适合工作范围 Application Range

适用于打地热井、水井、建筑中小型灌浆孔、微型桩

It is suitable for drilling water wells , geothermal wells , short mircopiles ,medium mini-type grouting hole of building , damand harbour project .

❶ 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跟进。

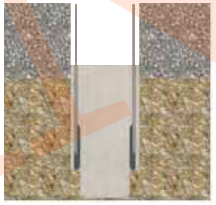
When drilling starts , the reamer swings out and reams the pilot-hole wide enough for the casing tube to slide down behind the drill bit assembly

❷ 跟管钻进到位后，反转偏心套旋回，再将偏心系统从套管中向上拔出。

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.

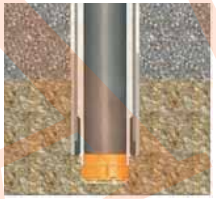
❸ 将套管向上拔，同时在孔底喷灌浆或其它填充物。

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.



❹ 在基岩中采用常规钻具钻进达到所需深度。

Drilling continues to the desired depth in the bedrock using a conventional drilling tools.



[偏心跟管钻具推荐型号技术参数表] Technical Parameter Table Of Standard Eccentric Casing System

推荐产品型号 Outer Dia.(A) mm	套管外径 Outer Dia.(A)mm	套管内径 Inner Dia.(B)mm	最大壁厚 The Max. Wall Thickness	扩孔直径 Reamed Dia.(C)mm	管靴内孔直径 Inner Dia. Of Casing Shoe(D)mm	通过管靴内孔的钻头最大直径 Inner Dia. Of Casing Shoe That Pilot Bit Can Pass Through	推荐配用冲击器型号 Type Of Hammer Recommended	可选配冲击器型号 Hammer Type(E)		钻杆 Drill Pipe mm
CEC108-CD35-84	108	96	6	118	86	84	Cd35	DHD3.5	QL30	76
CEC114-CD35-90	114	102	6	123	92	90	CD35	DHD3.5	QL30	76
CEC127-CD45-97	127	109	9	138	99	97	CD45	DHD340A	QL40	76
CEC140-CD45-115	140	128	6	152	117	115	CD45	DHD340A	QL40	76
CEC168-CD55-140	168	156	6	185	142	140	CD55	DHD350R	QL50	76/89
CEC178-CD55-146	178	158	10	195	148	146	CD55	DHD350R	QI50	76/89
CEC183-CD55-150	183	163	10	200	152	150	CD55	DHD350R	QI50	76/89
CEC194-CD65-165	194	180	7	209	167	165	CD65	DHD360	QL60	89/114
CEC219-CD65-190	219	205	7	237	192	190	CD65	DHD360	QL60	89/114
CEC245-CD85-208	245	225	10	264	210	208	CD85	DHD380	QL80	114
CEC273-CD85-240	273	259	7	308	242	240	CD85	DHD380	QL80	114
CEC325-CN100-280	325	305	10	358	282	280	CN100	NUMA100	SD10	114

备注：每种产品型号，客户可根据实际情况，选用公称尺寸相同的冲击器。

Remarks:According to the actual requirements,the customer can select same nominal specification of the Hammer as each specification of the product.

订购参数:套管外径(A) +套管内径(B) + 扩孔直径(C) + 管靴内孔直径 (D) + 冲击器(E)

Order Guide: Outer Dia(A) + Inner Dia(B) + Reamed Dia (C) + Inner Dia. Of Casing Shoe (D) + Hammer Type (E)

如您的订购参数为套管规格：273mm； 最大壁厚：6mm ； 冲击器 DHD380;则可确定您需要订购的产品名称为:

For example if requirement is: Specification of casing pipe 273mm; the max. wall thickness: 6mm； Hammer: DHD380, then the confirmable product code is:

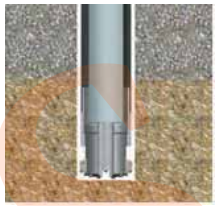
适合工作范围 Application Range

适用于打地热井、水井、建筑中小型灌浆孔、微型桩

It is suitable for drilling water wells , geothermal wells , short mircopiles ,medium mini-type grouting hole of building , damand harbour project .

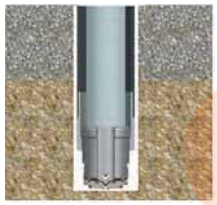
❶ 凿岩工作开始时，钻具向下压使扩孔块沿滑槽滑出，同时开始扩孔以保证套管和钻进系统同时跟进

When drilling starts , the reamer swings out and reams the pilot-hole wide enough for the casing tube to slide down behind the drill bit assembly



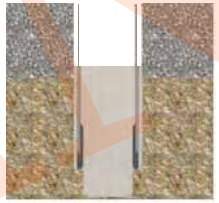
❷ 跟管钻进到位后，钻具向上提钻，扩孔块沿滑槽回收。再将扩孔系统从套管中向上拔出。

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.



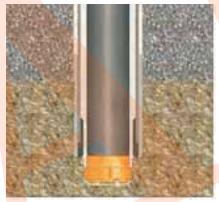
❸ 将套管向上拔，同时在孔底喷灌浆或其它填充物。

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.



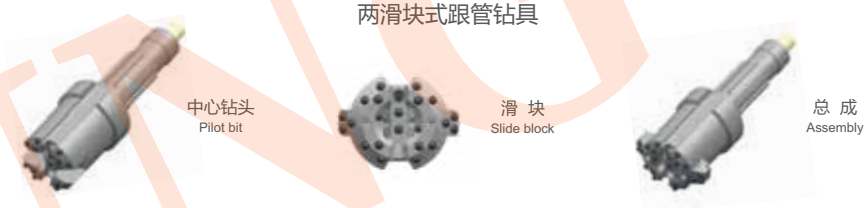
❹ 在基岩中采用常规钻具钻进达到所需深度。

Drilling continues to the desired depth in the bedrock using a conventional drilling tools.

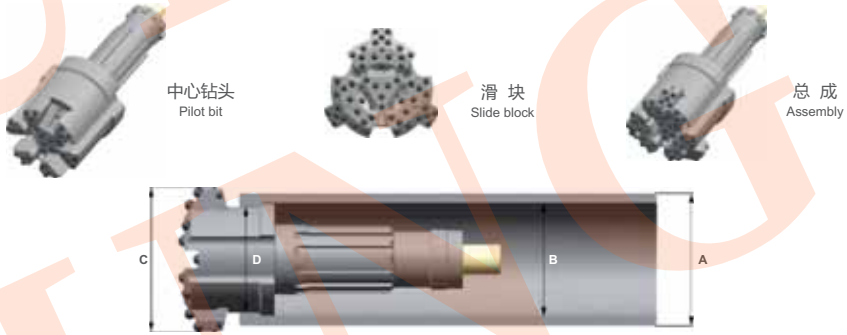


滑块式跟管钻具 SLIDE BLOCK CASING SYSTEMS

两滑块式跟管钻具



三滑块式跟管钻具



[滑块式跟管钻具推荐型号技术参数表] Technical Parameter Table Of Standard Eccentric Casing System

推荐产品型号 Outer Dia.(A) mm	套管外径 Outer Dia.(A)mm	套管内径 Inner Dia.(B)mm	最大壁厚 The Max. Wall Thickness	扩孔直径 Reamed Dia.(C)mm	扩孔块数量 Reamed block Dia.(C)mm	管靴内孔直径 Inner Dia. Of Casing Shoe(D)mm	通过管靴内孔的钻头最大直径 Inner Dia. Of Casing Shoe That Pilot Bit Can Pass Through	推荐配用冲击器型号 Type Of Hammer Recommended	可选配冲击器型号 Hammer Type(E)	钻杆 Drill Pipe mm
CSC168-CD55-140	168	156	6	185	2	142	140	Cd55	DHD350 QL50	76/89
CSC178-CD55-146	178	158	10	195	2	148	146	CD55	DHD350 QL50	76/89
CSC183-CD55-150	183	163	10	200	2	152	150	CD55	DHD350 QL50	76/89
CSC194-CD65-165	194	180	7	209	2	167	165	CD65	DHD360 QL60	89/114
CSC219-CD65-190	219	205	7	237	3	192	190	CD65	DHD360 QL60	89/114
CSC245-CD85-208	245	225	10	264	3	210	208	CD85	DHD380 QL80	114
CSC273-CD85-240	273	259	7	308	3	242	240	CD85	DHD380 QL80	114
CSC325-CN100-280	325	305	10	358	3	282	280	CN100	NUMA100 SD10	114
CSC406-CN125-355	406	382	12	426	4	360	355	CN125	NUMA125 SD12	127

订购参数:套管外径(A) +套管内径(B) + 扩孔直径(C) + 管靴内孔直径 (D) + 冲击器(E)
Order Guide: Outer Dia.(A) + Inner Dia.(B) + Reamed Dia.(C) + Inner Dia. Of Casing Shoe (D) + Hammer Type (E)

对心跟管钻具 SYMMETRIC OVERBURDEN DRILLING SYSTEMS

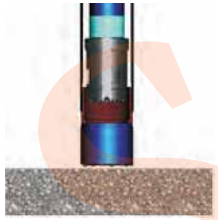
适合工作范围 Application Range

适用于打地热井、水井、建筑中小型灌浆孔、微型桩

It is suitable for drilling water wells , geothermal wells , short mircopiles ,medium mini-type grouting hole of building , damand harbour project .

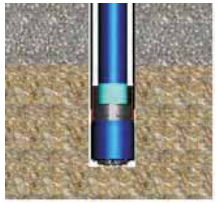
❶ 钻孔之前，将环形钻头和管靴组件与套管焊接好 ，然后将导向钻头与环形钻头管靴组件锁好，导向钻头肩部与管靴啮合。

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



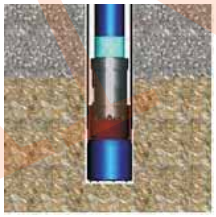
❷ 冲击器的冲击能传导至导向钻头和环形钻头开始破岩，部分能量带动套管向前。

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



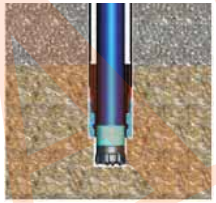
❸ 在钻进结束之后，通过轻轻反转让卡口连接解锁而取回导向钻头。环形钻头留在孔内，当孔进行注浆完毕。拔管时套管与环形钻头一起取出。

On completion of drilling and casing , the drill string with 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 .

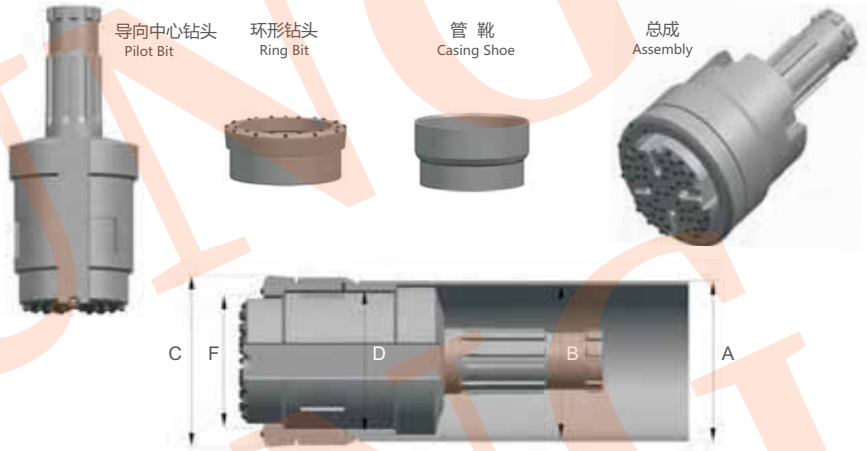


❹ 在基岩中采用常规钻具钻进发达到所需深度。

Drilling continues to the desired depth in the bedrock using a conventional drilling tools.



对心跟管钻具(不可回收型) SYMMETRIC OVERBURDEN DRILLING SYSTEMS(Permanent)



对心跟管钻具推荐型号技术参数(不可回收型)

Technical Parameter Table of Standard Symmetric Overburden Drilling System(Permanent)

推荐产品型号 Outer Dia.(A) mm	套管外径 Outer Dia.(A)mm	套管内径 Inner Dia.(B)mm	最大壁厚 The Max. Wall Thickness	扩孔直径 Reamed Dia.(C)mm	管靴内孔直径 Inner Dia. Of Casing Shoe(D)mm	通过管靴内孔的钻头最大直径 Inner Dia. Of Casing Shoe That Pilot Bit Can Pass Through	推荐配用冲击器型号 Type Of Hammer Recommended	可选配冲击器型号 Hammer Type(E)	钻杆 Drill Pipe mm
CSOD108-CD35-75-P	108	96	6	118	85	75	Cd35	DHD3.5 QL30	76
CSOD114-CD35-80-P	114	102	6	128	90	80	CD35	DHD3.5 QL30	76
CSOD127-CD45-85-P	127	109	9	141	97	85	CD45	DHD340 QL40	76
CSOD140-CD45-95-P	140	120	10	154	108	95	CD45	DHD340 QL40	76
CSOD168-CD55-125-P	168	148	10	182	138	125	CD55	DHD350 QL50	76/89
CSOD178-CD55-135-P	178	158	10	192	148	135	CD55	DHD350 QL50	76/89
CSOD183-CD55-140-P	183	163	10	198	152	140	CD55	DHD350 QL50	76/89
CSOD194-CD65-148-P	194	174	10	210	164	148	CD65	DHD360 QL60	89/114
CSOD219-CD65-172-P	219	199	10	235	184	172	CD65	DHD360 QL60	89/114
CSOD245-CD85-192-P	245	225	10	261	210	192	CD85	DHD380 QL80	114
CSOD273-CD85-219-P	273	253	10	305	238	219	CD85	DHD380 QL80	114
CSOD325-CN100-270-P	325	305	10	348	294	270	CN100	NUMA100 SD10	114
CSOD406-CN125-330-P	406	382	12	432	358	330	CN125	NUMA125 SD12	127

订购参数:套管外径(A) +套管内径(B) + 扩孔直径(C) + 管靴内孔直径 (D) + 冲击器(E)

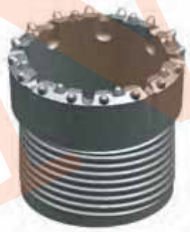
Order Guide: Outer Dia(A) + Inner Dia(B) + Reamed Dia (C) + Inner Dia. Of Casing Shoe (D) + Hammer Type (E)

双重跟管钻具

DOUBLE CASING DRILLING SYSTEMS

产品特点　Features

- 零件表面强化处理
  Hardening treatment of the part's surface
  更长的作业寿命，极好的抗磨损特性
  with longer operating life and excellent anti-wear properties.



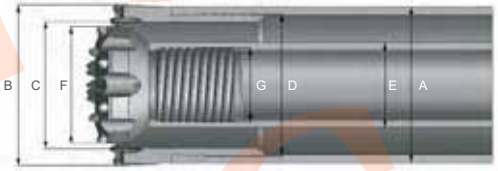
- 结构优化
  Structural optimization
  强化结构强度，操作简便
  Strengthen the structural,easy to operate.

- 优越性能
  Superior performance
  钻进平稳，效率高
  smoothly drilling with high efficiency.

管壁钻头
Crown Opener Bit

总成
Assembly

外螺纹钻头
Inner Opener Bit

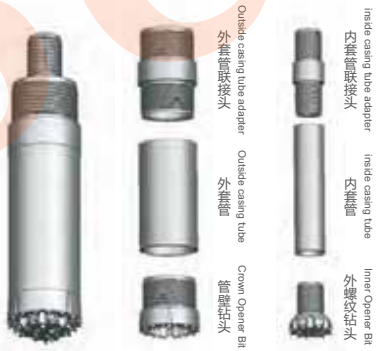


双重跟管钻具标准型号技术参数　Technical Parameter table of standard double casing drilling systems

套管外径 Outer Dia.(A) mm	扩孔直径 Reamed Dia.(B) mm	管壁钻头内径 Inner Dia.(C) mm	螺纹尺寸 Thread(D) mm	钻杆直径 Drill Rod Dia.(E) mm	外螺纹钻头直径 Drill Bit Dia.(F) mm	螺纹类型 Thread type (G)
118	125	88	104.5	76	83	R56
133	140	108	122	76	102	R56
146	152	120	134	89	116	R78
168	172	133	146.5	114	128	R83
216	225	178	203	114	165	R102

订购参数:套管外径(A) + 扩孔直径(B) +管壁钻头内径(C) +螺纹尺寸(D)+ 钻杆直径(E)+外螺纹钻头直径(F)+螺纹尺寸(G)
Order Guide: Outer Dia.(A)+Reamed Dia.(B)+Inner Dia.(C)+Thread(D)+ Drill Rod Dia.(E)+Drill Bit Dia.(F)+Thread(G)

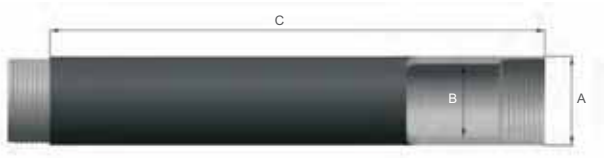
结构形式　Structure



管内用（顶锤式）钻杆连接
Top hammer type drilling inside the casing

管内用（潜孔冲击器）连接
DTH hammer type drilling inside the casing

套管 CASING



技术参数 Technical Parameters

套管外径 Outer Dia.(A) mm	套管内径 Inner Dia.(B) mm	壁厚 Wall thickness mm	套管长度 Length(C) mm			
108	96	6	1000	1500	2000	3000
114	102	6	1000	1500	2000	3000
127	109	9	1000	1500	2000	3000
140	128	6	1000	1500	2000	3000
146	126	10	1000	1500	2000	3000
168	148	10	1000	1500	2000	3000
178	158	10	1000	1500	2000	3000
183	163	10	1000	1500	2000	3000
194	174	10	1000	1500	2000	3000
219	199	10	1000	1500	2000	3000
245	225	10	1000	1500	2000	3000
273	253	10	1000	1500	2000	3000
325	305	10	1000	1500	2000	3000
406	382	12	1000	1500	2000	3000

★ **订购超金刚套管您需要提供哪些参数？**

- 套管的外径
- 套管的内径/壁厚
- 长度
- 螺纹 (焊接型套管不需提供)

★ What parameter needs to be provided to us when you purchase casing tube?

- Outer diameter of casing tube;
- Inner diameter of Casing or Wall thickness of casing tube;
- Length of casing tube;
- The thread type of casing tube.

1、螺纹型套管订购参数：套管外径(A)+套管内径(B)+长度(C)+螺纹(T)
Threaded Casing Tube :Outer Dia.(A)+ Inner Dia.(B)+Length(C)+thread(T)

2、焊接型套管订购参数：套管外径(A)+套管内径(B)+长度(C)
Welding Casing Tube :Outer Dia.(A)+ Inner Dia.(B)+Length(C)

反循环钻进和反循环冲击器介绍

Introduction of R.C. Drilling and R.C. DTH Hammers

什么叫反循环钻进：

- 反循环钻进也叫中心样品采集或双壁管钻进。这种钻进通常采用双壁钻管。钻进动力为高风压气体，高压气体通过外管与内管之间的空隙进入冲击器，使冲击器打击钻头破碎岩层，破碎的岩石汇集到钻头面上气孔中，再经过样品采集管和钻杆内管收集岩石样品。

IT HAS THE FOLLOWING CHARACTERISTICS:

- R.C. Drilling,referred to as “Centre Sample Recovery” or “Dual Wall Drilling”, employs a Dual Wall Pipe where the drilling medium,normally high pressure air,is passed between the outer and inner tubes down to the face of the drilling bit where it is returned up the centre tube along with the sample cut by the drill bit.

反循环冲击器的优点

- 无污染

反循环冲击器能在碎岩瞬间，迅速地在钻头面上提取样品。样品不需要通过冲击器长度，从而避免了样品污染和损失。

- 高生产率

在破碎和断裂岩层中，反循环冲击器在穿透速度方面比普通冲击器要强。

- 干燥的样品

甚至在有水的环境下，都能采集到干燥的样品，因为，岩屑在钻头面上刚产生就被采集了。

- 样品回收率高

因为是从钻头面上采集样品，所以在破碎和断裂岩层上能避免样本的损失。因为钻头直径和耐磨套的外径几乎相等，所以样品的采集回收率可以达到98%。

THE USE AND THE ADVANTAGES OF THE R.C. DTH HAMMER:

- No contamination

The R.C. System collects sample through the recovery holes in the face of the drill bit immediately as the cuttings or sample is formed. The drilled sample does not have to travel the length of the hammer where contamination and loss of sample takes place.

- Higher Production

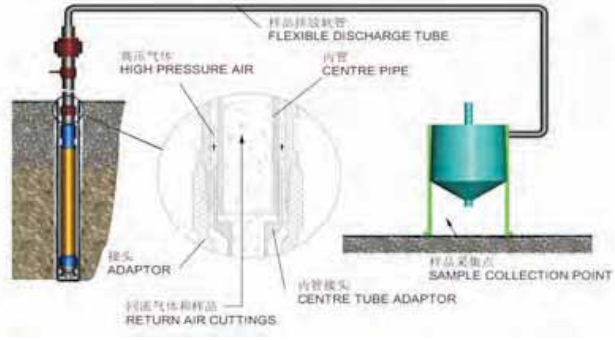
In broken and fractured ground conditions,the R.C. will often out perform the conventional hammer in terms of penetration rates.

- Dry Sample

Even in certain water bearing stratas it is still possible to collect a dry sample because the cuttings(sample) are collected as they are formed through the face of the drill bit.

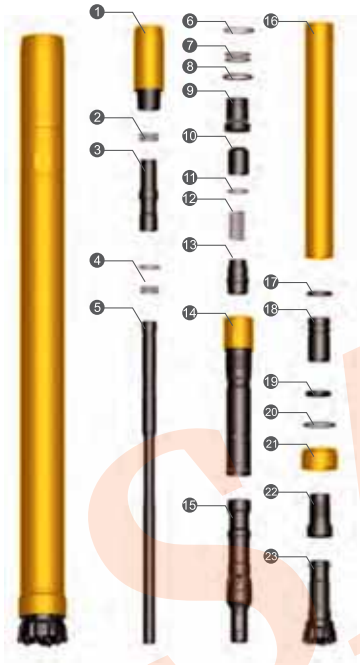
- Higher Sample Recovery

Because the sample is collected through the face of the drill bit there is no loss of sample when drilling through broken or fractured ground.And since the bit matched to the chuck size ,there is very little bypass of sample and recovery rates of up to 98% are generally achievable.



RC3-E531 反循环冲击器 RC3-E531 R.C. HAMMER

3" 反循环冲击器系列 3" R.C. Hammers



	零部件名称 Item Description		重量 Weight (Kg)	零部件代号 Part Number
1	接头	Top Sub	3.76	RC3-E531-01
2	"O" 形圈	"O" Ring	0.01	RC3-E531-02
3	联接管	Adaptor Screen	1.85	RC3-E531-03
4	"O" 形圈	"O" Ring	0.01	RC3-E531-04
5	采集管	Sample Tube	1.97	RC3-E531-05
6	卡簧	Circlip	0.04	RC3-E531-06
7	"O" 形圈	"O" Ring	0.01	RC3-E531-07
8	"O" 形圈	"O" Ring	0.01	RC3-E531-08
9	配气座	Distributor	0.37	RC3-E531-09
10	逆止阀	Plunger	0.08	RC3-E531-10
11	"O" 形圈	"O" Ring	0.01	RC3-E531-11
12	弹簧	Spring	0.10	RC3-E531-12
13	限位轴套	Mount Sample Tube	0.49	RC3-E531-13
14	内缸	Lnner Cylinder	3.40	RC3-E531-14
15	活塞	Piston	4.69	RC3-E531-15
16	外缸	Piston Case	9.20	RC3-E531-16
17	密封套	Seal cover	0.02	RC3-E531-17
18	衬套	Bush Drive Sub	1.03	RC3-E531-18
19	卡环	Bit Retaining Ring	0.08	RC3-E531-19
20	"O" 形圈	"O" Ring	0.01	RC3-E531-20
21	耐磨套	Shroud	0.45	RC3-E531-21
22	卡钎套	Drive Sub	1.60	RC3-E531-22
23	钻头	Drill Bit	4.20	RC3-E531-23

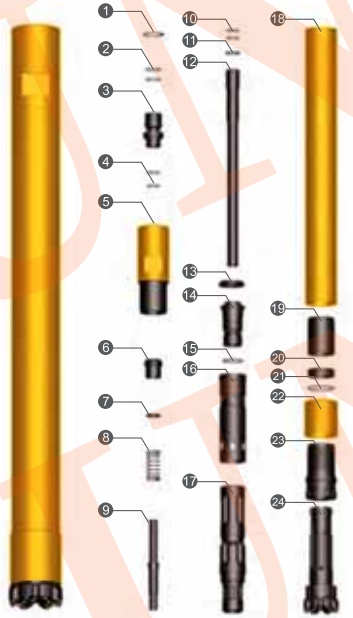
技术参数 Technical Date

总长（不含钻头） Length(Less bit)	总重（不含钻头） Weigth(Less bit)	冲击器外径 External diameter	可佩钻头钎柄 Bit Shank	钻孔范围 Hole range	后接头螺纹 Connection Thread
1069mm	29.0kg	Φ81mm	RE531	Φ84-Φ100	3 " Remet

可用工作风压 Working Pressure	在2.4Mpa时的冲击频率 Impact rate at 2.4Mpa	推荐转速 Recommended rotation speed	耗风量 Air consumption		
			1.7Mpa	2.4Mpa	3.0Mpa
1.0-3.0Mpa	30HZ	25-40r/min	7m³/min	10m³/min	14m³/min

RC4-E004 反循环冲击器 RC4-E004 R.C. HAMMER

4" 反循环冲击器系列 4" R.C. Hammers



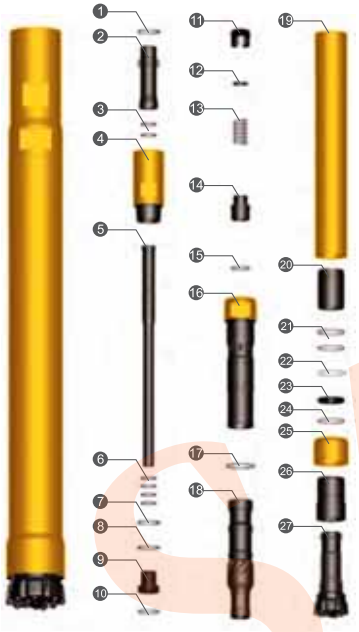
	零部件名称 Item Description		重量 Weight (Kg)	零部件代号 Part Number
1	卡簧	Circlip	0.02	RC4-E004-01
2	"O" 形圈	"O" Rings	0.02	RC4-E004-02
3	联接管	Adaptor Screen	1.06	RC4-E004-03
4	"O" 形圈	"O" Ring	0.02	RC4-E004-04
5	接头	Top Sub	7.79	RC4-E004-05
6	逆止阀	Plunger	0.51	RC4-E004-06
7	"Y" 形圈	"Y" Ring	0.02	RC4-E004-07
8	弹簧	Spring	0.06	RC4-E004-08
9	上采集管管	Sample Tube Upper	0.74	RC4-E004-09
10	"O" 形圈	"O" Ring	0.02	RC4-E004-10
11	"O" 形圈	"O" Ring	0.02	RC4-E004-11
12	采集管	Sample Tube Lower	2.38	RC4-E004-12
13	弹性垫圈	Spring washers	0.17	RC4-E004-13
14	配气座	Distributor	1.75	RC4-E004-14
15	"O" 形圈	"O" Ring	0.02	RC4-E004-15
16	内缸	Lnner Cylinder	2.45	RC4-E004-16
17	活塞	Piston	10.45	RC4-E004-17
18	外缸	Piston Case	17.95	RC4-E004-18
19	衬套	Bush Drive Sub	1.77	RC4-E004-19
20	卡环	Bit Retaining Ring	0.29	RC4-E004-20
21	"O" 形圈	"O" Ring	0.02	RC4-E004-21
22	耐磨套	Shroud	1.05	RC4-E004-22
23	卡钎套	Drive Sub	3.13	RC4-E004-23
24	钻头	Drill Bit	11.70	RC4-E004-24

技术参数 Technical Date

总长（不含钻头） Length(Less bit)	总重（不含钻头） Weigth(Less bit)	冲击器外径 External diameter	可佩钻头钎柄 Bit Shank	钻孔范围 Hole range	后接头螺纹 Connection Thread
1252mm	52.0kg	Φ107mm	RE004	Φ111-Φ127	3.5" -4 " Remet 4 " Metzke

可用工作风压 Working Pressure	在2.4Mpa时的冲击频率 Impact rate at 2.4Mpa	推荐转速 Recommended rotation speed	耗风量 Air consumption		
			1.7Mpa	2.4Mpa	3.0Mpa
1.0-3.0Mpa	30HZ	25-40r/min	8m³/min	12m³/min	16m³/min

RC4.5-E542反循环冲击器 RC4.5-E542 RC HAMMER



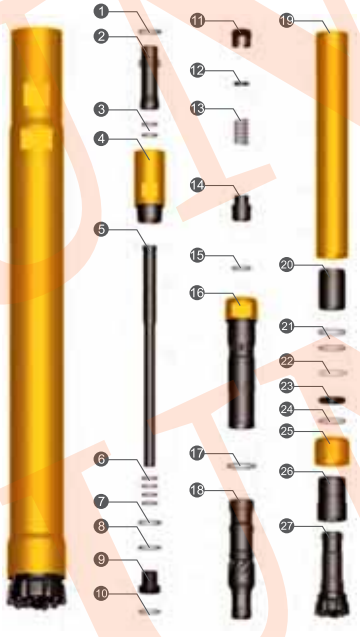
4.5" 反循环冲击器系列 4.5" R.C. Hammers	零部件名称 Item Description		重量 Weight (Kg)	零部件代号 Part Number
1	卡簧	Circlip	0.04	RC4.5-E542-01
2	联接管	Adaptor Screen	2.55	RC4.5-E542-02
3	“O”形圈	“O”Ring	0.02	RC4.5-E542-03
4	接头	Top Sub	8.52	RC4.5-E542-04
5	采集管	Sample Tube	3.5	RC4.5-E542-05
6	“O”形圈	“O”Ring	0.02	RC4.5-E542-06
7	卡簧	Circlip	0.04	RC4.5-E542-07
8	过滤板	Airscreen	0.02	RC4.5-E542-08
9	通气筛	Distributor Nozzle	0.56	RC4.5-E542-09
10	“O”形圈	“O”Ring	0.02	RC4.5-E542-10
11	逆止阀	Plunger	0.50	RC4.5-E542-11
12	“Y”形圈	“Y” Ring	0.02	RC4.5-E542-12
13	弹簧	Spring	0.08	RC4.5-E542-13
14	限位轴套	Mount Sample Tube	0.86	RC4.5-E542-14
15	“O”形圈	“O”Ring	0.02	RC4.5-E542-15
16	内缸	Lnner Cylinder	7.26	RC4.5-E542-16
17	“O”形圈	“O”Ring	0.02	RC4.5-E542-17
18	活塞	Piston	11.64	RC4.5-E542-18
19	外缸	Piston Case	19.17	RC4.5-E542-19
20	衬套	Bush Drive Sub	2.35	RC4.5-E542-20
21	“O”形圈	“O” Ring	0.02	RC4.5-E542-21
22	弹性挡圈	Piston Retaining Ring	0.05	RC4.5-E542-22
23	卡环	Bit Retaining Ring	0.26	RC4.5-E542-23
24	“O”形圈	“O”Ring	0.02	RC4.5-E542-24
25	耐磨套	Shroud	2.21	RC4.5-E542-25
26	卡钎套	Drive Sub	2.94	RC4.5-E542-26
27	钻头	Drill Bit	10.96	RC4.5-E542-27

技术参数 Technical Date

总长（不含钻头） Length(Less bit)	总重（不含钻头） Weigth(Less bit)	冲击器外径 External diameter	可佩钻头钎柄 Bit Shank	钻孔范围 Hole range	后接头螺纹 Connection Thread
1191mm	51.0kg	Φ109.5mm	RE542	Φ113-Φ130	3.5" -4 " Remet 4 " Metzke

可用工作风压 Working Pressure	在2.4Mpa时的冲击频率 Impact rate at 2.4Mpa	推荐转速 Recommended rotation speed	耗风量 Air consumption		
			1.7Mpa	2.4Mpa	3.0Mpa
1.5-3.5Mpa	35HZ	25-40r/min	12m³/min	18m³/min	26m³/min

RC4.5-E543 反循环冲击器 RC4.5-E543 R.C .HAMMER



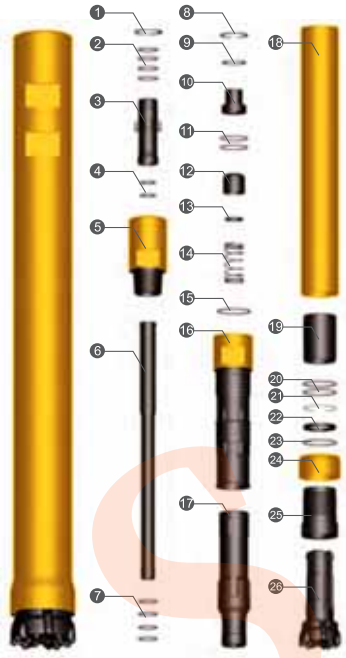
4.5" 反循环冲击器系列 4.5" R.C. Hammers	零部件名称 Item Description		重量 Weight (Kg)	零部件代号 Part Number
1	卡簧	Circlip	0.04	RC4.5-E543-01
2	联接管	Adaptor Screen	2.55	RC4.5-E543-02
3	“O”形圈	“O”Ring	0.02	RC4.5-E543-03
4	接头	Top Sub	8.52	RC4.5-E543-04
5	采集管	Sample Tube	3.5	RC4.5-E543-05
6	“O”形圈	“O”Ring	0.02	RC4.5-E543-06
7	卡簧	Circlip	0.04	RC4.5-E543-07
8	过滤板	Airscreen	0.02	RC4.5-E543-08
9	通气筛	Distributor Nozzle	0.56	RC4.5-E543-09
10	“O”形圈	“O”Ring	0.02	RC4.5-E543-10
11	逆止阀	Plunger	0.50	RC4.5-E543-11
12	“Y”形圈	“Y” Ring	0.02	RC4.5-E543-12
13	弹簧	Spring	0.08	RC4.5-E543-13
14	限位轴套	Mount Sample Tube	0.86	RC4.5-E543-14
15	“O”形圈	“O”Ring	0.02	RC4.5-E543-15
16	内缸	Lnner Cylinder	7.26	RC4.5-E543-16
17	“O”形圈	“O”Ring	0.02	RC4.5-E543-17
18	活塞	Piston	11.64	RC4.5-E543-18
19	外缸	Piston Case	19.17	RC4.5-E543-19
20	衬套	Bush Drive Sub	2.35	RC4.5-E543-20
21	“O”形圈	“O” Ring	0.02	RC4.5-E543-21
22	弹性挡圈	Piston Retaining Ring	0.05	RC4.5-E543-22
23	卡环	Bit Retaining Ring	0.26	RC4.5-E543-23
24	“O”形圈	“O”Ring	0.02	RC4.5-E543-24
25	耐磨套	Shroud	2.21	RC4.5-E543-25
26	卡钎套	Drive Sub	2.94	RC4.5-E543-26
27	钻头	Drill Bit	10.96	RC4.5-E543-27

技术参数 Technical Date

总长（不含钻头） Length(Less bit)	总重（不含钻头） Weigth(Less bit)	冲击器外径 External diameter	可佩钻头钎柄 Bit Shank	钻孔范围 Hole range	后接头螺纹 Connection Thread
1191mm	62.0kg	Φ116mm	RE543	Φ120-Φ135	3.5" -4 " Remet 4 " Metzke

可用工作风压 Working Pressure	在2.4Mpa时的冲击频率 Impact rate at 2.4Mpa	推荐转速 Recommended rotation speed	耗风量 Air consumption		
			1.7Mpa	2.4Mpa	3.0Mpa
1.5-3.5Mpa	35HZ	25-40r/min	12m³/min	18m³/min	26m³/min

RC5-E545反循环冲击器 RC5-E545 R.C. HAMMER

5" 反循环冲击器系列 5" R.C. Hammers		零部件名称 Item Description		重量 Weight (Kg)	零部件代号 Part Number
	❶	卡簧	Circlip	0.04	RC5-E545-01
	❷	"O" 形圈	"O" Ring	0.02	RC5-E545-02
	❸	联接管	Adaptor Screen	2.95	RC5-E545-03
	❹	"O" 形圈	"O" Ring	0.02	RC5-E545-04
	❺	接头	Top Sub	6.98	RC5-E545-05
	❻	采集管	Sample Tube	4.61	RC5-E545-06
	❼	"O" 形圈	"O" Ring	0.02	RC5-E545-07
	❽	卡簧	Circlip	0.04	RC5-E545-08
	❾	过滤板	Airscreen	0.02	RC5-E545-09
	❿	通气筛	Distributor Nozzle	0.48	RC5-E545-10
	⓫	"O" 形圈	"O" Ring	0.02	RC5-E545-11
	⓬	逆止阀	Plunger	0.53	RC5-E545-12
	⓭	"Y" 形圈	"Y" Ring	0.02	RC5-E545-13
	⓮	弹簧	Spring	0.12	RC5-E545-14
	⓯	"O" 形圈	"O" Ring	0.02	RC5-E545-15
	⓰	内缸	Lnner Cylinder	10.20	RC5-E545-16
	⓱	活塞	Piston	15.10	RC5-E545-17
	⓲	外缸	Piston Case	17.20	RC5-E545-18
	⓳	衬套	Bush Drive Sub	2.95	RC5-E545-19
	⓴	"O" 形圈	"O" Ring	0.02	RC5-E545-20
	㉑	弹性挡圈	Piston Retaining Ring	0.04	RC5-E545-21
	㉒	卡环	Bit Retaining Ring	0.23	RC5-E545-22
	㉓	"O" 形圈	"O" Ring	0.02	RC5-E545-23
	㉔	耐磨套	Shroud	1.60	RC5-E545-24
	㉕	卡钎套	Drive Sub	3.41	RC5-E545-25
	㉖	钻头	Drill Bit	12.60	RC5-E545-26

技术参数 Technical Date

总长（不含钻头） Length(Less bit)	总重（不含钻头） Weigth(Less bit)	冲击器外径 External diameter	可佩钻头钎柄 Bit Shank	钻孔范围 Hole range	后接头螺纹 Connection Thread
1261mm	65.0kg	Φ117.5mm	RE545	Φ122-Φ135	4" -4 .5" Remet 4 " - 4 .5" Metzke

可用工作风压 Working Pressure	在2.4Mpa时的冲击频率 Impact rate at 2.4Mpa	推荐转速 Recommended rotation speed	耗风量 Air consumption		
			1.7Mpa	2.4Mpa	3.0Mpa
1.5-3.5Mpa	35HZ	25-40r/min	16m³/min	22m³/min	28m³/min

RC5-P40反循环冲击器 RC5-P40 R.C. HAMMER

5" 反循环冲击器系列 5" R.C. Hammers		零部件名称 Item Description		重量 Weight (Kg)	零部件代号 Part Number
	❶	卡簧	Circlip	0.04	RC5-P40-01
	❷	联接管	Adaptor Screen	1.51	RC5-P40-02
	❸	"O" 形圈	"O" Ring	0.02	RC5-P40-03
	❹	过渡接头	Top Sub	5.96	RC5-P40-04
	❺	上采集管	Sample Tube Upper	1.33	RC5-P40-05
	❻	接头	Top Sub	9.81	RC5-P40-06
	❼	过滤筛	Airscreen Bottom Load	0.27	RC5-P40-07
	❽	"O" 形圈	"O" Ring	0.02	RC5-P40-08
	❾	卡簧	Circlip	0.03	RC5-P40-09
	❿	逆止阀	Plunger	0.63	RC5-P40-10
	⓫	"Y" 形圈	"Y" Ring	0.02	RC5-P40-11
	⓬	弹簧	Spring	0.12	RC5-P40-12
	⓭	垫圈	Make Up Ring Steel	0.09	RC5-P40-13
	⓮	橡胶垫圈	Viton Make Up Ring	0.06	RC5-P40-14
	⓯	"O" 形圈	"O" Ring	0.02	RC5-P40-15
	⓰	配气座	Distributor	1.34	RC5-P40-16
	⓱	"O" 形圈	"O" Ring	0.02	RC5-P40-17
	⓲	下采集管	Sample Tube Lower	4.32	RC5-P40-18
	⓳	"O" 形圈	"O" Ring	0.02	RC5-P40-19
	⓴	限位轴套	Mount Sample Tube	0.97	RC5-P40-20
	㉑	内缸	Lnner Cylinder	7.69	RC5-P40-21
	㉒	活塞	Piston	13.63	RC5-P40-22
	㉓	外缸	Piston Case	24.14	RC5-P40-23
	㉔	挡圈	Piston Retaining Ring	0.15	RC5-P40-24
	㉕	衬套	Bush Drive Sub	1.96	RC5-P40-25
	㉖	"O" 形圈	"O" Ring	0.02	RC5-P40-26
	㉗	"O" 形圈	"O" Ring	0.02	RC5-P40-27
	㉘	卡环	Bit Retaining Ring	0.31	RC5-P40-28
	㉙	"O" 形圈	"O" Ring	0.02	RC5-P40-29
	㉚	耐磨套	Shroud	2.20	RC5-P40-30
	㉛	卡钎套	Drive Sub	3.67	RC5-P40-31
	㉜	钻头	Drill Bit	15.09	RC5-P40-32

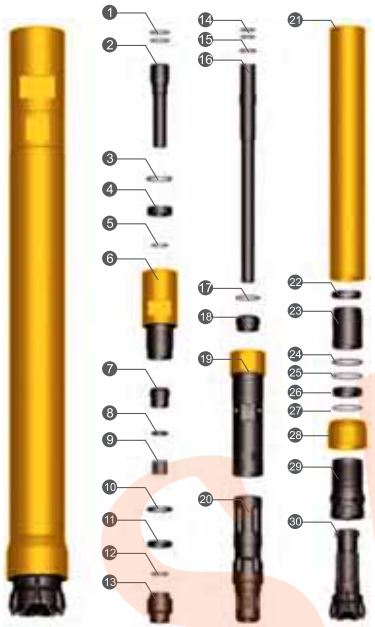
技术参数 Technical Date

总长（不含钻头） Length(Less bit)	总重（不含钻头） Weigth(Less bit)	冲击器外径 External diameter	可佩钻头钎柄 Bit Shank	钻孔范围 Hole range	后接头螺纹 Connection Thread
1362mm	80.5kg	Φ120.5mm	PR40	Φ124-Φ142	3.5 " -4.5 " Remet 3.5 " -4.5 " Metzke

可用工作风压 Working Pressure	在2.4Mpa时的冲击频率 Impact rate at 2.4Mpa	推荐转速 Recommended rotation speed	耗风量 Air consumption		
			1.7Mpa	2.4Mpa	3.0Mpa
1.5-3.5Mpa	35HZ	25-40r/min	16m³/min	22m³/min	28m³/min

RC5.5-P52/52R反循环冲击器 RC5.5-P52 R.C. HAMMER

5.5" 反循环冲击器系列 5.5" R.C. Hammers



	零部件名称 Item Description		重量 Weight (Kg)	零部件代号 Part Number
1	“O”形圈	“O” Ring	0.02	RC5.5-P52-01
2	联接管	Adaptor Screen	2.19	RC5.5-P52-02
3	卡簧	Adaptor Screen	0.04	RC5.5-P52-03
4	过滤筛	Airscreen Top Load	0.42	RC5.5-P52-04
5	卡簧	Circlip	0.03	RC5.5-P52-05
6	接头	Top Sub	8.92	RC5.5-P52-06
7	逆止阀	Plunger	0.63	RC5.5-P52-07
8	“Y”形圈	“Y” Ring	0.03	RC5.5-P52-08
9	弹簧	Spring	0.12	RC5.5-P52-09
10	垫圈	Make Up Ring Steel	0.10	RC5.5-P52-10
11	橡胶垫圈	Viton Make Up Ring	0.05	RC5.5-P52-11
12	“O”形圈	“O” Ring	0.02	RC5.5-P52-12
13	配气座	Distributor	1.31	RC5.5-P52-13
14	“O”形圈	“O” Ring	0.02	RC5.5-P52-14
15	“O”形圈	“O” Ring	0.02	RC5.5-P52-15
16	采集管	Sample Tube	4.52	RC5.5-P52-16
17	“O”形圈	“O” Ring	0.02	RC5.5-P52-17
18	限位轴套	Mount Sample Tube	0.80	RC5.5-P52-18
19	内缸	Lnner Cylinder	7.39	RC5.5-P52-19
20	活塞	Piston	14.63	RC5.5-P52-20
21	外缸	Piston Case	18.86	RC5.5-P52-21
22	挡圈	Piston Retaining Ring	0.13	RC5.5-P52-22
23	衬套	Bush Drive Sub	1.89	RC5.5-P52-23
24	“O”形圈	“O” Ring	0.02	RC5.5-P52-24
25	“O”形圈	“O” Ring	0.02	RC5.5-P52-25
26	卡环	Bit Retaining Ring	0.31	RC5.5-P52-26
27	“O”形圈	“O” Ring	0.02	RC5.5-P52-27
28	耐磨套	Shroud	1.86	RC5.5-P52-28
29	卡钎套	Drive Sub	4.17	RC5.5-P52-29
30	钻头	Drill Bit	11.01	RC5.5-P52-30

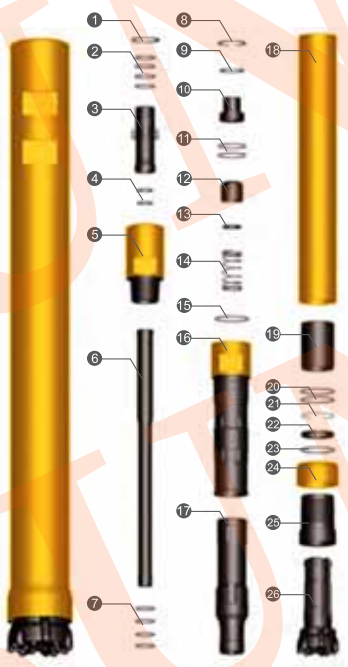
技术参数 Technical Date

总长（不含钻头） Length(Less bit)	总重（不含钻头） Weigth(Less bit)	冲击器外径 External diameter	可佩钻头钎柄 Bit Shank	钻孔范围 Hole range	后接头螺纹 Connection Thread
1227mm	68.5kg	Φ121mm	PR52	Φ126-Φ142	4" -4 .5" Remet 4 " - 4 .5" Metzke

可用工作风压 Working Pressure	在2.4Mpa时的冲击频率 Impact rate at 2.4Mpa	推荐转速 Recommended rotation speed	耗风量 Air consumption		
			1.7Mpa	2.4Mpa	3.0Mpa
1.5-3.5Mpa	35HZ	25-40r/min	16m³/min	22m³/min	28m³/min

RC5.5-E547反循环冲击器 RC5.5-E547 R.C. HAMMER

5.5" 反循环冲击器系列 5.5" R.C. Hammers



	零部件名称 Item Description		重量 Weight (Kg)	零部件代号 Part Number
1	卡簧	Circlip	0.04	RC5.5-E547-01
2	“O”形圈	“O”Ring	0.02	RC5.5-E547-02
3	联接管	Adaptor Screen	2.95	RC5.5-E547-03
4	“O”形圈	“O”Ring	0.02	RC5.5-E547-04
5	接头	Top Sub	7.38	RC5.5-E547-05
6	采集管	Sample Tube	4.61	RC5.5-E547-06
7	“O”形圈	“O”Ring	0.02	RC5.5-E547-07
8	卡簧	Circlip	0.04	RC5.5-E547-08
9	过滤板	Airscreen	0.02	RC5.5-E547-09
10	通气筛	Distributor Nozzle	0.48	RC5.5-E547-10
11	“O”形圈	“O”Ring	0.02	RC5.5-E547-11
12	逆止阀	Plunger	0.53	RC5.5-E547-12
13	“Y”形圈	“Y”Ring	0.02	RC5.5-E547-13
14	弹簧	Spring	0.12	RC5.5-E547-14
15	“O”形圈	“O”Ring	0.02	RC5.5-E547-15
16	内缸	Lnner Cylinder	10.97	RC5.5-E547-16
17	活塞	Piston	17.08	RC5.5-E547-17
18	外缸	Piston Case	18.55	RC5.5-E547-18
19	衬套	Bush Drive Sub	3.04	RC5.5-E547-19
20	“O”形圈	“O”Ring	0.02	RC5.5-E547-20
21	弹性挡圈	Piston Retaining Ring	0.04	RC5.5-E547-21
22	卡环	Bit Retaining Ring	0.23	RC5.5-E547-22
23	“O”形圈	“O”Ring	0.02	RC5.5-E547-23
24	耐磨套	Shroud	1.70	RC5.5-E547-24
25	卡钎套	Drive Sub	3.61	RC5.5-E547-25
26	钻头	Drill Bit	14.30	RC5.5-E547-26

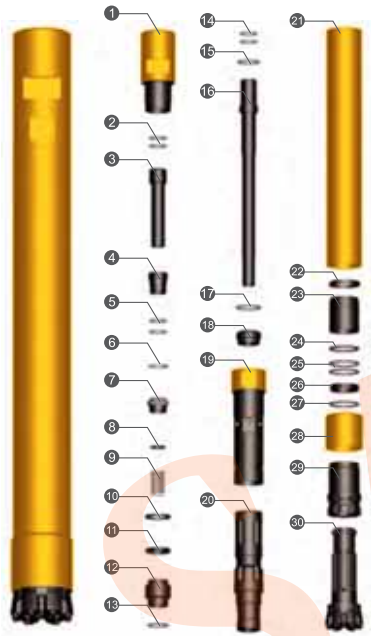
技术参数 Technical Date

总长（不含钻头） Length(Less bit)	总重（不含钻头） Weigth(Less bit)	冲击器外径 External diameter	可佩钻头钎柄 Bit Shank	钻孔范围 Hole range	后接头螺纹 Connection Thread
1270mm	71.0kg	Φ124.5mm	RE547	Φ130-Φ146	4 .5" Remet 4 .5" Metzke

可用工作风压 Working Pressure	在2.4Mpa时的冲击频率 Impact rate at 2.4Mpa	推荐转速 Recommended rotation speed	耗风量 Air consumption		
			1.7Mpa	2.4Mpa	3.0Mpa
1.5-3.5Mpa	35HZ	25-40r/min	16m³/min	22m³/min	28m³/min

RC5.5-P54/54R 反循环冲击器　RC5.5-P54 R.C. HAMMER

5.5" 反循环冲击器系列　5.5" R.C. Hammers



	零部件名称 Item Description		重量 Weight (Kg)	零部件代号 Part Number
1	接头	Top Sub	11.61	RC5.5-P54-01
2	“O” 形圈	“O” Ring	0.02	RC5.5-P54-02
3	联接管	Adaptor Screen	2.35	RC5.5-P54-03
4	过滤筛	Air Screen	0.37	RC5.5-P54-04
5	“O” 形圈	“O” Ring	7.79	RC5.5-P54-05
6	卡簧	Circlip	0.04	RC5.5-P54-06
7	逆止阀	Plunger	0.58	RC5.5-P54-07
8	“Y” 形圈	“Y” Ring	0.02	RC5.5-P54-08
9	弹簧	Spring	0.12	RC5.5-P54-09
10	垫圈	Make Up Ring Steel	0.14	RC5.5-P54-10
11	橡胶垫圈	Viton Make Up Ring	0.06	RC5.5-P54-11
12	配气座	Distributor	1.54	RC5.5-P54-12
13	“O” 形圈	“O” Ring	0.02	RC5.5-P54-13
14	“O” 形圈	“O” Ring	0.02	RC5.5-P54-14
15	“O” 形圈	“O” Ring	0.02	RC5.5-P54-15
16	采集管	Sample Tube	6.47	RC5.5-P54-16
17	“O” 形圈	“O” Ring	0.02	RC5.5-P54-17
18	限位轴套	Mount Sample Tube	1.02	RC5.5-P54-18
19	内缸	Lnner Cylinder	8.54	RC5.5-P54-19
20	活塞	Piston	17.20	RC5.5-P54-20
21	外缸	Piston Case	23.44	RC5.5-P54-21
22	挡圈	Piston Retaining Ring	0.20	RC5.5-P54-22
23	衬套	Bush Drive Sub	2.53	RC5.5-P54-23
24	“O” 形圈	“O” Ring	0.02	RC5.5-P54-24
25	“O” 形圈	“O” Ring	0.02	RC5.5-P54-25
26	卡环	Bit Retaining Ring	0.43	RC5.5-P54-26
27	“O” 形圈	“O” Ring	0.02	RC5.5-P54-27
28	耐磨套	Shroud	2.35	RC5.5-P54-28
29	卡钎套	Drive Sub	4.90	RC5.5-P54-29
30	钻头	Drill Bit	18.33	RC5.5-P54-30

技术参数　Technical Date

总长（不含钻头） Length(Less bit)	总重（不含钻头） Weigth(Less bit)	冲击器外径 External diameter	可佩钻头钎柄 Bit Shank	钻孔范围 Hole range	后接头螺纹 Connection Thread
1294mm	84.5kg	Φ130mm	PR54	Φ135-Φ150	4.5 " Remet 4.5 " Metzke

可用工作风压 Working Pressure	在2.4Mpa时的冲击频率 Impact rate at 2.4Mpa	推荐转速 Recommended rotation speed	耗风量 Air consumption		
			1.7Mpa	2.4Mpa	3.0Mpa
1.5-3.5Mpa	35HZ	25-40r/min	16m³/min	22m³/min	28m³/min

RE 531　反循环钻头与配套耐磨套

RE 531　Reverse circulation drill bit and shroud

直径 Diameter		合金数量、直径 No x Button diameter，mm		角度 Button angle°	水孔 Flushing holes	耐磨套外径 Shroud Diameter	重量 Weight (Kg)	编号 Part No
mm	inch	边齿 Gauge Buttons	中齿 Front Buttons					
86	2 1/4	6x12	4x12	35	2	84	4.2	RE531-86
89	2 1/2	8x12	5x12	35	2	87	4.3	RE531-89
95	2 3/4	8x12	6x12	35	2	93	4.6	RE531-95
102	3	8x12	6x12	35	2	100	4.9	RE531-102

RE 004　反循环钻头与配套耐磨套

RE 004　Reverse circulation drill bit and shroud

直径 Diameter		合金数量、直径 No x Button diameter，mm		角度 Button angle°	水孔 Flushing holes	耐磨套外径 Shroud Diameter	重量 Weight (Kg)	编号 Part No
mm	inch	边齿 Gauge Buttons	中齿 Front Buttons					
114	4 ½	8x14	6x14	35	2	112	11.5	RE004-114
118	4 5/8	8x14	6x14	35	2	116	11.7	RE004-118
121	4 3/4	8x14	6x14	35	2	119	12.0	RE004-121
127	5	8x14	8x14	35	2	125	12.4	RE004-127

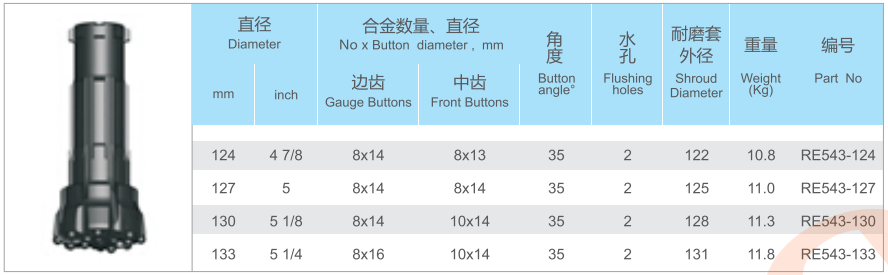
RE 542　反循环钻头与配套耐磨套

RE 542　Reverse circulation drill bit and shroud

直径 Diameter		合金数量、直径 No x Button diameter，mm		角度 Button angle°	水孔 Flushing holes	耐磨套外径 Shroud Diameter	重量 Weight (Kg)	编号 Part No
mm	inch	边齿 Gauge Buttons	中齿 Front Buttons					
121	4 3/4	8x14	6x14	35	2	119	10.6	RE542-121
124	4 7/8	8x14	8x13	35	2	122	10.8	RE542-124
127	5	8x14	8x14	35	2	125	11.0	RE542-127
130	5 1/8	8x14	10x14	35	2	128	11.3	RE542-130

RE 543 反循环钻头与配套耐磨套

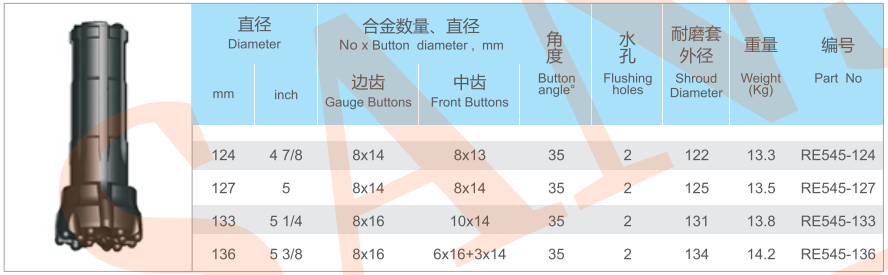
RE 543 Reverse circulation drill bit and shroud



直径 Diameter		合金数量、直径 No x Button diameter , mm		角度 Button angle°	水孔 Flushing holes	耐磨套外径 Shroud Diameter	重量 Weight (Kg)	编号 Part No
mm	inch	边齿 Gauge Buttons	中齿 Front Buttons					
124	4 7/8	8x14	8x13	35	2	122	10.8	RE543-124
127	5	8x14	8x14	35	2	125	11.0	RE543-127
130	5 1/8	8x14	10x14	35	2	128	11.3	RE543-130
133	5 1/4	8x16	10x14	35	2	131	11.8	RE543-133

RE 545 反循环钻头与配套耐磨套

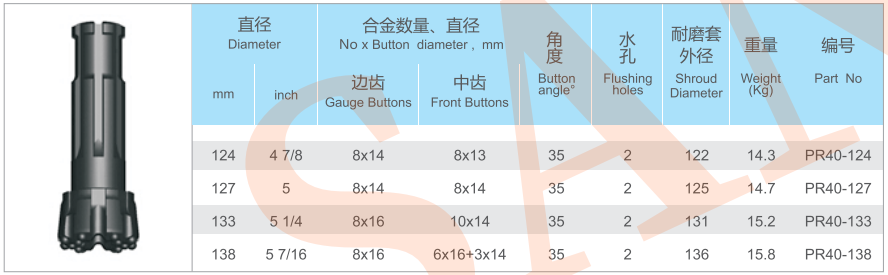
RE 545 Reverse circulation drill bit and shroud



直径 Diameter		合金数量、直径 No x Button diameter , mm		角度 Button angle°	水孔 Flushing holes	耐磨套外径 Shroud Diameter	重量 Weight (Kg)	编号 Part No
mm	inch	边齿 Gauge Buttons	中齿 Front Buttons					
124	4 7/8	8x14	8x13	35	2	122	13.3	RE545-124
127	5	8x14	8x14	35	2	125	13.5	RE545-127
133	5 1/4	8x16	10x14	35	2	131	13.8	RE545-133
136	5 3/8	8x16	6x16+3x14	35	2	134	14.2	RE545-136

PR 40 反循环钻头与配套耐磨套

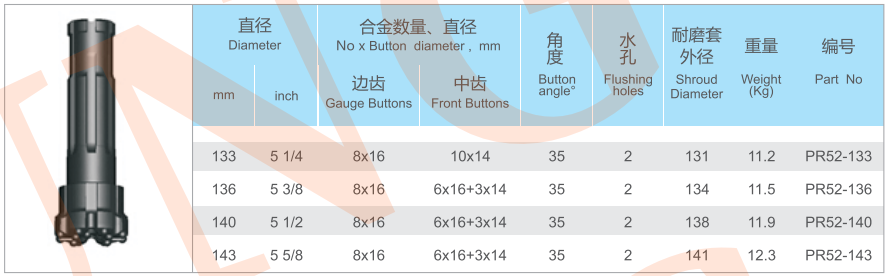
PR 40 Reverse circulation drill bit and shroud



直径 Diameter		合金数量、直径 No x Button diameter , mm		角度 Button angle°	水孔 Flushing holes	耐磨套外径 Shroud Diameter	重量 Weight (Kg)	编号 Part No
mm	inch	边齿 Gauge Buttons	中齿 Front Buttons					
124	4 7/8	8x14	8x13	35	2	122	14.3	PR40-124
127	5	8x14	8x14	35	2	125	14.7	PR40-127
133	5 1/4	8x16	10x14	35	2	131	15.2	PR40-133
138	5 7/16	8x16	6x16+3x14	35	2	136	15.8	PR40-138

PR 52 反循环钻头与配套耐磨套

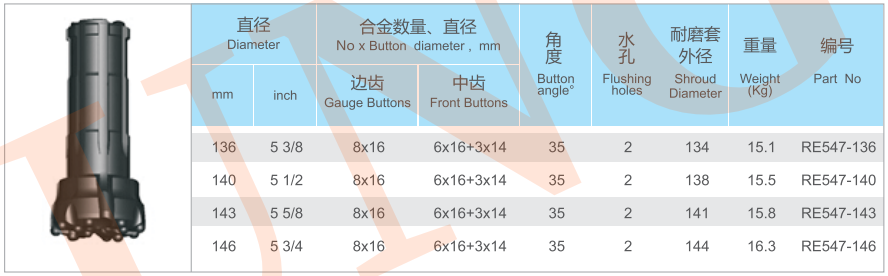
PR 52 Reverse circulation drill bit and shroud



直径 Diameter		合金数量、直径 No x Button diameter , mm		角度 Button angle°	水孔 Flushing holes	耐磨套外径 Shroud Diameter	重量 Weight (Kg)	编号 Part No
mm	inch	边齿 Gauge Buttons	中齿 Front Buttons					
133	5 1/4	8x16	10x14	35	2	131	11.2	PR52-133
136	5 3/8	8x16	6x16+3x14	35	2	134	11.5	PR52-136
140	5 1/2	8x16	6x16+3x14	35	2	138	11.9	PR52-140
143	5 5/8	8x16	6x16+3x14	35	2	141	12.3	PR52-143

RE 547 反循环钻头与配套耐磨套

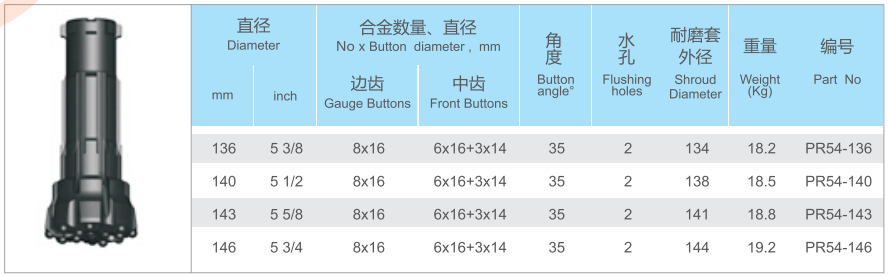
RE 547 Reverse circulation drill bit and shroud



直径 Diameter		合金数量、直径 No x Button diameter , mm		角度 Button angle°	水孔 Flushing holes	耐磨套外径 Shroud Diameter	重量 Weight (Kg)	编号 Part No
mm	inch	边齿 Gauge Buttons	中齿 Front Buttons					
136	5 3/8	8x16	6x16+3x14	35	2	134	15.1	RE547-136
140	5 1/2	8x16	6x16+3x14	35	2	138	15.5	RE547-140
143	5 5/8	8x16	6x16+3x14	35	2	141	15.8	RE547-143
146	5 3/4	8x16	6x16+3x14	35	2	144	16.3	RE547-146

PR 54 反循环钻头与配套耐磨套

PR 54 Reverse circulation drill bit and shroud



直径 Diameter		合金数量、直径 No x Button diameter , mm		角度 Button angle°	水孔 Flushing holes	耐磨套外径 Shroud Diameter	重量 Weight (Kg)	编号 Part No
mm	inch	边齿 Gauge Buttons	中齿 Front Buttons					
136	5 3/8	8x16	6x16+3x14	35	2	134	18.2	PR54-136
140	5 1/2	8x16	6x16+3x14	35	2	138	18.5	PR54-140
143	5 5/8	8x16	6x16+3x14	35	2	141	18.8	PR54-143
146	5 3/4	8x16	6x16+3x14	35	2	144	19.2	PR54-146

反循环钻杆（双壁钻杆） reverse circulation pipes (dual wall drilling)

气举反循环钻进是将压缩空气沿输气管送入井内一定深度后，经混合器注入管内与液体混合。由于混合液的密度小于冲洗液的密度，因此在井筒内与排渣管间产生压差，并在井筒液柱压力作用下使排浆管内混合的气液以较高速度向上流动，从而将孔底的岩心或岩屑连续不断的排出地表。该钻进方法具有钻进效率高，成孔质量好，在松散地层中施工不易发生孔壁坍塌事故等优点。

High pressure air transported into somewhere of the well along with air pip, via mixer to inject the high-pressure air into the pipe with liquid, due to the density of mixed liquor lower than the flushing liquor therefore a differential pressure occurred between pipe and sample tube that to make the mixed air and liquid flow up fleetly by the fluid column pressure and take the rock debris or powder out to the ground from bottom of the hole continuously. By this drilling method will provide with advantages like high penetration rate, quality pore-forming and fewer hole collapse during drilling in loose formation.

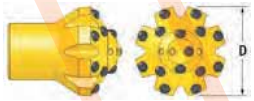
本系列气举反循环钻杆可有效提高漏层钻井效率，并减少或消除钻井液的漏失，保护储层、节约耗材开支。另外，此款钻杆可采取正循环、反循环两种方法压井，井控灵活。反循环压井重泥浆可以直接送至井底，不必分段循环，缩短处理时间。

This series reverse circulation pipes can increase penetration in lost-circulation formation, reduce drilling fluid consumption, protect reservoir stratum and save the cost of other consumption tools. In additional, the pipes can be worked in two direction circulation drilling ways to control the well drilling. By reverse circulation method to kill the well the heavy mud can be transferred directly to the bottom of well, no periodic circulation and save time.

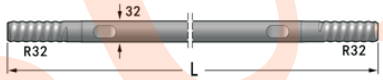
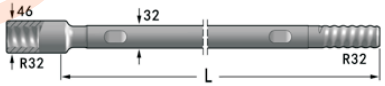
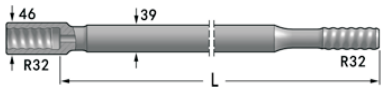
型号 TYPE	外管外径 external dia. of outer pipe	内管内径 Inner dia. of Inner pipe	接头螺纹 Thread of pipe	单根长度 length	内管密封方式 sealing	钻孔深度(m) Depth	备注 Marks
HJG80/48	80x8	48x5	偏梯形 buttress thread	1500-6000	双O型圈径向 dual O ring radial	300-800	
HJG89/38	89x8.56	38x4	3"Remet/Metzke	1500-6000	双O型圈径向 dual O ring radial	300-800	
HJG102/46	102x8.56	46x5	3"Remet/Metzke	1500-6000	双O型圈径向 dual O ring radial	300-1000	外管R780
HJG108/46	108x8.56	46x5	3 1/2"Remet/Metzke	1500-6000	双O型圈径向 dual O ring radial	300-1200	或DZ50(可选)
HJG114/50	114x8.56	50x5.5	4"Remet/Metzke	1500-6000	双O型圈径向 dual O ring radial	300-1200	内管45#
HJG120/60	127x9.35	60x7	4"Remet/Metzke	1500-6000	双O型圈径向 dual O ring radial	5000以下	
HJG146/73	146x10	75	4 1/2"Remet/Metzke	1500-6000	双O型圈径向 dual O ring radial	5000以下	

BENCH DRILLING R32

Drill Bit

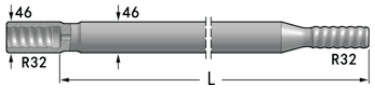
	Length mm	Length inch	Tip Size(mm) Front	Tip Size(mm) Gauge	Tip Size(mm) Angle	Flushing Hole Front	Flushing Hole Side	Weight Approx kg	HJG DRILL P/N
Dome bit for reaming									
Spherical buttons									
	76	3	1×13	9×13	35°	3	1	2.0	1441-76R32-113/913-45-31
	89	3 1/2	1×13	14×13	35°	2	2	2.6	1441-89R32-113/1413-45-31
	102	4	1×13	16×13	35°	2	2	3.2	1441-102R32-113/1613-45-31
	127	5	1×13	18×13	35°	3	1	4.8	1441-127R32-113/1813-45-31
Parabolic buttons									
	76	3	1×13	9×13	35°	3	1	2.0	1441-76R32-113/913-45-51
	89	3 1/2	1×13	14×13	35°	2	2	2.6	1441-89R32-113/1413-45-51
	102	4	1×13	16×13	35°	2	2	3.2	1441-102R32-113/1613-45-51
	127	5	1×13	18×13	35°	3	1	4.8	1441-127R32-113/1813-45-51
Cross-type bits									
	45	1 3/4	16×10		-	1	4	0.9	1221-45R32-16/10-42-23
	48	1 7/8	16×10		-	1	4	0.9	1221-48R32-16/10-42-23
	51	2	16×10		-	1	4	1.2	1221-51R32-16/10-42-23
	57	2 1/4	16×10		-	1	4	1.3	1221-57R32-16/10-42-23
	64	2 1/2	18×13		-	1	4	1.5	1221-64R32-18/13-42-23

Drill Rod

	Length mm	Length foot	Diameter mm	Diameter inch	Weight Approx kg	HJG DRILL P/N
Extension rod R32-Round32-R32						
Flushing hole 9.2mm.	915	3'	32	1 1/4	5.4	23R32-R32-0915-23
Wrench flat 25.4mm.	1000	3'33/8"	32	1 1/4	5.9	23R32-R32-1000-23
	1220	4'	32	1 1/4	7.2	23R32-R32-1220-23
	1830	6'	32	1 1/4	10.8	23R32-R32-1830-23
	2435	8'	32	1 1/4	14.3	23R32-R32-2435-23
	3050	10'	32	1 1/4	17.9	23R32-R32-3050-23
	3660	12'	32	1 1/4	21.5	23R32-R32-3660-23
MF-rod R32-Round32-R32						
Flushing hole 9.2mm.	915	3'	32	1 1/4	6.2	24R32-R32/46-0915-23
Wrench flat 25.4mm.	1220	4'	32	1 1/4	8.0	24R32-R32/46-1220-23
	1525	5'	32	1 1/4	9.8	24R32-R32/46-1525-23
	1830	6'	32	1 1/4	11.6	24R32-R32/46-1830-23
	2435	8'	32	1 1/4	15.1	24R32-R32/46-2435-23
	3050	10'	32	1 1/4	18.7	24R32-R32/46-3050-23
	3660	12'	32	1 1/4	22.3	24R32-R32/46-3660-23
Guide speedrod R32-Round39-R32						
Flushing hole 14.5mm.						
	3050	10'	39	1 1/2	27.0	24R39-R32/46-3050-23
	3660	12'	39	1 1/2	32.0	24R39-R32/46-3660-23

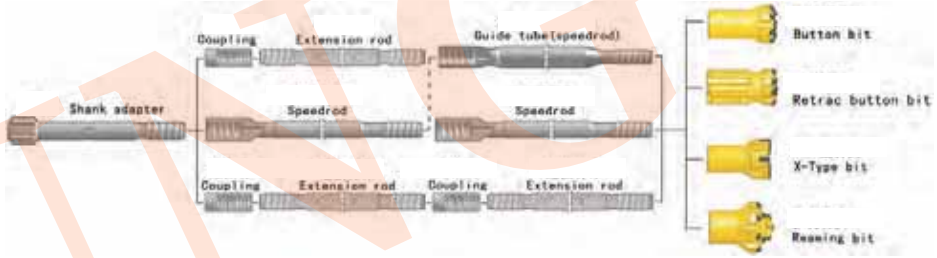
BENCH DRILLING R32

	Length		Diameter		Weight Approx kg	HJG DRILL P/N
	mm	inch	mm	inch		
Guide tube						
D46 for bits from 51-64mm						
	1220	4'	46	1 3/4	10.0	24R46-R32/46-1220-23
	1525	5'	46	1 3/4	12.5	24R46-R32/46-1525-23
	1830	6'	46	1 3/4	14.2	24R46-R32/46-1830-23
	3050	10'	46	1 3/4	25.0	24R46-R32/46-3050-23



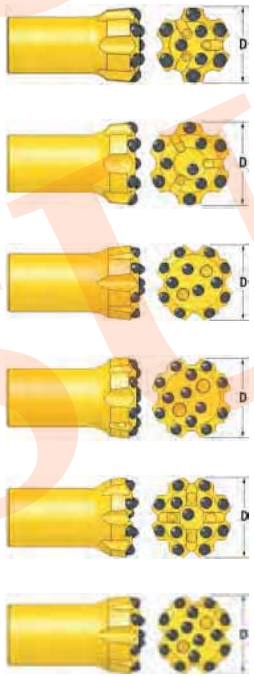
Coupling	Length		Diameter		Thread	Weight Approx kg	HJG DRILL P/N
	mm	inch	mm	inch			
Coupling sleeves	150	6 1/8	44	1 3/4	R32	1.0	31-R32-44-150-23
	160	6 1/4	44	1 3/4	R32	1.1	31-R32-44-160-23

BENCH DRILLING T38



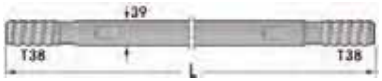
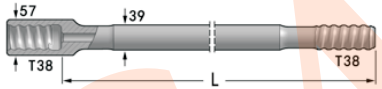
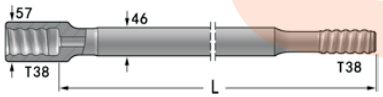
Drill Bit

Button bit

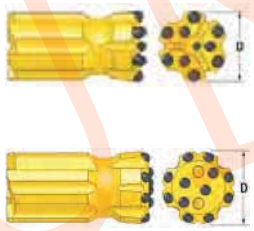
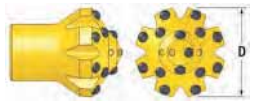


Drill Bit	Length		Tip Size(mm)			Flushing Hole		Weight Approx kg	HJG DRILL P/N
	mm	inch	Front	Gauge	Angle	Front	Side		
Spherical buttons									
	64	2 1/2	3×11	6×12	35°	3	-	1.8	1431-64T38-311/612-45-31
	64	2 1/2	4×10	8×10	40°	2	-	1.6	1431-64T38-410/810-45-31
	64	2 1/2	3×10,1×10	6×11	35°	3	-	1.7	1433-64T38-410/611-45-31
	70	2 3/4	4×11	8×11	40°	2	-	1.9	1431-70T38-411/811-45-31
	70	2 3/4	4×10,1×10	8×11	30°	4	-	1.9	1432-70T38-510/811-45-31
	70	2 3/4	3×10,1×10	6×12	35°	3	-	1.8	1433-70T38-410/612-45-31
	76	3	4×11	8×11	40°	2	-	2.4	1431-76T38-411/811-45-31
	76	3	5×11	8×13	35°	2	1	2.4	1431-76T38-511/813-45-31
	76	3	3×11,1×11	6×12	35°	3	1	2.6	1433-76T38-411/612-45-31
	76	3	4×11,1×11	8×12	35°	4	-	2.6	1432-76T38-511/812-45-31
	76	3	4×11,1×11	8×11	40°	4	-	2.6	1432-76T38-511/811-45-31
	89	3 1/2	4×13	8×13	40°	2	-	3.3	1431-89T38-413/813-45-31
	89	3 1/2	5×13	8×13	35°	2	-	3.3	1431-89T38-513/813-45-31
	89	3 1/2	6×11	8×12	35°	2	-	3.3	1431-89T38-611/812-45-31
	89	3 1/2	3×11,2×11	6×13	35°	3	1	3.3	1433-89T38-511/613-45-31
	89	3 1/2	4×11,1×11	8×13	35°	4	-	3.3	1433-89T38-511/813-45-31
	89	3 1/2	4×13,1×13	8×13	35°	4	-	3.3	1432-89T38-513/813-45-31
Parabolic buttons									
	64	2 1/2	3×11	6×12	35°	3	-	1.8	1431-64T38-311/612-45-51
	64	2 1/2	4×10	8×10	40°	2	-	1.6	1431-64T38-410/810-45-51
	64	2 1/2	3×10,1×10	6×11	35°	3	-	1.7	1433-64T38-410/611-45-51
	70	2 3/4	4×11	8×11	40°	2	-	1.9	1431-70T38-411/811-45-51
	70	2 3/4	3×10,1×10	6×12	35°	3	-	1.8	1433-70T38-410/612-45-51
	76	3	4×11	8×11	40°	2	-	2.4	1431-76T38-411/811-45-51
	76	3	5×11	8×13	35°	2	1	2.4	1431-76T38-511/813-45-51
	76	3	3×11,1×11	6×13	35°	3	1	2.6	1433-76T38-411/613-45-51
	76	3	4×11,1×11	8×12	35°	4	-	2.6	1432-76T38-511/812-45-51
	76	3	4×11,1×11	8×11	40°	4	-	2.6	1432-76T38-511/811-45-51
	89	3 1/2	5×13	8×13	35°	2	-	3.3	1431-89T38-513/813-45-51
	89	3 1/2	6×11	8×12	35°	2	-	3.3	1431-89T38-611/812-45-51
	89	3 1/2	3×11,2×11	6×13	35°	3	1	3.3	1433-89T38-511/613-45-51
	89	3 1/2	4×11,1×11	8×13	35°	4	-	3.3	1433-89T38-511/813-45-51
	89	3 1/2	4×13,1×13	8×13	35°	4	-	3.3	1432-89T38-513/813-45-51

BENCH DRILLING T38

Drill Rod	Length		Diameter		Weight Approx kg	HJG DRILL P/N
	mm	foot	mm	inch		
Extension rod T38-Round39-T38	1220	4'	39	1 1/2	10.2	23R39-T38-1220-23
Flushing hole 14.5mm.	1525	5'	39	1 1/2	12.8	23R39-T38-1525-23
Wrench flat 32mm.	1830	6'	39	1 1/2	15.3	23R39-T38-1830-23
	2435	8'	39	1 1/2	20.4	23R39-T38-2435-23
	3050	10'	39	1 1/2	25.5	23R39-T38-3050-23
	3660	12'	39	1 1/2	30.9	23R39-T38-3660-23
	3965	13'	39	1 1/2	33.2	23R39-T38-3965-23
	4270	14'	39	1 1/2	35.7	23R39-T38-4270-23
	4880	16'	39	1 1/2	41.0	23R39-T38-4880-23
	5530	18'11/2"	39	1 1/2	46.3	23R39-T38-5530-23
	6095	20'	39	1 1/2	50.9	23R39-T38-6095-23
MF-rod T38-Round39-T38	915	3'	39	1 1/2	10.7	24R39-T38/57-0915-23
Flushing hole 14.5mm.	1220	4'	39	1 1/2	13.3	24R39-T38/57-1220-23
	1525	5'	39	1 1/2	15.8	24R39-T38/57-1525-23
	1830	6'	39	1 1/2	18.3	24R39-T38/57-1830-23
	3050	10'	39	1 1/2	28.5	24R39-T38/57-3050-23
	3660	12'	39	1 1/2	33.6	24R39-T38/57-3660-23
	4270	14'	39	1 1/2	38.7	24R39-T38/57-4270-23
	4880	16'	39	1 1/2	43.7	24R39-T38/57-4880-23
	5530	18'11/2"	39	1 1/2	49.2	24R39-T38/57-5530-23
	6095	20'	39	1 1/2	53.9	24R39-T38/57-6095-23
Hex. extension rod T38-Hex32-T38	1220	4'	32	1 1/4	8.6	23H32-T38-1220-23
Flushing hole 9.6mm.	1830	6'	32	1 1/4	12.6	23H32-T38-1830-23
	2435	8'	32	1 1/4	16.6	23H32-T38-2435-23
	3050	10'	32	1 1/4	20.8	23H32-T38-3050-23
	3660	12'	32	1 1/4	24.9	23H32-T38-3660-23
Double thread rod T38-Round39-T38	3050	10'	46	1 3/4	25.7	23R39-T38/2T38-3050-23
Flushing hole 14.5mm. Wrench flat 32mm.	3660	12'	46	1 3/4	30.9	23R39-T38/2T38-3660-23
						
Guide speedrod T38-Round46-T38	1830	6'	46	1 3/4	23.5	24R46-T38/57-1830-23
Flushing hole 17mm.	3050	10'	46	1 3/4	37.2	24R46-T38/57-3050-23
	3660	12'	46	1 3/4	44.0	24R46-T38/57-3660-23
	4270	14'	46	1 3/4	50.9	24R46-T38/57-4270-23
	4880	16'	46	1 3/4	57.7	24R46-T38/57-4880-23
	5530	18'11/2"	46	1 3/4	65.0	24R46-T38/57-5530-23
	6095	20'	46	1 3/4	71.3	24R46-T38/57-6095-23

BENCH DRILLING T38

Drill Bit	Length		Tip Size(mm)			Flushing Hole		Weight Approx kg	HJG DRILL P/N
	mm	inch	Front	Gauge	Angle	Front	Side		
Button bit									
	Spherical buttons								
	64	2 1/2	4×10	8×10	30°	2	-	2.2	1531-64T38-410/810-45-31
	64	2 1/2	3×10,1×10	6×11	35°	3	-	2.2	1533-64T38-410/611-45-31
	70	2 3/4	4×11	8×11	40°	2	-	2.4	1531-70T38-411/811-45-31
	70	2 3/4	3×10,1×10	6×13	35°	3	-	2.4	1533-70T38-410/613-45-31
	70	2 3/4	4×10,1×10	8×11	35°	4	-	2.4	1632-70T38-510/811-45-31
	76	3	4×11	8×11	40°	2	-	3.3	1531-76T38-411/811-45-31
	76	3	4×11,1×11	8×11	35°	4	-	3.3	1632-76T38-511/811-45-31
	76	3	4×11,1×11	8×12	35°	4	-	3.3	1632-76T38-511/812-45-31
	89	3 1/2	4×13	8×13	40°	2	-	4.8	1531-89T38-413/813-45-31
	89	3 1/2	5×13	8×13	35°	2	-	4.8	1531-89T38-513/813-45-31
	89	3 1/2	6×11	8×12	35°	2	-	4.8	1531-89T38-611/812-45-31
	89	3 1/2	4×11,1×11	8×13	35°	4	-	4.8	1533-89T38-511/813-45-31
	89	3 1/2	4×13,1×13	8×13	35°	4	-	4.8	1632-89T38-513/813-45-31
	Parabolic buttons								
	64	2 1/2	4×10	8×10	30°	2	-	2.2	1531-64T38-410/810-45-51
	64	2 1/2	3×10,1×10	6×11	35°	3	-	2.2	1533-64T38-410/611-45-51
	70	2 3/4	4×11	8×11	40°	2	-	2.4	1531-70T38-411/811-45-51
	70	2 3/4	3×10,1×10	6×13	35°	3	-	2.4	1533-70T38-410/613-45-51
	70	2 3/4	4×10,1×10	8×11	35°	4	-	2.4	1632-70T38-510/811-45-51
	76	3	4×11	8×11	40°	2	-	3.3	1531-76T38-411/811-45-51
	76	3	4×11,1×11	8×11	35°	4	-	3.3	1632-76T38-511/811-45-51
	76	3	4×11,1×11	8×12	35°	4	-	3.3	1632-76T38-511/812-45-51
	89	3 1/2	4×13	8×13	40°	2	-	4.8	1531-89T38-413/813-45-51
	89	3 1/2	5×13	8×13	35°	2	-	4.8	1531-89T38-513/813-45-51
	89	3 1/2	6×11	8×12	35°	2	-	4.8	1531-89T38-611/812-45-51
	89	3 1/2	4×11,1×11	8×13	35°	4	-	4.8	1533-89T38-611/813-45-51
	89	3 1/2	4×13,1×13	8×13	35°	4	-	4.8	1632-89T38-513/813-45-51
									
X-type bit									
	64	2 1/2	25×13	-	1	2		1.9	1321-64T38-25/13-42-23
	76	3	25×13	-	1	2		2.5	1321-76T38-25/13-42-23
	89	3 1/2	25×13	-	1	2		2.8	1321-89T38-25/13-42-23
Dome bit for reaming									
	Spherical buttons								
	102	4	1×13	16×13	35°	2	2	3.8	1441-102T38-113/1613-45-31
	127	5	1×13	18×13	35°	1	3	5.2	1441-127T38-113/1813-45-31
	Parabolic buttons								
	102	4	1×13	16×13	35°	2	2	3.8	1441-102T38-113/1613-45-51
	127	5	1×13	18×13	35°	1	3	5.2	1441-127T38-113/1813-45-51

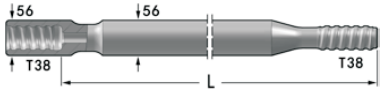
BENCH DRILLING T38

Guide Tube

Length		Diameter		Weight Approx kg	HJG DRILL P/N
mm	inch	mm	inch		
1220	4'	56	2 1/8	12.6	24G56-T38/56-1220-23
1525	5'	56	2 1/8	14	24G56-T38/56-1525-23
1830	6'	56	2 1/8	17.4	24G56-T38/56-1830-23
3050	10'	56	2 1/8	28.3	24G56-T38/56-3050-23
3660	12'	56	2 1/8	32.8	24G56-T38/56-3660-23
4920	16'2"	56	2 1/8	47.9	24G56-T38/56-4920-23
3660	12'	64	2 1/2	51	24G64-T38/64-3660-23

Guide tube

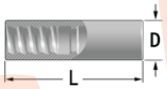
D56 for bits from 64-76mm and
D64 for bits from 76-89mm



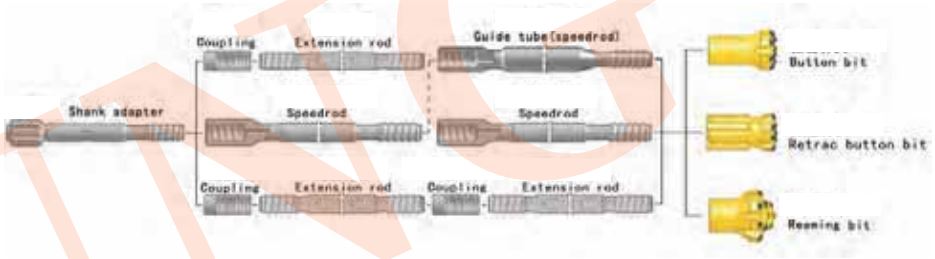
Coupling

Length		Diameter		Thread	Weight Approx kg	HJG DRILL P/N
mm	inch	mm	inch			
190	7 1/2	55	2 5/32	T38	2.1	31-T38-55-190-23

Coupling sleeves



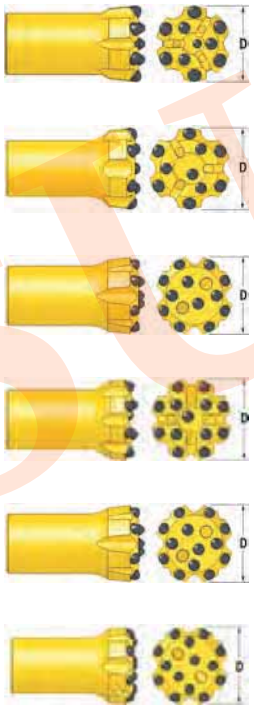
BENCH DRILLING T45



Drill Bit

Length		Tip Size(mm)			Flushing Hole		Weight Approx kg	HJG DRILL P/N
mm	inch	Front	Gauge	Angle	Front	Side		

Button bit



Spherical buttons

70	2 3/4	4×11	8×11	40°	2	-	2.3	1431-70T45-411/811-45-31
70	2 3/4	3×11,1×9	6×11	35°	3	-	2.2	1433-70T45-411/611-45-31
70	2 3/4	4×10,1×10	8×11	35°	4	-	2.2	1432-70T45-510/811-45-31
76	3	4×11	8×11	40°	2	-	2.6	1431-76T45-411/811-45-31
76	3	5×11	8×12	35°	2	1	2.6	1431-76T45-511/812-45-31
76	3	3×11,1×11	6×13	35°	3	-	2.4	1433-76T45-411/613-45-31
76	3	4×11,1×11	8×12	35°	4	-	2.6	1432-76T45-511/812-45-31
89	3 1/2	4×13	8×13	40°	2	-	4.6	1431-89T45-413/813-45-31
89	3 1/2	6×11	8×12	35°	2	-	4.6	1431-89T45-611/812-45-31
89	3 1/2	3×11,2×11	6×13	35°	3	1	4.1	1433-89T45-511/613-45-31
89	3 1/2	4×11,1×11	8×12	35°	4	-	4.6	1433-89T45-511/812-45-31
89	3 1/2	4×13,1×13	8×13	35°	4	-	4.6	1432-89T45-513/813-45-31
102	4	5×14	8×14	40°	2	-	5.0	1431-102T45-514/814-45-31
102	4	6×13	8×16	40°	2	1	5.0	1431-102T45-613/816-45-31
102	4	3×13,2×13	6×14	35°	3	1	4.5	1433-102T45-513/614-45-31
102	4	4×13,1×13	8×14	35°	4	-	4.5	1433-102T45-513/814-45-31
102	4	4×13,2×13	8×13	35°	4	1	4.5	1433-102T45-613/813-45-31

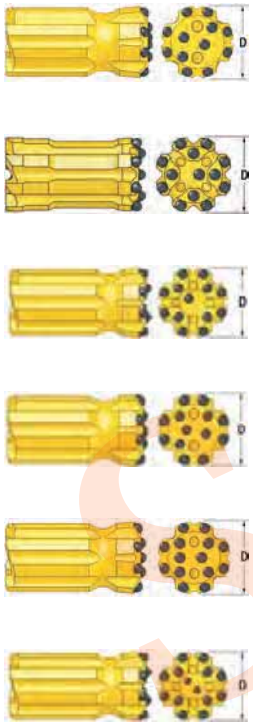
Parabolic buttons

70	2 3/4	3×11,1×9	6×11	35°	3	-	2.2	1433-70T45-411/611-45-51
70	2 3/4	4×10,1×10	8×11	35°	4	-	2.2	1432-70T45-510/811-45-51
76	3	4×11	8×11	40°	2	-	2.6	1431-76T45-411/811-45-51
76	3	5×11	8×12	35°	2	1	2.6	1431-76T45-511/812-45-51
76	3	3×11,1×11	6×13	35°	3	1	2.4	1433-76T45-411/613-45-51
76	3	4×11,1×11	8×11	35°	4	-	2.6	1432-76T45-511/811-45-51
76	3	4×11,1×11	8×12	35°	4	-	2.6	1432-76T45-511/812-45-51
89	3 1/2	4×13	8×13	40°	2	-	4.6	1431-89T45-413/813-45-51
89	3 1/2	6×11	8×12	35°	2	-	4.6	1431-89T45-611/812-45-51
89	3 1/2	3×11,2×11	6×13	35°	3	1	4.1	1433-89T45-511/613-45-51
89	3 1/2	4×11,1×11	8×12	35°	4	-	4.6	1433-89T45-511/812-45-51
89	3 1/2	4×13,1×13	8×13	35°	4	-	4.6	1432-89T45-513/813-45-51

BENCH DRILLING T45

Drill Bit

Button bit



Length mm	Length inch	Tip Size(mm) Front	Tip Size(mm) Gauge	Tip Size(mm) Angle	Flushing Hole Front	Flushing Hole Side	Weight Approx kg	HJG DRILL P/N
Spherical buttons								
70	2 3/4	4×11	8×11	40°	2	-	2.5	1531-70T45-411/811-45-31
70	2 3/4	3×11,1×9	6×11	35°	3	-	2.5	1533-70T45-411/611-45-31
70	2 3/4	4×10,1×10	8×11	35°	4	-	2.5	1632-70T45-510/811-45-31
76	3	4×11	8×11	40°	2	-	3.2	1531-76T45-411/811-45-31
76	3	5×11	8×12	35°	2	1	3.2	1531-76T45-511/812-45-31
76	3	3×11,1×11	6×13	35°	3	-	3.2	1533-76T45-411/613-45-31
76	3	4×11,1×11	8×11	35°	4	-	3.2	1632-76T45-511/811-45-31
76	3	4×11,1×11	8×12	35°	4	-	3.2	1632-76T45-511/812-45-31
89	3 1/2	4×13	8×13	40°	2	-	5.4	1531-89T45-413/813-45-31
89	3 1/2	6×11	8×12	35°	2	-	5.4	1531-89T45-611/812-45-31
89	3 1/2	3×11,2×11	6×13	35°	3	1	5.4	1533-89T45-511/613-45-31
89	3 1/2	4×11,1×11	8×12	35°	4	-	5.4	1533-89T45-511/812-45-31
89	3 1/2	4×13,1×13	8×13	35°	4	-	5.4	1632-89T45-513/813-45-31
102	4	5×14	8×14	40°	2	-	6.8	1531-102T45-514/814-45-31
102	4	6×13	8×16	40°	2	1	6.8	1531-102T45-613/816-45-31
102	4	3×13,2×13	6×14	35°	3	1	6.8	1533-102T45-513/614-45-31
102	4	4×13,1×13	8×14	35°	4	-	6.8	1533-102T45-513/814-45-31
102	4	4×13,2×13	8×13	35°	4	1	6.8	1533-102T45-613/813-45-31
Parabolic buttons								
70	2 3/4	3×11,1×9	6×11	35°	3	-	2.5	1533-70T45-411/611-45-51
70	2 3/4	4×10,1×10	8×11	35°	4	-	2.5	1632-70T45-510/811-45-51
76	3	4×11	8×11	40°	2	-	3.2	1531-76T45-411/811-45-51
76	3	5×11	8×12	35°	2	1	3.2	1531-76T45-511/812-45-51
76	3	3×11,1×11	6×13	35°	3	1	3.2	1533-76T45-411/613-45-51
76	3	4×11,1×11	8×11	35°	4	-	3.2	1632-76T45-511/811-45-51
76	3	4×11,1×11	8×12	35°	4	-	3.2	1632-76T45-511/812-45-51
89	3 1/2	4×13	8×13	40°	2	-	5.4	1531-89T45-413/813-45-51
89	3 1/2	6×11	8×12	35°	2	-	5.4	1531-89T45-611/812-45-51
89	3 1/2	3×11,2×11	6×13	35°	3	1	5.4	1533-89T45-511/613-45-51
89	3 1/2	4×11,1×11	8×12	35°	4	-	5.4	1533-89T45-511/812-45-51
89	3 1/2	4×13,1×13	8×13	35°	4	-	5.4	1632-89T45-513/813-45-51

Dome bit for reaming

Length mm	Length inch	Tip Size(mm) Front	Tip Size(mm) Gauge	Tip Size(mm) Angle	Flushing Hole Front	Flushing Hole Side	Weight Approx kg	HJG DRILL P/N
Spherical buttons								
127	5	1×13	18×13	35°	3	1	6.0	1441-127T45-113/1813-45-31
152	6	2×14	18×14	35°	3	1	10.6	1441-152T45-214/1814-45-31
抛物线齿 Parabolic buttons								
127	5	1×13	18×13	35°	3	1	6.0	1441-127T45-113/1813-45-51
152	6	2×14	18×14	35°	3	1	10.6	1441-152T45-214/1814-45-51
ii	ii	ii	ii	ii	ii	ii	ii	ii
ii	ii	ii	ii	ii	ii	ii	ii	ii

BENCH DRILLING T45

Drill Rod

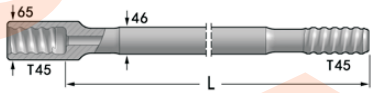
Extension rod T45-Round46-T45

Flushing hole 17mm.

Wrench flat 38mm.

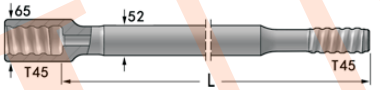
MF-rod T45-Round46-T45

Flushing hole 17mm.



Guide speedrod T45-Round52-T45

Flushing hole 21.5mm.



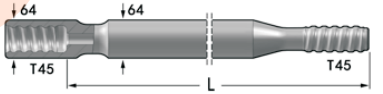
Length mm	Length foot	Diameter mm	Diameter inch	Weight Approx kg	HJG DRILL P/N
1830	6'	46	1 3/4	21.6	23R46-T45-1830-23
2435	8'	46	1 3/4	28.3	23R46-T45-2435-23
3050	10'	46	1 3/4	35.2	23R46-T45-3050-23
3660	12'	46	1 3/4	42.1	23R46-T45-3660-23
4270	14'	46	1 3/4	48.9	23R46-T45-4270-23
5530	18'	46	1 3/4	63.0	23R46-T45-5530-23
6095	20'	46	1 3/4	69.3	23R46-T45-6095-23
1525	5'	46	1 3/4	21.2	24R46-T45/65-1525-23
1830	6'	46	1 3/4	24.6	24R46-T45/65-1830-23
3050	10'	46	1 3/4	38.2	24R46-T45/65-3050-23
3660	12'	46	1 3/4	45.0	24R46-T45/65-3660-23
4270	14'	46	1 3/4	51.9	24R46-T45/65-4270-23
5530	18'	46	1 3/4	66.0	24R46-T45/65-5530-23
6095	20'	46	1 3/4	72.3	24R46-T45/65-6095-23
3050	10'	52	2	46.6	24R52-T45/65-3050-23
3660	12'	52	2	55.8	24R52-T45/65-3660-23
4270	14'	52	2	63.8	24R52-T45/65-4270-23
5530	18'	52	2	81.5	24R52-T45/65-5530-23
6095	20'	52	2	89.4	24R52-T45/65-6095-23

Guide Tube

Guide tube

D64 for bits from 76-89mm and

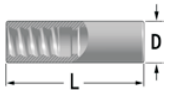
D76 for bits from 89-102mm



Length mm	Length foot	Diameter mm	Diameter inch	Weight Approx kg	HJG DRILL P/N
1220	4'	64	2 1/8	12.6	24G64-T45/64-1220-23
1525	5'	64	2 1/8	14.0	24G64-T45/64-1525-23
1830	6'	64	2 1/8	17.4	24G64-T45/64-1830-23
3050	10'	64	2 1/8	28.3	24G64-T45/64-3050-23
3660	12'	64	2 1/8	32.8	24G64-T45/64-3660-23
1830	6'	76	3	40.0	24G76-T45/76-1830-23
3660	12'	76	3	77.8	24G76-T45/76-3660-23

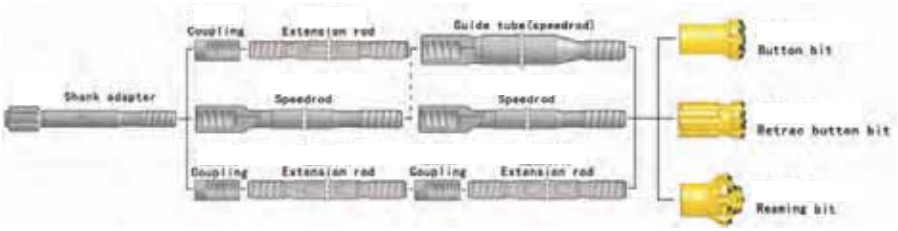
Coupling

Coupling sleeves



Length mm	Length foot	Diameter mm	Diameter inch	Thread	Weight Approx kg	HJG DRILL P/N
210	8 1/4	63	2 33/64	T45	3.0	31-T45-63-210-23
210	8 1/4	66	2 37/64	T45	3.3	31-T45-66-210-23

BENCH DRILLING T51



Drill Bit	Length		Tip Size(mm)			Flushing Hole		Weight Approx kg	HJG DRILL P/N
	mm	inch	Front	Gauge	Angle	Front	Side		
Button bit									
Spherical buttons									
	89	3 1/2	4×13	8×13	40°	2	-	4.9	1431-89T51-413/813-45-31
	89	3 1/2	5×13	8×13	35°	2	1	4.9	1431-89T51-513/813-45-31
	89	3 1/2	3×11,2×11	6×13	35°	4	-	4.9	1433-89T51-511/613-45-31
	89	3 1/2	4×11,1×11	8×13	35°	4	-	4.9	1433-89T51-511/813-45-31
	89	3 1/2	4×13,1×13	8×13	35°	4	-	4.9	1432-89T51-513/813-45-31
	102	4	4×14	8×14	40°	2	-	5.8	1431-102T51-414/814-45-31
	102	4	6×13	8×16	35°	2	1	5.8	1431-102T51-613/816-45-31
	102	4	3×13,2×13	6×14	35°	3	1	5.2	1433-102T51-513/614-45-31
	102	4	4×13,1×13	8×14	35°	4	-	5.8	1433-102T51-513/814-45-31
	102	4	4×13,2×13	8×13	35°	4	1	5.8	1433-102T51-613/813-45-31
	115	4 1/2	6×14	8×14	35°	2	-	6.8	1431-115T51-614/814-45-31
	115	4 1/2	6×14	8×16	35°	2	-	6.8	1431-115T51-614/816-45-31
	115	4 1/2	4×13,2×13	8×14	35°	4	-	6.8	1433-115T51-613/814-45-31
	115	4 1/2	4×13,3×13	8×14	35°	4	-	6.8	1433-115T51-713/814-45-31
	115	4 1/2	4×14,2×14	8×16	35°	4	-	6.8	1433-115T51-614/816-45-31
	127	5	8×14	8×16	35°	2	1	7.5	1431-127T51-814/816-45-31
	127	5	4×16,2×13	8×16	35°	4	-	7.5	1433-127T51-616/816-45-31
	127	5	4×14,3×14	8×14	35°	4	-	7.5	1433-127T51-714/814-45-31
Parabolic buttons									
	89	3 1/2	5×13	8×13	35°	2	1	4.9	1431-89T51-513/813-45-51
	89	3 1/2	3×11,2×11	6×13	35°	4	-	4.9	1433-89T51-511/613-45-51
	89	3 1/2	4×11,1×11	8×13	35°	4	-	4.9	1433-89T51-511/813-45-51
	89	3 1/2	4×13,1×13	8×13	35°	4	-	4.9	1432-89T51-513/813-45-51
	102	4	4×14	8×14	40°	2	-	5.8	1431-102T51-414/814-45-51
	102	4	6×13	8×16	35°	2	1	5.8	1431-102T51-613/816-45-51
	102	4	3×13,2×13	6×14	35°	3	1	5.2	1433-102T51-513/614-45-51
	102	4	4×13,1×13	8×14	35°	4	-	5.8	1433-102T51-513/814-45-51
	102	4	4×13,2×13	8×13	35°	4	1	5.8	1433-102T51-613/813-45-51
	115	4 1/2	6×14	8×16	35°	2	-	6.8	1431-115T51-614/816-45-51
	115	4 1/2	4×13,2×13	8×14	35°	4	-	6.8	1433-115T51-613/814-45-51
	115	4 1/2	4×13,3×13	8×14	35°	4	-	6.8	1433-115T51-713/814-45-51
	115	4 1/2	4×14,2×14	8×16	35°	4	-	6.8	1433-115T51-614/816-45-51

BENCH DRILLING T51

Drill Bit	Length		Tip Size(mm)			Flushing Hole		Weight Approx kg	HJG DRILL P/N
	mm	inch	Front	Gauge	Angle	Front	Side		
Button bit									
Spherical buttons									
	89	3 1/2	4×13	8×13	40°	2	-	5.3	1531-89T51-413/813-45-31
	89	3 1/2	5×13	8×13	35°	2	1	5.3	1531-89T51-513/813-45-31
	89	3 1/2	3×11,2×11	6×13	35°	4	-	5.3	1533-89T51-511/613-45-31
	89	3 1/2	4×11,1×11	8×13	35°	4	-	5.3	1533-89T51-511/813-45-31
	89	3 1/2	4×13,1×13	8×13	35°	4	-	5.3	1632-89T51-513/813-45-31
	102	4	4×14	8×14	40°	2	-	7.3	1531-102T51-414/814-45-31
	102	4	6×13	8×16	35°	2	1	7.3	1531-102T51-613/816-45-31
	102	4	4×13,1×13	8×14	35°	4	-	7.3	1533-102T51-513/814-45-31
	102	4	4×13,2×13	8×13	35°	4	1	7.3	1533-102T51-613/813-45-31
	102	4	4×13,1×13	8×14	35°	4	1	7.3	1533-102T51-513/814-45-31
	115	4 1/2	6×14	8×14	35°	2	-	9.8	1531-115T51-614/814-45-31
	115	4 1/2	6×14	8×16	35°	2	-	9.8	1531-115T51-614/816-45-31
	115	4 1/2	4×13,2×13	8×14	35°	4	-	9.8	1533-115T51-613/814-45-31
	115	4 1/2	4×13,3×13	8×14	35°	4	-	9.8	1533-115T51-713/814-45-31
	115	4 1/2	4×14,2×14	8×16	35°	4	-	9.8	1533-115T51-614/816-45-31
	127	5	8×14	8×16	35°	2	1	12.0	1531-127T51-814/816-45-31
	127	5	4×16,2×13	8×16	35°	4	-	12.0	1533-127T51-616/816-45-31
	127	5	4×14,3×14	8×14	35°	4	-	12.0	1533-127T51-714/814-45-31
Parabolic buttons									
	89	3 1/2	5×13	8×13	35°	2	1	5.3	1531-89T51-513/813-45-51
	89	3 1/2	3×11,2×11	6×13	35°	4	-	5.3	1533-89T51-511/613-45-51
	89	3 1/2	4×11,1×11	8×13	35°	4	-	5.3	1533-89T51-511/813-45-51
	89	3 1/2	4×13,1×13	8×13	35°	4	-	5.3	1632-89T51-513/813-45-51
	102	4	4×14	8×14	40°	2	-	7.3	1531-102T51-414/814-45-51
	102	4	6×13	8×16	35°	2	1	7.3	1531-102T51-613/816-45-51
	102	4	4×13,1×13	8×14	35°	4	-	7.3	1533-102T51-513/814-45-51
	102	4	4×13,2×13	8×13	35°	4	1	7.3	1533-102T51-613/813-45-51
	102	4	4×13,1×13	8×14	35°	4	1	7.3	1533-102T51-513/814-45-51
	115	4 1/2	6×14	8×16	35°	2	-	9.8	1531-115T51-614/816-45-51
	115	4 1/2	4×13,2×13	8×14	35°	4	-	9.8	1533-115T51-613/814-45-51
	115	4 1/2	4×13,3×13	8×14	35°	4	-	9.8	1533-115T51-713/814-45-51
	115	4 1/2	4×14,2×14	8×16	35°	4	-	9.8	1533-115T51-614/816-45-51
Dome bit for reaming									
Spherical buttons									
	152	6	2×14	18×14	35°	3	1	10.6	1441-152T51-214/1814-45-31
Parabolic buttons									
	152	6	2×14	18×14	35°	3	1	10.6	1441-152T51-214/1814-45-51

BENCH DRILLING T51

Drill Rod

Extension rod T51-Round52-T51

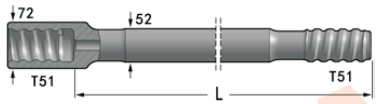
Flushing hole 21.5mm.

Wrench flat 45mm.

Length mm	Length foot	Diameter mm	Diameter inch	Weight Approx kg	HJG DRILL P/N
3050	10'	52	2	45.3	23R52-T51-3050-23
3660	12'	52	2	54.1	23R52-T51-3660-23
4270	14'	52	2	63.0	23R52-T51-4270-23
4880	16'	52	2	71.8	23R52-T51-4880-23
5530	18'	52	2	81.2	23R52-T51-5530-23
6095	20'	52	2	89.4	23R52-T51-6095-23

MF-rod T45-Round46-T45

Flushing hole 17mm.

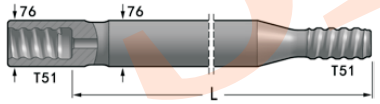


Length mm	Length foot	Diameter mm	Diameter inch	Weight Approx kg	HJG DRILL P/N
1525	5'	52	2	26.2	24R52-T51/72-1525-23
1830	6'	52	2	30.6	24R52-T51/72-1830-23
3050	10'	52	2	48.3	24R52-T51/72-3050-23
3660	12'	52	2	57.1	24R52-T51/72-3660-23
4270	14'	52	2	66.0	24R52-T51/72-4270-23
4880	16'	52	2	74.8	24R52-T51/72-4880-23
5530	18'	52	2	84.2	24R52-T51/72-5530-23
6095	20'	52	2	92.4	24R52-T51/72-6095-23

Guide Tube

Guide tube

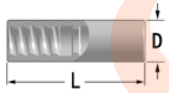
D76 for bits from 89-102mm and
D87 for bits from 102-127mm



Length mm	Length foot	Diameter mm	Diameter inch	Weight Approx kg	HJG DRILL P/N
1830	6'	76	3	42.0	24G76-T51/76-1830-23
3660	12'	76	3	81.0	24G76-T51/76-3660-23
3660	12'	87	3 1/2	86.0	24G87-T51/87-3660-23

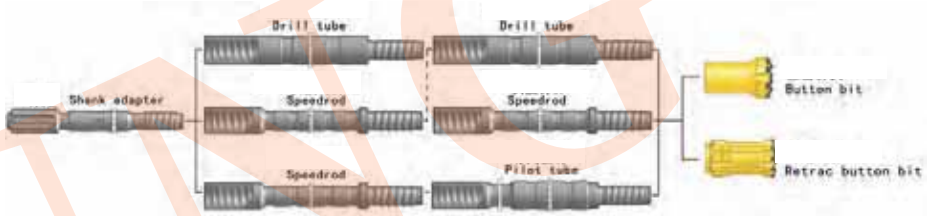
Coupling

Coupling sleeves



Length mm	Length inch	Diameter mm	Diameter inch	Thread	Weight Approx kg	HJG DRILL P/N
225	8 7/8	71	2 51/64	T51	4.6	31-T51-71-225-23
225	8 7/8	76	3	T51	4.8	31-T51-76-225-23
235	9 1/4	72	2 7/8	T51	4.7	31-T51-72-235-23
235	9 1/4	77	3 1/32	T51	4.9	31-T51-77-235-23

BENCH DRILLING T60



Drill Bit

Button bit

Spherical buttons

Length mm	Length inch	Tip Size(mm) Front	Gauge	Angle	FlushingHole Front	Side	Weight Approx kg	HJG DRILL P/N
92	3 5/8	4×13,1×13	8×13	35°	4	-	5.3	1432-92T60-513/813-45-31
96	3 3/4	4×13,1×13	8×14	35°	4	-	5.6	1432-96T60-513/814-45-31
102	4	9×11	9×13	35°	3	-	6.0	1431-102T60-911/913-45-31
115	4 1/2	10×12	9×14	35°	3	-	6.8	1431-115T60-1012/914-45-31
127	5	10×13	9×14	35°	3	-	7.5	1431-127T60-1013/914-45-31
140	5 1/2	10×14	9×16	35°	3	-	9.0	1431-140T60-1014/916-45-31
152	6	12×14	9×16	35°	3	-	10.6	1431-152T60-1214/916-45-31

Parabolic buttons

Length mm	Length inch	Tip Size(mm) Front	Gauge	Angle	FlushingHole Front	Side	Weight Approx kg	HJG DRILL P/N
92	3 5/8	4×13,1×13	8×13	35°	4	-	5.3	1432-92T60-513/813-45-51
96	3 3/4	4×13,1×13	8×14	35°	4	-	5.6	1432-96T60-513/814-45-51
102	4	9×11	9×13	35°	3	-	6.0	1431-102T60-911/913-45-51
115	4 1/2	10×12	9×14	35°	3	-	6.8	1431-115T60-1012/914-45-51
127	5	10×13	9×14	35°	3	-	7.5	1431-127T60-1013/914-45-51
140	5 1/2	10×14	9×16	35°	3	-	9.0	1431-140T60-1014/916-45-51
152	6	12×14	9×16	35°	3	-	10.6	1431-152T60-1214/916-45-51

Retrac button bit

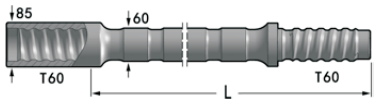
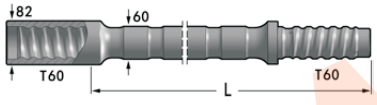
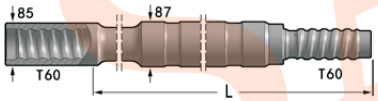
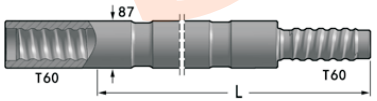
Spherical buttons

Length mm	Length inch	Tip Size(mm) Front	Gauge	Angle	FlushingHole Front	Side	Weight Approx kg	HJG DRILL P/N
92	3 5/8	9×12	9×12	40°	2	-	5.4	1531-92T60-912/912-45-31
96	3 3/4	9×12	9×12	40°	2	-	6.3	1531-96T60-912/912-45-31
102	4	10×12	9×13	40°	2	-	7.3	1531-102T60-1012/913-45-31
115	4 1/2	10×12	9×14	35°	3	-	9.8	1531-115T60-1012/914-45-31
118	4 5/8	6×13	9×16	35°	3	-	10.0	1531-118T60-613/916-45-31
127	5	10×13	9×14	35°	3	-	12.0	1531-127T60-1013/914-45-31
140	5 1/2	10×14	9×16	35°	3	-	14.0	1531-140T60-1014/916-45-31
152	6	12×14	9×16	35°	3	-	16.0	1531-152T60-1214/916-45-31

Parabolic buttons

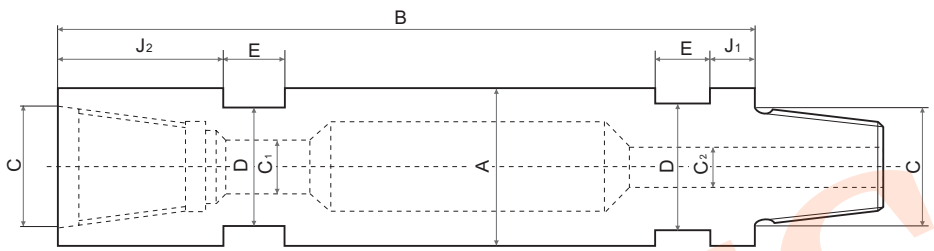
Length mm	Length inch	Tip Size(mm) Front	Gauge	Angle	FlushingHole Front	Side	Weight Approx kg	HJG DRILL P/N
92	3 5/8	9×12	9×12	40°	2	-	5.4	1531-92T60-912/912-45-51
96	3 3/4	9×12	9×12	40°	2	-	6.3	1531-96T60-912/912-45-51
102	4	10×12	9×13	40°	2	-	7.3	1531-102T60-1012/913-45-51
115	4 1/2	10×12	9×14	40°	3	-	9.8	1531-115T60-1012/914-45-51
118	4 5/8	6×13	9×16	35°	3	-	10.0	1531-118T60-613/916-45-51
127	5	10×13	9×14	35°	3	-	12.0	1531-127T60-1013/914-45-51
140	5 1/2	10×14	9×16	35°	3	-	14.0	1531-140T60-1014/916-45-51
152	6	12×14	9×16	35°	3	-	16.0	1531-152T60-1214/916-45-51

BENCH DRILLING T60

Drill Rod	Length		Diameter		Weight Approx kg	HJG DRILL P/N
	mm	foot	mm	inch		
MF-rod, For bits from 96mm Flushing hole 22.5mm.						
	3660	12'	60	2 3/8	73.9	24R60-T60/85-3600-23
	4265	14'	60	2 3/8	85.5	24R60-T60/85-4265-23
	6095	20'	60	2 3/8	116.6	24R60-T60/85-6095-23
	4265	14'	64	2 1/2	95.0	24R64-T60/85-4265-23
MF-rod T45-Round46-T45 Flushing hole 22.6mm.						
	3660	12'	60	2 3/8	73.9	24R60-T60/82-3600-23
	4265	14'	60	2 3/8	85.5	24R60-T60/82-4265-23
	6095	20'	60	2 3/8	116.6	24R60-T60/82-6095-23
Pilot Tube Female end OD 85mm (82mm on 76mm tubes)						
	1600	5'3"	87	3 1/2	39.0	24G87-T60/85-1600-23
	4265	14'	87	3 1/2	99.0	24G87-T60/85-4265-23
	5335	17'6"	76	3	124.9	24G76-T60/85-5335-23
Drill Tube						
	3660	12'	87	3 1/2	87.8	24G87-T60/87-3660-23
	4265	14'	87	3 1/2	99.0	24G87-T60/87-4265-23

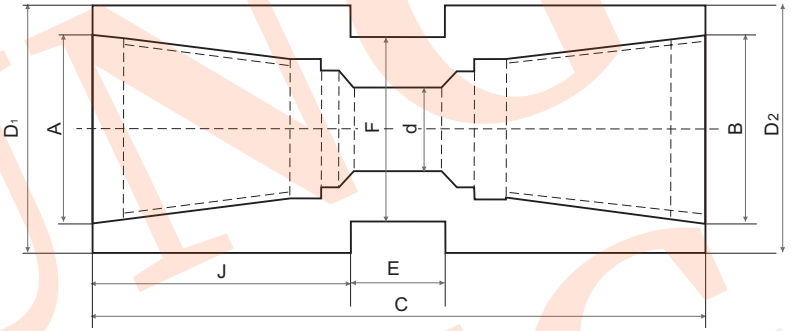
其它产品 The others

钻杆 Drill Pipe



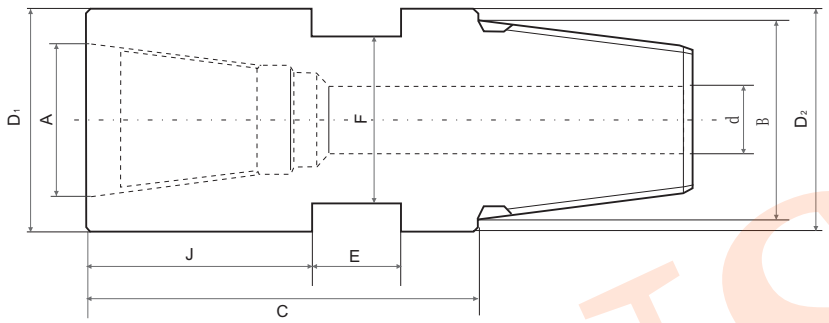
A 外径 OD(mm)	C 连接部位 C Tool joints 连接螺纹型号 Thread Type	C1	C2	J 肩头 Length shoulder to flat J1	J2	D 扳手方对径 Across flat (mm)	最大拉力（千牛/米） Allowed pull down (kNm)	大概重量 (3米长/公斤) Approx weight (3m long/kgs)	E 扳手方宽 Width spanner flat (mm)
Φ76	API23/8"REG	25.4	38.1	16	90.5	65	5.4	26.6	38.1
Φ89	API23/8"REG	28.6	38.1	11.1	76.2	69.8	11.2	53.4	60.3
Φ102	API31/2"REG	44.4	57.1	15.8	90.5	63.5	14.2	53.1	50.8
Φ114	API31/2"REG	38.1	57.1	15.8	69.8	92.2	22.2	77.4	69.8
Φ127	API31/2"REG	44.4	57.1	12.7	95.2	120.6	47	114	50.8s
Φ140	API31/2"REG	44.4	57.1	12.7	95.2	120.6	47	114	50.8
Φ152	API41/2"REG	76.2	85.7	19	120.6	130.1	52.9	127	60.3

母母接头 Box-Box Adapters



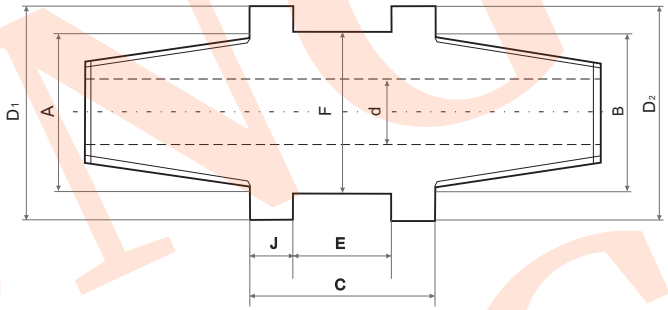
连接螺纹型号 Connection 母螺纹A Box up A	母螺纹B Thread Type(B)	C 长度 Length (mm)	J 肩长 Length shoulder (mm)	E 扳手方宽 Width spanner flats (mm)	d 顶部直径 Std bore (mm)	外径 Outside diameter D1 顶端 Top D1(mm)	D2 底端 Bottom D2(mm)	F 扳手方对径 Across flat (mm)
API23/8"REG	API23/8" REG	219	57.1	50.8	38.1	88.9	88.9	69.85
API27/8"REG	API23/8" REG	219	69.85	50.8	38.1	114.3	88.9	98.4
API23/8"REG	API31/2" REG	128.6	57.1	50.8	38.1	88.9	114.3	69.8
API31/2"REG	API31/2" REG	241.3	69.85	50.8	44.45	114.3	114.3	98.4
API31/2"REG	API41/2" REG	269.8	88.9	50.8	58.7	114.3	146	98.4
API27/8"REG	API31/2" REG	241.3	69.85	50.8	44.45	114.3	51.7	98.4
API41/2"REG	API27/8" REG	250.8	76.2	50.8	44.45	114.3	146	98.4

公母接头 Pin-Box Adapters



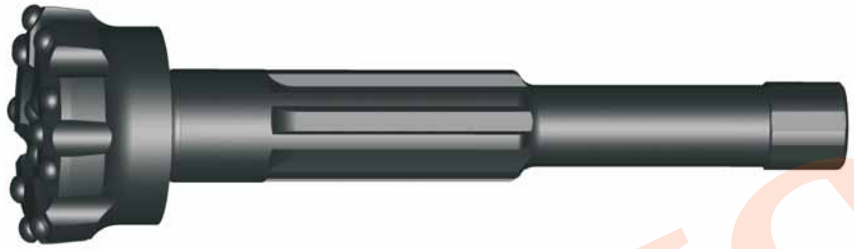
连接螺纹型号 Connection		C 长度	J 肩长	E 扳手方宽	d 顶部直径	外径 Outside diameter		F 扳手方对径
母螺纹A Box up A	公螺纹B Thread Type(B)	Length (mm)	Length shoulder (mm)	Width spanner flats (mm)	Std bore (mm)	D1 顶端 Top D1(mm)	D2 底端 Bottom D2(mm)	Across flat F (mm)
API23/8"REG	API23/8"REG	140	50.8	65	24	88.9	88.9	69.85
API23/8"REG	API27/8"REG	134.9	69.85	50.8	31.75	88.9	88.9	69.85
API23/8"REG	API31/2"REG	146	39.7	50.8	25.4	114.3	88.9	98.4
API31/2"REG	API31/2"REG	101.6	39.7	50.8	44.45	127	127	98.4
API31/2"REG	API41/2"REG	134.9	39.7	50.8	52.4	114.3	146	98.4
API27/8"REG	API23/8"REG	134.9	39.7	50.8	31.75	88.9	88.9	69.85
API27/8"REG	API31/2"REG	134.9	39.7	50.8	44.45	114.3	114.3	98.4
API27/8"REG	API41/2"REG	174.6	100	50.8	44.45	114.3	146	98.4

公公接头 Pin-Pin Adapters



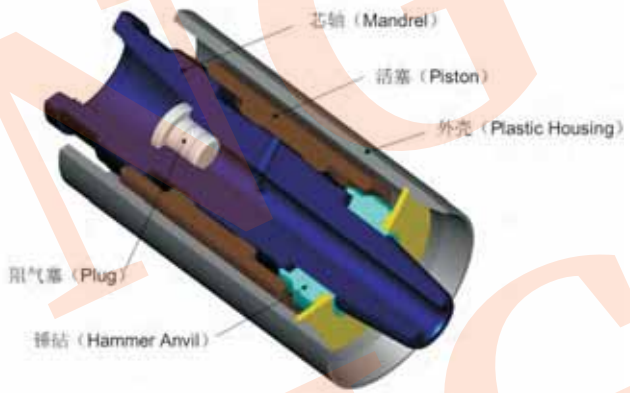
连接螺纹型号 Connection		C 长度	J 肩长	E 扳手方宽	d 顶部直径	外径 Outside diameter		F 扳手方对径
公螺纹A Pin up A	公螺纹B Thread Type(B)	Length (mm)	Length shoulder (mm)	Width spanner flats (mm)	Std bore (mm)	D1 顶端 Top D1(mm)	D2 底端 Bottom D2(mm)	Across flat (mm)
API23/8"REG	API23/8" REG	70	20	50.8	24	78	78	65
API23/8"REG	API27/8" REG	152.4	50.8	50.8	25.4	88.9	88.9	69.85
API23/8"REG	API31/2" REG	96	35	50.8	24	114.3	114.3	98.4
API31/2"REG	API31/2" REG	177.8	63.5	50.8	44.45	114.3	114.3	98.4
API31/2"REG	API41/2" REG	92	12.7	69.85	38.1	114.3	139.7	120.65
API41/2"REG	API41/2" REG	203.2	76.2	50.8	58.7	146	146	120.65

长尾巴钻头 Long Shank Bit



钎头直径 D mm	边齿 Gauge	正面齿 Front	水孔数量 Flushing holes	重量 Weight (Kg)	产品编号 Part-No
90	9x11	7x11	3x8	5.8	ROD76-90
95	9x12	7x11	3x8	6.0	ROD76-95
105	9x12	7x12	3x10	6.4	ROD76-105
105	9x13	7x12	3x13	9.1	ROD89-105
115	9x14	6x14	3x13	9.7	ROD89-115
127	9x14	7x14	3x13	10.6	ROD89-127
115	9x14	6x14	3x13	12.6	ROD102-115
127	9x14	7x14	3x13	13.2	ROD102-127
140	9x16	9x16	3x13	14.5	ROD102-140
140	9x16	9x16	3x15	21.3	ROD127-140
152	9x16	9x16	3x15	23.1	ROD127-152
165	10x16	10x16	3x15	23.9	ROD127-165

反打冲击器 Back Hammer



反打冲击器

当设备在钻孔时发生卡钻时，反打冲击器为您节约时间和金钱。

反打冲击器可安装在位于钻孔夹持器和旋转头之间的钻管接头上，形成一种有效的反打打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和注意连接部分的防护即可。

Backhammer

In case of jamming of any drilling tool in the boring process, the back hammer will help you save time and money.

The back hammer can be installed 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 emissions 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 unused.

产品名称 Product	工作风压 Pressure	连接螺纹 Thread	总长 Total Length(mm)	外径尺寸 Diameter(mm)	重量 Kg
BH140	8 Bar	API3 1/2"	510	140	31.0
BH160	8 Bar	API3 1/2"	540	160	44.0
BH190	8 Bar	API4 1/2"	580	190	63.0
BH240	8 Bar		600	240	85.0

冲击器拆卸台 Breakout Bench

冲击器拆卸工作台使用方法

- 把冲击器放进卸钎器里边。
- 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。
- 用螺丝固定好K形座。
- 用相应螺丝将扳手固定紧。
- 缓慢上下摇动千斤顶把手，将冲击器慢慢卸开。
- 接头拆卸完毕后，将千斤顶回油，回油完毕，松开螺丝，放下扳手，卸下K形座，将冲击器调头。
- 调节冲击器和扳手的位置，使扳手卡住卡钎套并与千斤顶处于同一平面内。
- 调整冲击器
- 放入K形座，并用螺丝将K形座及扳手固定好。
- 缓慢上下摇动千斤顶把手，将冲击器慢慢卸开。

Breakout Bench Operation Instruction

- Put hammer on the bench.
- Adjust the position of hammer and wrench; use wrench to block the top sub side of hammer; let wrench and jack in the same face.
- Fix K-shaped base with nut.
- Fix wrench with nuts.
- Shake handle of Jack slowly till top sub away from hammer
- After top sub dismantled, grease the jack, release nuts, discharge the K-shaped base and turn around the Hammer.
- Adjust the position of hammer and wrench; use wrench to block the drive chuck of hammer; let wrench and jack in the same face.
- Fix hammer
- Fix K-shaped base and the wrench with nut.
- Shake handle of Jack slowly till dive chuck away from hammer.

冲击器拆卸台 Breakout Bench

全液压自动拆卸台使用方法

- 把冲击器放进拆卸台里边。
- 推动卸杆油缸操作手柄，调节卸杆油缸到合适的高度。
- 调节左锁紧链条卡住接头方口并扣上活动销子。
- 调节右锁紧链条卡住冲击器外缸接头端并扣上活动销子。
- 向前推动左链条操作手柄及右链条操作手柄，将冲击器接头慢慢卸开。
- 拆卸完毕后，将卸杆油缸回油，回油完毕，取出活动销子，松开左、右链条，将冲击器调头。
- 推动卸杆油缸操作手柄，调节卸杆油缸到合适的高度。
- 调节左锁紧链条卡住卡钎套并扣上活动销子。
- 调节右锁紧链条卡住冲击器外缸卡钎套端并扣上活动销子。
- 向前推动左链条操作手柄及右链条操作手柄，将冲击器卡钎套慢慢卸开。

Breakout Bench Operation Instruction

- Put the hammer on the breakout bench.
- Drive the handle switch of unloading oil cylinder, adjust the cylinder to proper height.
- Adjust left lock chains to lock the top sub then fasten the active pin.
- Adjust right lock chains to lock top sub side of the external cylinder of hammer then fasten the active pin.
- Push handle switch of both the right and left lock chains, break out the top sub of hammer slowly.
- After finishing break out, make the oil cylinder return oil, take out the active pins and loosen the left and right chains, Turn the hammer around.
- Drive the handle switch of unloading oil cylinder, adjust the cylinder to proper height.
- Adjust left lock chains to lock the drive chuck then fasten the active pin.
- Adjust right lock chains to lock the chuck side of external cylinder of hammer then fasten the active pin.
- Push handle switch of both the right and left lock chains, break out the drive chuck of hammer slowly.