shape.
	133	2	8*φ16	8*φ14	12.50			
	140	2	8*φ16	8*φ14	13.00			
	146	2	8*φ18	8*φ14	13.50			
	PR4	115	2	8*φ16	8*φ13			
	127	2	8*φ16	8*φ14	15.00			
	133	2	8*φ16	8*φ14	15.50			

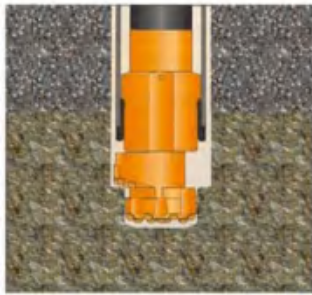
潜孔钻头系列
DTH Bits series

J系列低风压潜孔钻头和CIR系列低风压潜孔钻头

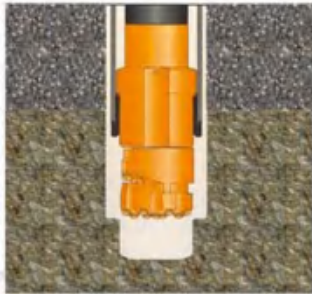
J Series Low Air Pressure DTH Bits and CIR Series Low Air Pressure DTH Bits

型号Type	直径Dia(mm)	花键齿数Spline NO	重量Weight(kg)	
J60C	65	4	2.26	我们可根据客户对钻头直径大小、排气孔数量、合金齿形状和钻头头部形状的不同要求分别设计制造。 We can design and manufacture according to customers' requirement of the bit diameter, the NO. of air holes, carbide buttons and the face shape.
J70C	75	4	2.40	
J80B	85	4	3.20	
J80B	90	4	3.60	
J100B	110	4	5.04	
J100B	115	4	5.40	
J100B	120	4	6.25	
J150B	155	6	14.0	
J150B	160	6	15.5	
J150B	165	6	22.0	
J170B	170	6	24.5	
J170B	180	6	28.6	
J200B	210	6	43.5	
J200B	220	6	45.0	

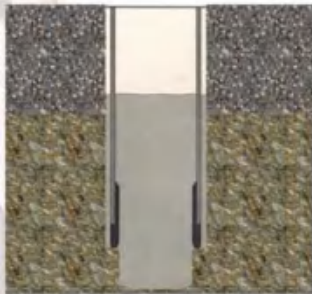
型号Type	直径Dia(mm)	花键齿数Spline NO	重量Weight(kg)	
CIR65	68	6	2.50	我们可根据客户对钻头直径大小、排气孔数量、合金齿形状和钻头头部形状的不同要求分别设计制造。 We can design and manufacture according to customers' requirement of the bit diameter, the NO. of air holes, carbide buttons and the face shape.
CIR70	76	6	3.40	
CIR80	83	6	3.45	
CIR80X	83	6	3.50	
CIR90	90	6	3.50	
CIR90	100	6	4.50	
CIR90	130	6	9.50	
CIR110	110	6	6.40	
CIR110	123	6	8.50	
CIR110W	110	6	6.50	
CIR110W	123	6	8.80	
CIR150	155	6	12.0	
CIR150A	155	6	12.5	
CIR150A	165	6	14.0	
CIR170	175	6	15.5	
CIR170A	185	6	16.0	
CIR200W	200	6	48.0	



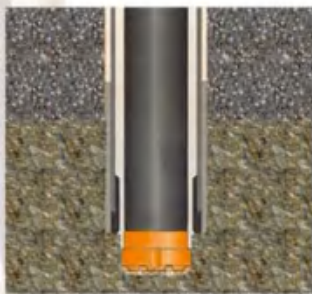
1. 凿岩工作开始时，偏心扩孔套沿偏心导向钻头旋出，同时开始扩孔以保证套管和钻进系统同时前进。
1. When starting drilling, the reamer swings out and reams the pilot-hole wide enough for the casing tube to slide down behind the drill bit assembly.



2. 跟管钻进到位后，小心地反转，偏心扩孔套旋回，并将偏心钻具系统从套管中拔出。
2. When the required depth is reached, rotation is reversed carefully, whereupon the reamer swings in. Allowing the drill bit assembly to be pulled up through the casing.



3. 将套管向上拔，同时在孔底喷灌砂浆或其它填充物。
3. Casing tubes that are to be left in the drill hole should be sealed at the bottom of the hole by means of cement grout or some other sealing agent.



4. 在基岩中采用常规钻具钻进以达到所需深度。
4. Drilling continues to the desired depth in the bedrock using a conventional drill string.



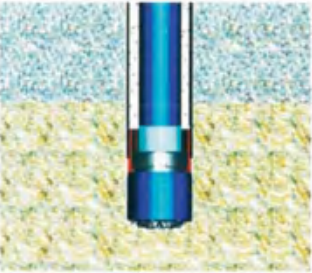
型号 Type	① 套管 Casing Tube	② 钻管 Drill Pipe	③ 导向接头 Guide Sleeve	④ 配用冲击器 DTH-Hammer	⑤ 管靴 Casing Shoe	⑥ 稳杆器 Guide Device	⑦ 偏心扩孔器 Reamer	⑧ 偏心导向器 Pilot Bit
NOD90	最大直径: Maximum O.D.: 115mm 最小直径: Minimum O.D.: 102mm	链接螺纹: Connection Thread: API2 3/8" Reg 外径: O.D.: 76mm 扳手槽后: Wrench Flats: 65mm	有效长度: Effective length: 174mm	ND35, COP32, IR3.5, NQL30	L3=90mm L4=55mm D3=101.7mm D4=93mm	L1=35mm L2=138mm D1=92mm D2=100mm	D5=91mm L5=70mm 最大扩孔直径: Reaming Diameter: 123mm 偏心孔套有 12 齿 合金 4 粒: Reamer has 4* Φ12 buttons	D6=90mm L6=59mm 边齿: Gauge button: 8*Φ12 中齿: Front button: 6*Φ10
NOD115	最大直径: Maximum O.D.: 142mm 最小直径: Minimum O.D.: 128mm	链接螺纹: Connection Thread: API2 3/8" Reg 外径: O.D.: 76mm 扳手槽后: Wrench Flats: 65mm	有效长度: Effective length: 174mm	ND45, COP44/ DHD340A, NSD4, NQL40, NM4	L3=76mm L4=55mm D3=127.5mm D4=117mm	L1=48mm L2=136mm D1=115mm D2=126mm	D5=114mm L5=89mm 最大扩孔直径: Reaming Diameter: 152mm 偏心孔套有 12 齿 合金 4 粒: Reamer has 4* Φ14 buttons	D6=114mm L6=67mm 边齿: Gauge button: 8*Φ14 中齿: Front button: 6*Φ12
NOD140	最大直径: Maximum O.D.: 160mm 最小直径: Minimum O.D.: 155.4mm	链接螺纹: Connection Thread: API2 3/8" Reg 外径: O.D.: 88mm 扳手槽后: Wrench Flats: 65mm	有效长度: Effective length: 205mm	ND55, COP54/ DHD350R, NSD5, NQL50	L3=90mm L4=63mm D3=155.3mm D4=143mm	L1=55mm L2=160mm D1=141mm D2=154mm	D5=138mm L5=69.5mm 最大扩孔直径: Reaming Diameter: 185mm 偏心孔套有 12 齿 合金 4 粒: Reamer has 7* Φ14 buttons	D6=138mm L6=66mm 边齿: Gauge button: 8*Φ16 中齿: Front button: 8*Φ14
NOD165	最大直径: Maximum O.D.: 193.7mm 最小直径: Minimum O.D.: 181mm	链接螺纹: Connection Thread: API3 1/2" Reg 外径: O.D.: 114mm 扳手槽后: Wrench Flats: 95mm	有效长度: Effective length: 225mm	ND65, COP64/ DHD360, NSD6, NQL60	L3=95mm L4=55mm D3=181.5mm D4=166mm	L1=61.5mm L2=181.5mm D1=165mm D2=178mm	D5=164mm L5=79.5mm 最大扩孔直径: Reaming Diameter: 211mm 偏心孔套有 12 齿 合金 4 粒: Reamer has 7* Φ14 buttons	D6=165.8mm L6=82.5mm 边齿: Gauge button: 8*Φ16 中齿: Front button: 8*Φ16
NOD190	最大直径: Maximum O.D.: 219.0mm 最小直径: Minimum O.D.: 205.0mm	链接螺纹: Connection Thread: API3 1/2" Reg 外径: O.D.: 114mm 扳手槽后: Wrench Flats: 95mm	有效长度: Effective length: 250mm	ND65, COP64/ DHD360, NSD6, NQL60	L3=110mm L4=70mm D3=204.7mm D4=193mm	L1=62.8mm L2=185mm D1=191mm D2=203mm	D5=185.5mm L5=90.2mm 最大扩孔直径: Reaming Diameter: 237mm 偏心孔套有 12 齿 合金 4 粒: Reamer has 7* Φ16 buttons	D6=190mm L6=82mm 边齿: Gauge button: 9*Φ18 中齿: Front button: 9*Φ16
NOD240	最大直径: Maximum O.D.: 273mm 最小直径: Minimum O.D.: 260.4mm	链接螺纹: Connection Thread: API3 1/2" Reg 外径: O.D.: 114mm 扳手槽后: Wrench Flats: 95mm	有效长度: Effective length: 343mm	ND85, COP84/ DHD380, NSD8, NQL80	L3=110mm L4=65mm D3=259mm D4=241mm	L1=70mm L2=190mm D1=240mm D2=257mm	D5=238mm L5=100mm 最大扩孔直径: Reaming Diameter: 308mm 偏心孔套有 12 齿 合金 4 粒: Reamer has 16* Φ16 buttons	D6=240mm L6=89.5mm 边齿: Gauge button: 12*Φ18 中齿: Front button: 32*Φ16
NOD280	最大直径: Maximum O.D.: 324mm 最小直径: Minimum O.D.: 305mm	链接螺纹: Connection Thread: API4 1/2" Reg 外径: O.D.: 114mm 扳手槽后: Wrench Flats: 95mm	有效长度: Effective length: 305mm	NSD10, NUMA100	L3=125mm L4=75mm D3=308mm D4=281mm	L1=97mm L2=254mm D1=280mm D2=303mm	D5=266mm L5=120mm 最大扩孔直径: Reaming Diameter: 378mm 偏心孔套有 12 齿 合金 4 粒: Reamer has 22* Φ18 buttons	D6=280mm L6=135mm 边齿: Gauge button: 12*Φ18 中齿: Front button: 27*Φ16





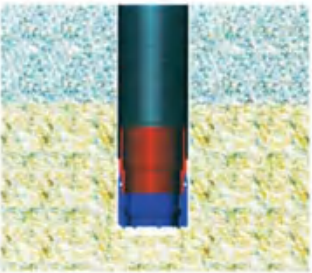
1. 钻孔之前，将环形钻头和管靴组件与套管焊好，然后将导向钻头与环形钻头管靴组件锁好，导向钻头肩部与管靴吻合。

1. Ring bit and casing shoe assembly is welded to casing prior to drilling. Lock the assembly into pilot bit with hammer. The pilot bit' shoulder engages the shoulder of the casing shoe.



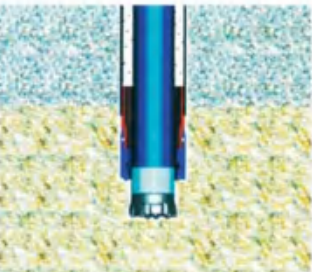
2. 冲击器的冲击能传至导向钻头和环形钻头开始破岩，部分能量带动套管向前。

2. Hammer's percussive energy is transferred through the pilot and ring bit, crushing rock. Part of impact energy advances casing.



3. 在钻进结束之后，通过轻轻反转让卡口连接解锁而取回钻具。环形钻头留在孔内，当孔进行注浆完毕，套管拔出时，环形钻头一起取出。

3. On completion of drilling and casing, the drill string wit pilot bit is retrieved by a slight reverse rotation to unlock the bayonet coupling. The ring bit stays in the hole, and can be recovered only if the casing is retrieved.



4. 在基岩中，如果需要进一步钻进，将导向钻头换成尺寸合适的标准钻头。

4. If further drilling is required on the bedrock, the pilot bit is simply replaced by an appropriate size of standard DTH bit.

对心跟管钻进的优点

- 成孔直线度好，钻进速度快。
对心钻进的工作原理能保证在砾石层、砂层和卵石层等所有地层中钻出较直的孔，并且钻进速度快。
- 钻进中扭矩较小。
对心钻进比偏心钻进需要的扭矩小得多。环形钻头保证在所有条件下顺利稳定地钻进，即使用小钻机也能钻较大的孔。
- 解锁-重新锁定比较容易。
钻孔过程中有时需要将系统解锁，对心钻进容易重新锁定，因为该系统中没有必须在孔内打开和关闭的偏心构件。
- 可以进行任何角度的钻孔。
对心钻进能钻任何角度的孔。
- 排渣效果好。
对心钻进中用于排渣的气流从导向钻头喷出后即沿套管上升，因此，对孔壁损害较小，排渣效果好。
- 操作容易，系统安全。
由于对心钻进工作较顺利，钻孔工人不需要持续关注钻进工作。
- 经济，成本低。
对心钻进系统的结构和工作原理能保证显著减少停机时间，消耗品少，运转成本低。

Advantages of Symmetric Drilling

- Sound drilling straightness and fast drilling speed.
Theoretically, symmetric drilling makes sure the hole in all formations such as gravel bed, sand bed and pebble bed etc. is considerably straight, the drilling speed fast and the drilling torque relatively small.
- The torque necessary for symmetric drilling is much less than that for eccentric drilling.
A smooth and steady drilling may be achieved using ring bit on all conditions and create big hole even if a small drilling rig is used.
- Unlocking-relocking can be relatively easily achieved.
Unlocking the system is sometimes required during drilling process. Relocking is easy since there are no eccentric components that must be opened or closed inside the hole.
- Drilling can be carried out at ant angle.
Symmetric drilling can shape the hole at any angle.
- Effective cuttings discharge
The airflow for cutting discharge purpose during the symmetric drilling will instantly ascend along the casing pipe after spurting out from the pilot bit. Hence, the negligible damage on the wall of hole can guarantee effective cutting discharge.
- Easy-to-operate and system security
Drilling workers are relieved of the need to maintain their continuous and constant attention on drilling process since symmetric drilling can carry on smoothly.
- Economical and cost-effective
The structure and principle of operation of symmetric drilling system can guarantee considerable reduction in downtime, fewer consumable and lower operation costs.

零件图 Part Description	套管外径 Casing OD	套管最大壁厚 Casing wall max	环形钻头内径 Ring bit ID	环形钻头外径 Ring bit OD	导向钻头外径 Pilot bit OD	冲击器型号 Hammer
冲击器 Hammer	114.3	6/10	91/78	128/124	100/92.5	ND35
导向钻头 Pilot bit	126.7	7	99	140	110	ND35
套管 Casing	139.7	7/10	116/94	154/150	124/117.5	ND45/NQL4
挡圈 Retainer Ring	168.3	8/12.7	142/121	182/178	150/140	ND55/NQL5
管靴 Casing Shoe	178.3	10	145	195	156	ND55/NQL5
管靴 Retainer Ring	193.7	6/12.7	167/148	212/203	180/167	ND65/NQL6
管靴 Retainer Ring	219.1	7/12.7	186/167	234	203/191	ND65/NQL6
管靴 Retainer Ring	273.0	8/12.7	232/219	292	255/246	ND85/NQL8
管靴 Retainer Ring	323.9	8/12.7	281/270	342/342	306/297	ND85/NQL8
管靴 Casing Shoe	406.4	12.7	328	419	374	NSD10/N125
管靴 Casing Shoe	508.0	15	412	526	470	ND475/SD15
环形钻头 Ring Bit	609.6	15	513	637	570	ND525/SD18

扩孔钻头系列
Hole Opener Bits Series

扩孔钻头系列
Hole Opener Bits Series

扩孔钻头系列
Hole Opener Bits Series

潜孔扩孔钻头、螺纹扩孔钻头、管壁扩孔钻头
DTH Opener Bits, Thread Opener Bits, Crown Opener Bits



	D mm	165	178	190	216	254	305	381	305	381	445	482	660
	D1 mm	82	99	115	138	159	208	296	208	296	305	311	445
	边齿 Gauge	14	16	16	16	16	16	16	16	16	18	18	19
	正面齿 Front	14	14	14	14	14	16	16	16	16	16	16	18
可配杆 杆柄 Shank		DHD340 SD4 QL40		DHD350 SD5 QL50		DHD360 SD8 QL60		DHD380 SD8 QL80		SD10 NUMA100		SD12 NUMA120	
	杆头直径 mm	76	89	102	115	102	115	127	140	165			
	杆孔直径 D2 mm	26	43	43	76	43	76	76	89	102			
	螺纹T Gauge	R32	R32	R38	R38	T38	T38	T45	T45	T51			
	Inner Opener Bits												
	D1 mm	125	140	152	172	225							
	D2 mm	118	133	133	165	216							
	D3 mm	88	108	108	133	178							
	边齿 Gauge	16	16	16	16	18							
	正面齿 Front	14	14	16	16	16							
	螺纹型号 Thread	T104.5	T122	T122	T146.5	T203							
	Crown Opener Bits												
	D mm	83	102	116	128	165							
	T mm	56	56	78	83	120							
	边齿 Gauge	13	14	16	16	18							
	正面齿 Front	12	14	14	16	16							
螺纹型号 Thread	R56 12.7	R56 12.7	R78 22.56	R83 22.56	R120 22.56								

N (R) 1 0 2 F (D) 8 - T (R) 3 8

38= 螺纹公称直径为38mm 38= Thread Dia.38mm

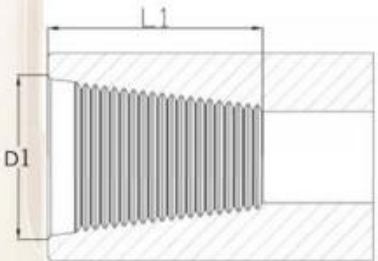
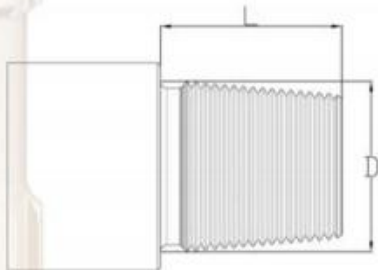
R = 波形螺纹 R = Rope Thread
T = 梯形螺纹 T = Trapezoidal Thread

边齿数量为8 NO. Gauge Button is 8.

D = 头部为中心下陷 D = The Bit Fore head is Drop Center
F = 头部为平面 F = The Bit Fore head is Flat

102 = 头部直径为102mm 102 = Gauge Dia 102mm

N = 普通螺纹钻头 N = Nomal Thread Bit
R = 易返式螺纹钻头 R = Retract Thread Bit



API(REG)	L (mm)	D (mm)
2 $\frac{3}{8}$ "	76.2	66.6
2 $\frac{7}{8}$ "	88.9	76.2
3 $\frac{1}{2}$ "	95.2	86.9
4 $\frac{1}{2}$ "	107.9	117.4
6 $\frac{5}{8}$ "	127.0	152.1
5 $\frac{1}{2}$ "	120.6	140.2
7 $\frac{5}{8}$ "	133.3	177.8
8 $\frac{5}{8}$ "	136.5	201.9

API(REG)	L (mm)	D (mm)
2 $\frac{3}{8}$ "	79.4	68.3
2 $\frac{7}{8}$ "	92.1	77.8
3 $\frac{1}{2}$ "	98.4	90.5
4 $\frac{1}{2}$ "	111.1	119.1
5 $\frac{1}{2}$ "	123.8	141.7
6 $\frac{5}{8}$ "	130.2	154.0
7 $\frac{5}{8}$ "	136.5	180.2
8 $\frac{5}{8}$ "	139.7	204.4

IF(NL)	L1 (mm)	D1 (mm)
2 $\frac{3}{8}$ "	76.2	73.05
2 $\frac{7}{8}$ "	86.9	86.1
3 $\frac{1}{2}$ "	101.6	102.0
4 $\frac{1}{2}$ "	114.3	133.3

IF(NL)	L1 (mm)	D1 (mm)
2 $\frac{3}{8}$ "	79.4	74.6
2 $\frac{7}{8}$ "	92.1	87.8
3 $\frac{1}{2}$ "	104.8	103.6
4 $\frac{1}{2}$ "	117.5	134.9

产品名称 Name of product	杆头直径Dia mm	合金Tip size(mm)		水孔数量No. of flushing holes		重量 Weight(kg)
		边齿Gauge	正面Front	侧Side	正Front	
R25/R32	41	4*9	2*8	1	1	0.54
	43	4*9	2*9	1	1	0.55
	45	5*10	2*9	1	1	0.60
R25/R32	41	5*8	2*8	1	1	0.50
	43	5*8	2*8	1	1	0.60
	45	5*10	2*9	1	2	0.80
	48	5*10	2*9	1	2	0.90
	51	5*10	2*9	1	2	1.10
R25/R32	45	6*9	2*9	2	1	0.80
	48	6*9	3*8	2	1	0.90
	57	6*9	3*9	1	1	1.30
	64	6*10	3*10	1	1	1.60
R25/R32	64	8*9	4*9	2	2	1.60
	76	8*11	4*10	2	2	2.80
	89	8*12	5*12	2	2	2.90
R25/R32	60	6*9	4*9	0	3	1.70
	64	6*9	4*9	0	3	1.90
	70	6*10	4*10	0	3	2.20
R25/R32	76	8*11	5*10	0	4	3.10
	89	8*12	6*12	0	4	5.00
	102	8*13	6*12	0	4	7.00
	115	8*14	6*13	0	4	9.60

螺纹钻头系列
Thread Bits Series

T38/R38螺纹钻头
T38 / R38 Thread Bits

产品名称 Name of product	钻头直径 Dia	合金Tip size(mm)		水孔数量 No. of flushing holes		重量 Weight(kg)
		边缘 Gauge	正面 Front	侧 Side	正 Front	
T38/R38	mm					
	57	5*11	3*10	0	2	1.6
	64	5*12	3*11	0	2	1.6
	76	6*13	4*10	0	3	2.4
	64	8*10	4*9	2	2	1.8
	76	8*11	4*10	2	2	2.6
	89	6*13	5*12	2	2	3.3
	102	8*13	6*12	2	2	4.7
	64	6*10	4*9	0	3	1.7
	70	6*11	4*10	0	3	2.2
	89	6*14	4*12	0	3	4.3
	64	8*9	5*9	0	4	1.7
	70	8*10	5*9	0	4	2.2
	76	8*11	5*10	0	4	2.7
	89	8*12	6*12	0	4	3.3
	102	8*13	6*12	0	4	4.7
	60	6*9	4*9	2	2	1.7
	64	8*9	4*9	2	2	2.0
	70	8*10	4*10	2	2	2.4
	76	8*12	4*10	2	2	3.2
	89	8*12	5*12	2	2	5.8
	64	8*9	5*9	0	4	1.9
	70	8*10	5*10	0	4	2.4
	76	8*11	5*10	0	4	3.3
	89	8*12	6*12	0	4	5.3

螺纹钻头系列
Thread Bits Series

T45螺纹钻头
T45 Thread Bits

产品名称 Name of product	钻头直径 Dia	合金Tip size(mm)		水孔数量 No. of flushing holes		重量 Weight(kg)
		边缘 Gauge	正面 Front	侧 Side	正 Front	
T45	mm					
	70	6*12	4*10	0	2	2.4
	76	6*13	4*10	0	2	2.6
	89	8*12	5*12	2	2	4.5
	102	8*13	6*12	2	2	5.0
	115	8*14	6*13	2	2	6.8
	64	6*10	4*9	0	3	1.6
	70	6*12	4*10	0	3	2.4
	76	8*11	5*10	0	4	2.6
	89	8*12	6*12	0	4	4.6
	102	8*13	6*12	0	4	4.5
	70	8*11	4*10	2	2	2.5
	76	8*11	4*10	2	2	3.1
	80	8*12	5*11	2	2	4.0
	89	8*12	5*12	2	2	5.1
	102	8*13	6*12	2	2	8.2
	70	8*10	5*9	0	4	2.2
	76	8*11	5*10	0	4	3.1
	89	8*12	6*12	0	4	5.4
	102	8*13	6*12	0	4	7.8
	105	8*13	6*12	0	4	8.3













螺纹钻头系列
Thread Bits Series

T51螺纹钻头
T51 Thread Bits

产品名称 Name of product	杆头直径 Dia	合金 Tip size(mm)		水孔数量 No. of flushing holes		重量 Weight(kg)
		边齿 Gauge	正面齿 Front	侧 Side	正 Front	
T51	mm					
	89	8*12	5*12	2	2	4.9
	102	8*13	6*12	2	2	5.8
	115	8*14	6*13	2	2	6.8
	127	8*14	7*13	2	2	7.5
	89	9*11	6*11	0	3	4.6
	102	9*12	6*12	0	3	5.9
	115	9*13	9*12	0	3	6.6
	127	9*14	9*13	0	3	8.4
	152	9*14	9*14	0	3	11.1
	89	8*12	6*12	0	4	4.5
	102	8*13	6*12	0	4	5.7
	115	8*13	6*13	0	4	6.8
	127	8*14	7*13	0	4	7.5
	140	8*16	7*14	0	4	14.4
	152	8*16	7*16	0	4	15.1
	89	8*12	5*12	2	2	5.1
	102	8*13	6*12	2	2	7.1
	115	8*14	7*13	2	2	10.5
	127	8*14	7*13	2	2	12.5
	89	8*12	6*12	0	4	5.3
	102	8*13	6*12	0	4	7.4
	115	8*14	6*13	0	4	10.2
	127	8*14	7*13	0	4	12.0

螺纹钻头系列
Thread Bits Series

ST58螺纹钻头
ST58 Thread Bits

产品名称 Name of product	杆头直径 Dia	合金 Tip size(mm)		水孔数量 No. of flushing holes		重量 Weight(kg)
		边齿 Gauge	正面齿 Front	侧 Side	正 Front	
ST58	mm					
	89	8*12	5*12	-	2	4.8
	102	8*13	6*12	-	2	6.5
	115	8*13	6*13	-	2	6.8
	127	8*14	7*14	-	2	8.5
	89	8*12	6*12	-	2	4.6
	102	8*13	6*12	-	2	6.0
	115	8*13	6*13	-	2	6.4
	127	8*14	7*14	-	2	8.2
	89	8*12	5*12	-	2	4.9
	102	8*13	6*12	-	2	6.4
	115	8*13	6*13	-	2	6.7
	127	8*14	7*14	-	2	8.8
	89	8*12	5*12	-	2	4.7
	102	8*13	6*12	-	2	6.2
	115	8*13	6*13	-	2	6.4
	127	8*14	7*14	-	2	8.3
	89	8*12	5*12	-	2	5.0
	102	8*13	6*12	-	2	6.9
	115	8*13	6*13	-	2	7.2
	127	8*14	7*14	-	2	8.9
	89	8*12	6*12	-	2	4.8
	102	8*13	6*12	-	2	6.6
	115	8*13	6*13	-	2	7.0
	127	8*14	7*14	-	2	8.7

螺纹钻头系列
Thread Bits Series

GT60螺纹钻头
GT60 Thread Bits

螺纹钻头系列
Thread Bits Series

ED68/ST68螺纹钻头
ED68/ST68 Thread Bits

产品名称 Name of product	杆头直径 Dia	合金 Tip size(mm)		水孔数量 No. of flushing holes		重量 Weight(kg)
		边齿 Gauge	正面齿 Front	侧 Side	正 Front	
GT60	mm					
	102	8*13	6*12	-	2	8.2
	115	8*13	6*13	-	2	10.1
	127	8*14	7*14	-	2	11.3
	152	8*18	7*16	-	2	15.9
	102	8*13	6*12	-	2	8.1
	115	8*13	6*13	-	2	10.0
	127	8*14	7*14	-	2	11.2
	152	8*18	7*16	-	2	15.8
	102	8*13	6*12	-	2	8.5
	115	8*13	6*13	-	2	10.4
	127	8*14	7*14	-	2	11.6
	152	8*18	8*16	-	2	15.9
	102	8*13	6*12	-	2	8.7
	115	8*13	6*13	-	2	10.6
	127	8*14	7*14	-	2	11.8
	152	8*18	7*16	-	2	16.2
	102	8*13	6*12	-	2	8.8
	115	8*13	6*13	-	2	10.9
	127	8*14	7*14	-	2	11.7
	152	8*18	7*16	-	2	16.6
	102	8*13	6*12	-	2	8.7
	115	8*13	6*13	-	2	10.6
	127	8*14	7*14	-	2	11.6
	152	8*18	7*16	-	2	16.4

产品名称 Name of product	杆头直径 Dia	合金 Tip size(mm)		水孔数量 No. of flushing holes		重量 Weight(kg)
		边齿 Gauge	正面齿 Front	侧 Side	正 Front	
ED68/ST68	mm					
	115	8*13	6*13	-	2	9.7
	127	8*14	7*14	-	2	10.2
	140	8*16	8*14	-	2	12.0
	152	8*18	7*16	-	2	16.0
	115	8*13	6*13	-	2	9.5
	127	8*14	7*14	-	2	10.0
	140	8*16	8*14	-	2	12.0
	152	8*18	7*16	-	2	16.0
	115	8*13	6*13	-	2	9.8
	127	8*14	7*14	-	2	10.3
	140	8*16	8*14	-	2	12.2
	152	8*18	7*16	-	2	16.2
	115	8*13	6*13	-	2	9.2
	127	8*14	7*14	-	2	10.2
	140	8*16	8*14	-	2	12.1
	152	8*18	7*16	-	2	16.1
	115	8*13	6*13	-	2	9.9
	127	8*14	7*14	-	2	10.6
	140	8*16	8*14	-	2	12.5
	152	8*18	7*16	-	2	16.8
	115	8*13	6*13	-	2	9.8
	127	8*14	7*14	-	2	10.4
	140	8*16	8*14	-	2	12.3
	152	8*18	7*16	-	2	16.6

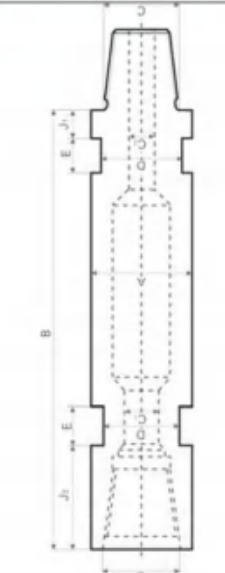


型号 Rock dill type (Dimensions, mm)	螺纹 Thread	D	L
	R32	38	300
	R38	38.5	380
	T38	38.5	380
	T38	44.3	390
	R38	38	498
	T38	38	500
	T45	45	500
	R32	45	340
	T51	52	670

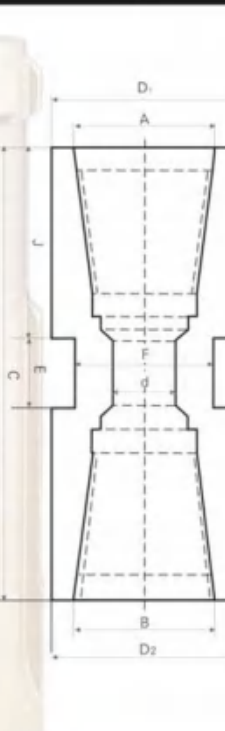
编号 Explanation Of Serial Number:	外径 D(mm)	螺纹 Thread	长度 Length
HCS-37X127-R25 	37	R25	127
	45	R32	160
	55	R32	180
		R38	180
		R38	180
	57	R38	180
		T38	180
	66	T45	207
	76	T51	225
	55	R32 R38	180
		R38 R38	180
	61	T45 T38	200
	66	T38 T45	200
	71	T45 T51	225

以上所列各种规格，
均可根据客户要求
进行加工。
We can manufacture
all kinds of adapters
according to
customer's sample.

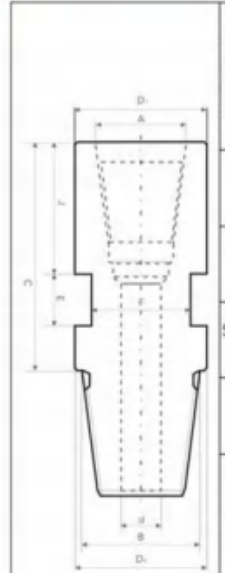
以上所列各种规格，
均可根据客户要求
进行加工。
We can manufacture
all kinds of coupling
sleeves according to
customer's sample.



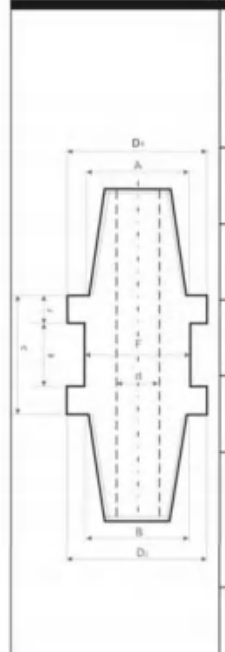
A OD (mm)	φ76	φ89	φ102	φ114	φ127	φ140	φ152				
	C Tool Joints		Connection		API2 ³ / ₈ REG	API2 ³ / ₈ REG	API3 ¹ / ₂ REG	API3 ¹ / ₂ REG	API3 ¹ / ₂ REG	API3 ¹ / ₂ REG	API4 ¹ / ₂ REG
	C1		25.4	28.6	44.4	38.1	44.4	44.4	76.2		
	C2		38.1	38.1	57.1	57.1	57.1	57.1	85.7		
	J Length shoulder to flat		J1	16	11.1	15.8	15.8	12.7	12.7	19	
	J2		90.5	76.2	90.5	69.8	95.2	95.2	120.6		
	D Across Flat (mm)		65	69.8	63.5	92.2	120.6	120.6	130.1		
	Allowed Pull Down Unit. (KNm)		5.4	11.2	14.2	22.2	47	47	52.9		
	Approx Weight unit 3m long/kgs		26.6	53.4	53.1	77.4	114	114	127		
	E Width Spanner flat (mm)		38.1	60.3	50.8	69.8	50.8s	50.8	60.3		



Connection	Box up A	API4 ¹ / ₂ REG	API2 ⁷ / ₈ REG	API3 ¹ / ₂ REG	API3 ¹ / ₂ REG	API2 ³ / ₈ REG	API2 ⁷ / ₈ REG	API2 ³ / ₈ REG
	Box down B	API2 ⁷ / ₈ REG	API3 ¹ / ₂ REG	API4 ¹ / ₂ REG	API3 ¹ / ₂ REG	API3 ¹ / ₂ REG	API2 ³ / ₈ REG	API2 ³ / ₈ REG
Length C (mm)		250.8	241.3	269.8	241.3	128.6	219	219
Length Shoulder J (mm)		76.2	69.85	88.9	69.85	57.1	69.85	57.1
Width Spanner flats E (mm)		50.8	50.8	50.8	50.8	50.8	50.8	50.8
Std bore d (mm)		44.45	44.45	58.7	44.45	38.1	38.1	38.1
Outside diameter	Top D ₁ (mm)	114.3	114.3	114.3	114.3	88.9	114.3	88.9
	Bottom D ₂ (mm)	146	51.7	146	114.3	114.3	88.9	88.9
Across Flat F (mm)		98.4	98.4	98.4	98.4	69.8	98.4	69.85



Connection	Box up A	API2 ³ / ₈ REG	API2 ³ / ₈ REG	API2 ³ / ₈ REG	API3 ¹ / ₂ REG	API3 ¹ / ₂ REG	API2 ⁷ / ₈ REG	API2 ⁷ / ₈ REG	API2 ⁷ / ₈ REG
	Box down B	API2 ³ / ₈ REG	API2 ⁷ / ₈ REG	API3 ¹ / ₂ REG	API3 ¹ / ₂ REG	API4 ¹ / ₂ REG	API2 ³ / ₈ REG	API3 ¹ / ₂ REG	API4 ¹ / ₂ REG
Length C (mm)		140	134.9	146	101.6	134.9	134.9	134.9	174.6
Length Shoulder J (mm)		50.8	69.85	39.7	39.7	39.7	39.7	39.7	100
Width Spanner flats E (mm)		65	50.8	50.8	50.8	50.8	50.8	50.8	50.8
Std bore d (mm)		24	31.75	25.4	44.45	52.4	31.75	44.45	44.45
Outside diameter	Top D ₁ (mm)	88.9	88.9	114.3	127	114.3	88.9	114.3	114.3
	Bottom D ₂ (mm)	88.9	88.9	88.9	127	146	88.9	114.3	146
Across Flat F (mm)		69.85	69.85	98.4	98.4	98.4	69.85	98.4	98.4



Connection	Box up A	API2 ³ / ₈ REG	API2 ³ / ₈ REG	API2 ³ / ₈ REG	API3 ¹ / ₂ REG	API3 ¹ / ₂ REG	API4 ¹ / ₂ REG
	Box down B	API2 ³ / ₈ REG	API2 ⁷ / ₈ REG	API3 ¹ / ₂ REG	API3 ¹ / ₂ REG	API4 ¹ / ₂ REG	API4 ¹ / ₂ REG
Length C (mm)		70	152.4	96	177.8	92	203.2
Length Shoulder J (mm)		20	50.8	35	63.5	12.7	76.2
Width Spanner flats E (mm)		50.8	50.8	50.8	50.8	69.85	50.8
Std bore d (mm)		24	25.4	24	44.45	38.1	58.7
Outside diameter	Top D ₁ (mm)	78	88.9	114.3	114.3	114.3	146
	Bottom D ₂ (mm)	78	88.9	114.3	114.3	139.7	146
Across Flat F (mm)		65	69.85	98.4	98.4	120.65	120.65

冲击器拆卸工作台 Breakout Bench



冲击器拆卸工作台使用方法:

1. 把冲击器放进卸钎器里边。
2. 调节冲击器和扳手的位置, 使扳手卡住接头方口处, 并与千斤顶处于同一平面内。
3. 用螺丝固定好K形座。
4. 用相应螺丝将扳手固定紧。
5. 缓慢上下摇动千斤顶把手, 将冲击器慢慢卸开。
6. 接头拆卸完后, 将千斤顶回油, 回油完后, 松开螺丝, 放下扳手, 卸下K形座, 将冲击器调头。
7. 调节冲击器和扳手的位置, 使扳手卡住卡钳套并与千斤顶处于同一平面内。
8. 调整冲击器。
9. 放入K形座, 并用螺丝将K形座及扳手固定好。
10. 缓慢上下摇动千斤顶把手, 将冲击器慢慢卸开。

Breakout Bench Operation Method:

- 1). Put hammer in the bench.
- 2). Adjust hammer and wrench to make wrench block at top sub; let wrench and jack be in the same plane.
- 3). Fix K-shaped base with nut.
- 4). Fix wrench with nuts.
- 5). Sway jack handle slowly to unlink hammer.
- 6). After top sub dismantled, grease jack, release nuts, discharge K-shaped base and turn around hammer.
- 7). Adjust hammer and wrench to make wrench block drive chuck; let wrench and jack be in the same plane.
- 8). Adjust hammer.
- 9). Fix K-shaped base and wrench with nuts.
- 10). Sway jack handle slowly to unlink hammer.

滚刀钻头 Cutter Bits



一般用于孔径在800mm至1400mm的钻进中, 每只钻头至少可以承受80KN载荷。
It is used for drilling holes from 800mm to 1400mm in diameter and allow a thrust load of 80KN at least.



产品简介:

选用独特优质材料, 热处理后, 工作性能得到进一步提高, 再结合科学的刀型设计, 能够在各种恶劣的环境下出色的完成破岩任务。
高品质的动密封组件, 保证钻头能在含水层正常工作。
精密而稳定可靠的轴承, 使钻头在各种恶劣的环境下运转灵活, 不会出现卡钻、偏磨现象。
先进而严格的加工工艺, 科学的装配手段, 使钻头的高品质得以充分体现。
我公司可提供适用于海瑞克、三菱、维尔特等各种盾构机及TBM使用的盘形滚刀。

Explanation of Product:

Superior material, reasonable design and improvement in its performance after heat treatment process, all these make it available in all kinds of tough working conditions.
High quality sealed parts guarantee bits' well-working.
Close and stable bearing makes bits work well in all execrable environment.
Advanced and strict techniques as well as scientific assembly make sure to produce high quality bits.
We offer all kinds of disk cutters for tunnel boring machines which match Herrenknecht, Mitsubishi and Wirth.



一般用于孔径在1200mm至3500mm的钻进中, 每只钻头至少可以承受140KN载荷。
It is used for drilling holes from 1200mm to 3500mm in diameter and allow a thrust load of 140KN at least.



一般用于孔径在1200mm至3500mm的钻进中, 每只钻头至少可以承受200KN载荷。
It is used for drilling holes from 1200mm to 3500mm in diameter and allow a thrust load of 200KN at least.

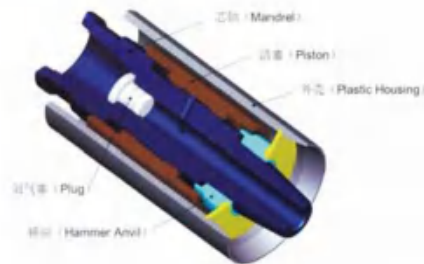


长尾巴钻头 Long Shank Bits



杆头直径(mm) Dia (mm)	边齿 Gauge	正面齿 Front	水孔数量 Flushing holes	重量 (kg) Weight(kg)
90	9*11	7*11	3*8	5.8
95	9*12	7*11	3*8	6.0
105	9*12	7*12	3*10	6.4
105	9*13	7*12	3*13	9.1
115	9*14	6*14	3*13	9.7
127	9*14	7*14	3*13	10.6
115	9*14	6*14	3*13	12.6
127	9*14	7*14	3*13	13.2
140	9*16	9*16	3*13	14.5
140	9*16	9*16	3*15	21.3
152	9*16	9*16	3*15	23.1
165	10*16	10*16	3*15	23.9

反打冲击器 Back Hammers



反打冲击器:

当设备在钻孔时发生卡钻时, 反打冲击器为节约时间和金钱。
反打冲击器可安装在位于钻头夹持器和旋转头之间的钻管接头处, 形成一种有效的反打冲击和震动的结合效果。
反打冲击器坚固而可靠, 只有三个部件和一个塑料外壳组成。塑料外壳除了引导废气排放外还起消音器的作用。保养工作只需在不使用时保持反打冲击器的清洁。

Back Hammer:

In case of jamming of any drilling tool during the boring process, the back hammer will help you save time and money.
The back hammer may be mounted on the drill pipe joint between the borehole gripper and the swivel head, thus, creating a combined effect of effective reverse impact and vibration.
Sturdy and reliable, the back hammer is composed of three components and a plastic housing which acts both as an exhaust emission guider and a muffler. With regards to the maintenance, it's only necessary to keep it clean and the linking section well protected when the back hammer is not working.

产品名称 Product	工作压力 Pressure	连接螺纹 Thread	总长 (mm) Total length(mm)	外径尺寸 (mm) Outer Dia.(mm)	重量 (kg) Weight(kg)
NBH14	8Bar	API3 1/2"	510	180	31.0
NBH16	8Bar	API3 1/2"	540	200	44.0
NBH19	8Bar	API3 1/2"	540	225	63.0