



# New Diamond Drilling Tools Product Manuals 新金刚钻具产品手册

湖南新金刚工程机械有限公司  
Hunan New Diamond Construction Machinery Co.,Ltd.

地址：中国湖南省岳阳平江工业园

ADD: Pingjiang Industry Park, Pingjiang county, Yueyang City, Hunan, China.

手机：+86-730-6808681  
传真：+86-730-6808681

TEL: +86-730-6808681  
Fax: +86-730-6808681

中国市场：yang.riquan@xjgdrill.com  
海外市场：rick.liao@xjgdrill.com

China Market : yang.riquan@xjgdrill.com  
Overseas Market : rick.liao@xjgdrill.com

产品技术咨询：yang.xiangfen@xjgdrill.com

Product technical enquiry : yang.xiangfen@xjgdrill.com

[www.xjgdrill.com](http://www.xjgdrill.com)



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## 打造一流品质 — 树立行业标杆

Build First-class Quality — Establish Industry Benchmark

湖南新金刚工程机械有限公司是一家专业从事凿岩和风动工具研究与制造的现代化高新技术企业，主要研究制造高压潜孔冲击器、各种潜孔钻头、钻杆和凿岩钻具，产品广泛应用于土石方工程、矿山开采、水井工程和建筑工程、地热钻探、市政工程等。

Hunan New Diamond Construction Machinery Co., Ltd. is a modern high-tech enterprise specializing in research and manufacture of rock drilling and pneumatic tools. It mainly studies and manufactures high-pressure down-the-hole impactors, various down-the-hole drills, drill pipes and drilling tools. The products are widely used in earthwork, mining, water well engineering and construction, geothermal drilling, municipal engineering, etc.

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# About Us New Diamond

NEW DIAMOND

## 关于新金刚

公司目前在职人员近700人，其中、中高层管理及研发人员135人，均具备有丰富的专业技术水平和管理能力。

"新金刚钻具"质量和技术水平处于国内领先、国际先进的水准，已成为国内外知名品牌，深受广大用户好评，产品远销澳大利亚、智利、加拿大、南非、埃塞俄比亚、马来西亚、韩国、巴西、俄罗斯、台湾、香港等30多个国家和地区。

多年来，湖南新金刚不断提升凿岩和掘进钻具行业标准，在砥砺前行中塑造着品牌典范！

At present, the company has nearly 700 employees, including 135 middle and senior management and R&D personnel, who have rich professional skills and management capabilities.

The quality and technical level of "New Diamond Drilling Tools" are in the leading position of domestic and international advanced level, has become a well-known brand in China and abroad, praised by users, our products exported to Australia, Chile, Canada, South Africa, Ethiopia, Malaysia, South Korea, Brazil, Russia, Taiwan province, HongKong District and more than 30 countries.

For many years, Hunan New Diamond has continuously improved the industry standards for rock drilling and drilling tools. Shaping the model of the brand in continuous progress!



# 700

在职人员近700人  
more than 700 employees

# 135

管理及研发人员135人  
135 Management and  
R & D personnel

# 30<sup>+</sup>

产品远销30多个国家和地区  
Exported to more than 30 countries





全面通过ISO9001:2015质量管理体系认证



研发团队每年推出2-3个系列新产品

### 企业管理

Business Management

公司注重人才引进和培养, 实行现代化管理, 为职工进行系统培训, 并量身定制了一套完整的企业管理及运作模式, 不断增强公司的凝聚力和战斗力。

The company focus on talent introduction and advancement, provides staff with systematic trainings. A complete set of corporate management and operation model had been specially made so that modern management has been realized to continuously enhance company's combination and effectiveness.

一路挺进, 在全球经济危机的大浪潮中, 我们精研科技, 将多年来积累先进制造技术投入应用, 成功解决了活塞、钻头易断不耐磨的难题, 打响了新金刚这个响亮的民族品牌!

Keep running. In the environment of global economic crisis, we intensively focus on R & D. Continuously put production experiences and technologies over years into real application .Successfully solved the difficulties of piston to be break easily and bit is not wear-resistant. New Diamond, had been resounded as a national brand.

### 质量研发

Quality Research and Development

建立整套科学而严格的质量管理体系, 全面通ISO9001:2015质量管理体系认证。加强公司内部治理, 研发团队每年推出2-3个系列新产品, 拥有强劲的产品开发能力。

A advanced & strict quality management system had been established in our company. Our products has passed the ISO9001:2015 certificate. To strong our competition, our R&D team ,which full of exploration capabilities, releases 2-3 series of new product every year.

# Advantage

企业优势

ISO9001:2015



# New Diamond Development History

## — 公司发展历程

- 2011年至2012年，湖南新金刚扎根娄底，奠定发展根基。  
From 2011 to 2012, Hunan New Diamond started in Loudi, build up a good basis.
- 2013年，湖南新金刚完成了在岳阳平江工业园的一期工程，一个占地面积55000平方米的高科技工业基地拔地而起。公司总部和生产基地整体搬迁至岳阳平江，并更名为“湖南新金刚工程机械有限公司”  
In 2013, the new Pingjiang industrial park is finished, which covers an area of 55,000m<sup>2</sup>. the company headquarters and production base were removed and relocated there and the company name has been changed to Hunan New Diamond Construction Machinery Co.,Ltd.
- 2014年，湖南新金刚拓延科研基地，组建现代管理团队。  
In 2014, Hunan New Diamond expand the scientific research base, build modern management team.

- 2015年，湖南新金刚自主潜心研发的“速霸”系列子品牌一炮而红，成为市场娇子。  
In 2015, Hunan New Diamond developed “Speed Master” series hammers, which won great reputation among customers.
- 2017年，湖南新金刚二期再次扩建，新购近百亩土地，建设高标准厂房五栋，专家楼一栋，工人文体中心一栋，配套引进大批国际一流设备。  
In 2017, Hunan New Diamond extension, purchased almost 66,667m<sup>2</sup> for 5 buildings high standard workshops, 1 building for experts, one worker sports center building. Imported international first-class equipment.
- 2018年，湖南新金刚以高速，高质完成了二期扩建。扩建成功后，公司总占地面积约110000平方米，高标准厂房共十栋，员工宿舍共两栋，办公楼一栋，员工食堂一栋，工人文体中心一栋，专家楼一栋。与此同时，湖南新金刚加大与科研院所的深度合作，实现产业规模的巨大提升。  
In 2018, Hunan New Diamond finish the second expansion project with high speed and high quality, which covers 110000m<sup>2</sup> area in total, owned 10 buildings high standard workshops, one Office building, one building for staff dormitory, one building for staff canteen, one building for experts, at the same time, Hunan New Diamond did strengthen cooperation with research institutes, achieving huge promotion in the industrial scale.
- 2019年湖南新金刚钻具亮相德国宝马展。享誉全球的工程机械行业盛会—德国宝马展bauma 2019在慕尼黑隆重开幕。作为中国领先的潜孔钻具制造商，湖南新金刚秉承“打造一流品质，树立行业标杆”的公司理念，携5款公司自主研发的潜孔钻头参展，在为期一周的展会期间，为200多个国家的60万名专业观众展示了我公司生产制作和发展创新的成果，向世界展现中国制造的实力。  
In 2019, Hunan New Diamond attended the Bauma Show in Germany, which has worldwide reputation for construction machinery industry, opening in Munich Germany. As the leading manufacturer of down-the-hole drilling tools in China, our philosophy is building world-class quality products and establishing the benchmark for the construction machinery career. There were 5 DTH button bits which developed by our company in the exhibition, show the innovation ability and strong production ability of China.





# Enterprise Honor

企业资质



| 质量管理体系认证 |



| 常务理事单位 |

| 认证供应商 |



| 最美诚信企业 |

| 税收贡献奖 |

“质量就是市场”的管理理念，严格按照国际质量管理体系要求，全程对 IQC、IPQC和OQC跟踪监控。

“Quality is the market”. So all our products strictly comply with the request of International quality management system, thus they keep tracking and monitoring the IQC.IPQC and OQC throughout.

### IQC/IPQC/OQC 全程监控

Monitoring The Iqc,ipqc And Oqc All The Way

公司始终信奉：“质量就是市场”的管理理念，严格按照国际质量管理体系要求，全程对 IQC、IPQC和OQC跟踪监控。公司荟萃了一批专业检测人员，并配有精良的检测设备，采用国际先进的检测手段和方法，对产品技术条件进行全面、严格的把关。

New Diamond persistently has the faith on the management philosophy that “Quality is the market”. So all our products are strictly comply with the request of International quality management system, thus they keep tracking and monitoring the IQC.IPQC and OQC all the way. Our factory with professional testing personnel, and equipped with sophisticated detection equipment, adopts the international advanced detection means and method, product technical conditions to conduct a comprehensive, strict inspection.

### 建立制度体系

Establishing an Institutional System

完善质量管理队伍，建立起一套严密的制度保障体系，规范、约束员工质量行为，构建公司质量文化，形成浓厚的质量氛围。公司致力于技术改进和改造，投入大量的资金，先后引进先进设备以不断提高公司技术能力，保证和提升产品质量。

New Diamond never stops to perfect the management team for quality inspection, and found a strict security system for all rules. So that we can standardize and limit the workers quality action, and constructing New Diamond quality culture, forming the atmosphere of quality control.

We committed to improving and reforming tech, so they spend a lot of money, bringing in many advanced equipment. Our pursuit is to ensure and improve our products be quality, which determines that we have to keep improving the tech ability of our company.





# 01

## DTH HAMMER

### 潜孔冲击器



#### 什么是潜孔冲击器？

潜孔冲击器广泛应用于岩土工程中，具有各种坚硬，高硬度等坚韧度差的坚硬岩石，具有以下特点：

- ① 根据中国的采矿条件，吸收国内外冲击器先进技术，设计制造新产品。
- ② 选料合理，制造工艺先进，质量保证完美。
- ③ 钻速更高。
- ④ 可以提供硬化处理，延长使用寿命，降低使用成本。
- ⑤ 单冲击力大，破碎石的耗电量低。
- ⑥ 活塞和重量有优良的动力传递。
- ⑦ 结构设计采用现代理论，使应力波持续时间更长，应力幅值更低，活塞寿命更长。

#### What is DTH Hammer ?

DTH Hammer has a wide range of use in all kinds of hard and abrasive rocks, following features:

- ① New products designed based on mining condition in china, improving by advanced technology from global market.
- ② Superior materials, advanced process, guaranteed quality.
- ③ Faster drilling rate.
- ④ Hardness can be enhanced to expand the lifespan of hammer, and lower the cost.
- ⑤ Huge impulse with low consumption of electricity.
- ⑥ The modern theory is adopted in the structural design, which makes the stress wave duration longer, the stress amplitude is lower, and the piston life is long.

#### 潜孔冲击器的应用

##### The Application of DTH Hammer

潜孔冲击器配合潜孔钻机和潜孔钻头，主要应用于矿山、大理石、采石场爆破、水井钻井等工程建设。

DTH hammers are used for blast hole drilling and blasting, mainly applied in Mining, Marble quarry or well drilling and other construction projects.





# Speed Master Series

## 速霸系列



城市高层建筑的建设，高铁、公路、桥梁、地铁的建设，水电站、核电站等项目的建设都会涉及到灌注桩基工程项目。随着这些工程项目对于桩基孔在硬岩地层入岩需求的逐渐增多，新金刚凭借在大直径钻孔及超深孔领域拥有的丰富经验推出了专为这类工程而设计的速霸系列大孔径潜孔冲击器，全面满足建筑领域桩基施工入岩需求。

Urban high-rise building construction, high-speed rail, highways, bridges, subway construction, hydroelectric stations, nuclear power plant construction projects will involve the pile foundation project. With the increasing demand for hard rock drilling in these projects, the new New Diamond designed Super series hammers and bits specifically for these types of projects is being developed by most experienced engineering experience in large diameter boreholes and ultra-deep boreholes drilling, fully meet the requirements of the pile foundation construction drilling work.

### 我司自主设计研发的无尾管高压冲击器

Our company own design high air pressure DTH hammer, without foot-valve, is one of the most advanced design in the world.

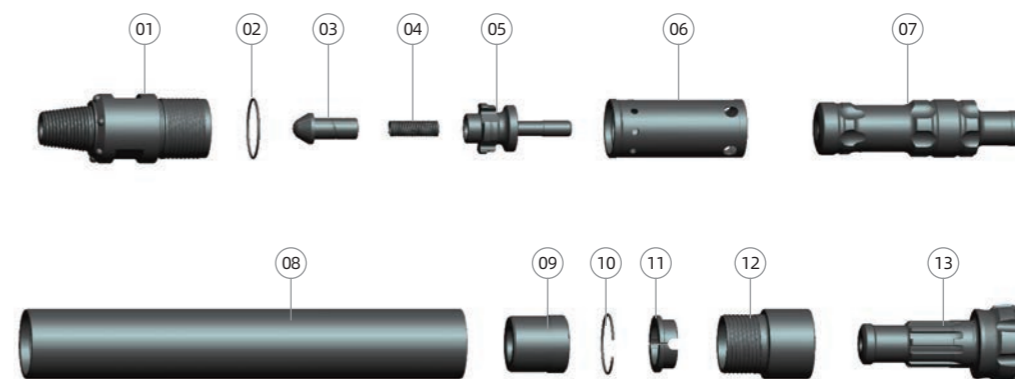
#### 其主要特点如下：

- 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 冲击器能耗低，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 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。

#### It has following advantages:

- ① Bit without foot valve will avoid the problem of foot valve broken or thermal expansion
- ② Lower energy consumption and higher impact frequency. The drilling speed is 15%-30% higher than the one with foot valve.
- ③ Less parts, simplified, and with parts proper heating treated.
- ④ Extend the life of using and easier to repairing.

## SP480



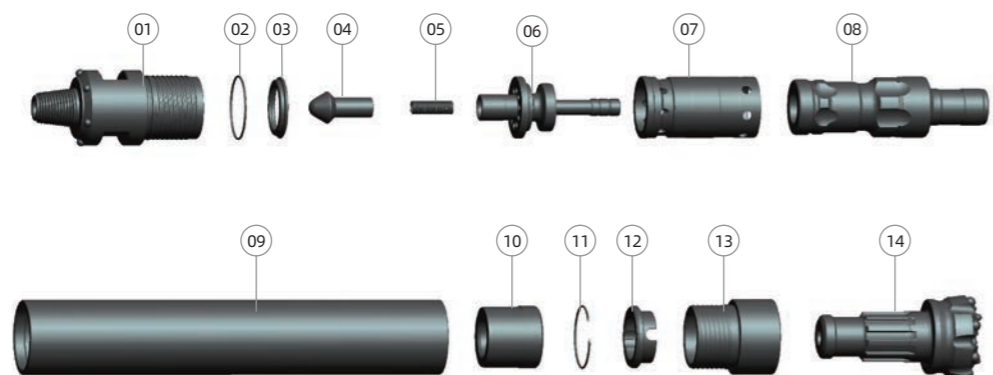
Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	接头 Top Sub	7.4 Kg	01-SP480-01	09	衬套 Guided Sleeve	1.5 Kg	01-SP480-09
02	O形圈 "O"Ring	0.01 Kg	01-SP480-02	10	挡圈 Check Ring	0.02 Kg	01-SP480-10
03	逆止阀 Check Valve	0.3 Kg	01-SP480-03	11	卡环 Retainer Ring	0.34 Kg	01-SP480-11
04	弹簧 Spring	0.04 Kg	01-SP480-04	12	卡钎套 Drive Chuck	3.1 Kg	01-SP480-12
05	配气座 Valve Seat	1 Kg	01-SP480-05	13	钻头 Drill Bit		01-SP480-13
06	内缸 Inner Cylinder	1.5 Kg	01-SP480-06				
07	活塞 Piston	8 Kg	01-SP480-07				
08	外缸 Piston Case	11.6 Kg	01-SP480-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
863mm	35Kg	φ 100mm	API2 3/8"REG	SP480	φ 108- φ 135mm
工作风压 Working Pressure		推荐转速 Recommended Rotation Speed		耗风量/Air Consumption	
1.0-1.9 Mpa		30-60 r/min		1.0Mpa	1.8Mpa
				5.5m³/min	9m³/min



## SP580

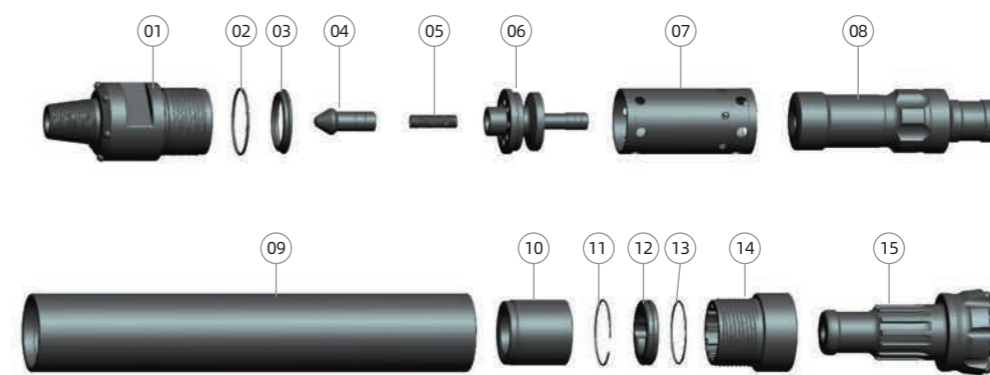


Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	接头 Top Sub	14.2 Kg	01-SP580-01	09	外缸 Piston Case	22.7 Kg	01-SP580-09
02	O形圈 "O"Ring	0.01 Kg	01-SP580-02	10	衬套 Guided Sleeve	3.1 Kg	01-SP580-10
03	碟簧 Disc Spring	0.2 Kg	01-SP580-03	11	挡圈 Check Rin	0.02 Kg	01-SP580-11
04	逆止阀 Check Valve	0.4 Kg	01-SP580-04	12	卡环 Retainer Ring	0.7 Kg	01-SP580-12
05	弹簧 Spring	0.02 Kg	01-SP580-05	13	卡钎套 Drive Chuck	5.7 Kg	01-SP580-13
06	配气座 Valve Seat	2.5 Kg	01-SP580-06	14	钻头 Drill Bit		01-SP580-14
07	内缸 Inner Cylinder	2.3 Kg	01-SP580-07				
08	活塞 Piston	12 Kg	01-SP580-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
970mm	64Kg	φ 126mm	API2 3/8"REG	SP580	φ 136- φ 155mm
适用气压 Work Pressure		推荐转速 Recommended Rotation Speed		耗风量/Air Consumption	
1.2-2.2 Mpa		30-60 r/min		1.0Mpa	1.8Mpa
				7.5m <sup>3</sup> /min	12m <sup>3</sup> /min

## SP680



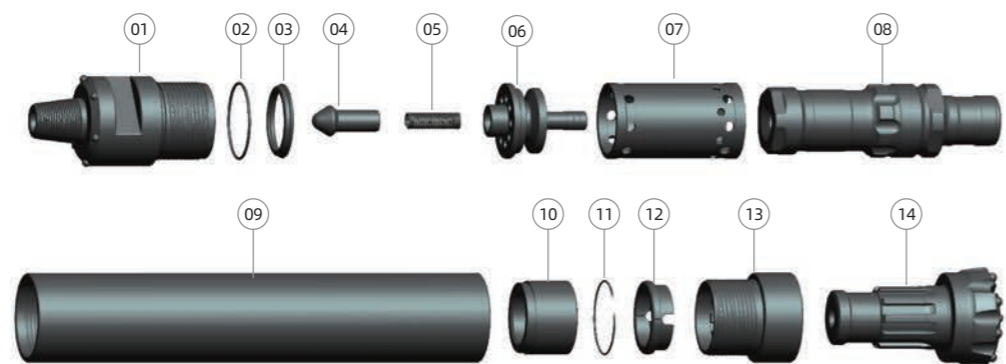
Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	接头 Top Sub	21.5 Kg	01-SP680-01	09	外缸 Piston Case	33 Kg	01-SP680-09
02	O形圈 "O"Ring	0.01 Kg	01-SP680-02	10	衬套 Guided Sleeve	5.5 Kg	01-SP680-10
03	碟簧 Disc Spring	0.34 Kg	01-SP680-03	11	挡圈 Check Ring	0.02 Kg	01-SP680-11
04	逆止阀 Check Valve	0.56 Kg	01-SP680-04	12	卡环 Retainer Ring	1 Kg	01-SP680-12
05	弹簧 Spring	0.05 Kg	01-SP680-05	13	O形圈 "O"Ring	0.01 Kg	01-SP680-13
06	配气座 Valve Seat	4.3 Kg	01-SP680-06	14	卡钎套 Drive Chuck	7 Kg	01-SP680-14
07	内缸 Inner Cylinder	4.2 Kg	01-SP680-07	15	钻头 Drill Bit		01-SP680-15
08	活塞 Piston	23 Kg	01-SP680-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1131mm	100.5Kg	φ 148mm	API3 1/2"REG	SP680	φ 158- φ 203mm
适用气压 Work Pressure		推荐转速 Recommended Rotation Speed		耗风量/Air Consumption	
1.2-2.7 Mpa		30-60 r/min		1.8Mpa	2.4Mpa
				16m <sup>3</sup> /min	23m <sup>3</sup> /min



## SP780

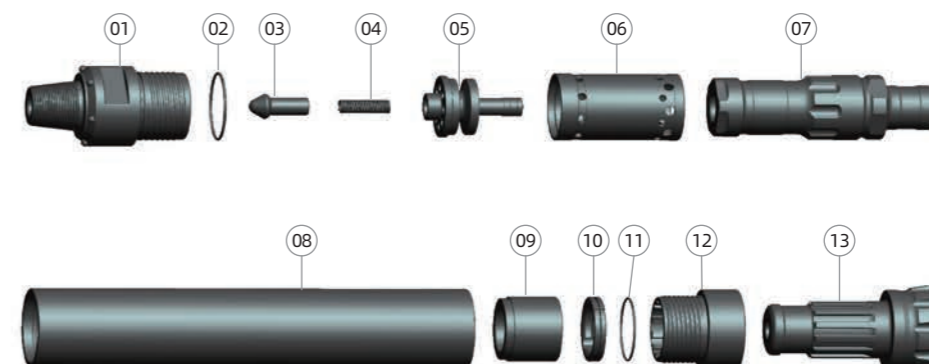


Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	接头 Top Sub	31.2 Kg	01-SP780-01	09	外缸 Piston Case	44.5 Kg	01-SP780-09
02	O形圈 "O"Ring	0.01 Kg	01-SP780-02	10	衬套 Guided Sleeve	5 Kg	01-SP780-10
03	碟簧 Disc Spring	0.5 Kg	01-SP780-03	11	挡圈 Check Rin	0.03 Kg	01-SP780-11
04	逆止阀 Check Valve	0.65 Kg	01-SP780-04	12	卡环 Retainer Ring	1.5 Kg	01-SP780-12
05	弹簧 Spring	0.09 Kg	01-SP780-05	13	卡钎套 Drive Chuck	10.5 Kg	01-SP780-13
06	配气座 Valve Seat	5.5 Kg	01-SP780-06	14	钻头 Drill Bit		01-SP780-14
07	内缸 Inner Cylinder	5.5 Kg	01-SP780-07				
08	活塞 Piston	34.5 Kg	01-SP780-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1195mm	140Kg	φ 165mm	API3 1/2"REG	SP780	φ 178- φ 216mm
适用气压 Work Pressure		推荐转速 Recommended Rotation Speed		耗风量/Air Consumption	
1.5-2.8 Mpa		30-60 r/min		1.8Mpa	2.4Mpa
				21m <sup>3</sup> /min	28m <sup>3</sup> /min

## SP882



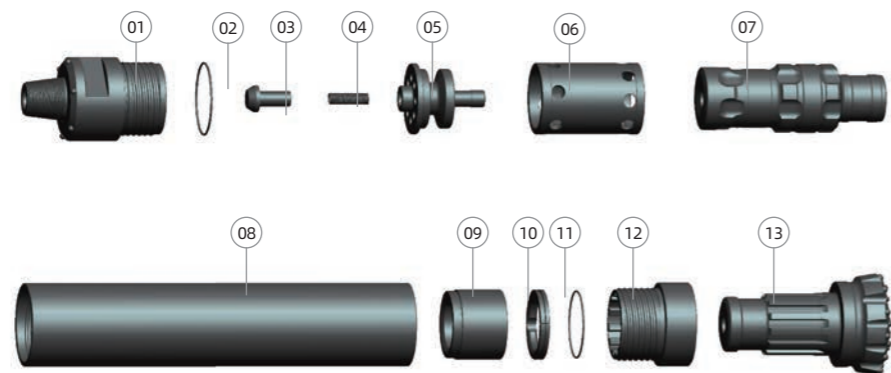
Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	接头 Top Sub	38.5 Kg	01-SP882-01	09	衬套 Guided Sleeve	6.8 Kg	01-SP882-09
02	O形圈 "O"Ring	0.02 Kg	01-SP882-02	10	卡环 Retainer Ring	1.3 Kg	01-SP882-10
03	逆止阀 Check Valve	0.65 Kg	01-SP882-03	11	O形圈 "O"Ring	0.01 Kg	01-SP882-11
04	弹簧 Spring	0.1 Kg	01-SP882-04	12	卡钎套 Drive Chuck	12.6 Kg	01-SP882-12
05	配气座 Valve Seat	6.2 Kg	01-SP882-05	13	钻头 Drill Bit		01-SP882-13
06	内缸 Inner Cylinder	7.4 Kg	01-SP882-06				
07	活塞 Piston	44.5 Kg	01-SP882-07				
08	外缸 Piston Case	63 Kg	01-SP882-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1264mm	181Kg	φ 185mm	API4 1/2"REG	SP882	φ 198- φ 254mm
适用气压 Work Pressure		推荐转速 Recommended Rotation Speed		耗风量/Air Consumption	
1.5-3.3 Mpa		30-60 r/min		1.8Mpa	2.4Mpa
				25m <sup>3</sup> /min	34m <sup>3</sup> /min



## SP1080

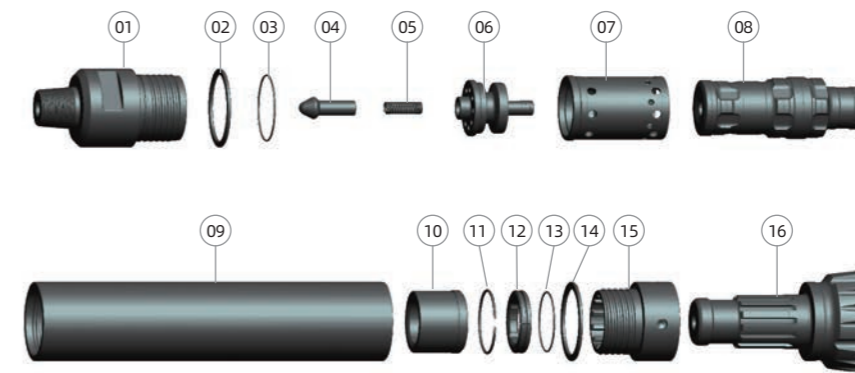


Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	接头 Top Sub	62 Kg	01-SP1080-01	09	衬套 Guided Sleeve	12.5 Kg	01-SP1080-09
02	O形圈 "O"Ring	0.02 Kg	01-SP1080-02	10	卡环 Retainer Ring	2 Kg	01-SP1080-10
03	逆止阀 Check Valve	1.5 Kg	01-SP1080-03	11	O形圈 "O"Ring	0.02 Kg	01-SP1080-11
04	弹簧 Spring	0.25 Kg	01-SP1080-04	12	卡钎套 Drive Chuck	19.8 Kg	01-SP1080-12
05	配气座 Valve Seat	13.5 Kg	01-SP1080-05	13	钻头 Drill Bit		01-SP1080-13
06	内缸 Inner Cylinder	13 Kg	01-SP1080-06				
07	活塞 Piston	71.5 Kg	01-SP1080-07				
08	外缸 Piston Case	92 Kg	01-SP1080-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1410mm	289Kg	φ 225mm	API 1/2"REG	SP1080	φ 254- φ 311mm
适用气压 Work Pressure		推荐转速 Recommended Rotation Speed		耗风量 / Air Consumption	
1.5-3.3 Mpa		25 ~ 50 r/min		1.8Mpa	2.4Mpa
				36m <sup>3</sup> /min	58m <sup>3</sup> /min

## SP1280



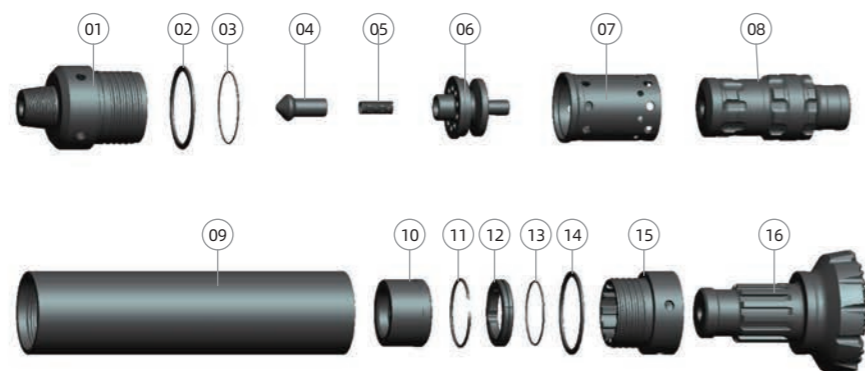
Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	接头 Top Sub	126 Kg	01-SP1280-01	09	外缸 Piston Case	185.4 Kg	01-SP1280-09
02	垫片 Adjuster Shim	1.2 Kg	01-SP1280-02	10	衬套 Guided Sleeve	19 Kg	01-SP1280-10
03	O形圈 "O"Ring	0.03 Kg	01-SP1280-03	11	挡圈 Check Ring	0.25 Kg	01-SP1280-11
04	逆止阀 Check Valve	1.5 Kg	01-SP1280-04	12	卡环 Retainer Ring	4.5 Kg	01-SP1280-12
05	弹簧 Spring	0.2 Kg	01-SP1280-05	13	O形圈 "O"Ring	0.03 Kg	01-SP1280-13
06	配气座 Valve Seat	18.5 Kg	01-SP1280-06	14	垫片 Adjuster Shim	1.2 Kg	01-SP1280-14
07	内缸 Inner Cylinder	22 Kg	01-SP1280-07	15	卡钎套 Drive Chuck	42.5 Kg	01-SP1280-15
08	活塞 Piston	107 Kg	01-SP1280-08	16	钻头 Drill Bit		01-SP1280-16

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1630mm	530Kg	φ 275mm	API 5/8"REG	SP1280	φ 295- φ 400mm
适用气压 Work Pressure		推荐转速 Recommended Rotation Speed		耗风量 / Air Consumption	
1.5-3.3 Mpa		30 ~ 55 r/min		1.8Mpa	2.4Mpa
				45m <sup>3</sup> /min	68m <sup>3</sup> /min



## SP1480

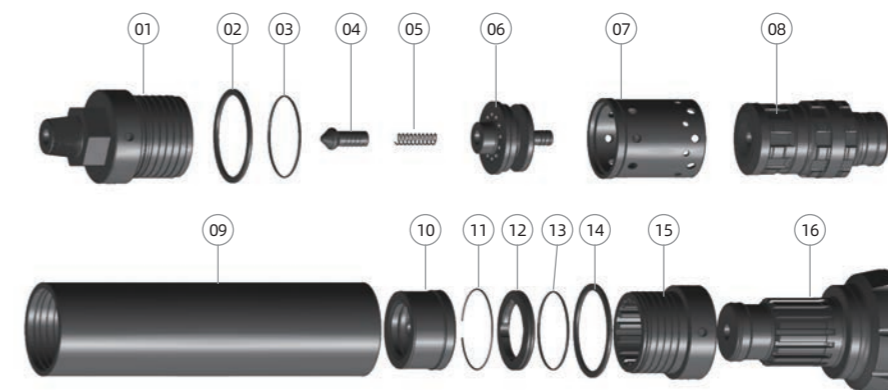


Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	接头 Top Sub	160 Kg	01-SP1480-01	09	外缸 Piston Case	292 Kg	01-SP1480-09
02	垫片 Adjuster Shim	1.5 Kg	01-SP1480-02	10	衬套 Guided Sleeve	31.5 Kg	01-SP1480-10
03	O形圈 "O"Ring	0.05 Kg	01-SP1480-03	11	挡圈 Check Ring	0.5 Kg	01-SP1480-11
04	逆止阀 Check Valve	3.4 Kg	01-SP1480-04	12	卡环 Retainer Ring	7.6 Kg	01-SP1480-12
05	弹簧 Spring	0.4 Kg	01-SP1480-05	13	O形圈 "O"Ring	0.03 Kg	01-SP1480-13
06	配气座 Valve Seat	31.5 Kg	01-SP1480-06	14	垫片 Adjuster Shim	1.5 Kg	01-SP1480-14
07	内缸 Inner Cylinder	28.7 Kg	01-SP1480-07	15	卡钎套 Drive Chuck	64 Kg	01-SP1480-15
08	活塞 Piston	173 Kg	01-SP1480-08	16	钻头 Drill Bit		01-SP1480-16

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1744mm	796Kg	φ 332mm	API7 5/8"REG	SP1480	φ 350- φ 550mm
适用气压 Work Pressure		推荐转速 Recommended Rotation Speed		耗风量/Air Consumption	
				1.8Mpa	2.4Mpa
1.5-3.3 Mpa		30 ~ 55 r/min		53m <sup>3</sup> /min	76m <sup>3</sup> /min

## SP1880



Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	接头 Top Sub	361.5Kg	01-SP1880-01	09	外缸 Piston Case	493 Kg	01-SP1880-09
02	垫片 Adjuster Shim	4 Kg	01-SP1880-02	10	衬套 Guided Sleeve	69 Kg	01-SP1880-10
03	O形圈 "O"Ring	0.1 Kg	01-SP1880-03	11	挡圈 Check Ring	1 Kg	01-SP1880-11
04	逆止阀 Check Valve	3.4 Kg	01-SP1880-04	12	卡环 Retainer Ring	14.8 Kg	01-SP1880-12
05	弹簧 Spring	0.4 Kg	01-SP1880-05	13	O形圈 "O"Ring	0.08 Kg	01-SP1880-13
06	配气座 Valve Seat	76 Kg	01-SP1880-06	14	垫片 Adjuster Shim	4 Kg	01-SP1880-14
07	内缸 Inner Cylinder	54.5 Kg	01-SP1880-07	15	卡钎套 Drive Chuck	134 Kg	01-SP1880-15
08	活塞 Piston	366 Kg	01-SP1880-08	16	钻头 Drill Bit		01-SP1880-16

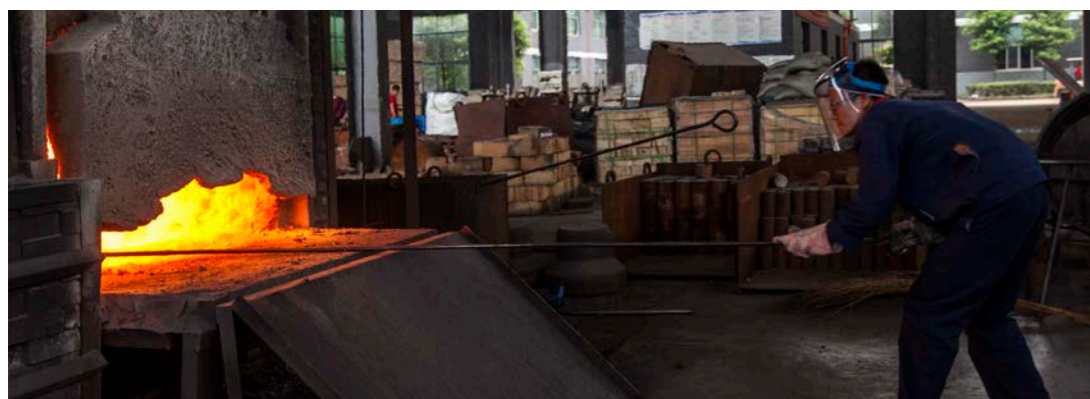
### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1957mm	1582Kg	φ 445mm	API8 5/8"REG	SP1880	φ 500- φ 680mm
适用气压 Work Pressure		推荐转速 Recommended Rotation Speed		耗风量/Air Consumption	
				1.8Mpa	2.4Mpa
1.5-3.3 Mpa		20-40 r/min		73m <sup>3</sup> /min	97m <sup>3</sup> /min



# ND/QL Valveless Series DTH Hammer

ND/QL 无尾管系列冲击器



搭配使用无尼龙管钻头的高风压潜孔冲击器由我司自主设计研发，是目前世界上最先进的冲击器之一。

This high air pressure DTH hammer work without footvalve is designed and developed by our own, which is the one of the most advanced DTH hammer in the world.

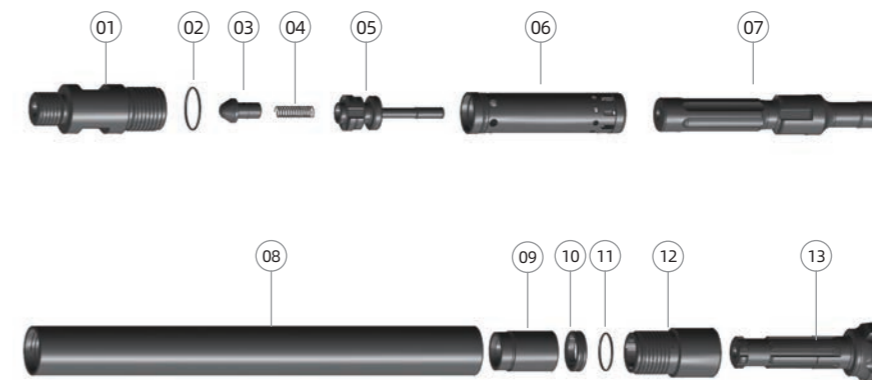
其主要特点如下:

- 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 冲击器能耗低，冲击频率高，钻进速度比同类型带尼龙管冲击器快15%-30%。
- ③ 所用部件少，结构简单。维修保养简单，费用低。
- ④ 内部零件均硬化处理。工作寿命长，故障少。
- ⑤ 接头和卡钎套采用螺纹与外缸联接，拆卸容易。

It has following advantages

- ① Avoid the problem happens on foot valve. Fracture, expansion and contraction.
- ② Lower air consumption and higher impact frequency. 15-30% higher drilling efficiency than the bit with foot valve.
- ③ Simpler structure and less spare parts, makes easier & cheaper maintenance.
- ④ Heat-hardened spare parts, makes longer serving life and less problem.
- ⑤ Thread connection for top sub and drive chuck, makes easier disassembly.

## ND25A



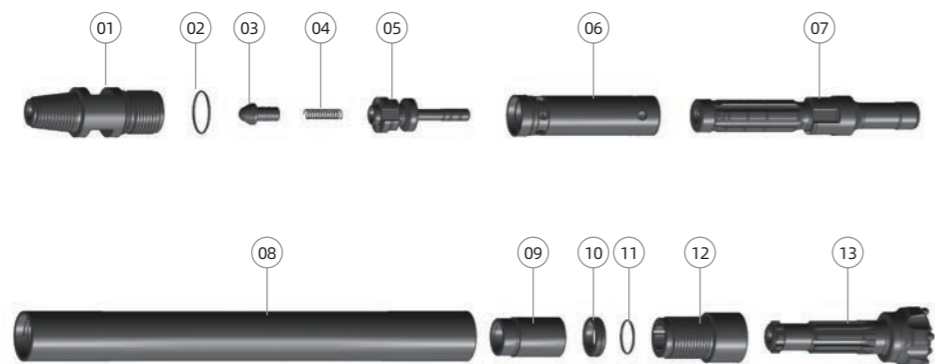
Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	接头 Top Sub	3.5 Kg	01-ND25A-01	09	衬套 Guided Sleeve	0.7 Kg	01-ND25A-09
02	O形圈 "O"Ring	0.01 Kg	01-ND25A-02	10	卡环 Retainer Ring	0.1 Kg	01-ND25A-10
03	逆止阀 Check Valve	0.13 Kg	01-ND25A-03	11	O形圈 "O"Ring	0.01 Kg	01-ND25A-11
04	弹簧 Spring	0.02 Kg	01-ND25A-04	12	卡钎套 Drive Chuck	1.5 Kg	01-ND25A-12
05	配气座 Valve Seat	0.56 Kg	01-ND25A-05	13	钻头 Drill Bit		01-ND25A-13
06	内缸 Inner Cylinder	1.1 Kg	01-ND25A-06				
07	活塞 Piston	3.8 Kg	01-ND25A-07				
08	外缸 Piston Case	4.5 Kg	01-ND25A-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
872mm	16Kg	φ 71mm	T48X10X1.5	ND25A	φ 76- φ 90mm
适用气压 Work Pressure		推荐转速 Recommended Rotation Speed		耗风量/Air Consumption	
1.0-1.7 Mpa		30-50 r/min		1.0Mpa	1.5Mpa
				3m <sup>3</sup> /min	4.5m <sup>3</sup> /min



## ND35A

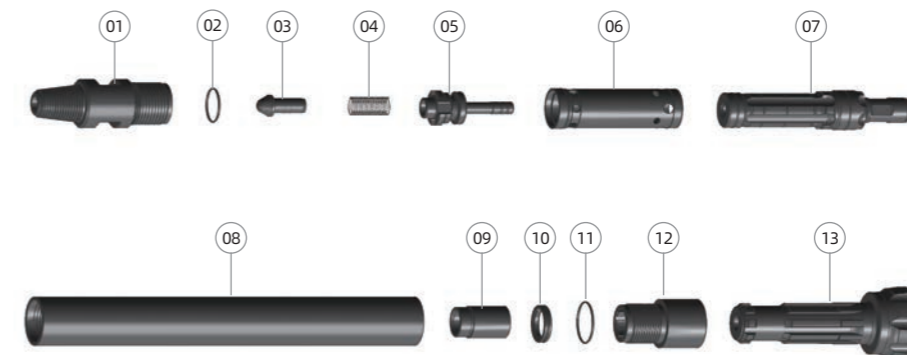


Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	接头 Top Sub	4.5 Kg	01-ND35A-01	09	衬套 Guided Sleeve	0.9 Kg	01-ND35A-09
02	O形圈 "O"Ring	0.01 Kg	01-ND35A-02	10	卡环 Retainer Ring	0.15 Kg	01-ND35A-10
03	逆止阀 Check Valve	0.13 Kg	01-ND35A-03	11	O形圈 "O"Ring	0.01 Kg	01-ND35A-11
04	弹簧 Spring	0.02 Kg	01-ND35A-04	12	卡钎套 Drive Chuck	1.9 Kg	01-ND35A-12
05	配气座 Valve Seat	0.76 Kg	01-ND35A-05	13	钻头 Drill Bit		01-ND35A-13
06	内缸 Inner Cylinder	1.45 Kg	01-ND35A-06				
07	活塞 Piston	4.8 Kg	01-ND35A-07				
08	外缸 Piston Case	9.5 Kg	01-ND35A-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
886mm	24.2Kg	φ 82mm	API2 3/8"REG	ND35A	φ 90- φ 115mm
适用气压 Work Pressure	推荐转速 Recommended Rotation Speed	耗风量/Air Consumption			
		1.0Mpa	1.5Mpa		
1.0-1.7 Mpa	30-50 r/min	4m <sup>3</sup> /min	6.5m <sup>3</sup> /min		

## ND45A



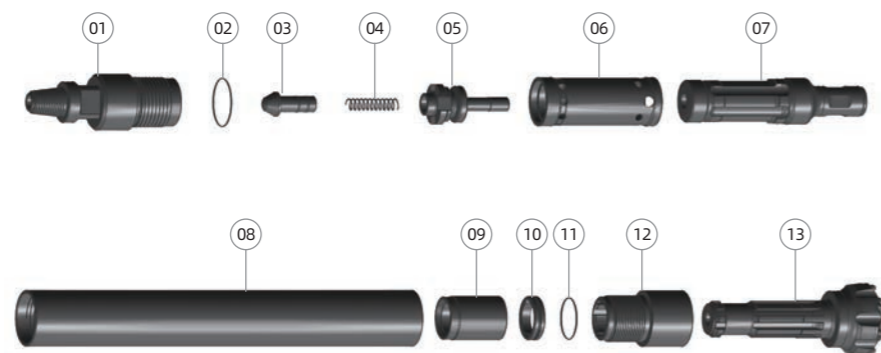
Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	接头 Top Sub	8.1 Kg	01-ND45A-01	09	衬套 Guided Sleeve	1 Kg	01-ND45A-09
02	O形圈 "O"Ring	0.01 Kg	01-ND45A-02	10	卡环 Retainer Ring	0.2 Kg	01-ND45A-10
03	逆止阀 Check Valve	0.3 Kg	01-ND45A-03	11	O形圈 "O"Ring	0.01 Kg	01-ND45A-11
04	弹簧 Spring	0.04 Kg	01-ND45A-04	12	卡钎套 Drive Chuck	3.6 Kg	01-ND45A-12
05	配气座 Valve Seat	1.5 Kg	01-ND45A-05	13	钻头 Drill Bit		01-ND45A-13
06	内缸 Inner Cylinder	2.1 Kg	01-ND45A-06				
07	活塞 Piston	8.4 Kg	01-ND45A-07				
08	外缸 Piston Case	15 Kg	01-ND45A-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
986mm	40.5Kg	φ 99mm	API2 3/8"REG	ND45A	φ 110- φ 135mm
适用气压 Work Pressure	推荐转速 Recommended Rotation Speed	耗风量/Air Consumption			
		1.0Mpa	1.8Mpa		
1.0-2.2 Mpa	30-60 r/min	5m <sup>3</sup> /min	9m <sup>3</sup> /min		



# ND55A

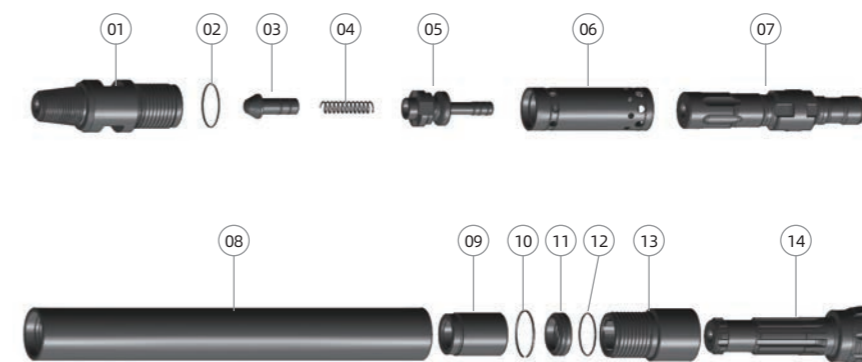


Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	接头 Top Sub	14 Kg	01-ND55A-01	09	衬套 Guided Sleeve	2.64 Kg	01-ND55A-09
02	O形圈 "O"Ring	0.01 Kg	01-ND55A-02	10	卡环 Retainer Ring	0.5 Kg	01-ND55A-10
03	逆止阀 Check Valve	0.6 Kg	01-ND55A-03	11	O形圈 "O"Ring	0.01 Kg	01-ND55A-11
04	弹簧 Spring	0.06 Kg	01-ND55A-04	12	卡钎套 Drive Chuck	7 Kg	01-ND55A-12
05	配气座 Valve Seat	2.15 Kg	01-ND55A-05	13	钻头 Drill Bit		01-ND55A-13
06	内缸 Inner Cylinder	3.3 Kg	01-ND55A-06				
07	活塞 Piston	15.5 Kg	01-ND55A-07				
08	外缸 Piston Case	24.2 Kg	01-ND55A-08				

## 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1122mm	70Kg	φ 126mm	API2 3/8"REG	ND55A	φ 136- φ 155mm
适用气压 Work Pressure		推荐转速 Recommended Rotation Speed		耗风量/Air Consumption	
1.0-2.5 Mpa		30-60 r/min		1.0Mpa	1.5Mpa
				7m <sup>3</sup> /min	13m <sup>3</sup> /min

# ND55S



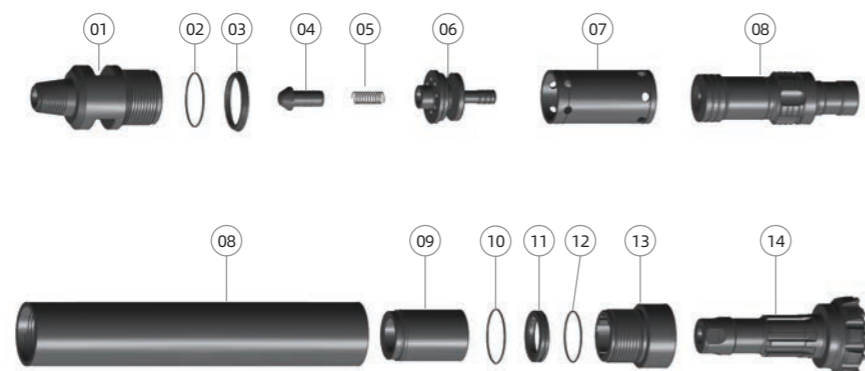
Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	接头 Top Sub	13.5 Kg	01-ND55S-01	09	衬套 Guided Sleeve	2.3 Kg	01-ND55S-09
02	O形圈 "O"Ring	0.01 Kg	01-ND55S-02	10	挡圈 Check Ring	0.02 Kg	01-ND55S-10
03	逆止阀 Check Valve	0.6 Kg	01-ND55S-03	11	卡环 Retainer Ring	0.5 Kg	01-ND55S-11
04	弹簧 Spring	0.06 Kg	01-ND55S-04	12	O形圈 "O"Ring	0.01 Kg	01-ND55S-12
05	配气座 Valve Seat	1.85 Kg	01-ND55S-05	13	卡钎套 Drive Chuck	5.8 Kg	01-ND55S-13
06	内缸 Inner Cylinder	3.1 Kg	01-ND55S-06	14	钻头 Drill Bit		01-ND55S-13
07	活塞 Piston	11.8 Kg	01-ND55S-07				
08	外缸 Piston Case	22.5 Kg	01-ND55S-08				

## 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1119mm	62Kg	φ 117mm	API3 1/2"REG	ND55S	φ 127- φ 145mm
适用气压 Work Pressure		推荐转速 Recommended Rotation Speed		耗风量/Air Consumption	
1.0-2.5 Mpa		30-60 r/min		1.0Mpa	1.5Mpa
				6m <sup>3</sup> /min	12m <sup>3</sup> /min

## ND65A

(SP681)



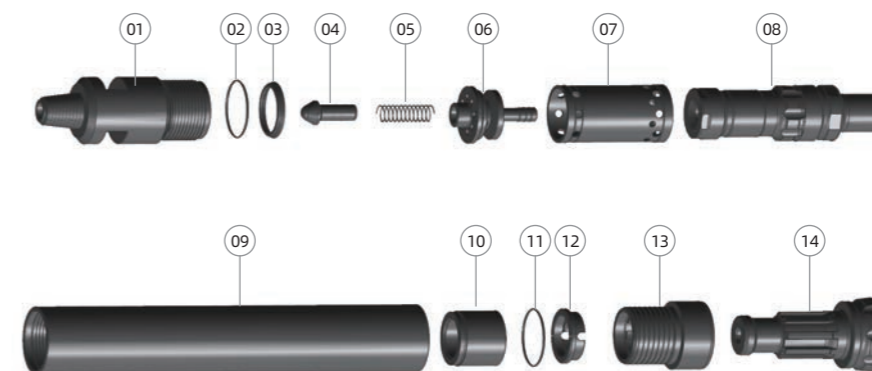
Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	接头 Top Sub	21.5 Kg	01-SP681-01	09	外缸 Piston Case	36.5 kg	01-SP681-09
02	O形圈 "O"Ring	0.01 Kg	01-SP681-02	10	衬套 Guided Sleeve	6.3 kg	01-SP681-10
03	碟簧 Disc Spring	0.34 Kg	01-SP681-03	11	挡圈 Check Ring	0.02 kg	01-SP681-11
04	逆止阀 Check Valve	0.56 Kg	01-SP681-04	12	卡环 Retainer Ring	1 kg	01-SP681-12
05	弹簧 Spring	0.05 Kg	01-SP681-05	13	O形圈 "O"Ring	0.01 Kg	01-SP681-13
06	配气座 Valve Seat	4.3 Kg	01-SP681-06	14	卡钎套 Drive Chuck	8.2 kg	01-SP681-14
07	内缸 Inner Cylinder	4.2 Kg	01-SP681-07	15	钻头 Drill Bit		01-SP681-15
08	活塞 Piston	23 Kg	01-SP681-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1210mm	106Kg	φ 148mm	API3 1/2"REG	ND65A	φ 158- φ 203mm
适用气压 Work Pressure		推荐转速 Recommended Rotation Speed		耗风量/Air Consumption	
1.2-2.5 Mpa		30-60 r/min		1.8Mpa	2.4Mpa
				16m <sup>3</sup> /min	23m <sup>3</sup> /min

## ND75A

(SP781)



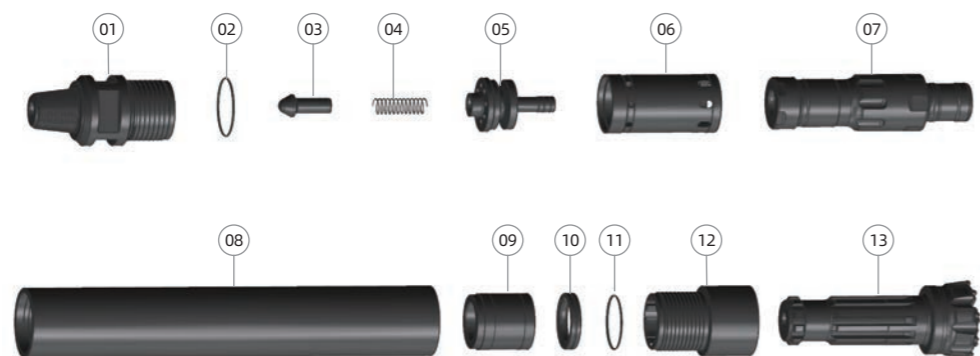
Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	接头 Top Sub	31.2 Kg	01-SP781-01	09	外缸 Piston Case	47 kg	01-SP781-09
02	O形圈 "O"Ring	0.01 Kg	01-SP781-02	10	衬套 Guided Sleeve	5.65 kg	01-SP781-10
03	碟簧 Disc Spring	0.5 Kg	01-SP781-03	11	挡圈 Check Ring	0.02 kg	01-SP781-11
04	逆止阀 Check Valve	0.65 Kg	01-SP781-04	12	卡环 Retainer Ring	1.3 kg	01-SP781-12
05	弹簧 Spring	0.09 Kg	01-SP781-05	13	卡钎套 Drive Chuck	11.5 kg	01-SP781-13
06	配气座 Valve Seat	5.5 Kg	01-SP781-06	14	钻头 Drill Bit		01-SP781-14
07	内缸 Inner Cylinder	5.5 Kg	01-SP781-07				
08	活塞 Piston	34.5 Kg	01-SP781-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1225mm	143.5Kg	φ 165mm	API3 1/2"REG	ND75A	φ 178- φ 216mm
适用气压 Work Pressure		推荐转速 Recommended Rotation Speed		耗风量/Air Consumption	
1.5-2.8 Mpa		30-60 r/min		1.8Mpa	2.4Mpa
				21m <sup>3</sup> /min	28m <sup>3</sup> /min



## ND85A (SP880)

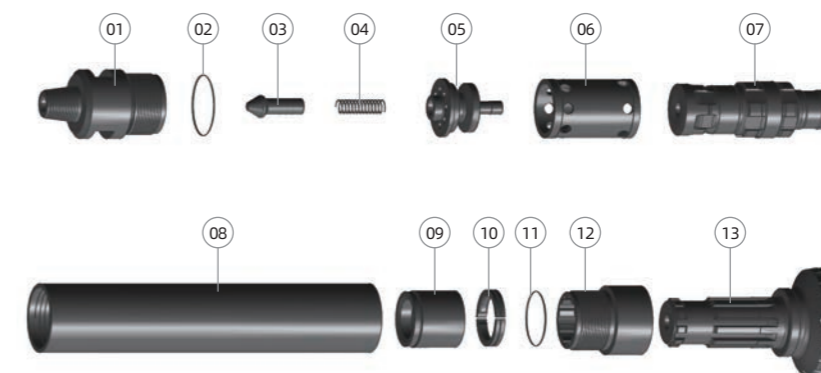


Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	接头 Top Sub	38.5 Kg	01-SP880-01	09	衬套 Guided Sleeve	6.1 kg	01-SP880-09
02	O形圈 "O"Ring	0.02 Kg	01-SP880-02	10	卡环 Retainer Ring	1.2 kg	01-SP880-10
03	逆止阀 Check Valve	0.65 Kg	01-SP880-03	11	O形圈 "O"Ring	0.01 Kg	01-SP880-11
04	弹簧 Spring	0.1 Kg	01-SP880-04	12	卡钎套 Drive Chuck	19.3 kg	01-SP880-12
05	配气座 Valve Seat	6.2 Kg	01-SP880-05	13	钻头 Drill Bit		01-SP880-13
06	内缸 Inner Cylinder	7.4 Kg	01-SP880-06				
07	活塞 Piston	44.5 Kg	01-SP880-07				
08	外缸 Piston Case	69.5 Kg	01-SP880-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1354mm	193Kg	φ 185mm	API4 1/2"REG	ND85A	φ 198- φ 254mm
适用气压 Work Pressure		推荐转速 Recommended Rotation Speed		耗风量/Air Consumption	
1.5-3.3 Mpa		30-60 r/min		1.8Mpa	2.4Mpa
				25m <sup>3</sup> /min	34m <sup>3</sup> /min

## N100A (SP1081)

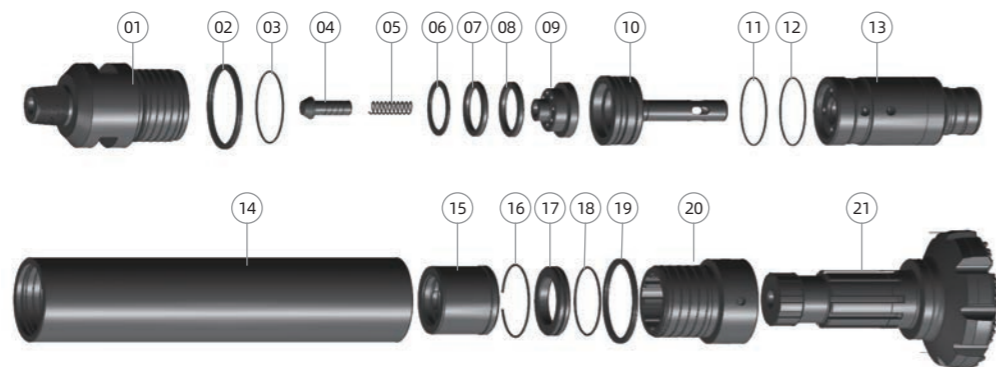


Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	接头 Top Sub	62 Kg	01-SP1081-01	09	衬套 Guided Sleeve	11.5 kg	01-SP1081-09
02	O形圈 "O"Ring	0.02 Kg	01-SP1081-02	10	卡环 Retainer Ring	2.2 kg	01-SP1081-10
03	逆止阀 Check Valve	1.5 Kg	01-SP1081-03	11	O形圈 "O"Ring	0.02 Kg	01-SP1081-11
04	弹簧 Spring	0.20 Kg	01-SP1081-04	12	卡钎套 Drive Chuck	26 kg	01-SP1081-12
05	配气座 Valve Seat	13.5 Kg	01-SP1081-05	13	钻头 Drill Bit		01-SP1081-13
06	内缸 Inner Cylinder	13 Kg	01-SP1081-06				
07	活塞 Piston	71.5 Kg	01-SP1081-07				
08	外缸 Piston Case	98 Kg	01-SP1081-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1475mm	299.5Kg	φ 225mm	API5 1/2"REG	NUMA100A	φ 254- φ 311mm
适用气压 Work Pressure		推荐转速 Recommended Rotation Speed		耗风量/Air Consumption	
1.5-3.3 Mpa		25~50 r/min		1.8Mpa	2.4Mpa
				36m <sup>3</sup> /min	58m <sup>3</sup> /min

# N125A

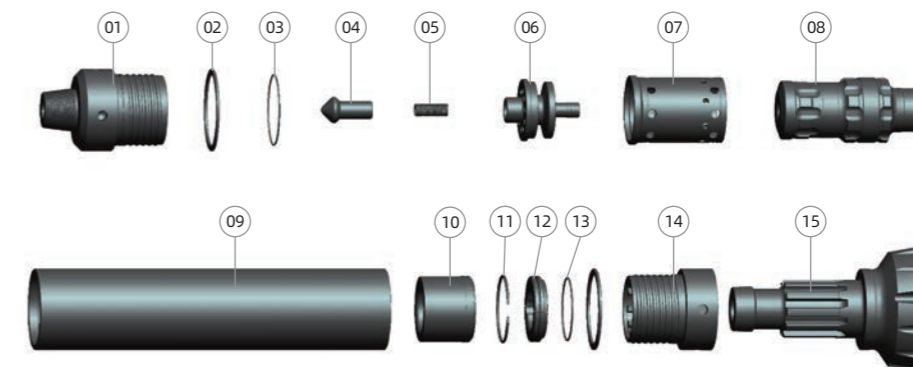


Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	接头 Top Sub	163.5 Kg	01-N125A-01	12	O形圈 "O"Ring	0.03 Kg	01-N125A-12
02	垫圈 Washer	1.5 Kg	01-N125A-02	13	活塞 Piston	137.7Kg	01-N125A-13
03	O形圈 "O"Ring	0.03 Kg	01-N125A-03	14	外缸 Piston Case	247.5Kg	01-N125A-14
04	逆止阀 Check Valve	1.5 Kg	01-N125A-04	15	衬套 Guided Sleeve	29.7 Kg	01-N125A-15
05	弹簧 Spring	0.2 Kg	01-N125A-05	16	挡圈 Check Ring	0.2 Kg	01-N125A-16
06	垫片 Adjuster Shim	0.7 Kg	01-N125A-06	17	卡环 Retainer Ring	7 Kg	01-N125A-17
07	橡胶垫 Rubber Buffer	0.3 Kg	01-N125A-07	18	O形圈 "O"Ring	0.3 Kg	01-N125A-18
08	橡胶垫 Rubber Buffer	0.3 Kg	01-N125A-08	19	垫圈 Washer	1.5 Kg	01-N125A-19
09	配气座 Valve Seat	11.8 Kg	01-N125A-09	20	卡钎套 Drive Chuck	67.2 Kg	01-N125A-20
10	配气杆 Rigid Valve	27.4 Kg	01-N125A-10	21	钻头 Drill Bit		01-N125A-21
11	O形圈 "O"Ring	0.03 Kg	01-N125A-11				

## 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1785mm	698.5Kg	φ 305mm	API6 5/8"REG	NUMA125A	φ 330- φ 400mm
适用气压 Work Pressure		推荐转速 Recommended Rotation Speed		耗风量/Air Consumption	
1.5-3.3 Mpa		25 ~ 45 r/min		1.8Mpa	2.4Mpa
1.5-3.3 Mpa		25 ~ 45 r/min		46m <sup>3</sup> /min	58m <sup>3</sup> /min

# ND140A (SP330)



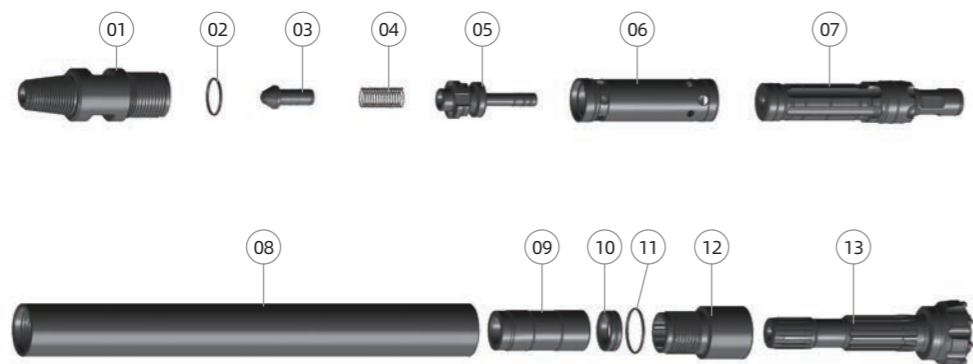
Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	接头 Top Sub	160 Kg	01-SP330-01	09	外缸 Piston Case	317 Kg	01-SP330-09
02	垫片 Adjuster Shim	1.5 Kg	01-SP330-02	10	衬套 Guided Sleeve	43.5 Kg	01-SP330-10
03	O形圈 "O"Ring	0.05 Kg	01-SP330-03	11	挡圈 Check Ring	0.5 Kg	01-SP330-11
04	逆止阀 Check Valve	3.4 Kg	01-SP330-04	12	卡环 Retainer Ring	12.4 Kg	01-SP330-12
05	弹簧 Spring	0.4 Kg	01-SP330-05	13	O形圈 "O"Ring	0.03 Kg	01-SP330-13
06	配气座 Valve Seat	31.5 Kg	01-SP330-06	14	垫片 Adjuster Shim	1.9 Kg	01-SP330-14
07	内缸 Inner Cylinder	28.7 Kg	01-SP330-07	15	卡钎套 Drive Chuck	77.4 Kg	01-SP330-15
08	活塞 Piston	173 Kg	01-SP330-08	16	钻头 Drill Bit		01-SP330-16

## 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1861mm	851Kg	φ 332mm	API7 5/8"REG	SP330	φ 350- φ 550mm
适用气压 Work Pressure		推荐转速 Recommended Rotation Speed		耗风量/Air Consumption	
1.5-3.3 Mpa		25 ~ 45 r/min		1.8Mpa	2.4Mpa
1.5-3.3 Mpa		25 ~ 45 r/min		53m <sup>3</sup> /min	76m <sup>3</sup> /min



## QL40A

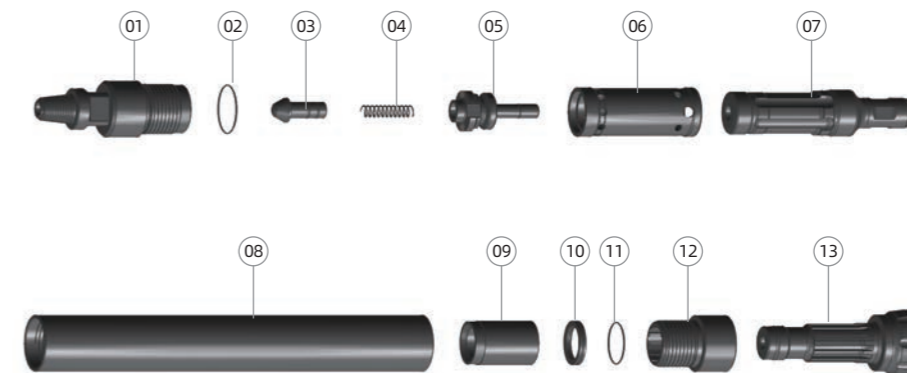


Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	接头 Top Sub	8.1 Kg	01-QL40A-01	09	衬套 Guided Sleeve	2.3 Kg	01-QL40A-09
02	O形圈 "O"Ring	0.01 Kg	01-QL40A-02	10	卡环 Retainer Ring	0.27 Kg	01-QL40A-10
03	逆止阀 Check Valve	0.3 Kg	01-QL40A-03	11	O形圈 "O"Ring	0.01 Kg	01-QL40A-11
04	弹簧 Spring	0.04 Kg	01-QL40A-04	12	卡钎套 Driver Chuck	3.3 Kg	01-QL40A-12
05	配气座 Valve Seat	1.5 Kg	01-ND45A-05	13	钻头 Drill Bit		01-QL40A-13
06	内缸 Inner Cylinder	2.1 Kg	01-QL40A-06				
07	活塞 Piston	8.4 Kg	01-QL40A-07				
08	外缸 Piston Case	16.4 Kg	01-QL40A-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1057mm	42.7Kg	φ 99mm	API2 3/8"REG	QL40A	φ 110- φ 135mm
适用气压 Work Pressure	推荐转速 Recommended Rotation Speed	耗风量/Air Consumption			
		1.0Mpa	1.8Mpa		
1.0-2.2 Mpa	30-60 r/min	5m <sup>3</sup> /min	9m <sup>3</sup> /min		

## QL50A

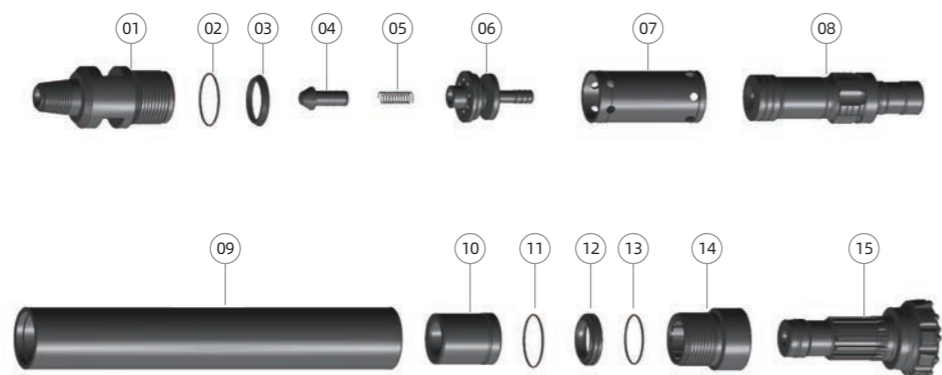


Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	接头 Top Sub	14 Kg	01-QL50A-01	09	衬套 Guided Sleeve	2.75 Kg	01-QL50A-09
02	O形圈 "O"Ring	0.01 Kg	01-QL50A-02	10	卡环 Retainer Ring	0.45 Kg	01-QL50A-10
03	逆止阀 Check Valve	0.6 Kg	01-QL50A-03	11	O形圈 "O"Ring	0.01 Kg	01-QL50A-11
04	弹簧 Spring	0.06 Kg	01-QL50A-04	12	卡钎套 Drive Chuck	5.4 Kg	01-QL50A-12
05	配气座 Valve Seat	2.15 Kg	01-QL50A-05	13	钻头 Drill Bit		01-QL50A-13
06	内缸 Inner Cylinder	3.3 Kg	01-QL50A-06				
07	活塞 Piston	15.5 Kg	01-QL50A-07				
08	外缸 Piston Case	24.2 Kg	01-QL50A-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 External Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1102mm	68.5Kg	φ 126mm	API2 3/8"REG	QL50A	φ 136- φ 155mm
适用气压 Work Pressure	推荐转速 Recommended Rotation Speed	耗风量/Air Consumption			
		1.0Mpa	1.8Mpa		
1.0-2.5 Mpa	30-60 r/min	7m <sup>3</sup> /min	13m <sup>3</sup> /min		

## QL680

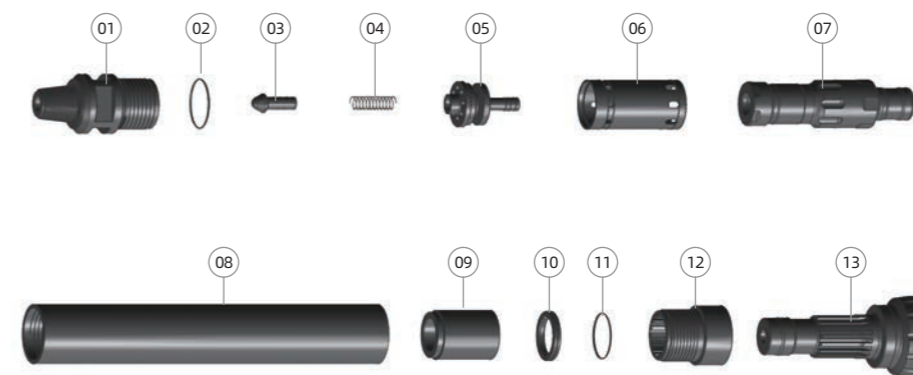


Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	接头 Top Sub	21.5 Kg	01-QL680-01	09	外缸 Piston Case	34.3 Kg	01-QL680-09
02	O形圈 "O"Ring	0.01 Kg	01-QL680-02	10	衬套 Guided Sleeve	5.4 Kg	01-QL680-10
03	碟簧 Disc Spring	0.34 Kg	01-QL680-03	11	挡圈 Check Ring	0.02 Kg	01-QL680-11
04	逆止阀 Check Valve	0.56 Kg	01-QL680-04	12	卡环 Retainer Ring	0.92 Kg	01-QL680-12
05	弹簧 Spring	0.05 Kg	01-QL680-05	13	O形圈 "O"Ring	0.01 Kg	01-QL680-13
06	配气座 Valve Seat	4.3 Kg	01-QL680-06	14	卡钎套 Drive Chuck	7.5 Kg	01-QL680-14
07	内缸 Inner Cylinder	4.2 Kg	01-QL680-07	15	钻头 Drill Bit		01-QL680-15
08	活塞 Piston	23 Kg	01-QL680-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 External Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1155mm	102Kg	φ 148mm	API3 1/2"REG	QL60A	φ 158- φ 203mm
适用气压 Work Pressure		推荐转速 Recommended Rotation Speed		耗风量/Air Consumption	
1.2-2.7 Mpa		30 ~ 60 r/min		1.8Mpa	2.4Mpa
				16m <sup>3</sup> /min	23m <sup>3</sup> /min

## QL880



Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	接头 Top Sub	38.5 Kg	01-QL880-01	09	衬套 Guided Sleeve	10.5 kg	01-QL880-09
02	O形圈 "O"Ring	0.02 Kg	01-QL880-02	10	卡环 Retainer Ring	1.2 kg	01-QL880-10
03	逆止阀 Check Valve	0.65 Kg	01-QL880-03	11	O形圈 "O"Ring	0.01 Kg	01-QL880-11
04	弹簧 Spring	0.1 Kg	01-QL880-04	12	卡钎套 Drive Chuck	14.5 kg	01-QL880-12
05	配气座 Valve Seat	6.2 Kg	01-QL880-05	13	钻头 Drill Bit		01-QL880-13
06	内缸 Inner Cylinder	7.4 Kg	01-QL880-06				
07	活塞 Piston	44.5 Kg	01-QL880-07				
08	外缸 Piston Case	64.5 Kg	01-QL880-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 External Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1335mm	188Kg	φ 185mm	API4 1/2"REG	QL80A	φ 198- φ 254mm
适用气压 Work Pressure		推荐转速 Recommended Rotation Speed		耗风量/Air Consumption	
1.5-3.3 Mpa		30 ~ 60 r/min		2.4Mpa	
				25m <sup>3</sup> /min	34m <sup>3</sup> /min



# ND/QL Series DTH Hammer with Foot Valve

## ND/QL 有尾管系列冲击器

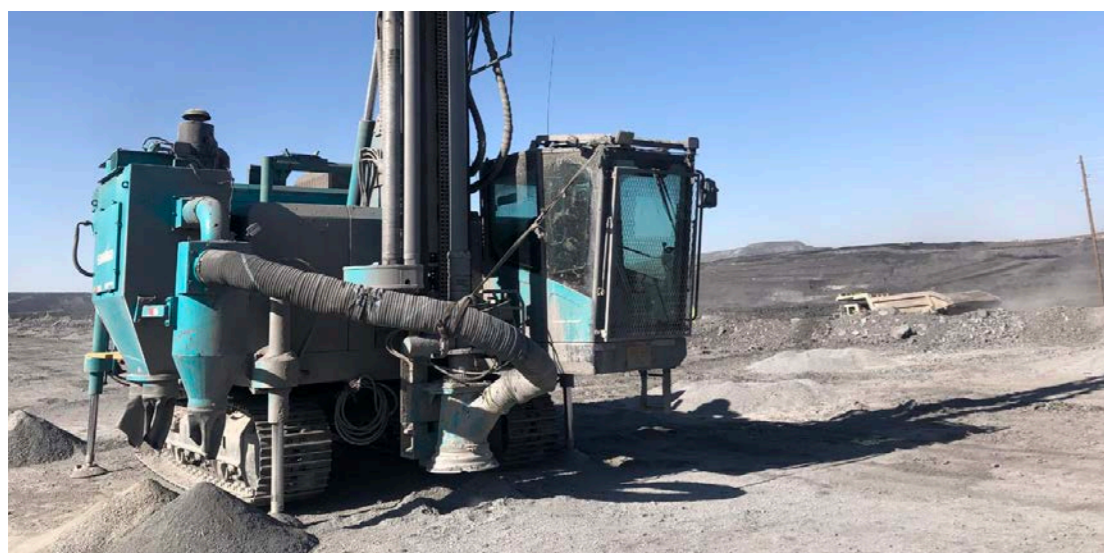
装配带尼龙管钻头的高风压潜孔冲击器是我公司自行设计的无阀高压冲击器  
 This high air pressure DTH hammer working with footvalve

其主要特点如下:

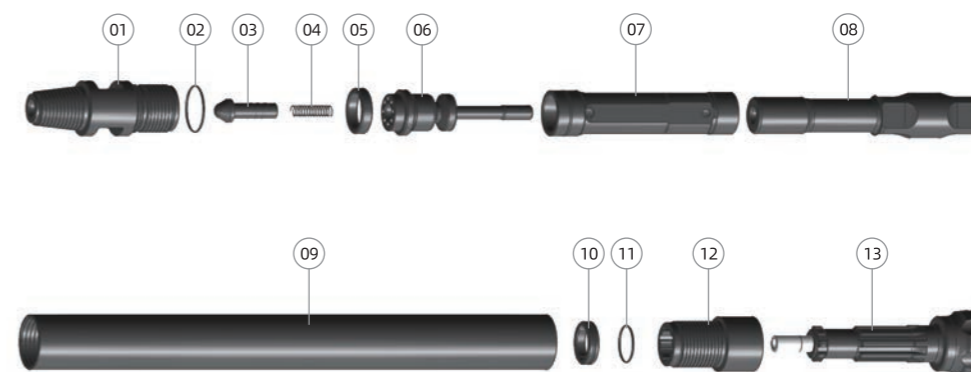
- ① 活塞构造简单, 不易损坏。
- ② 能量传递理想, 钻进速度快, 耗气量小, 油耗低。
- ③ 所用部件少, 结构简单, 加上各部件均硬化处理, 因此, 工作寿命长, 故障少, 维修方便。
- ④ 接头和卡钎套采用螺纹与外缸联接, 拆卸容易。

The main features are as following:

- ① Simple design of the piston.long life span.
- ② More efficient energy transfer,faster drilling speed,lower air consumption and lower oil consumption.
- ③ Fewer intenal parts,simple structure,long life span,less failure and easier to maintain because all the parts are heat trated.
- ④ Easy to disassemble because the top sub,the drive chuck and the extemal cyinder are connected by mupltiple steps thread.



## DHD3.5

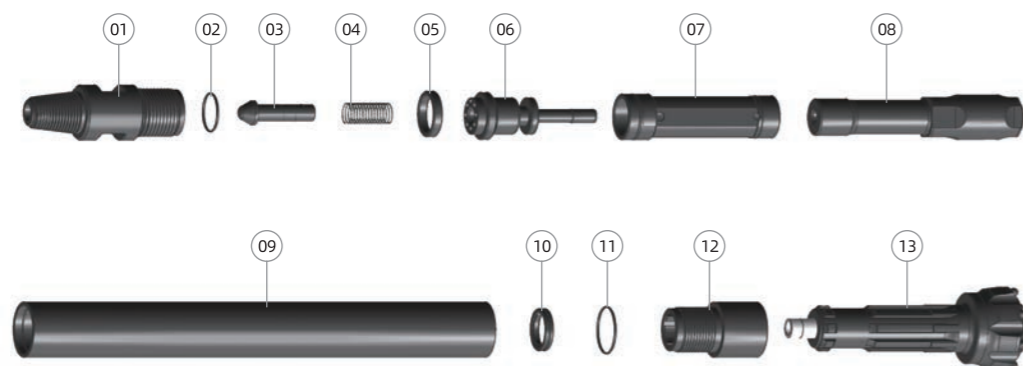


Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	接头 Top Sub	4.4 Kg	01-DHD3.5-01	09	外缸 Piston Case	9.5 Kg	01-DHD3.5-09
02	O形圈 "O"Ring	0.01 Kg	01-DHD3.5-02	10	卡环 Retainer Ring	0.1 Kg	01-DHD3.5-10
03	逆止阀 Check Valve	0.2 Kg	01-DHD3.5-03	11	O形圈 O Ring of Top Sub	0.01 Kg	01-DHD3.5-11
04	弹簧 Spring	0.02 Kg	01-DHD3.5-04	12	卡钎套 Drive Chuckk	2.1 Kg	01-DHD3.5-12
05	橡胶垫 Rubber Buffer	0.02 Kg	01-DHD3.5-05	13	钻头 Drill Bit		01-DHD3.5-13
06	配气座 Valve Seatt	1.4 Kg	01-DHD3.5-06				
07	内缸 Inner Cylinder	1.7 Kg	01-DHD3.5-07				
08	活塞 Piston	5.6 Kg	01-DHD3.5-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
928mm	25Kg	φ 82mm	API2 3/8"REG	DHD3.5	φ 90- φ 110mm
工作风压 working pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
1.0-1.7 Mpa		30-60 r/min		1.0Mpa	1.5Mpa
				4.5m³/min	8.5m³/min

## DHD340

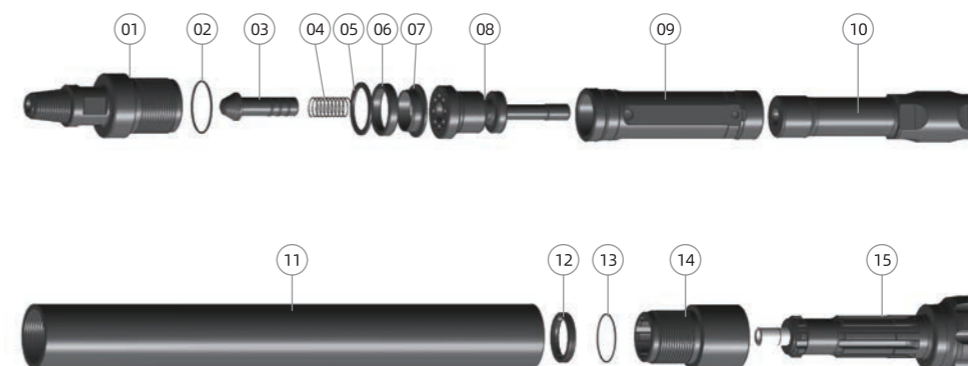


Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	接头 Top Sub	8.8 Kg	01-DHD340-01	09	外缸 Piston Case	15.9 Kg	01-DHD340-09
02	O形圈 "O"Ring	0.01 Kg	01-DHD340-02	10	卡环 Retainer Ring	0.2 Kg	01-DHD340-10
03	逆止阀 Check Valve	0.46 Kg	01-DHD340-03	11	O形圈 "O"Ring	0.01 Kg	01-DHD340-11
04	弹簧 Spring	0.04 Kg	01-DHD340-04	12	卡钎套 Drive Chuckk	3.7 Kg	01-DHD340-12
05	橡胶垫 Rubber Buffer	0.2 Kg	01-DHD340-05	13	钻头 Drill Bit		01-DHD340-13
06	配气座 Valve Seat	2.1 Kg	01-DHD340-06				
07	内缸 Inner Cylinder	2.45 Kg	01-DHD340-07				
08	活塞 Piston	9 Kg	01-DHD340-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1032mm	43Kg	φ 99mm	API2 3/8"REG	DHD340	φ 110- φ 135mm
适用气压 Work Pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
1.0-2.2 Mpa		30-60 r/min		1.0Mpa	1.8Mpa
1.0-2.2 Mpa		30-60 r/min		5.5m <sup>3</sup> /min	10m <sup>3</sup> /min

## DHD350



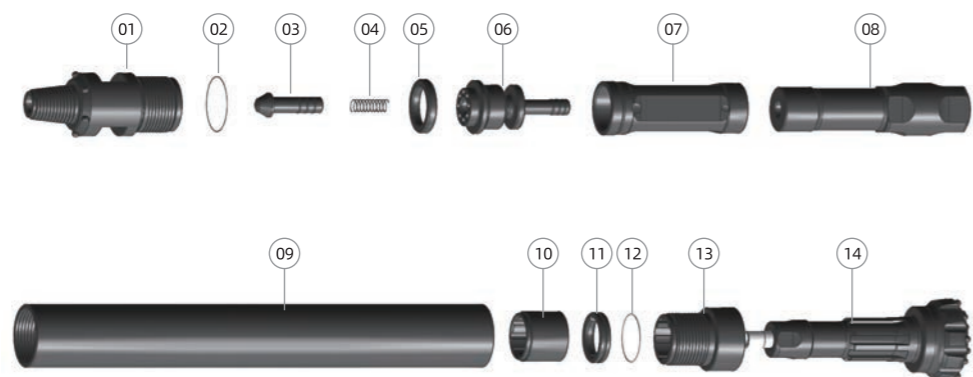
Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	接头 Top Sub	14.7 Kg	01-DHD350-01	09	内缸 Inner Cylinde	4.9 Kg	01-DHD350-09
02	O形圈 "O"Ring	0.02 Kg	01-DHD350-02	10	活塞 Piston	15.5 Kg	01-DHD350-10
03	逆止阀 Check Valve	1 Kg	01-DHD350-03	11	外缸 Piston Case	30.3 Kg	01-DHD350-11
04	弹簧 Spring	0.06 Kg	01-DHD350-04	12	卡环 Retainer Ring	0.3 Kg	01-DHD350-12
05	调整圈 Adjuster Ring	0.1 Kg	01-DHD350-05	13	O形圈 "O"Ring	0.01 Kg	01-DHD350-13
06	橡胶垫 Rubber Buffer	0.06 Kg	01-DHD350-06	14	卡钎套 Drive Chuckk	7.1 Kg	01-DHD350-14
07	垫座 Ring Lock	0.2 Kg	01-DHD350-07	15	钻头 Drill Bit		01-DHD350-15
08	配气座 Valve Seat	4.2 Kg	01-DHD350-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1209mm	78.5Kg	φ 125mm	API2 3/8"REG	DHD350	φ 135- φ 155mm
适用气压 Work Pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
1.0-2.5 Mpa		30-60 r/min		1.0Mpa	1.8Mpa
1.0-2.5 Mpa		30-60 r/min		9m <sup>3</sup> /min	15m <sup>3</sup> /min



## DHD360

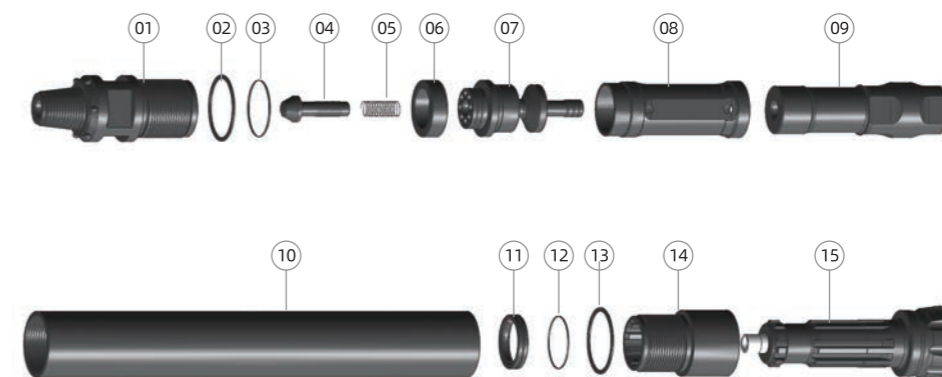


Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	接头 Top Sub	20.3 Kg	01-ND45A-01	09	外缸 Piston Case	37.2 Kg	01-DHD360-09
02	O形圈 "O"Ring	0.02 Kg	01-ND45A-02	10	衬套 Guided Sleeve	2.5 Kg	01-DHD360-10
03	逆止阀 Check Valve	0.8 Kg	01-ND45A-03	11	卡环 Retainer Ring	0.6 Kg	01-DHD360-11
04	弹簧 Spring	0.05 Kg	01-ND45A-04	12	O形圈 "O"Ring	0.02 Kg	01-DHD360-12
05	橡胶垫 Rubber Buffer	0.3 Kg	01-ND45A-05	13	卡钎套 Drive Chuckk	6 Kg	01-DHD360-13
06	内缸 Inner Cylinder	5 Kg	01-ND45A-06	14	钻头 Drill Bit		01-DHD360-14
07	活塞 Piston	4 Kg	01-ND45A-07				
08	外缸 Piston Case	23.5 Kg	01-ND45A-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1063mm	100.5Kg	φ 142mm	API3 1/2"REG	DHD360	φ 150- φ 190mm
适用气压 Work Pressure	推荐转速 Recommended rotation speed	耗风量/Air Consumption			
		1.0Mpa	1.8Mpa		
1.0-2.5 Mpa	30-60 r/min	20m <sup>3</sup> /min	28m <sup>3</sup> /min		

## DHD380

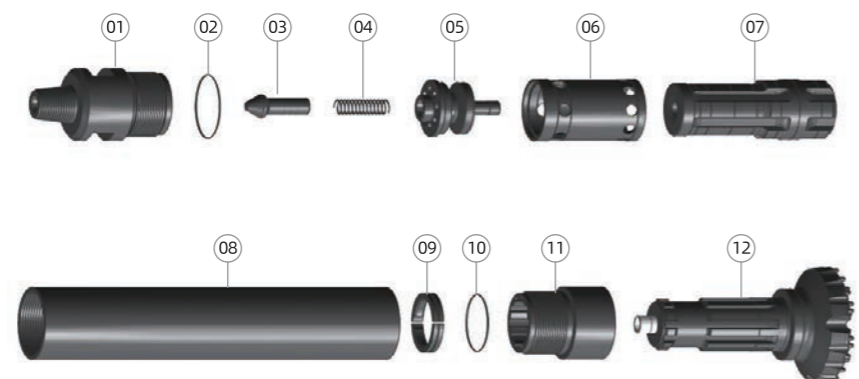


Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	接头 Top Sub	42 Kg	01-DHD380-01	09	活塞 Piston	41.5 Kg	01-DHD380-09
02	垫片 Adjuster Shim	0.2 Kg	01-DHD380-02	10	外缸 Piston Case	62.5 Kg	01-DHD380-10
03	O形圈 "O"Ring	0.02 Kg	01-DHD380-03	11	卡环 Retainer Ring	1.2 Kg	01-DHD380-11
04	逆止阀 Check Valve	1.3 Kg	01-DHD380-04	12	O形圈 "O"Ring	0.02 Kg	01-DHD380-12
05	弹簧 Spring	0.09 Kg	01-DHD380-05	13	垫片 Adjuster Shim	0.2 Kg	01-DHD380-13
06	橡胶垫 Rubber Buffer	0.4 Kg	01-DHD380-06	14	卡钎套 Drive Chuckk	18.2 Kg	01-DHD380-14
07	配气座 Valve Seat	13 Kg	01-DHD380-07	15	钻头 Drill Bit		01-DHD380-15
08	内缸 Inner Cylinder	9.1 Kg	01-DHD380-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1492mm	190Kg	φ 180mm	API4 1/2"REG	DHD380	φ 195- φ 254mm
适用气压 Work Pressure	推荐转速 Recommended rotation speed	耗风量/Air Consumption			
		1.8Mpa	2.4Mpa		
1.5-3.3 Mpa	30-60 r/min	26m <sup>3</sup> /min	34m <sup>3</sup> /min		

## NUMA100

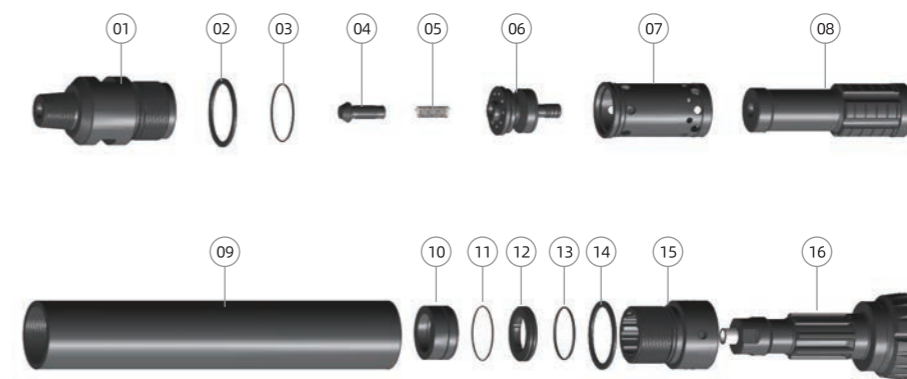


Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	接头 Top Sub	60 kg	01-NUMA100-01	09	卡环 Retainer Ring	2.2 kg	01-NUMA100-09
02	O形圈 "O"Ring	0.03 kg	01-NUMA100-02	10	O形圈 "O"Ring	0.02 kg	01-NUMA100-10
03	逆止阀 Check Valve	1.5 kg	01-NUMA100-03	11	卡钎套 Drive Chuckk	27 kg	01-NUMA100-11
04	弹簧 Spring	0.2 kg	01-NUMA100-04	12	钻头 Drill Bit		01-NUMA100-12
05	配气座 Valve Seatt	12.8 kg	01-NUMA100-05				
06	内缸 Inner Cylinder	13.5 kg	01-NUMA100-06				
07	活塞 Piston	71 kg	01-NUMA100-07				
08	外缸 Piston Case	94.5 kg	01-NUMA100-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1432mm	283Kg	φ 225mm	API5 1/2"REG	NUMA100	φ 254- φ 311mm
适用气压 Work Pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
1.5-3.3 Mpa		25 ~ 50 r/min		1.8Mpa	2.4Mpa
1.5-3.3 Mpa		25 ~ 50 r/min		40m <sup>3</sup> /min	60m <sup>3</sup> /min

## DHD1120



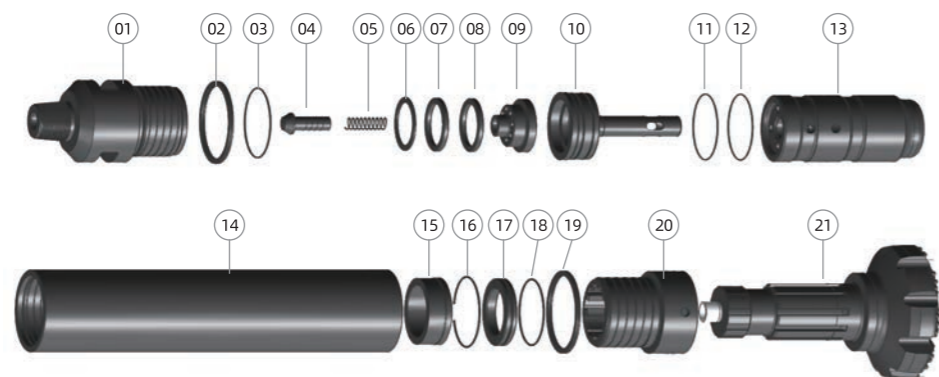
Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	接头 Top Sub	134 kg	01-DHD1120-01	09	外缸 Piston Case	220 Kg	01-DHD1120-09
02	垫片 Adjuster Shim	0.8 kg	01-DHD1120-02	10	衬套 Guided Sleeve	12 Kg	01-DHD1120-10
03	O形圈 "O"Ring	0.04 kg	01-DHD1120-03	11	挡圈 Check Ring	0.25 Kg	01-DHD1120-11
04	逆止阀 Check Valve	1.5 kg	01-DHD1120-04	12	卡环 Retainer Ring	5.2 Kg	01-DHD1120-12
05	弹簧 Spring	0.2 kg	01-DHD1120-05	13	O形圈 "O"Ring	0.04 Kg	01-DHD1120-13
06	配气座 Valve Seatt	21 kg	01-DHD1120-06	14	垫片 Adjuster Shim	1.2 Kg	01-DHD1120-14
07	内缸 Inner Cylinder	29 kg	01-DHD1120-07	15	卡钎套 Drive Chuckk	53.5 Kg	01-DHD1120-15
08	活塞 Piston	119 kg	01-DHD1120-08	16	钻头 Drill Bit		01-DHD1120-16

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1845mm	598Kg	φ 275mm	API6 5/8"REG	DHD1120	φ 295- φ 400mm
适用气压 Work Pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
1.5-3.3 Mpa		25 ~ 50 r/min		1.8Mpa	2.4Mpa
1.5-3.3 Mpa		25 ~ 50 r/min		50m <sup>3</sup> /min	70m <sup>3</sup> /min



# N125

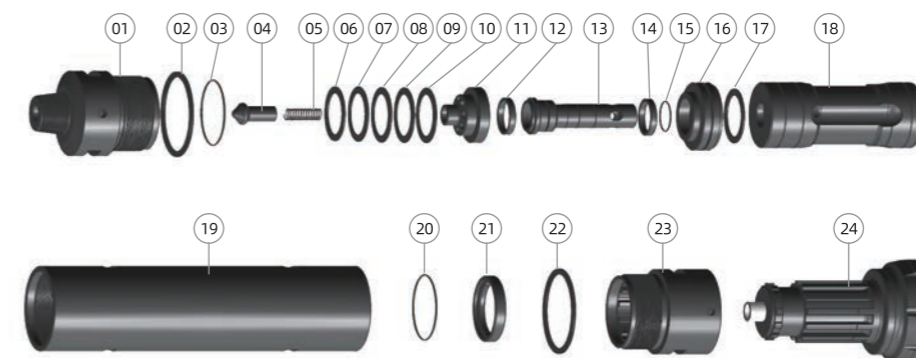


Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	接头 Top Sub	163.5 Kg	01-N125-01	12	O形圈 "O"Ring	0.03 Kg	01-N125-12
02	垫圈 Adjuster Shim	1.5 Kg	01-N125-02	13	活塞 Piston	154 Kg	01-N125-13
03	O形圈 "O"Ring	0.03 Kg	01-N125-03	14	外缸 Piston Case	246.5Kg	01-N125-14
04	逆止阀 Check Valve	1.5 Kg	01-N125-04	15	衬套 Guided Sleeve	12.7 Kg	01-N125-15
05	弹簧 Spring	0.2 Kg	01-N125-05	16	挡圈 Check Ring	0.2 Kg	01-N125-16
06	垫片 Adjuster Shim	0.7 Kg	01-N125-06	17	卡环 Retainer Ring	7 Kg	01-N125-17
07	橡胶垫 Rubber Buffer	0.3 Kg	01-N125-07	18	O形圈 "O"Ring	0.3 Kg	01-N125-18
08	橡胶垫 Rubber Buffer	0.3 Kg	01-N125-08	19	垫圈 Adjuster Shim	1.5 Kg	01-N125-19
09	配气座 Valve Seatt	11.8 Kg	01-N125-09	20	卡钎套 Driver Chuck	68.5 Kg	01-N125-20
10	配气杆 Rigid Valve	27.4 Kg	01-N125-10	21	钻头 Drill Bit		01-N125-21
11	O形圈 "O"Ring	0.03 Kg	01-N125-11				

## 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1785mm	698Kg	φ 305mm	API6 5/8"REG	NUMA125	φ 330- φ 400mm
适用气压 Work Pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
1.5-3.3 Mpa		25 ~ 45 r/min		1.8Mpa	2.4Mpa
1.5-3.3 Mpa		25 ~ 45 r/min		46m <sup>3</sup> /min	58m <sup>3</sup> /min

# YC410

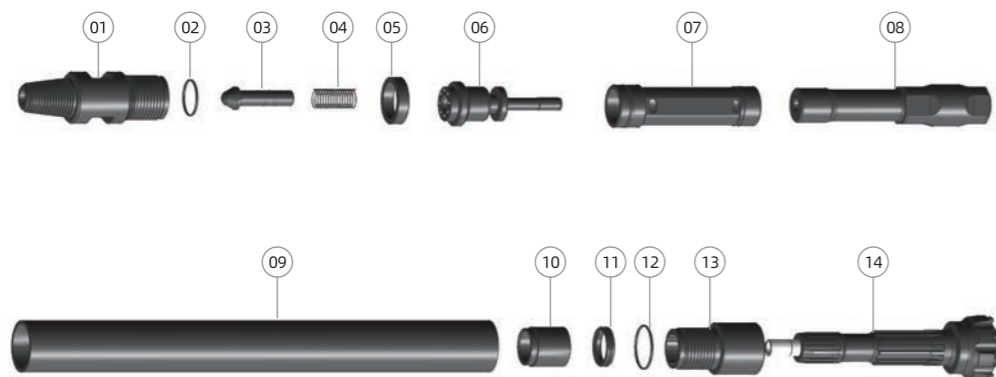


Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	接头 Top Sub	274 Kg	01-YC410-01	13	配气杆 Rigid Valve	0.3 Kg	01-YC410-13
02	垫片 Adjuster Shim	2.9 Kg	01-YC410-02	14	橡胶垫 Rubber Buffer	0.3 Kg	01-YC410-14
03	O形圈 "O"Ring	0.03 Kg	01-YC410-03	15	O形圈 "O"Ring	0.03 Kg	01-YC410-15
04	逆止阀 Check Valve	3.4 Kg	01-YC410-04	16	杆座 Pole seat	50 Kg	01-YC410-16
05	弹簧 Spring	0.3 Kg	01-YC410-05	17	O形圈 "O"Ring	0.03 Kg	01-YC410-17
06	调整圈 Adjuster Ring	1.5 Kg	01-YC410-06	18	活塞 Piston	347 Kg	01-YC410-18
07	碟簧 Disc Spring	1.35 Kg	01-YC410-07	19	外缸 Piston Case	562 Kg	01-YC410-19
08	碟簧 Disc Sping	1.35 Kg	01-YC410-08	20	挡圈 Check Ring	0.3 Kg	01-YC410-20
09	碟簧 Disc Sping	1.35 Kg	01-YC410-09	21	卡环 Retainer Ring	10 Kg	01-YC410-21
10	碟簧 Disc Sping	1.35 Kg	01-YC410-10	22	垫片 Adjuster Shim	2.9 Kg	01-YC410-22
11	配气座 Valve Seat	26.4 Kg	01-YC410-11	23	卡钎套 Driver Chuck	155 Kg	01-YC410-23
12	橡胶垫 Rubber Buffer	0.3 Kg	01-YC410-12	24	钻头 Drill Bit		01-YC410-24

## 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
2162mm	1464Kg	φ 406mm	API8 5/8"REG	Numa180	φ 450- φ 600mm
适用气压 Work Pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
1.5-3.5 Mpa		20~40 r/min		1.8Mpa	2.4Mpa
1.5-3.5 Mpa		20~40 r/min		63m <sup>3</sup> /min	85m <sup>3</sup> /min

## QL40

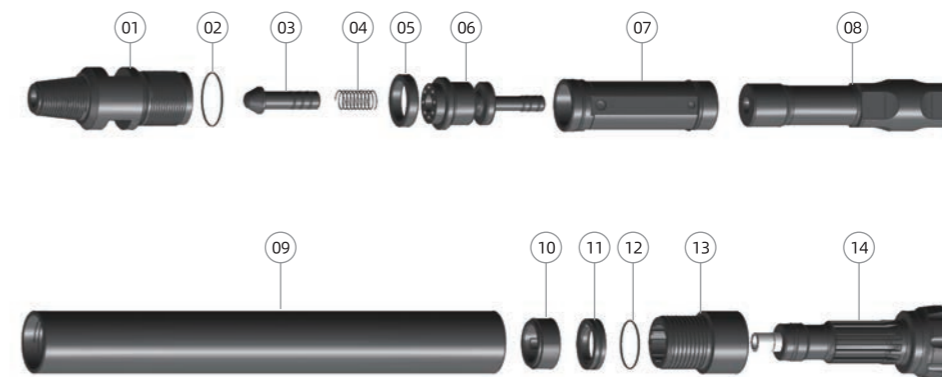


Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	接头 Top Sub	8.8 Kg	01-QL40-01	09	外缸 Piston Case	16.5 Kg	01-QL40-09
02	O形圈 "O"Ring	0.01 Kg	01-QL40-02	10	衬套 Guided Sleeve	0.9 Kg	01-QL40-10
03	逆止阀 Check Valve	0.46 Kg	01-QL40-03	11	卡环 Retainer Ring	0.2 Kg	01-QL40-11
04	弹簧 Spring	0.04 Kg	01-QL40-04	12	O形圈 "O"Ring	0.01 Kg	01-QL40-12
05	橡胶垫 Rubber Buffer	0.2 Kg	01-QL40-05	13	卡钎套 Drive Chuck	3.3 Kg	01-QL40-13
06	配气座 Valve Seat	2.1 Kg	01-QL40-06	14	钻头 Drill Bit		01-QL40-14
07	内缸 Inner Cylinder	2.45 Kg	01-QL40-07				
08	活塞 Piston	8.8 Kg	01-QL40-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1102mm	43.7Kg	φ 99mm	API2 3/8"REG	QL40	φ 110- φ 135mm
适用气压 Work Pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
1.0-2.2 Mpa		30-60 r/min		1.0Mpa	1.8Mpa
				5.5m <sup>3</sup> /min	10m <sup>3</sup> /min

## QL50



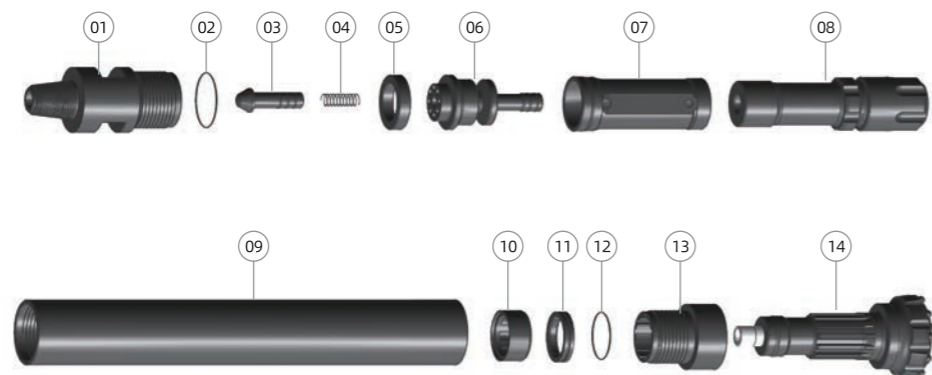
Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	接头 Top Sub	14.7 Kg	01-QL50-01	09	外缸 Piston Case	24.7 Kg	01-QL50-09
02	O形圈 "O"Ring	0.02 Kg	01-QL50-02	10	衬套 Guided Sleeve	1 Kg	01-QL50-10
03	逆止阀 Check Valve	1 Kg	01-QL50-03	11	卡环 Retainer Ring	0.6 Kg	01-QL50-11
04	弹簧 Spring	0.06 Kg	01-QL50-04	12	O形圈 "O"Ring	0.01 Kg	01-QL50-12
05	橡胶垫 Rubber Buffer	0.2 Kg	01-QL50-05	13	卡钎套 Drive Chuck	5.6 Kg	01-QL50-13
06	配气座 Valve Seat	4.1 Kg	01-QL50-06	14	钻头 Drill Bit		01-QL50-14
07	内缸 Inner Cylinder	4.4 Kg	01-QL50-07				
08	活塞 Piston	17 Kg	01-QL50-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1154mm	73.5Kg	φ 126mm	API2 3/8"REG	QL50	φ 135- φ 155mm
适用气压 Work Pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
1.0-2.5 Mpa		30-60 r/min		1.0Mpa	1.8Mpa
				9m <sup>3</sup> /min	15m <sup>3</sup> /min



## QL60

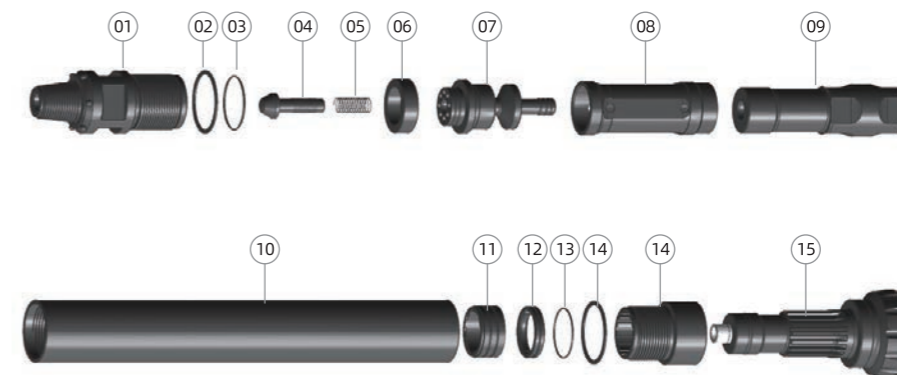


Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	接头 Top Sub	23 Kg	01-QL60-01	09	外缸 Piston Case	39 Kg	01-QL60-09
02	O形圈 "O"Ring	0.02 Kg	01-QL60-02	10	衬套 Guided Sleeve	1.1 Kg	01-QL60-10
03	逆止阀 Check Valve	0.08 Kg	01-QL60-03	11	卡环 Retainer Ring	0.6 Kg	01-QL60-11
04	弹簧 Spring	0.05 Kg	01-QL60-04	12	O形圈 "O"Ring	0.02 Kg	01-QL60-12
05	橡胶垫 Rubber Buffer	0.3 Kg	01-QL60-05	13	卡钎套 Drive Chuckk	6.3 Kg	01-QL60-13
06	配气座 Valve Seat	6.2 Kg	01-QL60-06	14	钻头 Drill Bit		01-QL60-14
07	内缸 Inner Cylinder	5 Kg	01-QL60-07				
08	活塞 Piston	23.5 Kg	01-QL60-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1211mm	105Kg	φ 148mm	API3 1/2"REG	QL60	φ 158- φ 190mm
适用气压 Work Pressure	1.0-2.5 Mpa	推荐转速 Recommended rotation speed	30-60 r/min	耗风量/Air Consumption	
				1.0Mpa	1.8Mpa
				20m <sup>3</sup> /min	28m <sup>3</sup> /min

## QL80



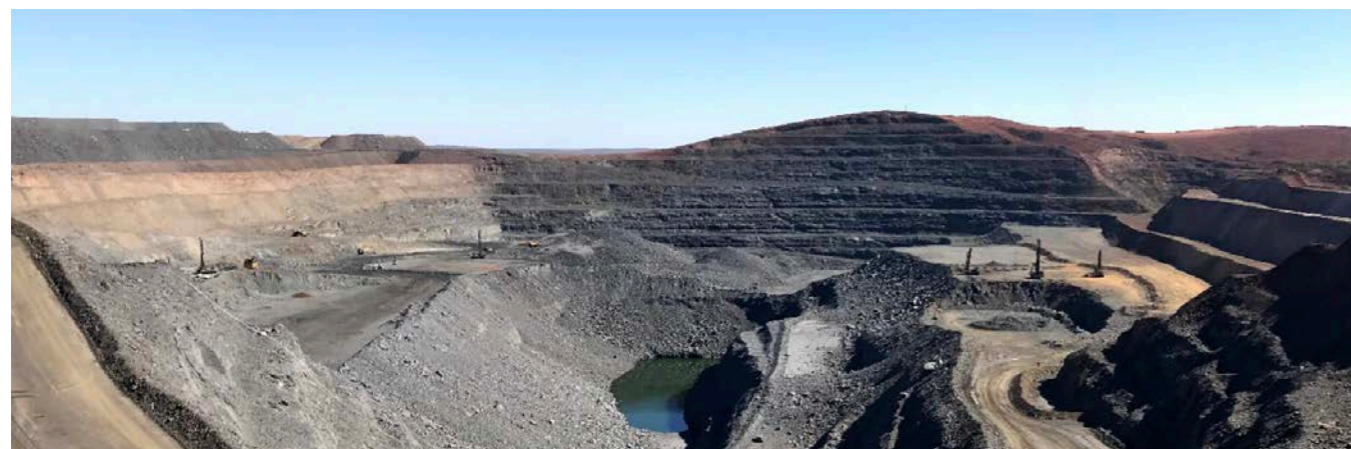
Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	接头 Top Sub	42 Kg	01-QL80-01	09	活塞 Piston	41 Kg	01-QL80-09
02	垫片 Adjuster Shim	0.2 Kg	01-QL80-02	10	外缸 Piston Case	64 Kg	01-QL80-10
03	O形圈 "O"Ring	0.02 Kg	01-QL80-03	11	衬套 Guided Sleeve	2.9 Kg	01-QL80-11
04	逆止阀 Check Valve	1.3 Kg	01-QL80-04	12	卡环 Retainer Ring	1.2 Kg	01-QL80-12
05	弹簧 Spring	0.1 Kg	01-QL80-05	13	O形圈 "O"Ring	0.02 Kg	01-QL80-13
06	橡胶垫 Rubber Buffer	0.4 Kg	01-QL80-06	14	垫片 Adjuster Shim	0.2 Kg	01-QL80-14
07	配气座 Valve Seat	12.7 Kg	01-QL80-07	15	卡钎套 Drive Chuckk	12 Kg	01-QL80-15
08	内缸 Inner Cylinder	9.1 Kg	01-QL80-08	16	钻头 Drill Bit		01-QL80-16

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1471mm	187Kg	φ 180mm	API4 1/2"REG	QL80	φ 195- φ 254mm
适用气压 Work Pressure	1.5-3.3 Mpa	推荐转速 Recommended rotation speed	30-60 r/min	耗风量/Air Consumption	
				1.8Mpa	2.4Mpa
				26m <sup>3</sup> /min	34m <sup>3</sup> /min

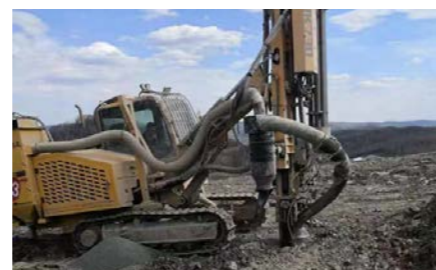
# MISSION / SD Shank DTH Hammer

Mission/SD series 系列

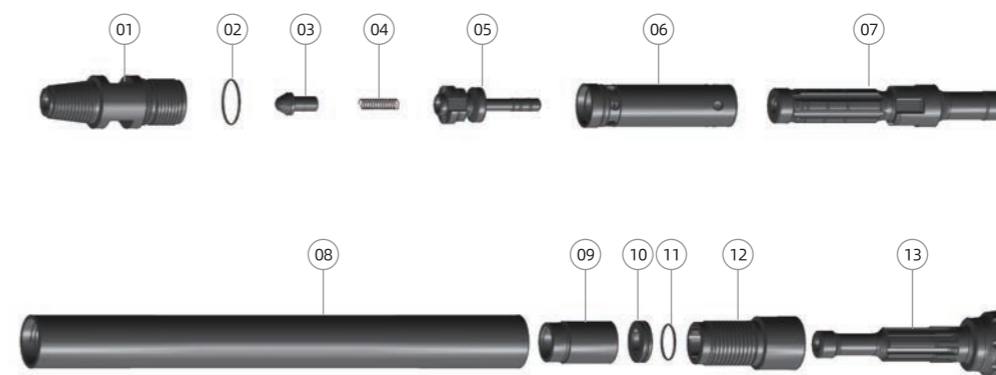


新金刚冲击器采用国际先进设计原理,使冲击器能更好地传导能量,钻孔速度更快,耗气量更低。新金刚采用优质的原材料,先进的加工工艺,冲击器性能稳定,寿命长,易于使用、安装、拆卸和维修。

New Diamond DTH hammer designed by international advanced high-tech theory, which make the hammer has better energy transduction, faster working speed and less air consumption. New Diamond use best raw material with advanced production process make the hammers have much stable working performance, long life and easier to use, to assemble and to repair.



## M30



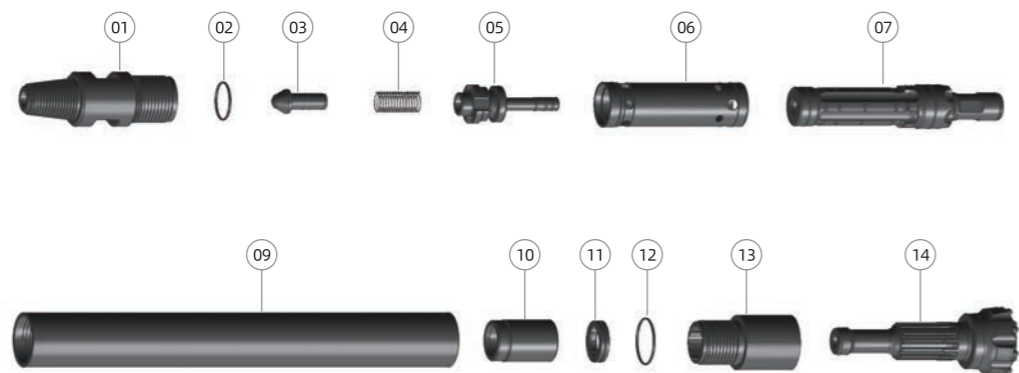
Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	接头 Top Sub	4.5 Kg	01-Mis30-01	09	衬套 Guided Sleeve	0.9 Kg	01-Mis30-09
02	O形圈 "O"Ring	0.01 Kg	01-Mis30-02	10	卡环 Retainer Ring	0.2 kg	01-Mis30-10
03	逆止阀 Check Valve	0.13 Kg	01-Mis30-03	11	O形圈 "O"Ring	0.01 Kg	01-Mis30-11
04	弹簧 Spring	0.02 Kg	01-Mis30-04	12	卡钎套 Drive Chuckk	2.5 kg	01-Mis30-12
05	配气座 Valve Seat	0.76 Kg	01-Mis30-05	13	钻头 Drill Bit		01-Mis30-13
06	内缸 Inner Cylinder	1.45 Kg	01-Mis30-06				
07	活塞 Piston	4.8 Kg	01-Mis30-07				
08	外缸 Piston Case	7.6 Kg	01-Mis30-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
931mm	23Kg	φ 82mm	API2 3/8"REG	M30	φ 90- φ 115mm
适用气压 Work Pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
1.0-1.7 Mpa		30-50 r/min		1.0Mpa	1.5Mpa
				4m <sup>3</sup> /min	6.5m <sup>3</sup> /min



## M40

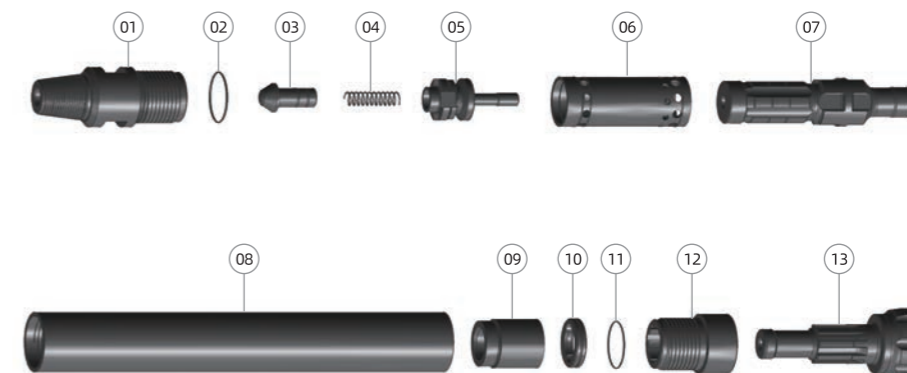


Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	接头 Top Sub	8.1 Kg	01-Mis40-01	09	衬套 Guided Sleeve	1.84 Kg	01-Mis40-09
02	O形圈 "O"Ring	0.01 Kg	01-Mis40-02	10	卡环 Retainer Ring	0.3 Kg	01-Mis40-10
03	逆止阀 Check Valve	0.3 Kg	01-Mis40-03	11	O形圈 "O"Ring	0.01 Kg	01-Mis40-11
04	弹簧 Spring	0.04 Kg	01-Mis40-04	12	卡钎套 Drive Chuckk	3.9 Kg	01-Mis40-12
05	配气座 Valve Seat	1.5 Kg	01-Mis40-05	13	钻头 Drill Bit		01-Mis40-13
06	内缸 Inner Cylinder	2.1 Kg	01-Mis40-06				
07	活塞 Piston	8.4 Kg	01-Mis40-07				
08	外缸 Piston Case	15 Kg	01-Mis40-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1004mm	40.5Kg	φ 99mm	API2 3/8"REG	M40	φ 110- φ 135mm
适用气压 Work Pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
1.0-2.2 Mpa		30-60 r/min		5m <sup>3</sup> /min	9m <sup>3</sup> /min

## NM5C

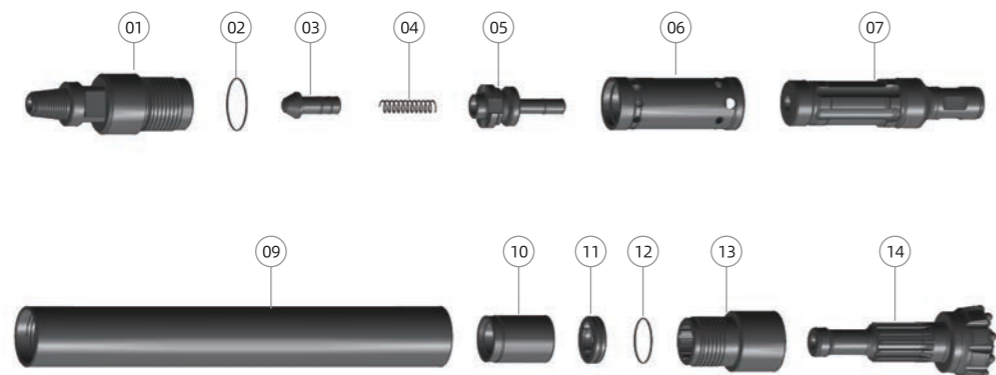


Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	接头 Top Sub	12.7 Kg	01-NM5C-01	09	衬套 Guided Sleeve	3 Kg	01-NM5C-09
02	O形圈 "O"Ring	0.01 Kg	01-NM5C-02	10	卡环 Retainer Ring	0.7 Kg	01-NM5C-10
03	逆止阀 Check Valve	0.6 Kg	01-NM5C-03	11	O形圈 "O"Ring	0.01 Kg	01-NM5C-11
04	弹簧 Spring	0.06 Kg	01-NM5C-04	12	卡钎套 Drive Chuckk	5.3 Kg	01-NM5C-12
05	配气座 Valve Seat	1.7 Kg	01-NM5C-05	13	钻头 Drill Bit		01-NM5C-13
06	内缸 Inner Cylinder	2.9 Kg	01-NM5C-06				
07	活塞 Piston	12 Kg	01-NM5C-07				
08	外缸 Piston Case	23 Kg	01-NM5C-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1080mm	62Kg	φ 114mm	API2 3/8"REG	NM5C	φ 125- φ 146mm
适用气压 Work Pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
1.0-2.5 Mpa		30-60 r/min		1.0Mpa	1.8Mpa
				6m <sup>3</sup> /min	12m <sup>3</sup> /min

## M50

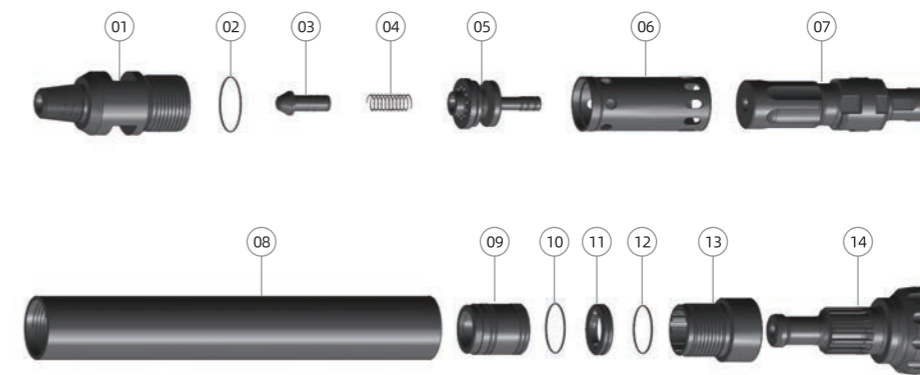


Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	接头 Top Sub	13.7 Kg	01-Mis50-01	09	衬套 Guided Sleeve	2.6 Kg	01-Mis50-09
02	O形圈 "O"Ring	0.02 Kg	01-Mis50-02	10	卡环 Retainer Ring	0.7 Kg	01-Mis50-10
03	逆止阀 Check Valve	0.7 Kg	01-Mis50-03	11	O形圈 "O"Ring	0.01 Kg	01-Mis50-11
04	弹簧 Spring	0.1 Kg	01-Mis50-04	12	卡钎套 Drive Chuckk	7.1 Kg	01-Mis50-12
05	配气座 Valve Seat	2 Kg	01-Mis50-05	13	钻头 Drill Bit		01-Mis50-13
06	内缸 Inner Cylinder	2.8 Kg	01-Mis50-06				
07	活塞 Piston	15 Kg	01-Mis50-07				
08	外缸 Piston Case	24 Kg	01-Mis50-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1122mm	70.5Kg	φ 126mm	API2 3/8"REG	M50	φ 136- φ 155mm
适用气压 Work Pressure	1.0-2.5 Mpa	推荐转速 Recommended rotation speed	30-60 r/min	耗风量/Air Consumption	
				1.0Mpa	1.8Mpa
1.0-2.5 Mpa		30-60 r/min		7m <sup>3</sup> /min	13m <sup>3</sup> /min

## M60



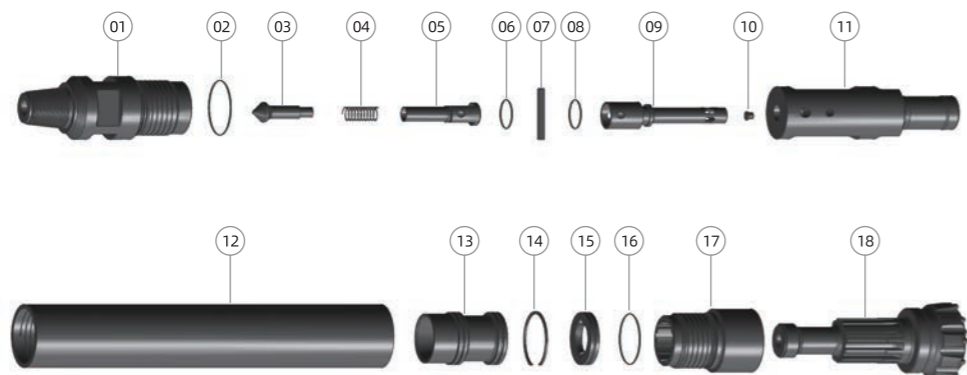
Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	接头 Top Sub	20 kg	01-Mis60-01	09	衬套 Guided Sleeve	4.8 kg	01-Mis60-09
02	O形圈 "O"Ring	0.01 Kg	01-Mis60-02	10	O形圈 "O"Ring	0.01 Kg	01-Mis60-10
03	逆止阀 Check Valve	0.56 Kg	01-Mis60-03	11	卡环 Retainer Ring	0.9 kg	01-Mis60-11
04	弹簧 Spring	0.06 Kg	01-Mis60-04	12	O形圈 "O"Ring	0.01 Kg	01-Mis60-12
05	配气座 Valve Seat	3.5 kg	01-Mis60-05	13	卡钎套 Drive Chuckk	5.8 kg	01-Mis60-13
06	内缸 Inner Cylinder	3.9 kg	01-Mis60-06	14	钻头 Drill Bit		01-Mis60-14
07	活塞 Piston	21.5 kg	01-Mis60-07				
08	外缸 Piston Case	30.5 kg	01-Mis60-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1129mm	91.5Kg	φ 144mm	API3 1/2"REG	M60	φ 152- φ 203mm
适用气压 Work Pressure	1.0-2.8 Mpa	推荐转速 Recommended rotation speed	30-60 r/min	耗风量/Air Consumption	
				1.0Mpa	1.8Mpa
1.0-2.8 Mpa		30-60 r/min		18m <sup>3</sup> /min	25m <sup>3</sup> /min



## M80

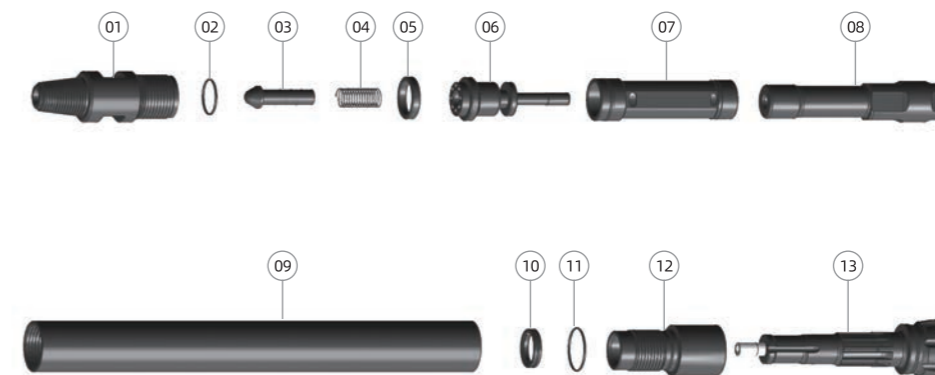


Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	接头 Top Sub	43 Kg	01-Mis80-01	10	尼龙塞 Nylon Plug	0.04 Kg	01-Mis80-10
02	O形圈 "O"Ring	0.01 Kg	01-Mis80-02	11	活塞 Piston	42 Kg	01-Mis80-11
03	逆止阀 Check Valve	0.46 Kg	01-Mis80-03	12	外缸 Piston Case	43 Kg	01-Mis80-12
04	弹簧 Spring	0.07 Kg	01-Mis80-04	13	衬套 Guided Sleeve	9.8 Kg	01-Mis80-13
05	阀座 Valve Seatt	0.65 Kg	01-Mis80-05	14	挡圈 Check Ring	0.09 Kg	01-Mis80-14
06	O形圈 "O"Ring	0.01 Kg	01-Mis80-06	15	卡环 Retainer Ring	1.9 Kg	01-Mis80-15
07	插销 Lock Pin	0.3 Kg	01-Mis80-07	16	O形圈 "O"Ring	0.01 Kg	01-Mis80-16
08	O形圈 "O"Ring	0.01 Kg	01-Mis80-08	17	卡钎套 Drive Chuckk	17 Kg	01-Mis80-17
09	配气杆 Rigid Valve	2 Kg	01-Mis80-09	18	钻头 Drill Bit		01-Mis80-18

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1333mm	160.5Kg	φ 180mm	API4 1/2"REG	M80	φ 195- φ 245mm
适用气压 Work Pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
1.5-3.3 Mpa		30 ~ 60 r/min		1.8Mpa	2.4Mpa
				26m <sup>3</sup> /min	35m <sup>3</sup> /min

## SD4

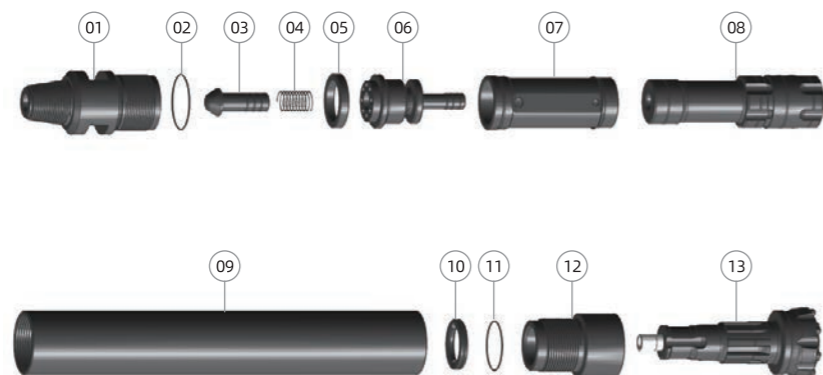


Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	01 接头 Top Sub	8.8 Kg	01-SD4-01	09	外缸 Piston Case	15.6 Kg	01-SD4-09
02	O形圈 "O"Ring	0.01 Kg	01-SD4-02	10	卡环 Retainer Ring	0.2 Kg	01-SD4-10
03	逆止阀 Check Valve	0.46 Kg	01-SD4-03	11	O形圈 "O"Ring	0.01 Kg	01-SD4-11
04	弹簧 Spring	0.04 Kg	01-SD4-04	12	卡钎套 Drive Chuckk	4 Kg	01-SD4-12
05	橡胶垫 Rubber Buffer	0.2 Kg	01-SD4-05	13	钻头 Drill Bit		01-SD4-13
06	配气座 Valve Seat	2.1 Kg	01-SD4-06				
07	内缸 Inner Cylinder	2.45 Kg	01-SD4-07				
08	活塞 Piston	9 Kg	01-SD4-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1082mm	43Kg	φ 99mm	API2 3/8"REG	SD4	φ 110- φ 135mm
适用气压 Work Pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
1.0-2.2 Mpa		30-60 r/min		1.8Mpa	2.4Mpa
				5.5m <sup>3</sup> /min	10m <sup>3</sup> /min

## SD5

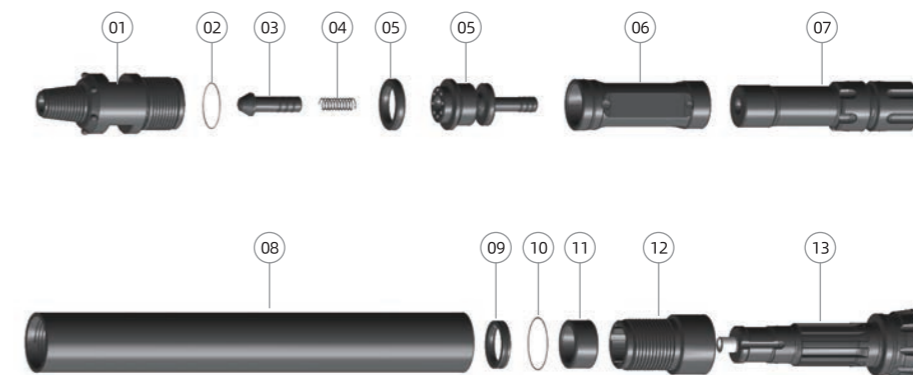


Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	接头 Top Sub	14.7 Kg	01-SD5-01	09	外缸 Piston Case	23.5 Kg	01-SD5-09
02	O形圈 "O"Ring	0.02 Kg	01-SD5-02	10	卡环 Retainer Ring	0.5 Kg	01-SD5-10
03	逆止阀 Check Valve	1 Kg	01-SD5-03	11	O形圈 "O"Ring	0.01 Kg	01-SD5-11
04	弹簧 Spring	0.06 Kg	01-SD5-04	12	卡钎套 Drive Chuck	7.8 Kg	01-SD5-12
05	橡胶垫 Rubber Buffer	0.2 Kg	01-SD5-05	13	钻头 Drill Bit		01-SD5-13
06	配气座 Valve Seat	4.1 Kg	01-SD5-06				
07	内缸 Inner Cylinder	4.4 Kg	01-SD5-07				
08	活塞 Piston	17.3 Kg	01-SD5-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1178mm	73.6Kg	φ 125mm	API2 3/8"REG	SD5	φ 135- φ 155mm
适用气压 Work Pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
1.0-2.5 Mpa		30-60 r/min		1.8Mpa	2.4Mpa
1.0-2.5 Mpa		30-60 r/min		9m <sup>3</sup> /min	15m <sup>3</sup> /min

## SD6

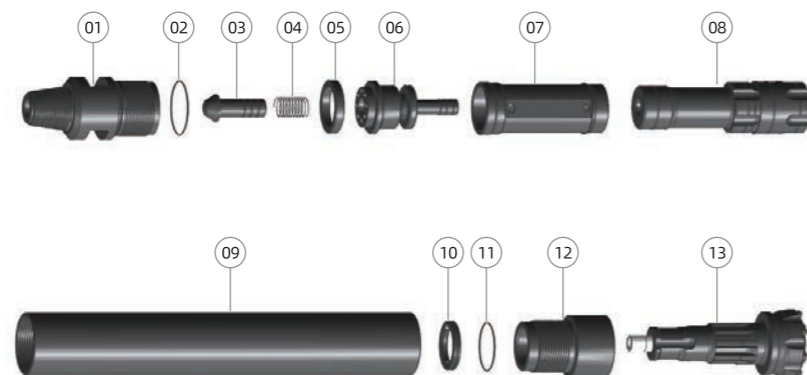


Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	接头 Top Sub	20.3 Kg	01-SD6-01	09	外缸 Piston Case	34.5 Kg	01-SD6-09
02	O形圈 "O"Ring	0.02 Kg	01-SD6-02	10	卡环 Retainer Ring	0.5 Kg	01-SD6-10
03	逆止阀 Check Valve	0.8 Kg	01-SD6-03	11	O形圈 "O"Ring	0.01 Kg	01-SD6-11
04	弹簧 Spring	0.05 Kg	01-SD6-04	12	衬套 Guided Sleeve	1.6 Kg	01-SD6-12
05	橡胶垫 Rubber Buffer	0.3 Kg	01-SD6-05	13	卡钎套 Drive Chuckk	8 Kg	01-SD6-13
06	配气座 Valve Seat	5 Kg	01-SD6-06	14	钻头 Drill Bit		01-SD6-14
07	内缸 Inner Cylinder	4 Kg	01-SD6-07				
08	活塞 Piston	23.5 Kg	01-SD6-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1277mm	99Kg	φ 142mm	API3 1/2"REG	SD6	φ 150- φ 190mm
适用气压 Work Pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
1.0-2.5 Mpa		30-60 r/min		1.8Mpa	2.4Mpa
1.0-2.5 Mpa		30-60 r/min		20m <sup>3</sup> /min	28m <sup>3</sup> /min

## SD8

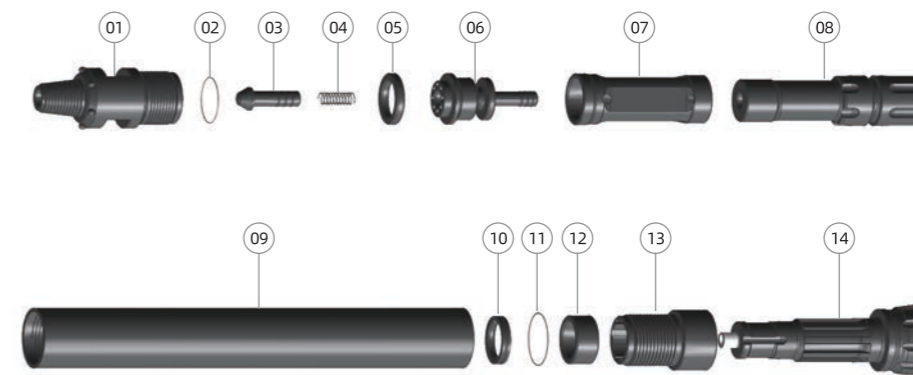


Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	接头 Top Sub	42 Kg	01-SD8-01	09	活塞 Piston	43.5 Kg	01-SD8-09
02	垫片 Adjuster Shim	0.2 Kg	01-SD8-02	10	外缸 Piston Case	64.5 Kg	01-SD8-10
03	O形圈 "O"Ring	0.02 Kg	01-SD8-03	11	卡环 Retainer Ring	1.25 Kg	01-SD8-11
04	逆止阀 Check Valve	1.3 Kg	01-SD8-04	12	O形圈 "O"Ring	0.02 Kg	01-SD8-12
05	弹簧 Spring	0.09 Kg	01-SD8-05	13	衬套 Guided Sleeve	3.35 Kg	01-SD8-13
06	橡胶垫 Rubber Buffer	0.4 Kg	01-SD8-06	14	卡钎套 Drive Chuckk	16 Kg	01-SD8-14
07	配气座 Valve Seat	12.7 Kg	01-SD8-07	15	钻头 Drill Bit		01-SD8-15
08	内缸 Inner Cylinder	9.1 Kg	01-SD8-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1463mm	194Kg	φ 180mm	API4 1/2"REG	SD8	φ 195- φ 254mm
适用气压 Work Pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
1.5-3.3 Mpa		30-60 r/min		1.8Mpa	2.4Mpa
				26m <sup>3</sup> /min	34m <sup>3</sup> /min

## SD10



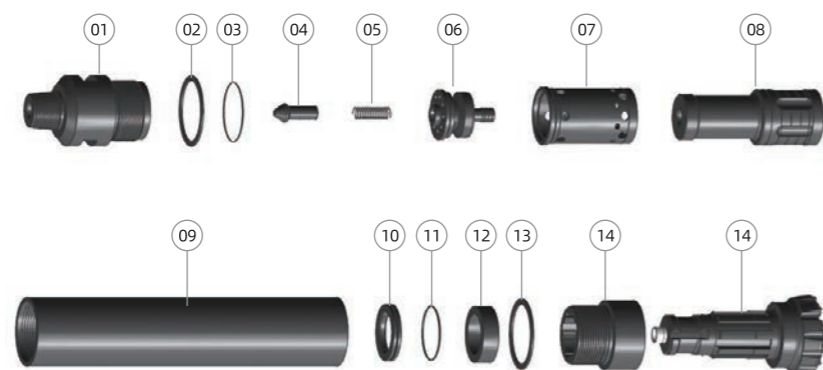
Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	接头 Top Sub	60 kg	01-SD10-01	09	卡环 Retainer Ring	2.76 kg	01-SD10-09
02	O形圈 "O"Ring	0.03 kg	01-SD10-02	10	O形圈 "O"Ring	0.02 kg	01-SD10-10
03	逆止阀 Check Valve	1.5 kg	01-SD10-03	11	衬套 Guided Sleeve	5 kg	01-SD10-11
04	弹簧 Spring	0.2 kg	01-SD10-04	12	卡钎套 Drive Chuckk	21 kg	01-SD10-12
05	配气座 Valve Seat	12.8 kg	01-SD10-05	13	钻头 Drill Bit		01-SD10-13
06	内缸 Inner Cylinder	13.5 kg	01-SD10-06				
07	活塞 Piston	71 kg	01-SD10-07				
08	外缸 Piston Case	85 kg	01-SD10-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1413mm	273Kg	φ 225mm	API5 1/2"REG	SD10	φ 254- φ 311mm
适用气压 Work Pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
1.5-3.3 Mpa		25 ~ 50 r/min		1.8Mpa	2.4Mpa
				40m <sup>3</sup> /min	60m <sup>3</sup> /min



## SD12



Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	接头 Top Sub	134 kg	01-SD12-01	09	外缸 Piston Case	220 kg	01-SD12-09
02	垫片 Adjuster Shim	0.8 kg	01-SD12-02	10	卡环 Retainer Ring	5.2 kg	01-SD12-10
03	O形圈 "O"Ring	0.04 kg	01-SD12-03	11	O形圈 "O"Ring	0.03 kg	01-SD12-11
04	逆止阀 Check Valve	1.5 kg	01-SD12-04	12	衬套 Guided Sleeve	5.2 kg	01-SD12-12
05	弹簧 Spring	0.2 kg	01-SD12-05	13	垫片 Adjuster Shim	0.8 kg	01-SD12-13
06	配气座 Valve Seat	21 kg	01-SD12-06	14	卡钎套 Drive Chuckk	53.5 kg	01-SD12-14
07	内缸 Inner Cylinder	29 kg	01-SD12-07	15	钻头 Drill Bit		01-SD12-15
08	活塞 Piston	118 kg	01-SD12-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1825mm	589Kg	φ 275mm	API6 5/8"REG	SD12	φ 295- φ 400mm
适用气压 Work Pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
1.5-3.3 Mpa		25 ~ 50 r/min		1.8Mpa	2.4Mpa
				50m <sup>3</sup> /min	70m <sup>3</sup> /min

## TD40

Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	接头 Top Sub	8.9 Kg	01-TD40-01	08	活塞 Piston	9 Kg	01-TD40-09
02	O形圈 "O"Ring	0.01 Kg	01-TD40-02	09	外缸 Piston Case	15.9 Kg	01-TD40-10
03	逆止阀 Check Valve	0.46 Kg	01-TD40-03	10	卡环 Retainer Ring	0.2 Kg	01-TD40-11
04	弹簧 Spring	0.04 Kg	01-TD40-04	11	O形圈 "O"Ring	0.01 Kg	01-TD40-12
05	橡胶垫 Rubber Buffer	0.2 Kg	01-TD40-05	12	卡钎套 Drive Chuckk	3.6 Kg	01-TD40-13
06	配气座 Valve Seat	2.1 Kg	01-TD40-06	13	钻头 Drill Bit		
07	内缸 Inner Cylinder	2.45 Kg	01-TD40-07				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1032mm	42.8Kg	φ 99mm	API2 3/8"REG	TD40	φ 110- φ 135mm
适用气压 Work Pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
1.0-2.2 Mpa		30-60 r/min		1.0Mpa	1.8Mpa
				5.5m <sup>3</sup> /min	10m <sup>3</sup> /min

## COP32

Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	接头 Top Sub	4.5 Kg	01-COP32-01	08	外缸 Piston Case	9.6 Kg	01-COP32-09
02	O形圈 "O"Ring	0.01 Kg	01-COP32-02	09	衬套 Guided Sleeve	0.9 Kg	01-COP32-10
03	逆止阀 Check Valve	0.13 Kg	01-COP32-03	10	卡环 Retainer Ring	0.15 Kg	01-COP32-11
04	弹簧 Spring	0.02 Kg	01-COP32-04	11	O形圈 "O"Ring	0.01 Kg	01-COP32-12
05	配气座 Valve Seat	0.76 Kg	01-COP32-05	12	卡钎套 Drive Chuckk	1.9 Kg	01-COP32-13
06	内缸 Inner Cylinder	1.45 Kg	01-COP32-06	13	钻头 Drill Bit		
07	活塞 Piston	4.8 Kg	01-COP32-07				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
921mm	25.5Kg	φ 82mm	API2 3/8"REG	COP32	φ 90- φ 115mm
适用气压 Work Pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
1.0-1.7 Mpa		30-50 r/min		1.0Mpa	1.5Mpa
				4m <sup>3</sup> /min	6.5m <sup>3</sup> /min

# Medium-Low DTH Hammer

## 中低风压潜孔冲击器

其主要特点如下

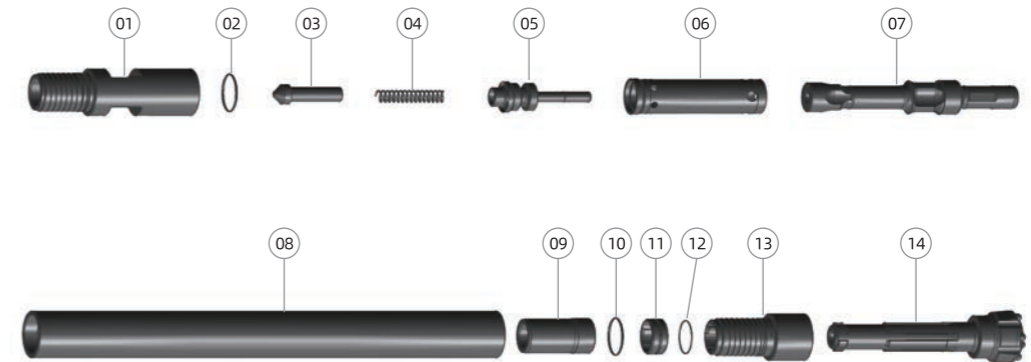
- 适应工作风压为0.7—1.75Mpa。
- 该冲击器为无阀冲击器。
- 结构简单、拆卸容易、寿命长。
- 冲击功率大,钻进速度快。
- 耗风量小,能耗低。当需要加大排渣时,可在逆止阀上钻孔。
- 特别适应于石材开采。

The main features are as following:

- The pressure are between 0.7 MPa and 1.75 MPa.
- Valveless hammers.
- Simple structure, esily to assemble and to disassemble, long lifespan.
- Higher impulse and faster drilling rate.
- Lower air consumption and lower oil consumption. A hole can be drilled on the check valve to provide more efficient cuttings discharge.
- Especially suitable for quarrying.



## BR1

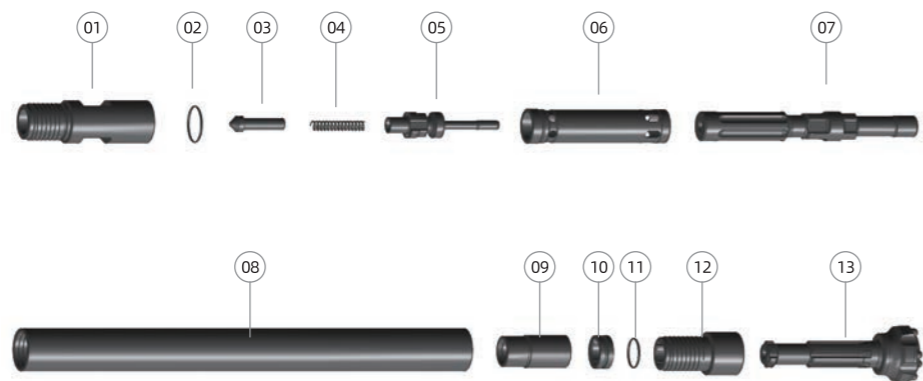


Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	接头 Top Sub	1.92 kg	03-BR1-01	09	衬套 Guided Sleeve	0.29 kg	03-BR1-09
02	O形圈 "O"Ring	0.01 Kg	03-BR1-02	10	挡圈 Check Ring	0.1 kg	03-BR1-10
03	逆止阀 Check Valve	0.08 kg	03-BR1-03	11	卡环 Retainer Ring	0.08 kg	03-BR1-11
04	弹簧 Spring	0.01 Kg	03-BR1-04	12	O形圈 "O"Ring	0.01 Kg	03-BR1-12
05	配气座 Valve Seat	0.46 kg	03-BR1-05	13	卡钎套 Drive Chuckk	0.82 kg	03-BR1-13
06	内缸 Inner Cylinder	0.38 kg	03-BR1-06	14	钻头 Drill Bit		03-BR1-14
07	活塞 Piston	1.16 kg	03-BR1-07				
08	外缸 Piston Case	3.46 kg	03-BR1-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
698mm	8.8Kg	φ 56mm	RD40 BOX	BR1	φ 64- φ 76mm
适用气压 Working Pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
0.8-1.5 MPa		30-50 r/min		1.0MPa	1.4MPa
				2m <sup>3</sup> /min	3m <sup>3</sup> /min

## BR2

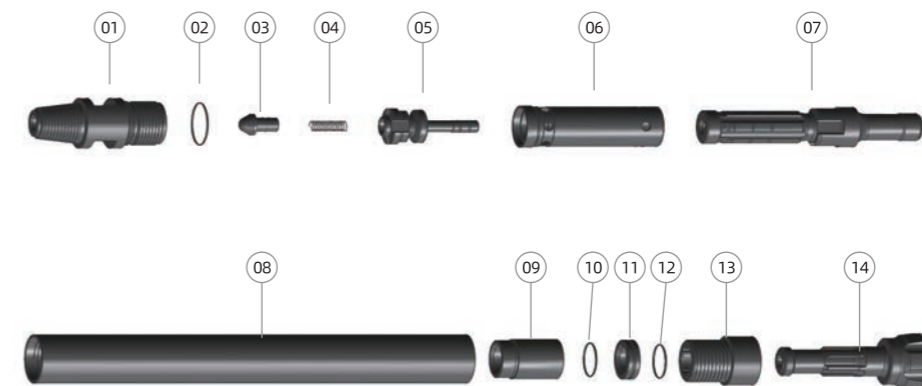


Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	接头 Top Sub	2.5 Kg	03-BR2-01	09	衬套 Guided Sleeve	0.52 Kg	03-BR2-09
02	O形圈 "O"Ring	0.01 Kg	03-BR2-02	10	卡环 Retainer Ring	0.1 Kg	03-BR2-10
03	逆止阀 Check Valve	0.08 Kg	03-BR2-03	11	O形圈 "O"Ring	0.01 Kg	03-BR2-11
04	弹簧 Spring	0.05 Kg	03-BR2-04	12	卡钎套 Drive Chuckk	1.2 Kg	03-BR2-12
05	配气座 Valve Seat	0.5 Kg	03-BR2-05	13	钻头 Drill Bit		03-BR2-13
06	内缸 Inner Cylinder	0.6 Kg	03-BR2-06				
07	活塞 Piston	2.3 Kg	03-BR2-07				
08	外缸 Piston Case	4.5 Kg	03-BR2-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
810mm	12.5Kg	φ 64mm	RD50 BOX	BR2	φ 70- φ 90mm
适用气压 Work Pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
0.8-1.5 Mpa		30-50 r/min		1.0Mpa	1.4Mpa
				3m <sup>3</sup> /min	4.5m <sup>3</sup> /min

## BR3



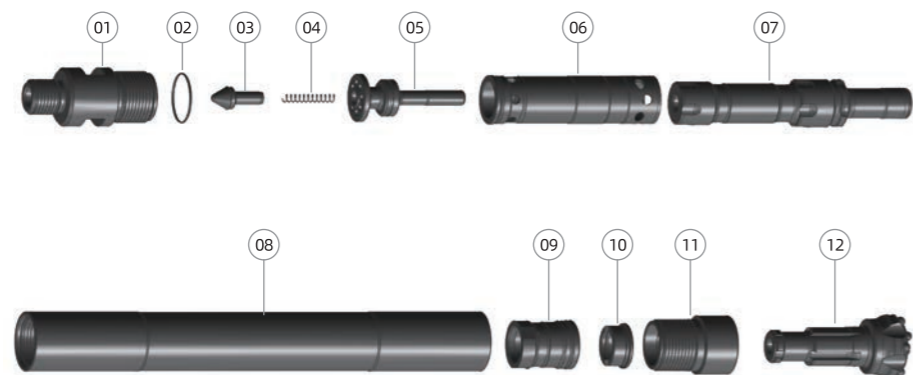
Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	接头 Top Sub	4.4 Kg	01-BR3-01	09	衬套 Guided Sleeve	0.9 Kg	01-BR3-09
02	O形圈 "O"Ring	0.01 Kg	01-BR3-02	10	挡圈 Check Ring	0.15 Kg	01-BR3-10
03	逆止阀 Check Valve	0.13 Kg	01-BR3-03	11	卡环 Retainer Ring	0.25 Kg	01-BR3-11
04	弹簧 Spring	0.02 Kg	01-BR3-04	12	O形圈 "O"Ring	0.01 Kg	01-BR3-12
05	配气座 Valve Seat	0.76 Kg	01-BR3-05	13	卡钎套 Drive Chuckk	2 kg	01-BR3-13
06	内缸 Inner Cylinder	1.45 Kg	01-BR3-06	14	钻头 Drill Bit		01-BR3-14
07	活塞 Piston	4.7 Kg	01-BR3-07				
08	外缸 Piston Case	6 Kg	01-BR3-08				

### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
871mm	21Kg	φ 82mm	API2 3/8"REG	BR3	φ 90- φ 115mm
适用气压 Work Pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
1.0-1.7 Mpa		30-50 r/min		1.0Mpa	1.5Mpa
				4m <sup>3</sup> /min	7m <sup>3</sup> /min



# N3

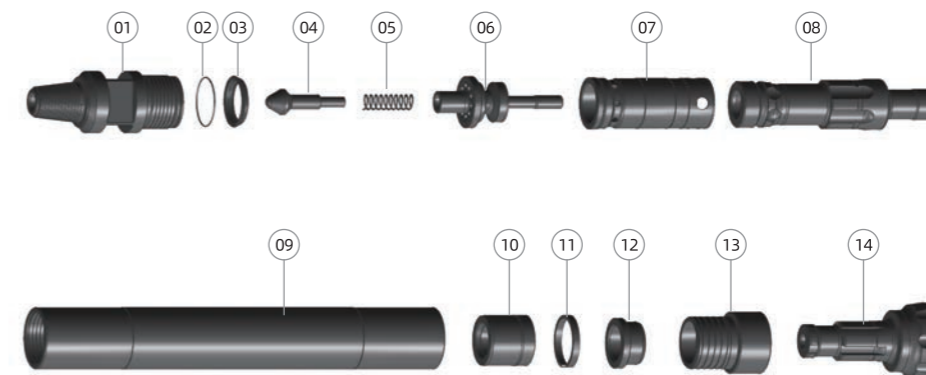


Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	接头 Top Sub	3.55 Kg	01-N3-01	07	活塞 Piston	4.7 Kg	01-N3-07
02	O形圈 "O"Ring	0.01 Kg	01-N3-02	08	外缸 Piston Case	7.5 Kg	01-N3-08
03	逆止阀 Check Valve	0.12 Kg	01-N3-03	09	衬套 Guided Sleeve	0.9 Kg	01-N3-09
04	弹簧 Spring	0.01 Kg	01-N3-04	10	卡环 Retainer Ring	0.2 Kg	01-N3-10
05	配气座 Valve Seat	0.7 Kg	01-N3-05	11	卡钎套 Drive Chuckk	1.75 Kg	01-N3-11
06	内缸 Inner Cylinder	1 Kg	01-N3-06	12	钻头 Drill Bit		01-N3-12

## 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
771.5mm	20.5Kg	φ 80mm	T48X10	N3	φ 87- φ 110mm
适用气压 Work Pressure	推荐转速 Recommended rotation speed	耗风量 / Air Consumption			
		1.0Mpa	1.5Mpa		
0.8-1.7 Mpa	30-60 r/min	5m <sup>3</sup> /min	7m <sup>3</sup> /min		

# N4



Ref.	部件 Parts	单重 Weight	件号 Part No.	Ref.	部件 Parts	单重 Weight	件号 Part No.
01	接头 Top Sub	6.65 Kg	01-N4-01	09	外缸 Piston Case	12.1 Kg	01-N4-09
02	O形圈 "O"Ring	0.01 KG	01-N4-02	10	衬套 Guided Sleeve	1.6 Kg	01-N4-10
03	承压垫 Bearing Pad	0.12 Kg	01-N4-03	11	挡圈 Retaining Ring	0.1 Kg	01-N4-11
04	逆止阀 Check Valve	0.41 Kg	01-N4-04	12	卡环 Retainer Ring	0.5 Kg	01-N4-12
05	弹簧 Spring	0.05 Kg	01-N4-05	13	卡钎套 Drive Chuckk	2.9 Kg	01-N4-13
06	配气座 Valve Seat	1.4 Kg	01-N4-06	14	钻头 Drill Bit		01-N4-14
07	内缸 Inner Cylinder	1.4 Kg	01-N4-07				
08	活塞 Piston	7.8 Kg	01-N4-08				

## 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
856mm	35Kg	φ 100mm	API2 3/8"REG	N4	φ 108- φ 135mm
适用气压 Work Pressure	推荐转速 Recommended rotation speed	耗风量 / Air Consumption			
		1.0Mpa	1.5Mpa		
0.8-1.9 Mpa	30-60 r/min	5.5m <sup>3</sup> /min	9m <sup>3</sup> /min		

# 02

## DOWN THE HOLE BITS 潜孔钻头

### 潜孔钻头特色优势

- ① 钻头寿命长：合金刚材质，其使用寿命长，并且高于同类产品；
- ② 钻进效率高：钻齿耐磨，使得钻头能始终保持锐利，因而大大提高进齿速度；
- ③ 钻进速度稳定：钻头以冲击、剪切来破碎岩石；
- ④ 保径效果好：新金刚钻头耐磨性强，保径性能好，能使切削齿得到高效利用；
- ⑤ 使用范围广：实践证明，该钻头适用于碳酸盐岩、灰岩、白垩岩、粘土岩、粉砂岩、砂岩等软、中硬（可钻性9级以下的岩层，）硬地层的钻进，与一般的钻头相比，特别是钻进6-8级的岩层，效果尤为显著。

### 潜孔冲击器的应用

#### The Application of DTH Hammer

新金刚潜孔钻头主要用于地质勘探、煤矿、水利水电、公路、铁路、桥梁、建设施工等。

The New Diamond dive drill is mainly used in geological exploration, coal mine, water conservancy and hydropower, highway, railway, bridge, construction and construction, etc.

### Advantages Of New Diamond Dive Drilling

- ① The longer life of the drill: the alloy material, with longer using life which better than the similar products;
- ② High Drilling Efficiency: the drill buttons is wear-resistant, so that the drill can always keep sharp, thus greatly improving the speed of the drilling.
- ③ The drilling speed is stable: the bit is scraped and cut to break the rock.
- ④ Good Performance: the New Diamond bit has strong wear resistance, good Diameter protection and can make the cutting teeth be used efficiently.
- ⑤ The use of a wide range: the practice proves that the bit is suitable for carbonate rock, limestone, chalk, clay rock, siltstone, sandstone and other soft and hard (9 - grade drillability of rock, hard rock drilling), compared with normal bit, especially drilling in 6-8 grade rock the effect is particularly significant.





# Drill Bit Design

## 钻头面型示意图



## Drill Bit Characteristics

### 钻头面型特点

#### 平面型/ Flat Face

这种平面型头适应于高风压时钻凿很坚硬岩层以及腐蚀性强的岩层。钻速更快，钻体磨损小。

This flat face is suitable for drilling very hard rock formations and corrosive wall formations at high air pressures. When the bits is drilling, the faster the drilling speed, the less wear of the drill body.

#### 凹面型/ Concave Face

这种头部形状适合用于所有岩层，特别是在中硬和岩性均匀的岩层中使用效果好。炮孔偏离度小，排渣效果好。

This Concave face is suitable for all rock formations, especially in medium-hard and homogeneous rock formations, the effect is good. The blast hole deviation is small, and the slag discharge effect is good.

#### 中心下陷型/ Drop Center

采用低-中风压钻凿软-中硬以及有裂缝的岩层时，为了获得很快的凿岩速度和较小炮孔偏斜率，通常采用这种头部形状。

When using low-medium pressure to drill soft-medium hard and fractured rock formations, in order to obtain fast rock drilling speed and less blast hole slope, this face shape is usually used.

#### 凸面型/ Convex Face

这种形状适合用于低-中风压钻凿软-中硬岩层，钻头钢体不易腐蚀。其特点是边齿承载较低，磨损不严重，钻速速度快。

This Convex face is suitable for low- to medium-pressure drilling of soft-medium hard rock formations, and the drill block is not easy to corrode. The characteristics of this design are the low load of the side button, the wear is not badly and the drilling speed is fast.

#### 双边齿型/ Double Gauge Face

这种双边齿型头部适应于高风压时钻凿很坚硬的岩层。此时钻速快，钻头体磨损较少。

This double-sided button face is suitable for drilling very hard rock formations at high air pressures. When the bits is drilling, drilling speed is fast, the bit body wear will also be less.

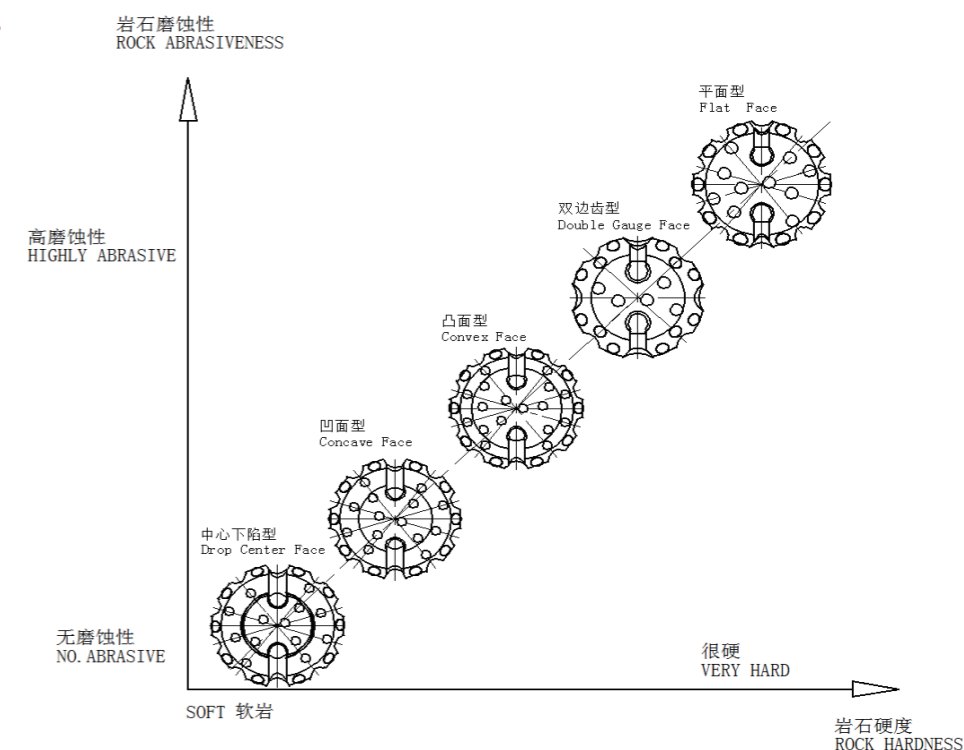
# Carbide Button Shape Selection

## 合金齿形选择

齿形/Tooth profile	名称/Product Name	应用/Application
球齿 Domed/Round Button		潜孔钻头边齿，适用于磨蚀性强、非常坚硬的岩石。 Domed/round buttons are usually used as gauge buttons of DTH bits, suitable for very abrasive and very hard formations.
抛物线齿 Parabolic/Semi-Ballistic Button		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 buttons are usually used as gauge buttons and front buttons of DTH bits, suitable for medium abrasive and hard formations.
弹头齿 Ballistic Button		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 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 Sharp Button		潜孔钻头的中齿，适用于高转速、低断齿率的软岩层。 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 Flat Button		潜孔钻头的边保护齿，减少钻头体表面的磨损。 Flat buttons are usually used as protection buttons to reduce wear on rubbing surface of DTH bits.

## Main Technial Features

### 主要技术

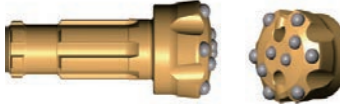



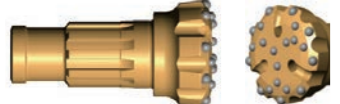





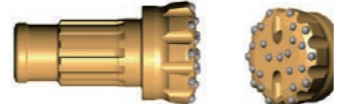



# High Air Pressure DTH Drill Bit

## 高风压潜孔钻头

### SP系列钻头 / SP Shank Drill Bits

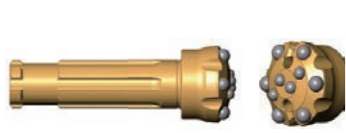
钻头规格 Specifications	头部规格 Specification		尾柄长度 Shank Length	花键数 Spline	排气孔数量 Port holes	合金数量X直径 Button qty.pcs X dia.mm			重量 Weight (Kg)	
	头部形状 Head Shape	钻头头部直径 Head Diameter (mm)				齿型 Button Type (选配件 Optional)	边齿 Gauge Buttons	芯齿 Front buttons		
	<b>SP35A</b>									
	平面 Flat Face	90	150	6	2	球齿+弹头齿 Domed+Ballistic	6XØ14	5XØ12	4.3	
	平面 Flat Face	95	150	6	2	球齿+弹头齿 Domed+Ballistic	6XØ14	5XØ12	4.4	
	平面 Flat Face	100	150	6	2	球齿+弹头齿 Domed+Ballistic	6XØ14	6XØ12	4.6	
平面 Flat Face	108	150	6	2	球齿+弹头齿 Domed+Ballistic	8XØ13	6XØ12	4.9		
	<b>SP480</b>									
	凸面 Convex Face	108	165	10	2	球齿+弹头齿 Domed+Ballistic	7XØ16	6XØ14	7.3	
	凸面 Convex Face	115	165	10	2	球齿+弹头齿 Domed+Ballistic	7XØ16	6XØ14	7.7	
	凸面 Convex Face	127	165	10	2	球齿+弹头齿 Domed+Ballistic	8XØ16	4XØ14+3XØ13	8.7	
凸面 Convex Face	130	165	10	2	球齿+弹头齿 Domed+Ballistic	8XØ16	4XØ14+3XØ13	8.8		
	<b>SP580</b>									
	凸面 Convex Face	140	185	10	2	球齿+弹头齿 Domed+Ballistic	7XØ18	4XØ15+3XØ14	13.2	
	平面 Flat Face	146	185	10	2	球齿 Domed	8XØ18	8XØ14	13.9	
	平面 Flat Face	152	185	10	2	球齿+弹头齿 Domed+Ballistic	8XØ18	8XØ14	14.3	
	平面 Flat Face	165	185	10	2	球齿+弹头齿 Domed+Ballistic	8XØ18	9XØ14	16.3	
凹面 Concave Face	178	185	10	2	球齿 Domed	8XØ18	6XØ16+5XØ14	17.8		
	<b>SP680</b>									
	凹面 Concave Face	154	231	12	2	球齿 Domed	8XØ18	4XØ16+4XØ15	21.6	
	平面 Flat Face	165	231	12	2	球齿+弹头齿 Domed+Ballistic	8XØ18	8XØ16	21.8	
	凹面 Concave Face	171	231	12	2	球齿 Domed	8XØ18	6XØ16+4XØ15	23.3	
	凹面 Concave Face	178	231	12	2	球齿 Domed	8XØ18	6XØ16+5XØ15	24.3	
	凹面 Concave Face	190	231	12	3	球齿 Domed	9XØ18	6XØ16+5XØ15	25.5	
凹面 Concave Face	203	231	12	2	球齿 Domed	10XØ18	8XØ16+6XØ15	28.7		
	<b>SP780</b>									
	凹面 Concave Face	190	220	10	3	球齿 Domed	9XØ18	6XØ16+5XØ15	29.5	
	凹面 Concave Face	195	220	10	3	球齿 Domed	9XØ18	6XØ16+5XØ15	30.3	
凹面 Concave Face	203	220	10	2	球齿 Domed	10XØ18	8XØ16+6XØ15	31.5		
	<b>SP781</b>									
	凹面 Concave Face	190	250	8	3	球齿 Domed	9XØ18	6XØ16+5XØ15	29.5	
	凹面 Concave Face	195	250	8	3	球齿 Domed	9XØ18	6XØ16+5XØ15	30.7	
凹面 Concave Face	203	250	8	2	球齿 Domed	10XØ18	8XØ16+6XØ15	32		

### SP系列钻头 / SP Shank Drill Bits

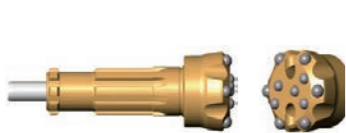
钻头规格 Specifications	头部规格 Specification		尾柄长度 Shank Length	花键数 Spline	排气孔数量 Port holes	合金数量X直径 Button qty.pcs X dia.mm			重量 Weight (Kg)	
	头部形状 Head Shape	钻头头部直径 Head Diameter (mm)				齿型 Button Type (选配件 Optional)	边齿 Gauge Buttons	芯齿 Front buttons		
	<b>SP882</b>									
	凹面 Concave Face	203	260	12	2	球齿 Domed	10XØ18	4XØ18+10XØ16	43.5	
	凹面 Concave Face	216	260	12	2	球齿 Domed	10XØ18	4XØ18+10XØ16	47	
	凹面 Concave Face	230	260	12	2	球齿 Domed	12XØ18	12XØ18+6XØ16	50	
	凹面 Concave Face	235	260	12	2	球齿 Domed	12XØ18	12XØ18+6XØ16	50.5	
	凹面 Concave Face	254	260	12	2	球齿 Domed	12XØ18	12XØ18+8XØ16	57.5	
	凸凹面 Convex- Concave Face	275	260	12	2	球齿 Domed	12XØ18	8XØ16+19XØ16	64	
凸凹面 Convex- Concave Face	305	260	12	3	球齿 Domed	15XØ18	12XØ16+23XØ16	72.5		
	<b>SP1080</b>									
	凸凹面 Convex- Concave Face	254	310	12	2	球齿 Domed	12XØ19	8XØ18+19XØ16	82.5	
	凸凹面 Convex- Concave Face	275	310	12	2	球齿 Domed	12XØ19	8XØ18+20XØ16	87	
	凸凹面 Convex- Concave Face	305	310	12	3	球齿 Domed	15XØ19	27XØ18+8XØ16	97	
	凸凹面 Convex- Concave Face	325	310	12	3	球齿 Domed	15XØ19	27XØ18+9XØ16	105	
	凸凹面 Convex- Concave Face	350	310	12	4	球齿 Domed	16XØ19	32XØ18+14XØ16	115	
凸凹面 Convex- Concave Face	400	310	12	4	球齿 Domed	16XØ19	40XØ18+25XØ16	140		
	<b>SP1280</b>									
	凸凹面 Convex- Concave Face	305	375	12	3	球齿 Domed	15XØ20	27XØ18+8XØ16	140.5	
	凸凹面 Convex- Concave Face	311	375	12	3	球齿 Domed	15XØ20	27XØ18+8XØ16	141	
	凸凹面 Convex- Concave Face	325	375	12	3	球齿 Domed	15XØ20	27XØ18+9XØ16	150	
	凸凹面 Convex- Concave Face	350	375	12	4	球齿 Domed	16XØ20	32XØ18+13XØ16	168	
	凸凹面 Convex- Concave Face	381	375	12	4	球齿 Domed	16XØ20	36XØ18+18XØ16	178	
	凸凹面 Convex- Concave Face	400	375	12	4	球齿 Domed	16XØ20	40XØ18+28XØ16	193.5	
	凸凹面 Convex- Concave Face	445	375	12	4	球齿 Domed	20XØ20	48XØ18+25XØ16	231.5	
凸凹面 Convex- Concave Face	500	375	12	4	球齿 Domed	24XØ20	90XØ18	287		
	<b>SP1480</b>									
	双边齿凹面 Double gauge button concave face	450	405	12	4	球齿 Domed	20XØ20	16XØ19+57XØ18	291.5	
	双边齿凹面 Double gauge button concave face	500	405	12	4	球齿 Domed	24XØ20	16XØ19+73XØ18	340	
	双边齿凹面 Double gauge button concave face	550	405	12	4	球齿 Domed	24XØ20	16XØ19+79XØ18	397	
双边齿凹面 Double gauge button concave face	600	405	12	4	球齿 Domed	24XØ20	16XØ19+96XØ18	469		

**DHD系列钻头/ DHD Shank Drill Bits**

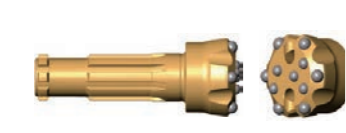
钻头规格 Specifications	头部规格 Specification							合金数量X直径 Button qty.pcs X dia.mm			重量 Weight (Kg)
	头部形状 Head Shape	钻头头部直径 Head Diameter (mm)	尾柄长度 Shank Length	花键数 Spline	排气孔数量 Port holes	齿型 Button Type (选购件 Optional)	边齿 Gauge Buttons	芯齿 Front buttons			



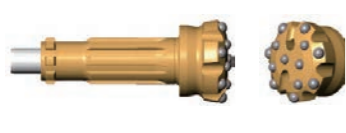
HD25A										
平面 Flat Face	76	174	6	2	弹头齿 Ballistic	6XØ14	4XØ11	3.2		
平面 Flat Face	80	174	6	2	弹头齿 Ballistic	6XØ14	4XØ11	3.3		
平面 Flat Face	85	174	6	2	弹头齿 Ballistic	6XØ14	4XØ12	3.4		
平面 Flat Face	90	174	6	2	弹头齿 Ballistic	6XØ14	4XØ12	3.6		



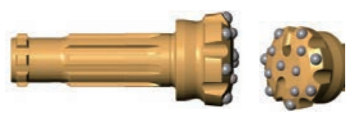
DHD3.5										
平面 Flat Face	90	180	8	2	球齿+弹头齿 Spherical+Ballistic	6XØ14	5XØ12	4.7		
平面 Flat Face	95	180	8	2	球齿+弹头齿 Spherical+Ballistic	6XØ14	5XØ12	4.8		
平面 Flat Face	100	180	8	2	球齿+弹头齿 Spherical+Ballistic	6XØ14	6XØ12	4.9		
平面 Flat Face	108	180	8	2	球齿+弹头齿 Spherical+Ballistic	8XØ13	6XØ12	5.4		



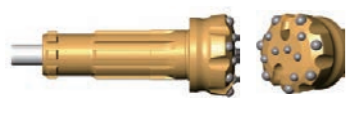
DHD3.5A										
平面 Flat Face	90	180	8	2	球齿+弹头齿 Spherical+Ballistic	6XØ14	5XØ12	4.7		
平面 Flat Face	95	180	8	2	球齿+弹头齿 Spherical+Ballistic	6XØ14	5XØ12	4.8		
平面 Flat Face	100	180	8	2	球齿+弹头齿 Spherical+Ballistic	6XØ14	6XØ12	4.9		
平面 Flat Face	108	180	8	2	球齿+弹头齿 Spherical+Ballistic	8XØ13	6XØ12	5.4		



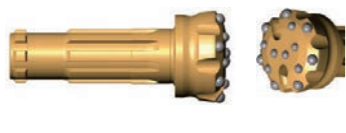
DHD340										
凸面 Convex Face	108	209	8	2	球齿+弹头齿 Spherical+Ballistic	7XØ16	6XØ14	7.85		
凸面 Convex Face	115	209	8	2	球齿+弹头齿 Spherical+Ballistic	7XØ16	6XØ14	8.22		
凸面 Convex Face	127	209	8	2	球齿+弹头齿 Spherical+Ballistic	8XØ16	4XØ14+3XØ13	8.88		
凸面 Convex Face	130	209	8	2	球齿+弹头齿 Spherical+Ballistic	8XØ16	4XØ14+3XØ13	9.15		



DHD340A										
凸面 Convex Face	108	209	8	2	球齿+弹头齿 Spherical+Ballistic	7XØ16	6XØ14	7.85		
凸面 Convex Face	115	209	8	2	球齿+弹头齿 Spherical+Ballistic	7XØ16	6XØ14	8.22		
凸面 Convex Face	127	209	8	2	球齿+弹头齿 Spherical+Ballistic	8XØ16	4XØ14+3XØ13	8.88		
凸面 Convex Face	130	209	8	2	球齿+弹头齿 Spherical+Ballistic	8XØ16	4XØ14+3XØ13	9.15		



DHD350										
凸面 Convex Face	140	260	8	2	球齿+弹头齿 Spherical+Ballistic	7XØ18	4XØ15+3XØ14	15.8		
平面 Flat Face	146	260	8	2	球齿+弹头齿 Spherical+Ballistic	8XØ18	8XØ14	16.5		
平面 Flat Face	152	260	8	2	球齿+弹头齿 Spherical+Ballistic	8XØ18	8XØ14	17		
凹面 Concave Face	165	260	8	2	球齿 Spherical	8XØ18	4XØ16+4XØ14	18.9		
凹面 Concave Face	178	260	8	2	球齿 Spherical	8XØ18	6XØ16+5XØ14	20.4		



DHD350A										
凸面 Convex Face	140	260	8	2	球齿+弹头齿 Spherical+Ballistic	7XØ18	4XØ15+3XØ14	15.8		
平面 Flat Face	146	260	8	2	球齿+弹头齿 Spherical+Ballistic	8XØ18	8XØ14	16.5		
平面 Flat Face	152	260	8	2	球齿+弹头齿 Spherical+Ballistic	8XØ18	8XØ14	17		
凹面 Concave Face	165	260	8	2	球齿 Spherical	8XØ18	4XØ16+4XØ14	18.9		
凹面 Concave Face	178	260	8	2	球齿 Spherical	8XØ18	6XØ16+5XØ14	20.4		



DHD350S										
凸面 Convex Face	127	260	8	2	球齿+弹头齿 Spherical+Ballistic	8XØ18	6XØ16	14.5		
凸面 Convex Face	130	260	8	3	球齿+弹头齿 Spherical+Ballistic	9XØ16	6XØ15+4XØ14	14.7		



DHD360										
凹面 Concave Face	154	308.5	8	2	球齿 Domed	8XØ18	4XØ16+4XØ15	22.5		
平面 Flat Face	165	308.5	8	2	球齿 Domed	8XØ18	8XØ16	23.6		
凹面 Concave Face	171	308.5	8	2	球齿 Domed	8XØ18	6XØ16+4XØ15	25.2		
凹面 Concave Face	178	308.5	8	2	球齿 Domed	8XØ18	6XØ16+5XØ15	26.1		
凹面 Concave Face	190	308.5	8	3	球齿 Domed	9XØ18	6XØ16+5XØ15	29		
凹面 Concave Face	203	308.5	8	2	球齿 Domed	10XØ18	8XØ16+6XØ15	30.4		



DHD360A										
凹面 Concave Face	154	308.5	8	2	球齿 Domed	8XØ18	4XØ16+4XØ15	22.5		
平面 Flat Face	165	308.5	8	2	球齿 Domed	8XØ18	8XØ16	23.6		
凹面 Concave Face	171	308.5	8	2	球齿 Domed	8XØ18	6XØ16+4XØ15	25.2		
凹面 Concave Face	178	308.5	8	2	球齿 Domed	8XØ18	6XØ16+5XØ15	26.1		
凹面 Concave Face	190	308.5	8	3	球齿 Domed	9XØ18	6XØ16+5XØ15	29		
凹面 Concave Face	203	308.5	8	2	球齿 Domed	10XØ18	8XØ16+6XØ15	30.4		



DHD380										
凹面 Concave Face	203	350	10	2	球齿 Domed	10XØ18	4XØ18+10XØ16	48.5		
凹面 Concave Face	216	350	10	2	球齿 Domed	10XØ18	4XØ18+10XØ16	52.1		
凹面 Concave Face	230	350	10	2	球齿 Domed	12XØ18	12XØ18+6XØ16	54.8		
凹面 Concave Face	235	350	10	2	球齿 Domed	12XØ18	12XØ18+6XØ16	55.5		
凹面 Concave Face	254	350	10	2	球齿 Domed	12XØ18	12XØ18+8XØ16	62.4		
凸凹面 Convex-Concave Face	275	350	10	2	球齿 Domed	12XØ18	27XØ16	69		
凸凹面 Convex-Concave Face	305	350	10	3	球齿 Domed	15XØ18	35XØ16	77.6		




DHD380A										
凹面 Concave Face	203	350	10	2	球齿 Domed	10XØ18	4XØ18+10XØ16	48.5		
凹面 Concave Face	216	350	10	2	球齿 Domed	10XØ18	4XØ18+10XØ16	52.1		
凹面 Concave Face	230	350	10	2	球齿 Domed	12XØ18	12XØ18+6XØ16	54.8		
凹面 Concave Face	235	350	10	2	球齿 Domed	12XØ18	12XØ18+6XØ16	55.5		
凹面 Concave Face	254	350	10	2	球齿 Domed	12XØ18	12XØ18+8XØ16	62.4		
凸凹面 Convex-Concave Face	275	350	10	2	球齿 Domed	12XØ18	8XØ16+19XØ16	69		
凸凹面 Convex-Concave Face	305	350	10	3	球齿 Domed	15XØ18	12XØ16+23XØ16	77.6		






DHD1120										
凸凹面 Convex-Concave Face	305	490	8	3	球齿 Domed	15XØ20	27XØ18+8XØ16	141.3		
凸凹面 Convex-Concave Face	311	490	8	3	球齿 Domed	15XØ20	27XØ18+8XØ16	141.6		
凸凹面 Convex-Concave Face	325	490	8	3	球齿 Domed	15XØ20	27XØ18+9XØ16	164.3		
凸凹面 Convex-Concave Face	350	490	8	4	球齿 Domed	16XØ20	32XØ18+13XØ16	169.1		
凸凹面 Convex-Concave Face	381	490	8	4	球齿 Domed	16XØ20	36XØ18+18XØ16	183		
凸凹面 Convex-Concave Face	400	490	8	4	球齿 Domed	16XØ20	40XØ18+28XØ16	194		
凸凹面 Convex-Concave Face	445	490	8	4	球齿 Domed	20XØ20	48XØ18+25XØ16	225.7		
凸凹面 Convex-Concave Face	500	490	8	4	球齿 Domed	24XØ20	90XØ18	331.2		

**QL系列钻头/ QL Shank Drill Bits**

钻头规格 Specifications	头部规格 Specification										
	头部形状 Head Shape	钻头头部直径 Head Diameter (mm)	尾柄长度 Shank Length	花键数 Spline	排气孔数量 Port holes	合金数量X直径 Button qty.pcs X dia.mm			重量 Weight (Kg)		
						齿型 Button Type (选购件 Optional)	边齿 Gauge Buttons	芯齿 Front buttons			
	<b>QL40</b>										
	凸面 Convex Face	108	280	10	2	球齿+弹头齿 Domed+Ballistic	7XØ16	6XØ14	9.42		
	凸面 Convex face	115	280	10	2	球齿+弹头齿 Domed+Ballistic	7XØ16	6XØ14	9.5		
	凸面 Convex face	127	280	10	2	球齿+弹头齿 Domed+Ballistic	8XØ16	4XØ14+3XØ13	10.7		
	凸面 Convex face	130	280	10	2	球齿+弹头齿 Domed+Ballistic	8XØ16	4XØ14+3XØ13	10.9		
	<b>QL40A</b>										
	凸面 Convex Face	108	280	10	2	球齿+弹头齿 Domed+Ballistic	7XØ16	6XØ14	9.42		
	凸面 Convex Face	115	280	10	2	球齿+弹头齿 Domed+Ballistic	7XØ16	6XØ14	9.5		
	凸面 Convex Face	127	280	10	2	球齿+弹头齿 Domed+Ballistic	8XØ16	4XØ14+3XØ13	10.7		
	凸面 Convex Face	130	280	10	2	球齿+弹头齿 Domed+Ballistic	8XØ16	4XØ14+3XØ13	10.9		
	<b>QL50</b>										
	凸面 Convex Face	140	240	12	a2	球齿+弹头齿 Domed+Ballistic	7XØ18	4XØ15+3XØ14	15.3		
	平面 Flat Face	146	240	12	2	球齿+弹头齿 Domed+Ballistic	8XØ18	8XØ14	16		
	平面 Flat Face	152	240	12	2	球齿+弹头齿 Domed+Ballistic	8XØ18	8XØ14	16.5		
	凹面 Concave Face	165	240	12	2	球齿 Domed	8XØ18	4XØ16+4XØ14	18.5		
	凹面 Concave Face	178	240	12	2	球齿 Domed	8XØ18	6XØ16+5XØ14	20		
	<b>QL50A</b>										
	凸面 Convex Face	140	240	12	2	球齿+弹头齿 Domed+Ballistic	7XØ18	4XØ15+3XØ14	15.3		
	平面 Flat Face	146	240	12	2	球齿+弹头齿 Domed+Ballistic	8XØ18	8XØ14	16		
	平面 Flat Face	152	240	12	2	球齿+弹头齿 Domed+Ballistic	8XØ18	8XØ14	16.5		
	凹面 Concave Face	165	240	12	2	球齿 Domed	8XØ18	4XØ16+4XØ14	18.5		
	凹面 Concave Face	178	240	12	2	球齿 Domed	8XØ18	6XØ16+5XØ14	20		
	<b>QL60</b>										
	凹面 Concave Face	154	253	12	2	球齿 Domed	8XØ18	4XØ16+4XØ15	22.5		
	平面 Flat Face	165	253	12	2	球齿 Domed	8XØ18	8XØ16	23		
	凹面 Concave Face	171	253	12	2	球齿 Domed	8XØ18	6XØ16+4XØ15	24.4		
	凹面 Concave Face	178	253	12	2	球齿 Domed	8XØ18	6XØ16+5XØ15	25.3		
	凹面 Concave Face	190	253	12	3	球齿 Domed	9XØ18	6XØ16+5XØ15	26.5		
	凹面 Concave Face	203	253	12	2	球齿 Domed	10XØ18	8XØ16+6XØ15	29.7		
	<b>QL680</b>										
	凹面 Concave Face	154	253	12	2	球齿 Domed	8XØ18	4XØ16+4XØ15	22.5		
	平面 Flat Face	165	253	12	2	球齿 Domed	8XØ18	8XØ16	23		
	凹面 Concave Face	171	253	12	2	球齿 Domed	8XØ18	6XØ16+4XØ15	24.4		
	凹面 Concave Face	178	253	12	2	球齿 Domed	8XØ18	6XØ16+5XØ15	25.3		
	凹面 Concave Face	190	253	12	3	球齿 Domed	9XØ18	6XØ16+5XØ15	26.5		
	凹面 Concave Face	203	253	12	2	球齿 Domed	10XØ18	8XØ16+6XØ15	29.7		

<b>QL80</b>											
头部规格 Specification											
钻头规格 Specifications	头部形状 Head Shape	钻头头部直径 Head Diameter (mm)	尾柄长度 Shank Length	花键数 Spline	排气孔数量 Port holes	合金数量X直径 Button qty.pcs X dia.mm			重量 Weight (Kg)		
						齿型 Button Type (选购件 Optional)	边齿 Gauge Buttons	芯齿 Front buttons			
	凹面 Concave Face	203	331	16	2	球齿 Domed	10XØ18	4XØ18+10XØ16	48.2		
	凹面 Concave Face	216	331	16	2	球齿 Domed	10XØ18	4XØ18+10XØ16	51.9		
	凹面 Concave Face	230	331	16	2	球齿 Domed	12XØ18	12XØ18+6XØ16	54.7		
	凹面 Concave Face	235	331	16	2	球齿 Domed	12XØ18	12XØ18+6XØ16	55.3		
	凹面 Concave Face	254	331	16	2	球齿 Domed	12XØ18	12XØ18+8XØ16	62.2		
	凸凹面 Convex-Concave Face	275	331	16	2	球齿 Domed	12XØ18	8XØ16+19XØ16	68.8		
	凸凹面 Convex-Concave Face	305	331	16	3	球齿 Domed	15XØ18	12XØ16+23XØ16	77.3		
	<b>QL880</b>										
	凹面 Concave Face	203	331	16	2	球齿 Domed	10XØ18	4XØ18+10XØ16	48.2		
	凹面 Concave Face	216	331	16	2	球齿 Domed	10XØ18	4XØ18+10XØ16	51.9		
凹面 Concave Face	230	331	16	2	球齿 Domed	12XØ18	12XØ18+6XØ16	54.7			
凹面 Concave Face	235	331	16	2	球齿 Domed	12XØ18	12XØ18+6XØ16	55.3			
凹面 Concave Face	254	331	16	2	球齿 Domed	12XØ18	12XØ18+8XØ16	62.2			
凸凹面 Convex-Concave Face	275	331	16	2	球齿 Domed	12XØ18	8XØ16+19XØ16	68.8			
凸凹面 Convex-Concave Face	305	331	16	3	球齿 Domed	15XØ18	12XØ16+23XØ16	77.3			

**NUMA系列钻头/ Numa Shank Drill Bits**

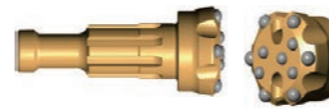
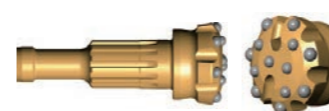
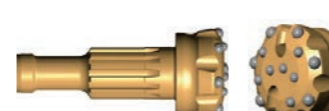
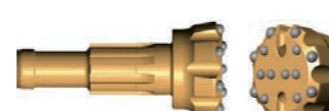
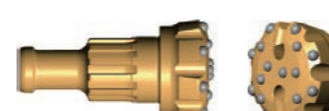

头部规格 Specification											
钻头规格 Specifications	头部形状 Head Shape	钻头头部直径 Head Diameter (mm)	尾柄长度 Shank Length	花键数 Spline	排气孔数量 Port holes	合金数量X直径 Button qty.pcs X dia.mm			重量 Weight (Kg)		
						齿型 Button Type (选购件 Optional)	边齿 Gauge Buttons	芯齿 Front buttons			
	<b>NUMA100</b>										
	凸凹面 Convex-Concave Face	254	375	10	2	球齿 Domed	12XØ19	8XØ18+19XØ16	89		
	凸凹面 Convex-Concave Face	275	375	10	2	球齿 Domed	12XØ19	8XØ18+20XØ16	93.5		
	凸凹面 Convex-Concave Face	305	375	10	3	球齿 Domed	15XØ19	27XØ18+8XØ16	103.5		
	凸凹面 Convex-Concave Face	325	375	10	3	球齿 Domed	15XØ19	27XØ18+9XØ16	112		
	凸凹面 Convex-Concave Face	350	375	10	4	球齿 Domed	16XØ19	32XØ18+14XØ16	121		
	凸凹面 Convex-Concave Face	400	375	10	4	球齿 Domed	16XØ19	40XØ18+25XØ16	146.5		
	<b>NUMA100A</b>										
	凸凹面 Convex-Concave Face	254	375	10	2	球齿 Domed	12XØ19	8XØ18+19XØ16	89		
	凸凹面 Convex-Concave Face	275	375	10	2	球齿 Domed	12XØ19	8XØ18+20XØ16	93.5		
	凸凹面 Convex-Concave Face	305	375	10	3	球齿 Domed	15XØ19	27XØ18+8XØ16	103.5		
	凸凹面 Convex-Concave Face	325	375	10	3	球齿 Domed	15XØ19	27XØ18+9XØ16	112		
	凸凹面 Convex-Concave Face	350	375	10	4	球齿 Domed	16XØ19	32XØ18+14XØ16	121		
	凸凹面 Convex-Concave Face	400	375	10	4	球齿 Domed	16XØ19	40XØ18+25XØ16	146.5		
	<b>N125</b>										
	凸凹面 Convex-Concave Face	305	491	10	3	球齿 Domed	15XØ20	27XØ18+8XØ16	175.5		
	凸凹面 Convex-Concave Face	311	491	10	3	球齿 Domed	15XØ20	27XØ18+8XØ16	176		
	凸凹面 Convex-Concave Face	325	491	10	3	球齿 Domed	15XØ20	27XØ18+9XØ16	185		
	凸凹面 Convex-Concave Face	350	491	10	4	球齿 Domed	16XØ20	32XØ18+13XØ16	200		
	凸凹面 Convex-Concave Face	381	491	10	4	球齿 Domed	16XØ20	36XØ18+18XØ16	213		
	凸凹面 Convex-Concave Face	400	491	10	4	球齿 Dome	16XØ20	40XØ18+28XØ16	228.5		
	凸凹面 Convex-Concave Face	445	491	10	4	球齿 Domed	20XØ20	48XØ18+25XØ16	266.5		
	凸凹面 Convex-Concave Face	500	491	10	4	球齿 Domed	24XØ20	90XØ18	322		







































**W系列潜孔钻头 / W Shank Drill Bits**

钻头规格 Specifications	头部规格 Specification		钻头头部直径 Head Diameter (mm)	尾柄长度 Shank Length	花键数 Spline	排气孔数量 Port holes	合金数量X直径 Button qty.pcs X dia.mm			重量 Weight (Kg)
	头部形状 Head Shape	齿型 Button Type (选购件 Optional)					边齿 Gauge Buttons	芯齿 Front buttons		
<b>NK90</b>										
	平面 Flat Face	球齿+弹头齿 Spherical+Ballistic	90	130	8	2	6XØ14	5XØ12	4	
	平面 Flat Face	球齿+弹头齿 Spherical+Ballistic	95	130	8	2	6XØ14	5XØ12	4.15	
	平面 Flat Face	球齿+弹头齿 Spherical+Ballistic	100	130	8	2	6XØ14	6XØ12	4.3	
	平面 Flat Face	球齿+弹头齿 Spherical+Ballistic	108	130	8	2	8XØ13	6XØ12	4.7	
<b>WK40</b>										
	凸面 Convex Face	球齿+弹头齿 Spherical+Ballistic	108	143	8	2	7XØ16	6XØ14	6.5	
	凸面 Convex face	球齿+弹头齿 Spherical+Ballistic	115	143	8	2	7XØ16	6XØ14	6.9	
	凸面 Convex face	球齿+弹头齿 Spherical+Ballistic	127	143	8	2	8XØ16	4XØ14+3XØ13	7.8	
	凸面 Convex face	球齿+弹头齿 Spherical+Ballistic	130	143	8	2	8XØ16	4XØ14+3XØ13	8	
<b>WK50</b>										
	凸面 Convex Face	球齿+弹头齿 Spherical+Ballistic	140	170	8	2	7XØ18	4XØ15+3XØ14	12.6	
	平面 Flat Face	球齿 Domed	146	170	8	2	8XØ18	8XØ14	13.3	
	平面 Flat Face	球齿+弹头齿 Spherical+Ballistic	152	170	8	2	8XØ18	8XØ14	13.8	
	平面 Flat Face	球齿+弹头齿 Spherical+Ballistic	165	170	8	2	8XØ18	9XØ14	15.8	
	凹面 Concave Face	球齿 Domed	178	170	8	2	8XØ18	6XØ16+5XØ14	17.2	
<b>WK60</b>										
	凹面 Concave Face	球齿 Domed	154	200	10	2	8XØ18	4XØ16+4XØ15	19.6	
	平面 Flat Face	球齿+弹头齿 Spherical+Ballistic	165	200	10	2	8XØ18	8XØ16	19.8	
	凹面 Concave Face	球齿 Domed	171	200	10	2	8XØ18	6XØ16+4XØ15	21.3	
	凹面 Concave Face	球齿 Domed	178	200	10	2	8XØ18	6XØ16+5XØ15	22.3	
	凹面 Concave Face	球齿 Domed	190	200	10	2	9XØ18	6XØ16+5XØ15	23.5	
	凹面 Concave Face	球齿 Domed	203	200	10	2	10XØ18	8XØ16+6XØ15	26.7	

**Mission系列钻头 / Mission Shank Drill Bits**

钻头规格 Specifications	头部规格 Specification		钻头头部直径 Head Diameter (mm)	尾柄长度 Shank Length	花键数 Spline	排气孔数量 Port holes	合金数量X直径 Button qty.pcs X dia.mm			重量 Weight (Kg)
	头部形状 Head Shape	齿型 Button Type (选购件 Optional)					边齿 Gauge Buttons	芯齿 Front buttons		
<b>Mission30</b>										
	平面 Flat Face	球齿+弹头齿 Spherical+Ballistic	90	225	8	2	6XØ14	5XØ12	4.8	
	平面 Flat Face	球齿+弹头齿 Spherical+Ballistic	95	225	8	2	6XØ14	5XØ12	4.9	
	平面 Flat Face	球齿+弹头齿 Spherical+Ballistic	100	225	8	2	6XØ14	6XØ12	5.1	
	平面 Flat Face	球齿+弹头齿 Spherical+Ballistic	108	225	8	2	8XØ13	6XØ12	5.4	
<b>Mission40</b>										
	凸面 Convex Face	球齿+弹头齿 Spherical+Ballistic	108	228	12	2	7XØ16	6XØ14	7.8	
	凸面 Convex Face	球齿+弹头齿 Spherical+Ballistic	115	228	12	2	7XØ16	6XØ14	8.2	
	凸面 Convex Face	球齿+弹头齿 Spherical+Ballistic	127	228	12	2	8XØ16	4XØ14+3XØ13	9.2	
	凸面 Convex Face	球齿+弹头齿 Spherical+Ballistic	130	228	12	2	8XØ16	4XØ14+3XØ13	9.3	
<b>Mission50</b>										
	凸面 Convex Face	球齿+弹头齿 Spherical+Ballistic	140	260	12	2	7XØ18	4XØ15+3XØ14	13.9	
	平面 Flat Face	球齿 Spherical	146	260	12	2	8XØ18	8XØ14	14.6	
	平面 Flat Face	球齿+弹头齿 Spherical+Ballistic	152	260	12	2	8XØ18	8XØ14	15	
	平面 Flat Face	球齿+弹头齿 Spherical+Ballistic	165	260	12	2	8XØ18	9XØ14	17	
	凹面 Concave Face	球齿 Spherical	178	260	12	2	8XØ18	6XØ16+5XØ14	18.5	
<b>HM5C</b>										
	凹面 Concave Face	球齿+弹头齿 Spherical+Ballistic	140	231	8	2	7XØ18	4XØ15+3XØ14	12.7	
	平面 Flat Face	球齿 Spherical	146	231	8	2	8XØ18	8XØ14	13.4	
	平面 Flat Face	球齿+弹头齿 Spherical+Ballistic	152	231	8	2	8XØ18	8XØ14	13.8	
	平面 Flat Face	球齿+弹头齿 Spherical+Ballistic	165	231	8	2	8XØ18	9XØ14	15.8	
	凹面 Concave Face	球齿 Spherical	178	231	8	2	8XØ18	6XØ16+5XØ14	17.3	
<b>Mission60</b>										
	凹面 Concave Face	球齿 Spherical	154	231	12	2	8XØ18	4XØ16+4XØ15	20.3	
	平面 Flat Face	球齿 Spherical	165	231	12	2	8XØ18	8XØ16	20.5	
	凹面 Concave Face	球齿 Spherical	171	231	12	2	8XØ18	6XØ16+4XØ15	22	
	凹面 Concave Face	球齿 Spherical	178	231	12	2	8XØ18	6XØ16+5XØ15	23	
	凹面 Concave Face	球齿 Spherical	190	231	12	3	9XØ18	6XØ16+5XØ15	24	
	凹面 Concave Face	球齿 Spherical	203	231	12	2	10XØ18	8XØ16+6XØ15	27.3	
<b>Mission80</b>										
	凹面 Concave Face	球齿 Spherical	203	329	12	2	10XØ18	4XØ18+10XØ16	41.2	
	凹面 Concave Face	球齿 Spherical	216	329	12	2	10XØ18	4XØ18+10XØ16	46	
	凹面 Concave Face	球齿 Spherical	230	329	12	2	12XØ18	12XØ18+6XØ16	48.7	
	凹面 Concave Face	球齿 Spherical	235	329	12	2	12XØ18	12XØ18+6XØ16	49.3	
	凹面 Concave Face	球齿 Spherical	254	329	12	2	12XØ18	12XØ18+8XØ16	56.2	
	凸凹面 Convex-Concave Face	球齿 Spherical	275	329	12	2	12XØ18	8XØ16+19XØ16	62.8	
	凸凹面 Convex-Concave Face	球齿 Spherical	305	329	12	3	15XØ18	12XØ16+23XØ16	71.3	

**SD系列钻头 / SD Shank Drill Bits**

钻头规格 Specifications	头部规格 Specification		尾柄长度 Shank Length	花键数 Spline	排气孔数量 Port holes	合金数量X直径 Button qty.pcs X dia.mm			重量 Weight (Kg)
	头部形状 Head Shape	钻头头部直径 Head Diameter (mm)				齿型 Button Type (选购件 Optional)	边齿 Gauge Buttons	芯齿 Front buttons	
<b>SD4</b>									
	凸面 Convex Face	108	260	8	2	球齿+弹头齿 Spherical+Ballistic	7XØ16	6XØ14	9
	凸面 Convex Face	115	260	8	2	球齿+弹头齿 Spherical+Ballistic	7XØ16	6XØ14	9.3
	凸面 Convex Face	127	260	8	2	球齿+弹头齿 Spherical+Ballistic	8XØ16	4XØ14+3XØ13	10.3
	凸面 Convex Face	130	260	8	2	球齿+弹头齿 Spherical+Ballistic	8XØ16	4XØ14+3XØ13	10.5
<b>SD5</b>									
	凸面 Convex Face	140	259	8	2	球齿+弹头齿 Spherical+Ballistic	7XØ18	4XØ15+3XØ14	15
	平面 Flat Face	146	259	8	2	球齿+弹头齿 Spherical+Ballistic	8XØ18	8XØ14	15.8
	平面 Flat Face	152	259	8	2	球齿+弹头齿 Spherical+Ballistic	8XØ18	8XØ14	16.1
	凹面 Concave Face	165	259	8	2	球齿 Spherical	8XØ18	4XØ16+4XØ14	18.2
	凹面 Concave Face	178	259	8	2	球齿 Spherical	8XØ18	6XØ16+5XØ14	19.6
<b>SD6</b>									
	凹面 Concave Face	154	322	8	2	球齿 Spherical	8XØ18	4XØ16+4XØ15	25
	平面 Flat Face	165	322	8	2	球齿 Spherical	8XØ18	8XØ16	25.8
	凹面 Concave Face	171	322	8	2	球齿 Spherical	8XØ18	6XØ16+4XØ15	27.3
	凹面 Concave Face	178	322	8	2	球齿 Spherical	8XØ18	6XØ16+5XØ15	28.2
	凹面 Concave Face	190	322	8	3	球齿 Spherical	9XØ18	6XØ16+5XØ15	29.4
	凹面 Concave Face	203	322	8	2	球齿 Spherical	10XØ18	8XØ16+6XØ15	32.5
<b>SD8</b>									
	凹面 Concave Face	203	321	8	2	球齿 Spherical	10XØ18	4XØ18+10XØ16	41.3
	凹面 Concave Face	216	321	8	2	球齿 Spherical	10XØ18	4XØ18+10XØ16	45
	凹面 Concave Face	230	321	8	2	球齿 Spherical	12XØ18	12XØ18+6XØ16	47.8
	凹面 Concave Face	235	321	8	2	球齿 Spherical	12XØ18	12XØ18+6XØ16	48.4
	凹面 Concave Face	254	321	8	2	球齿 Spherical	12XØ18	12XØ18+8XØ16	55.3
	凸凹面 Convex- Concave Face	275	321	8	2	球齿 Spherical	12XØ18	27XØ16	62
	凸凹面 Convex- Concave Face	305	321	8	3	球齿 Spherical	15XØ18	35XØ16	70.5
<b>SD10</b>									
	凸凹面 Convex- Concave Face	254	356	8	2	球齿 Spherical	12XØ19	8XØ18+19XØ16	83.2
	凸凹面 Convex- Concave Face	275	356	8	2	球齿 Spherical	12XØ19	8XØ18+20XØ16	87.7
	凸凹面 Convex- Concave Face	305	356	8	3	球齿 Spherical	15XØ19	27XØ18+8XØ16	97.5
	凸凹面 Convex- Concave Face	325	356	8	3	球齿 Spherical	15XØ19	27XØ18+9XØ16	106
	凸凹面 Convex- Concave Face	350	356	8	4	球齿 Spherical	16XØ19	32XØ18+14XØ16	115.3
	凸凹面 Convex- Concave Face	400	356	8	4	球齿 Spherical	16XØ19	40XØ18+25XØ16	140.7
<b>SD12</b>									
	凸凹面 Convex- Concave Face	305	470	8	3	球齿 Spherical	15XØ20	27XØ18+8XØ16	146.5
	凸凹面 Convex- Concave Face	311	470	8	3	球齿 Spherical	15XØ20	27XØ18+8XØ16	147
	凸凹面 Convex- Concave Face	325	470	8	3	球齿 Spherical	15XØ20	27XØ18+9XØ16	156
	凸凹面 Convex- Concave Face	350	470	8	4	球齿 Spherical	16XØ20	32XØ18+13XØ16	166
	凸凹面 Convex- Concave Face	381	470	8	4	球齿 Spherical	16XØ20	36XØ18+18XØ16	184
	凸凹面 Convex- Concave Face	400	470	8	4	球齿 Spherical	16XØ20	40XØ18+28XØ16	199
	凸凹面 Convex- Concave Face	445	470	8	4	球齿 Spherical	20XØ20	48XØ18+25XØ16	237.5
	凸凹面 Convex- Concave Face	500	470	8	4	球齿 Spherical	24XØ20	90XØ18	293













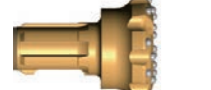






**SP1880+SP330系列钻头 / SP1880 + SP330 Shank Drill Bits**

钻头规格 Specifications	头部规格 Specification		尾柄长度 Shank Length	花键数 Spline	排气孔数量 Port holes	合金数量X直径 Button qty.pcs X dia.mm			重量 Weight (Kg)
	头部形状 Head Shape	钻头头部直径 Head Diameter (mm)				齿型 Button Type (选购件 Optional)	边齿 Gauge Buttons	芯齿 Front buttons	
<b>SP330</b>									
	双边齿凹面 Double gauge button Concave Face	450	520	10	4	球齿 Domed	20XØ20	16XØ19+57XØ18	308
	双边齿凹面 Double gauge button Concave Face	500	520	10	4	球齿 Domed	24XØ20	16XØ19+73XØ18	354
	双边齿凹面 Double gauge button Concave Face	550	520	10	4	球齿 Domed	24XØ20	16XØ19+79XØ18	410
	双边齿凹面 Double gauge button Concave Face	600	520	10	4	球齿 Domed	24XØ20	16XØ19+96XØ18	483
<b>SP1880</b>									
	凸凹面 Convex- Concave Face	600	480	16	4	球齿 Domed	24XØ22	72XØ20+32XØ18	636
	双边齿凹面 Double gauge button Concave Face	650	480	16	4	球齿 Domed	24XØ22	80XØ20+38XØ18	721
	双边齿凹面 Double gauge button Concave Face	700	480	16	5	球齿 Domed	30XØ22	90XØ20+43XØ18	838
	凸凹面 Convex- Concave Face	800	480	16	6	球齿 Domed	36XØ22	182XØ19	1152

# Middle-Low Air Pressure DTH Button Bits

## 中低风压潜孔钻头

### CIR系列钻头/ CIR Series Drill Bits

钻头规格 Face shape	头部规格 Button bits face	头部形状 Head Shape	钻头头部直径 Diameter of button face (mm)	尾柄长度 Shank Length	花键数 Spline	排气孔数量 NO.Air Holes	合金数量X直径 Button qty.pcs X dia.mm			重量 Weight (Kg)
							齿型 Button Type (选购件 Optional)	边齿 Gauge Buttons	芯齿 Front buttons	
<b>CIR65</b>										
	平面 Flat Face	65	105	4	2	球齿 Spherical	4XØ12	2XØ12	1.5	
	凸面 Convex Face	68	105	4	2	球齿 Spherical	4XØ12	2XØ12	1.6	
<b>CIR70</b>										
	平面 Flat Face	76	111	4	2	球齿 Spherical	6XØ12	4XØ11	2	
	凸面 Convex Face	85	111	4	2	球齿 Spherical	6XØ13	2XØ12+2XØ11	2.3	
<b>CIR90</b>										
	凸面 Convex Face	90	130	6	2	球齿 Spherical	6XØ14	2XØ13+2XØ12	3.75	
	凹面 Concave Face	110	130	6	2	弹头齿 Ballistic	6XØ14	6XØ13	4.8	
<b>CIR110</b>										
	凹面 Concave Face	110	140	6	2	弹头齿 Ballistic	6XØ14	6XØ13	6.2	
	凹面 Concave Face	130	140	6	2	弹头齿 Ballistic	8XØ14	4XØ14+3XØ13	8.05	
	平面 Flat Face	140	140	6	2	弹头齿 Ballistic	8XØ14	8XØ14	9	
<b>CIR150</b>										
	凸面 Convex Face	155	170	6	3	弹头齿 Ballistic	9XØ16	10XØ14	16.7	
	凸面 Convex Face	165	170	6	3	弹头齿 Ballistic	9XØ16	10XØ14	17.55	
	凸面 Convex Face	178	170	6	3	弹头齿 Ballistic	9XØ16	6XØ16+6XØ14	18.85	
<b>CIR170</b>										
	凸面 Convex Face	195	170	6	3	弹头齿 Ballistic	9XØ16	6XØ16+8XØ14	24.2	
	凸面 Convex Face	203	170	6	3	弹头齿 Ballistic	9XØ16	6XØ16+10XØ14	26.35	
<b>N3</b>										
	凸面 Convex Face	90	130	6	2	弹头齿 Ballistic	6XØ14	2XØ13+2XØ12	3.55	
	凹面 Concave Face	110	130	6	2	弹头齿 Ballistic	6XØ14	6XØ13	4.6	
<b>N4</b>										
	凹面 Concave Face	110	140	6	2	弹头齿 Ballistic	6XØ14	6XØ13	6	
	凹面 Concave Face	130	140	6	2	弹头齿 Ballistic	8XØ14	4XØ14+3XØ13	7.85	
	平面 Flat Face	140	140	6	2	弹头齿 Ballistic	8XØ14	8XØ14	8.8	

### BR系列钻头/ BR Series Drill Bits

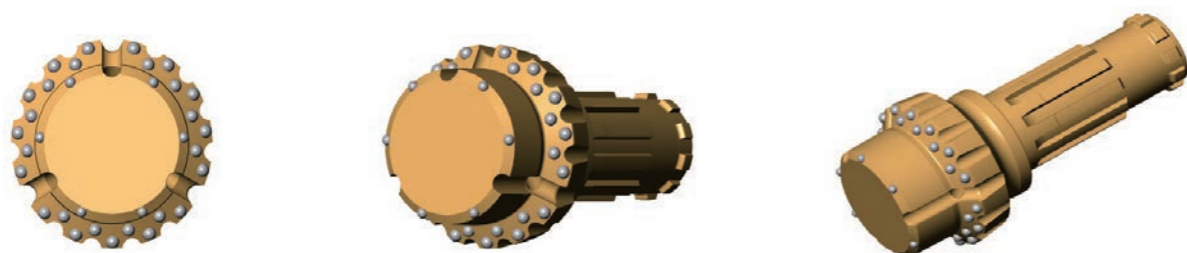
钻头规格 Face shape	头部规格 Button bits face	头部形状 Head Shape	钻头头部直径 Diameter of button face (mm)	尾柄长度 Shank Length	花键数 Spline	排气孔数量 Port holes	合金数量X直径 Button qty.pcs X dia.mm			重量 Weight (Kg)
							齿型 Button Type (选购件 Optional)	边齿 Gauge Buttons	芯齿 Front buttons	
<b>BR1</b>										
	平面 Flat Face	64	163	6	2	弹头齿 Ballistic	6XØ10	4XØ9	1.8	
	凸面 Convex Face	70	163	6	2	弹头齿 Ballistic	6XØ11	4XØ10	2	
<b>BR2</b>										
	平面 Flat Face	76	165	6	2	弹头齿 Ballistic	6XØ14	4XØ11	2.7	
	平面 Flat Face	80	165	6	2	弹头齿 Ballistic	6XØ14	4XØ11	2.8	
	平面 Flat Face	85	165	6	2	弹头齿 Ballistic	6XØ14	4XØ12	3	
	平面 Flat Face	90	165	6	2	弹头齿 Ballistic	6XØ14	4XØ12	3.1	
<b>BR3</b>										
	平面 Flat Face	90	165	6	2	球齿+弹头齿 Spherical+Ballistic	6XØ14	5XØ12	4.1	
	平面 Flat Face	95	165	6	2	球齿+弹头齿 Spherical+Ballistic	6XØ14	5XØ12	4.3	
	平面 Flat Face	100	165	6	2	球齿+弹头齿 Spherical+Ballistic	6XØ14	6XØ12	4.5	
	平面 Flat Face	108	165	6	2	球齿+弹头齿 Spherical+Ballistic	8XØ13	6XØ12	4.8	



# Hole Opener Bit Design

潜孔扩孔钻头

扩孔钻头示意图  
 3D-Effect Drawing Of Hole Opener Bit



## 扩孔钻头规格/Reaming Bit 's

头部规格 Specification 钻头规格 Specifications	具体尺寸 Specific Detailed Size											
D(mm)	165	178	190	216	254	305	305	381	381	445	482	600
D1(mm)	82	99	115	138	159	208	208	296	296	305	311	445
边齿	16	16	18	18	18	18	20	20	20	20	22	22
中齿	14	14	15	15	16	16	18	18	18	18	19	19
可配尾柄	ND45A SP480 Mission40	ND55A SP580 Mission50	ND65A SP680 Mission60	SP880A SP882/SP883 Mission80	SP1080/SP1081 SD10	SP1280/SD12/ QL120						

备注:扩孔钻头的导向尺寸与扩孔尺寸, 合金大小, 可根据客户要求设计。

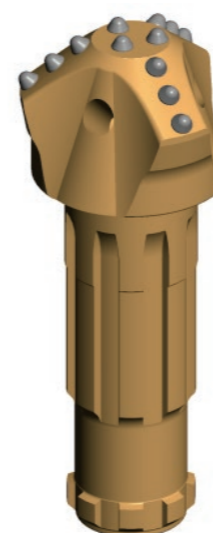
# 3-Wings DTH Bit

潜孔三翼钻头

## 三翼钻头规格/3-Wings DTH Bit's

头部规格 Specification 钻头规格 Specifications	钻头头部直径 Head Diameter (mm)	排气孔数量 Port Holes	合金数量X直径 Button qty.pcs X dia.mm		
			齿型 Button Type (选购件 Optional)	边齿 Gauge Buttons	芯齿 Front Buttons
	130	3	弹头齿 Ballistic	9×Ø14	3×Ø13
	140	3	弹头齿 Ballistic	9×Ø14	3×Ø14
	150	3	弹头齿 Ballistic	9×Ø14	3×Ø14
	152	3	弹头齿 Ballistic	9×Ø15	3×Ø15
	165	3	弹头齿 Ballistic	9×Ø15	3×Ø15
	180	3	弹头齿 Ballistic	9×Ø15	3×Ø15
	180	3	弹头齿 Ballistic	9×Ø16	3×Ø15
	190	3	弹头齿 Ballistic	9×Ø16	4×Ø15
	203	3	弹头齿 Ballistic	9×Ø16	4×Ø15
	219	3	弹头齿 Ballistic	12×Ø16	4×Ø15
	254	3	弹头齿 Ballistic	15×Ø16	4×Ø15

备注:三翼钻头同规格的头部布齿一样, 只是钻头尾柄不一样。





# 03

## CASING SYSTEM

### 跟管钻具

#### 跟管钻具的应用

#### The Application Of Casing System

适用于建筑、堤坝、港口工程的水井、地热井、短孔、中、小型灌浆孔的钻进。

It is suitable for drilling water wells , geothermal wells , short micropiles ,medium mini-type grouting hole of building .





# Eccentric Casing System

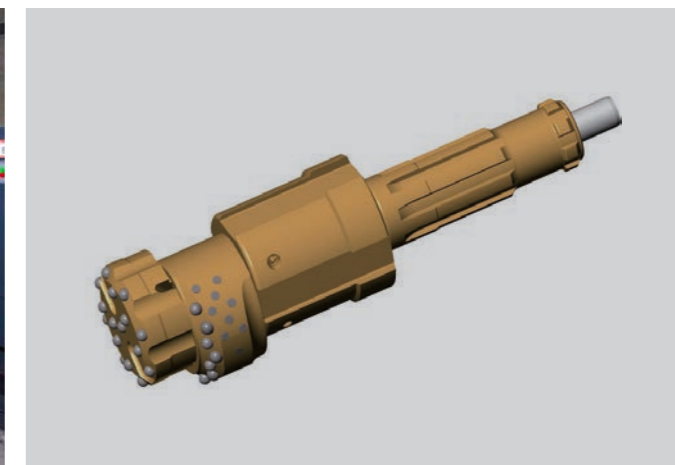
## 偏心扩孔钻具

**零件表面的硬化处理**  
Hardening treatment of the part's surface

具有较长的使用寿命和优异的抗磨性能。  
with longer operating life and excellent anti-wear properties.

**优越性能**  
Superior performance

性能稳定可靠，钻进速度快。  
Stable and reliable performance, high drilling speed

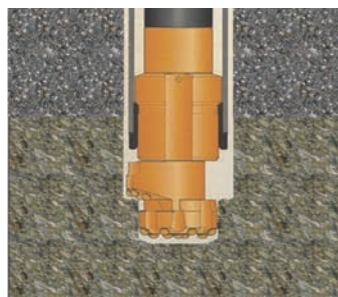


## Working Principle of Drill

### 钻具工作原理

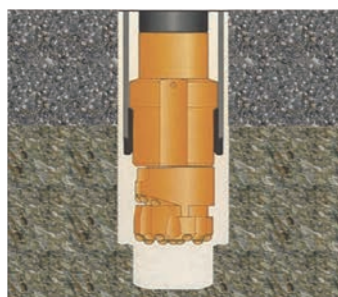
**01** 凿岩工作开始时，偏心扩孔套沿偏心导向钻头旋出，同时开始扩孔以保证套管和钻进系统同时前进。

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.



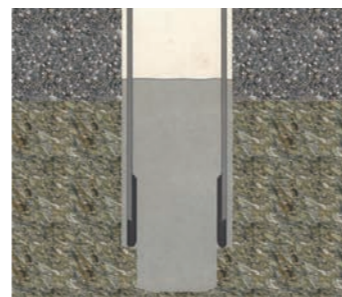
**02** 跟管钻进到位后，小心地反转，偏心扩孔套旋回，并将偏心钻具系统从套管中拔出。

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



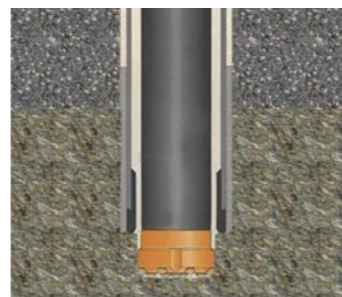
**03** 套管向上拔，同时在孔底喷灌砂浆或其它填充物。

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.



**04** 在基岩中采用常规钻具钻进以达到所需深度。

Drilling continues to the desired depth in the bedrock using a conventional drill string.



## 偏心扩孔钻具规格/ODEX Casing System/Eccentric Overburden Casing System

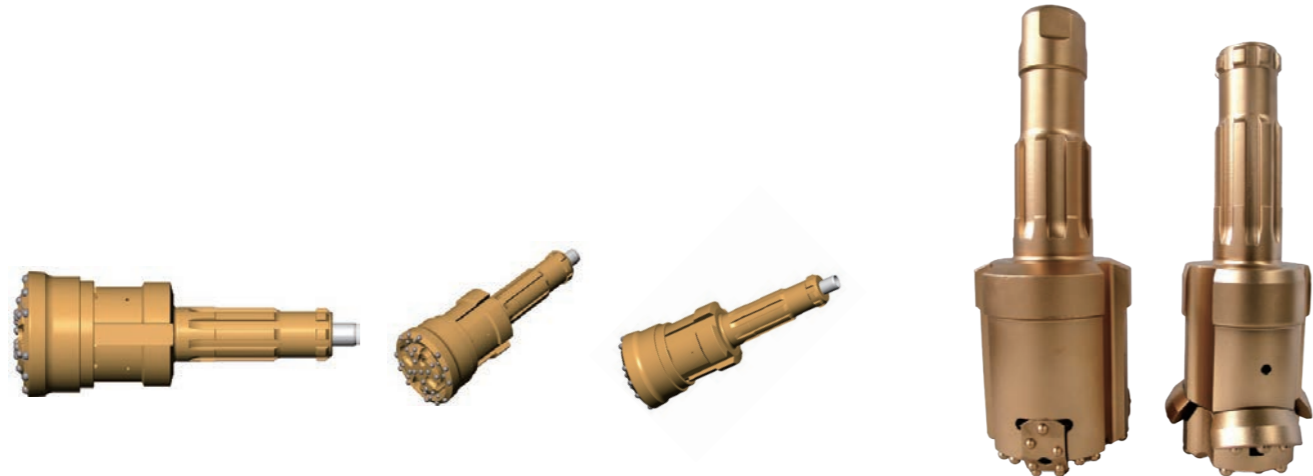
规格型号 Model	套管外径(mm) Casing Tube O.D	稳杆器最大外径D (mm) Maximum O.D. of Guide Device	钻头含齿直径D1(mm) Bit Diameter( Button Included)	管靴内径(mm) Casing Shoe I.D.	扩孔最大直径D2 (mm) Maximum Reaming O.D.	所配冲击器规格 Hammer Style
108偏心钻具	φ 108	φ 92	φ 84	φ 86	φ 118	3寸
114偏心钻具	φ 114	φ 100	φ 92	φ 94	φ 124	3寸
127偏心钻具	φ 127	φ 110	φ 100	φ 102	φ 136	3~4寸
146偏心钻具	φ 146	φ 124	φ 115	φ 117	φ 156	4寸
168偏心钻具	φ 168	φ 146	φ 134	φ 138	φ 178	5寸
178偏心钻具	φ 178	φ 156	φ 144	φ 148	φ 193	5寸
183偏心钻具	φ 183	φ 160	φ 144	φ 152	φ 193	5寸
194偏心钻具	φ 194	φ 178	φ 165	φ 167	φ 208	6寸
219偏心钻具	φ 219	φ 203	φ 189	φ 193	φ 237	6~7寸
245偏心钻具	φ 245	φ 220	φ 206	φ 210	φ 260	6~8寸
273偏心钻具	φ 273	φ 256	φ 238	φ 242	φ 308	8寸
325偏心钻具	φ 325	φ 297	φ 280	φ 285	φ 355	8~10寸
377偏心钻具	φ 377	φ 351	φ 328	φ 333	φ 420	10~12寸

备注:以上尺寸为厂标设计尺寸,客户套管壁厚如有不同需特殊设计.



# Concentric Casing System

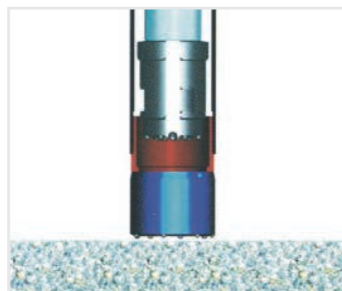
## 同心跟管钻具



### Working Principle of Drill

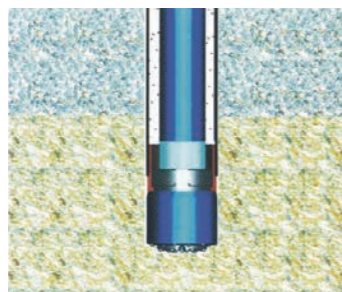
#### 钻具工作原理

01 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。



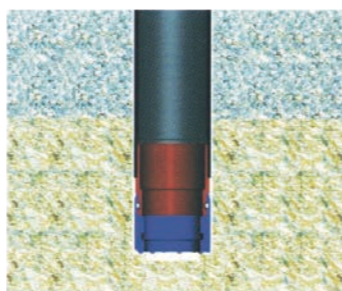
Ring bit and casing shoe assembly is welded to casing prior to drilling. Lock the assembly into pilot bit with hammer. The pilot bit' shoulder engages the shoulder of the casing shoe.

02 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。



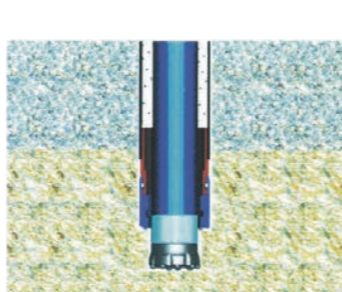
Hammer's percussive energy is transferred through the pilot and ring bit, crushing rock. Part of impact energy advances casing.

03 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。



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.

04 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。



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

### Advantages of Concentric Drilling

#### 同心跟管钻具优势

- ① 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。
- ② 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。
- ③ 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。
- ④ 可以进行任何角度的钻孔。  
对心钻具能钻任何角度的孔。
- ⑤ 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立即沿套管上升，因此，对孔壁损害较小，排渣效果好。
- ⑥ 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。
- ⑦ 经济，成本低。  
对心钻进系统的结构和原理能保证显著减少停机时间，消耗品少，运转成本低。

- ① **Drilling Straight and fast**  
Theoretically, Concentric 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.
- ② **The torque for Concentric drilling is much less than 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.
- ③ **Easily Unlocking-relocking**  
Unlocking the system is sometimes required during process. Relocking is easy since there are no eccentric components that must be opened or closed inside the hole.
- ④ **Drilling in any angle.**  
Concentric drilling system can drill the hole at any angle.
- ⑤ **Effective cuttings discharge.**  
The airflow for cutting discharge purpose during the Concentric 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.
- ⑥ **Easy-to-operate and system security**  
Drilling workers are relieved of the need to maintain their continuous and constant attention on drilling process since Concentric drilling can carry on smoothly.
- ⑦ **Economical and cost-effective.**  
The structure and principle of operation of Concentric drilling system can guarantee considerable reduction in downtime, fewer consumable and lower operation costs.

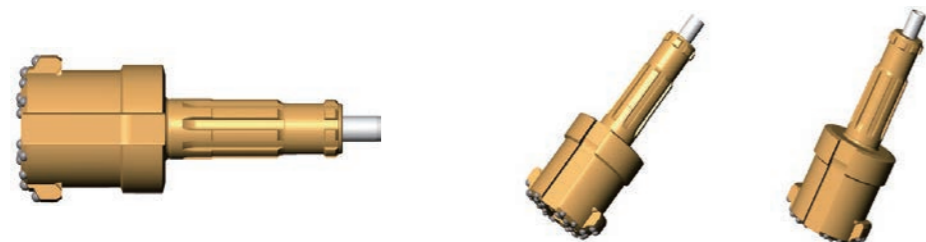
### 同心跟管钻具规格/Concentric Casing System

规格型号 Model	套管外径(mm) Casing Tube O.D	中心钻头最大外径D(mm) Bit Diameter( Button Included)	管靴内径(mm) Casing Shoe I.D.	扩孔最大尺寸(mm) Maximum Reaming O.D.	所配冲击器规格 Hammer Style
146同心钻具 Concentric Casing	φ 146	φ 123.5	φ 116	φ 156	4寸
168同心钻具 Concentric Casing	φ 168	φ 146	φ 140	φ 184	5寸
178同心钻具 Concentric Casing	φ 178	φ 157	φ 150	φ 194	5寸
183同心钻具 Concentric Casing	φ 183	φ 160	φ 152	φ 198	5寸
194同心钻具 Concentric Casing	φ 194	φ 178	φ 164	φ 208	6寸
219同心钻具 Concentric Casing	φ 219	φ 203	φ 192	φ 234	6~7寸
245同心钻具 Concentric Casing	φ 245	φ 217	φ 205	φ 260	6~8寸
273同心钻具 Concentric Casing	φ 273	φ 246	φ 233	φ 291	8寸
325同心钻具 Concentric Casing	φ 325	φ 297	φ 282	φ 340	8~10寸
377同心钻具 Concentric Casing	φ 377	φ 351	φ 332	φ 405	10~12寸

备注:以上尺寸为厂标设计尺寸,客户套管壁厚如有不同需特殊设计.

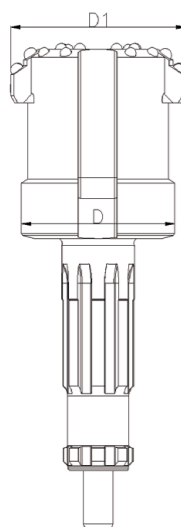
# Slide Block Casing System

滑块式跟管钻具



## 滑块式跟管钻具规格/Slide Block Casing System

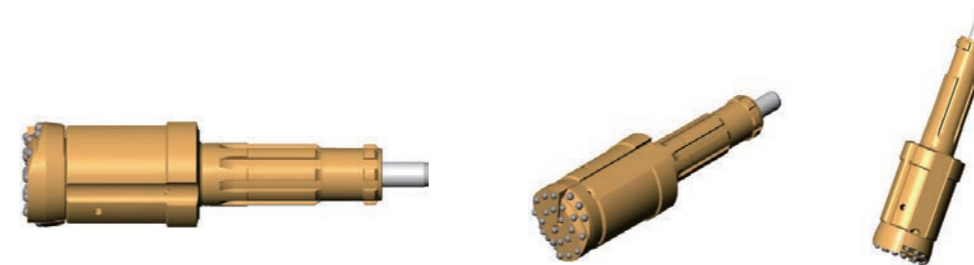
规格型号 Model	套管外径(mm) Casing OD	中心钻头最大外径D(mm) Maximum OD of Center Bit	管靴内径(mm) Casing Shoe ID	扩孔最大尺寸(mm) Maximum OD of Reaming	所配冲击器规格 Hammer Type
146滑块钻具 Slide Block Casing	φ 146	φ 123	φ 115	φ 156	4寸
168滑块钻具 Slide Block Casing	φ 168	φ 146	φ 140	φ 185	5寸
178滑块钻具 Slide Block Casing	φ 178	φ 156	φ 150	φ 193	5寸
183滑块钻具 Slide Block Casing	φ 183	φ 160	φ 154	φ 193	5寸
194滑块钻具 Slide Block Casing	φ 194	φ 178	φ 166	φ 211	6寸
219滑块钻具 Slide Block Casing	φ 219	φ 203	φ 193	φ 237	6~7寸
245滑块钻具 Slide Block Casing	φ 245	φ 220	φ 210	φ 260	6~8寸
273滑块钻具 Slide Block Casing	φ 273	φ 251	φ 241	φ 308	8寸
325滑块钻具 Slide Block Casing	φ 325	φ 298	φ 281	φ 378	8~10寸
377滑块钻具 Slide Block Casing	φ 377	φ 350	φ 335	φ 430	10~12寸
406滑块钻具 Slide Block Casing	φ 406	φ 380	φ 363	φ 426	12寸
560滑块钻具 Slide Block Casing	φ 560	φ 530	φ 511	φ 590	18寸
610滑块钻具 Slide Block Casing	φ 610	φ 582	φ 556	φ 640	18寸



备注:以上尺寸为厂标设计尺寸,客户套管壁厚如有不同需特殊设计.

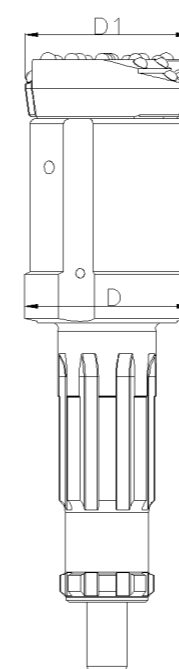
# Overburden Wing Bit

旋翼式跟管钻具



## 旋翼式跟管钻具规格/Overburden Wing Bit

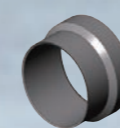
规格型号 Model	套管外径(mm) Casing OD	中心钻头最大外径D(mm) Maximum OD of Center Bit	管靴内径(mm) Casing Shoe ID	扩孔最大尺寸(mm) Maximum OD of Reaming	所配冲击器规格 Hammer Type
146旋翼钻具 Overburden Wing Bit	φ 146	φ 123	φ 115	φ 156	4寸
168旋翼钻具 Overburden Wing Bit	φ 168	φ 146	φ 136	φ 184	5寸
178旋翼钻具 Overburden Wing Bit	φ 178	φ 156	φ 142	φ 193	5寸
183旋翼钻具 Overburden Wing Bit	φ 183	φ 160	φ 146	φ 198	5寸
194旋翼钻具 Overburden Wing Bit	φ 194	φ 178	φ 162	φ 208	6寸
219旋翼钻具 Overburden Wing Bit	φ 219	φ 203	φ 180	φ 234	6~7寸
245旋翼钻具 Overburden Wing Bit	φ 245	φ 220	φ 202	φ 260	6~8寸
273旋翼钻具 Overburden Wing Bit	φ 273	φ 251	φ 237	φ 300	8寸
325旋翼钻具 Overburden Wing Bit	φ 325	φ 298	φ 280	φ 355	8~10寸
377旋翼钻具 Overburden Wing Bit	φ 377	φ 350	φ 330	φ 407	10~12寸



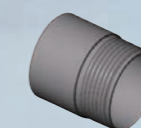
备注:以上尺寸为厂标设计尺寸,客户套管壁厚如有不同需特殊设计.

# Drilling Equipment

管靴与跟管产品



焊接管靴示意图  
Weldable Casing Shoe/ Weldable Crown



螺纹管靴示意图  
Threaded Casing Shoe/ Threaded Crown



跟管示意图  
Casing Tube





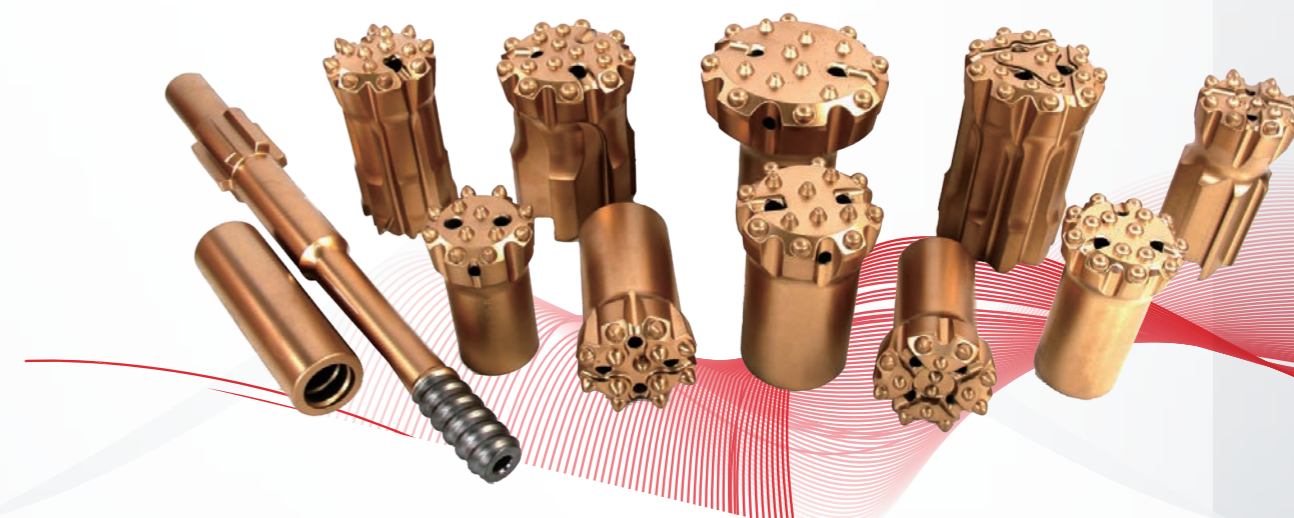
# 04

## TOP HAMMER DRILL BIT

### 顶锤钻头

新金刚顶锤产品主要用于地质勘探、煤矿、水利水电、公路、铁路、桥梁、建设施工等。

The new diamond top hammer drill bit is mainly used in geological exploration, coal mine, water conservancy and hydropower, highway, railway, bridge, construction and construction, etc.












# Top Hammer Drill Bit

## 顶锤钻头






### 导向系列钻头/Retrac Button Bit

钻头规格 Specifications	头部规格 Specification		钎头长度 (不含合金) Length (without Button)	水孔数量 Holes		合金数量X直径 Button qty pcs X dia.mm			重量 Weight (Kg)
	头部形状 Head Shape	钻头头部直径 Head Diameter (mm)		面水孔 Port Holes	边水孔 Side Holes	齿型 Button Type (可选 Optional)	边齿 Gauge Buttons	芯齿 Front buttons	
	<b>R32</b>								
	平面 Flat Face	51	130	3	/	球齿+球齿 Domed+Domed	6-φ10	3-φ9	1.25
	平面 Flat Face	57	130	3	/	弹头齿 Ballistic	6-φ10	3-φ9	1.65
	<b>R38</b>								
	平面 Flat Face	64	140	3	/	球齿+弹头齿 Domed+Ballistic	6XØ11	3-φ9	2.05
	中心下陷 Center Drop Face	76	160	4	/	球齿+球齿 Domed+Domed	8-φ11	5-φ11	3.65
	中心下陷 Center Drop Face	89	170	4	/	球齿+球齿 Domed+Domed	8-φ12	4-φ12+2-φ10	5.3
	<b>T38</b>								
	中心下陷 Center Drop Face	64	160	2	/	球齿+球齿 Domed+Domed	8-φ9	5-φ9	2.45
	平面 Flat Face	70	160	3	/	球齿+球齿 Domed+Domed	6-φ11	4-φ9	2.85
	中心下陷 Center Drop Face	76	160	4	/	球齿+球齿 Domed+Domed	8-φ11	5-φ11	3.7
	中心下陷 Center Drop Face	89	170	4	/	抛物线+抛物线 Parabola+Parabola	8-φ12	4-φ12+2-φ10	5.3
	<b>T45</b>								
	中心下陷 Center Drop Face	72	160	4	/	球齿+球齿 Domed+Domed	8-φ11	5-φ10	3.15
	中心下陷 Center Drop Face	76	160	4	/	球齿+球齿 Domed+Domed	8-φ12	4-φ11+1-φ10	3.55
	中心下陷 Center Drop Face	89	170	4	/	弹头齿+弹头齿 Ballistic+Ballistic	8-φ12	4-φ12+2-φ10	5
	中心下陷 Center Drop Face	102	180	4	/	球齿+球齿 Domed+Domed	8-φ13	6-φ12	7.3
	<b>T51</b>								
	中心下陷 Center Drop Face	89	170	4	/	弹头齿+弹头齿 Ballistic+Ballistic	8-φ12	4-φ12+2-φ11	5
	中心下陷 Center Drop Face	102	180	4	/	弹头齿+弹头齿 Ballistic+Ballistic	8-φ13	4-φ13+2-φ12	7.12
	平面 Flat Face	115	185	2	2	球齿+球齿 Domed+Domed	8-φ14	6-φ13	10.1
	中心下陷 Center Drop Face	127	185	4	/	球齿+球齿 Domed+Domed	8-φ14	4-φ14+3-φ13	12.4
	<b>ST58</b>								
	平面 Flat Face	102	180	3	/	抛物线+抛物线 Parabola+Parabola	9-φ13	6-φ12	6.5
	平面 Flat Face	115	185	2	2	球齿+球齿 Domed+Domed	8-φ14	6-φ13	9.5
	中心下陷 Center Drop Face	127	185	4	/	球齿+球齿 Domed+Domed	8-φ14	4-φ14+3-φ13	11.7
	<b>GT60山特维克款</b>								
	平面三角形 Flat Triangle Face	102	212	3	/	球齿+球齿 Domed+Domed	9-φ13	9-φ11	10
	平面三角形 Flat Triangle Face	115	212	3	/	球齿+球齿 Domed+Domed	9-φ14	10-φ12	8
	平面三角形 Flat Triangle Face	127	212	3	/	球齿+球齿 Domed+Domed	9-φ16	10-φ14	13.9
	平面三角形 Flat Triangle Face	140	225	3	/	球齿+球齿 Domed+Domed	9-φ16	10-φ14	17.4



### 导向系列钻头/Retrac Button Bit

钻头规格 Specifications	头部规格 Specification		钎头长度 (不含合金) Length (without Button)	水孔数量 Holes		合金数量X直径 Button qty pcs X dia.mm			重量 Weight (Kg)
	头部形状 Head Shape	钻头头部直径 Head Diameter (mm)		面水孔 Port Holes	边水孔 Side Holes	齿型 Button Type (可选 Optional)	边齿 Gauge Buttons	芯齿 Front buttons	
	<b>EL60款</b>								
	中心下陷 Center Drop Face	102	200	3	/	球齿+球齿 Domed+Domed	9-φ14	7-φ13	6.5
	中心下陷 Center Drop Face	115	200	4	/	球齿+球齿 Domed+Domed	8-φ14	4-φ14+2-φ13	9
	中心下陷 Center Drop Face	127	205	4	/	球齿+球齿 Domed+Domed	8-φ14	4-φ14+3-φ13	12
	<b>ST68</b>								
	中心下陷 Center Drop Face	102	185	4	/	球齿+球齿 Domed+Domed	8-φ14	4-φ13+2-φ12	6.1
	中心下陷 Center Drop Face	115	185	4	/	球齿+球齿 Domed+Domed	8-φ14	4-φ14+2-φ13	8.4
	中心下陷 Center Drop Face	127	190	4	/	球齿+球齿 Domed+Domed	8-φ14	4-φ14+3-φ13	11.4
	中心下陷 Center Drop Face	140	190	4	/	球齿+球齿 Domed+Domed	8-φ16	4-φ14+3-φ13	14.3
	<b>T45 山特维克款</b>								
	梅花槽 Triangle Face	89	170	4	/	球齿+球齿 Domed+Domed	8-φ13	5-φ13	5
	平面三角形 Flat Triangle Face	102	175	3	/	球齿+球齿 Domed+Domed	9-φ13	9-φ11	7.25
	平面三角形 Flat Triangle Face	115	175	3	/	球齿+球齿 Domed+Domed	9-φ14	10-φ12	9.5
	<b>T51 山特维克款</b>								
	平面三角形 Flat Triangle Face	102	185	3	/	球齿+球齿 Domed+Domed	9-φ13	9-φ11	7.5
	平面三角形 Flat Triangle Face	115	185	3	/	球齿+球齿 Domed+Domed	9-φ14	10-φ12	10
	平面三角形 Flat Triangle Face	127	185	3	/	球齿+球齿 Domed+Domed	9-φ14	10-φ13	12.8

**螺纹系列钻头/Normal Button Bit**

钻头规格 Specifications	头部规格 Specification		钎头长度 (不含合金) Length (without Button)	水孔数量 Holes		合金数量X直径 Button qty pcs X dia.mm			重量 Weight (Kg)
	头部形状 Head Shape	钻头头部直径 Head Diameter (mm)		面水孔 Port Holes	边水孔 Side Holes	齿型 Button Type (可选 Optional)	边齿 Gauge Buttons	芯齿 Front buttons	
	<b>R25</b>								
	平面 Flat Face	38	105	1	2	弹头齿 Ballistic	5-φ8	2-φ8	0.5
	平面 Flat Face	45	110	3	2	弹头齿 Ballistic	6-φ9	3-φ8	0.65
	<b>R32</b>								
	平面 Flat Face	45	113	3	2	弹头齿 Ballistic	6-φ9	3-φ8	0.75
	平面 Flat Face	64	130	2	/	球齿 Domed	6-φ10	4-φ9	2.1
	凸面 Convex Face	76	130	2	/	球齿 Domed	6-φ12	2φ12+2-φ10	2.7
	<b>R38</b>								
	中心下陷 Center Drop Face	64	130	3	/	球齿+弹头齿 Domed+Ballistic	6XØ11	3-φ9	1.85
	中心下陷 Center Drop Face	76	130	2	2	球齿+球齿 Domed+Domed	8-φ12	4-φ12	2.45
	中心下陷 Center Drop Face	89	130	2	2	球齿+球齿 Domed+Domed	8-φ12	6-φ12	3.5
	<b>T38</b>								
	中心下陷 Center Drop Face	64	130	2	/	球齿+球齿 Domed+Domed	8-φ9	5-φ9	1.85
	平面 Flat Face	70	130	3	2	球齿+球齿 Domed+Domed	6-φ12	4-φ10	2.05
	中心下陷 Center Drop Face	76	130	4	/	球齿+球齿 Domed+Domed	8-φ11	5-φ10	2.55
	中心下陷 Center Drop Face	89	130	4	/	抛物线+抛物线 Parabola+Parabola	8-φ12	4-φ12+2-φ10	3.55
	<b>T45</b>								
	中心下陷 Center Drop Face	72	140	4	/	球齿+球齿 Domed+Domed	8-φ11	5-φ10	2.25
	中心下陷 Center Drop Face	76	140	4	/	球齿+球齿 Domed+Domed	8-φ11	4-φ11+1-φ10	2.9
	中心下陷 Center Drop Face	89	145	4	/	弹头齿+弹头齿 Ballistic+Ballistic	8-φ12	4-φ12+2-φ10	3.8
	中心下陷 Center Drop Face	102	150	4	/	球齿+球齿 Domed+Domed	8-φ13	6-φ12	4.8
	<b>T51</b>								
	中心下陷 Center Drop Face	89	155	4	/	弹头齿+弹头齿 Ballistic+Ballistic	8-φ12	4-φ12+2-φ11	4.15
	中心下陷 Center Drop Face	102	155	4	/	弹头齿+弹头齿 Ballistic+Ballistic	8-φ14	4-φ13+2-φ12	5.8
	平面 Flat Face	115	160	2	2	球齿+球齿 Domed+Domed	8-φ14	6-φ13	6.55
	中心下陷 Center Drop Face	127	165	4	/	球齿+球齿 Domed+Domed	8-φ14	4-φ14+3-φ13	7.7
	<b>ST58</b>								
	中心下陷 Center Drop Face	89	175	4	/	弹头齿+弹头齿 Ballistic+Ballistic	8-φ12	4-φ12+2-φ11	4.4
	平面 Flat Face	102	180	3	/	抛物线+抛物线 Parabola+Parabola	9-φ13	6-φ12	5.8
	平面 Flat Face	115	185	2	2	球齿+球齿 Domed+Domed	8-φ14	6-φ13	7.7
	中心下陷 Center Drop Face	127	185	4	/	球齿+球齿 Domed+Domed	8-φ14	4-φ14+3-φ13	8.9
	<b>GT60山特维克款</b>								
	平面三角形 Flat Triangle Face	102	220	3	/	球齿+球齿 Domed+Domed	9-φ13	9-φ11	8.1
	平面三角形 Flat Triangle Face	115	220	3	/	球齿+球齿 Domed+Domed	9-φ14	10-φ12	8.8
	平面三角形 Flat Triangle Face	127	225	3	/	球齿+球齿 Domed+Domed	9-φ16	10-φ14	10.6
	平面三角形 Flat Triangle Face	140	230	3	/	球齿+球齿 Domed+Domed	9-φ16	10-φ14	11.7

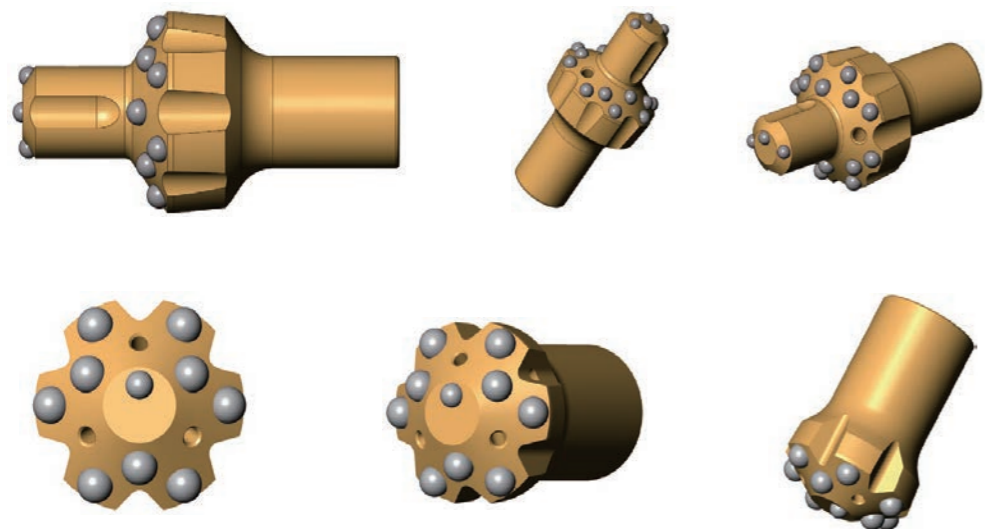
**螺纹系列钻头/Normal Button Bit**

钻头规格 Specifications	头部规格 Specification		钎头长度 (不含合金) Length (without Button)	水孔数量 Holes		合金数量X直径 Button qty pcs X dia.mm			重量 Weight (Kg)
	头部形状 Head Shape	钻头头部直径 Head Diameter (mm)		面水孔 Port Holes	边水孔 Side Holes	齿型 Button Type (可选 Optional)	边齿 Gauge Buttons	芯齿 Front buttons	
	<b>ST68</b>								
	平面 Flat Face	102	180	2	2	球齿+球齿 Domed+Domed	8-φ14	6-φ13	5.4
	中心下陷 Center Drop Face	115	180	4	/	球齿+球齿 Domed+Domed	8-φ14	4-φ14+2-φ13	6.65
	中心下陷 Center Drop Face	127	190	4	/	球齿+球齿 Domed+Domed	8-φ14	4-φ14+3-φ13	8.9
	中心下陷 Center Drop Face	140	190	4	/	球齿+球齿 Domed+Domed	8-φ16	4-φ14+3-φ13	10.8
	<b>T45</b>								
	梅花槽 Triangle Face	89	145	4	/	球齿+球齿 Domed+Domed	8-φ13	5-φ13	3.5
	平面三角形 Flat Triangle Face	102	150	3	/	球齿+球齿 Domed+Domed	9-φ13	9-φ11	4.5
	平面三角形 Flat Triangle Face	115	160	3	/	球齿+球齿 Domed+Domed	9-φ14	10-φ12	5
	<b>T51</b>								
	平面三角形 Flat Triangle Face	102	155	3	/	球齿+球齿 Domed+Domed	9-φ13	9-φ11	5.5
	平面三角形 Flat Triangle Face	115	165	3	/	球齿+球齿 Domed+Domed	9-φ14	10-φ12	6.5
	平面三角形 Flat Triangle Face	127	165	3	/	球齿+球齿 Domed+Domed	9-φ14	10-φ13	7.5
	<b>EL60</b>								
	平面 Flat Face	102	210	2	2	球齿+球齿 Domed+Domed	8-φ14	6-φ13	7.5
	中心下陷 Center Drop Face	115	210	4	/	球齿+球齿 Domed+Domed	8-φ14	4-φ14+2-φ13	8.2
	中心下陷 Center Drop Face	127	220	4	/	球齿+球齿 Domed+Domed	8-φ14	4-φ14+3-φ13	10



# Top Hammer Opener Bit

顶锤扩孔钻头



## 螺纹扩孔钻头规格 / Thread Opener Bits

头部规格 Specification 钻头规格 Specifications	具体尺寸 Specific Detailed Size									
D(mm)	76	89	102	115	102	115	127	140	165	
D1(mm)	26	43	43	76	43	76	76	89	102	
螺纹规格	R32	R32	R38	R38	T38	T38	T45	T45	T51	

备注:扩孔钻头的导向尺寸与扩孔尺寸,合金大小,可根据客户要求设计。

# Coupling Sleeves

钎杆连接套



产品材质: 主体采用优质合金钢为原料

工艺: 采用先进的高压锻制生产工艺, 真空整体调质热处理。应用数控自动化设备加工成型, 保证了稳定可靠的产品质量

用途: 连接钻杆和钻机; 连接钻杆与钻杆; 连接钻杆与钻头。

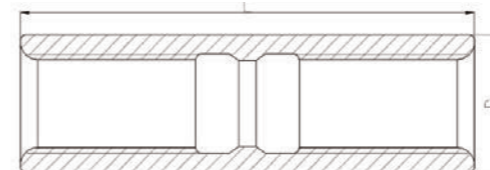
Product Material: Alloy Steel

Process: use the most advanced forging process and heat treatment technology with the latest automated equipment to ensure quality control.

Use: connecting drill rod and drilling rig; connecting drill rod and drill rod; connecting drill rod and drill bit.

## 连接套常用规格

连接套螺纹型号	具体尺寸 Specific Detailed Size					
	T38-R32	T38-T38	T38-T45	T38-T51	T45-T45	T51-T51
外径(D) mm	56	56	68	74	68	77
长度(L) mm	170	190	200	210	210	230



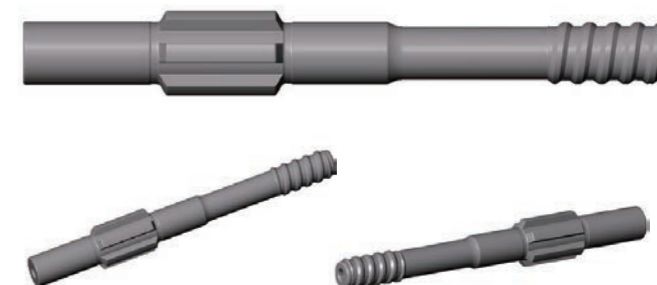
备注:连接套的长度/外径尺寸, 可根据客户需求定制

# Shank Adapter Tubes

钎尾

新金刚为客户提供适配Epiroc (Atlas Copco), Furukawa, Montabert 及 Tamrock 等系列机型的顶锤钎尾。钎尾选用高强度材料, 为客户提供更长工作寿命。

New Diamond provides Shank adapters for difters of Epiroc(Atlas Copco), Furukawa, Montabert and Tamrock series. We choose high quality material for shank adapters to provide longer working life.





# 05

## REVERSE CIRCULATION PRODUCT

### 反循环产品

#### 反循环冲击器优势

- ① 根据以往普通冲击器的经验，结合反循环冲击器的使用特点，优化内部结构，使能量传递理想，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，都能很好的完成取样工作。

#### Advantages of Reverse Circulation Hammer

- ① Based on previous experience of conventional hammer,combined with feature of reverse circulation hammer,optimized internal structure and ideal energy transfer, to ensure the RC hammers achieves fast drilling rate stable and continuous sampling.
- ② The internal structure is very simple with components of high rigidity,thus ensured hammer life and convenience of maintenance.
- ③ The sample tube uses an integrative design and can be replaced without disassembling the hammer. With carburizing treatment,it has good abrasive resistance.
- ④ Bits designed with patent . Simply by replacing the drill bit, the hammer can drill holes different from sizes and ensure that the sample is not contaminated.
- ⑤ In tough conditions such as loose soil,hard rock and plenty of water exist,sampling can be done well.

#### 反循环冲击器的应用

#### The Application of Reverse Circulation

NRC反循环系列潜孔冲击器是我公司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。  
NRC series reverse circulation hammer is the newest developed product of our company. It is mainly used for deep exploration drilling and core sampling.





# RE004

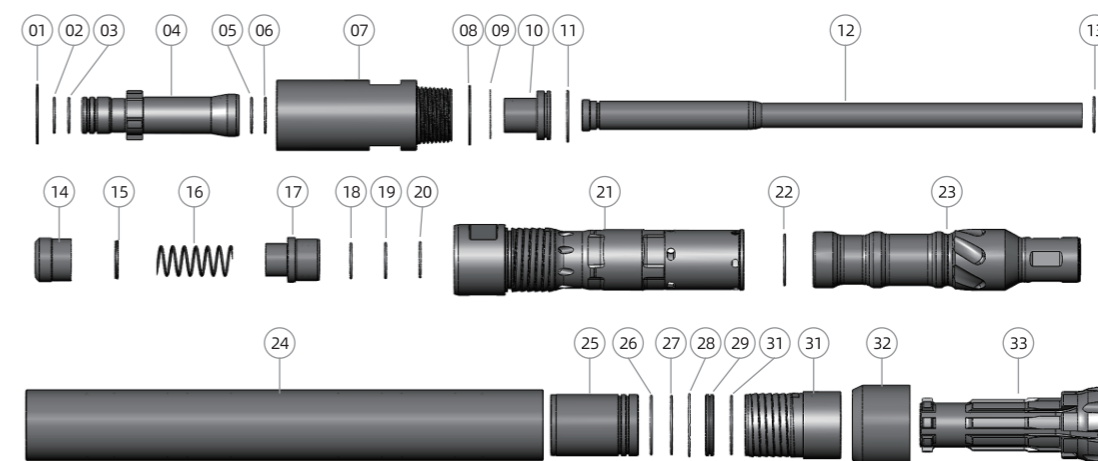


Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	卡簧 Circlip	0.03 Kg	01-RE004-01	15	内缸 Inner Cylinder	2.5 Kg	08-RE004-15
02	O形圈 "O"Ring	0.02 Kg	01-RE004-02	16	O形圈 "O"Ring	0.02 Kg	08-RE004-16
03	O形圈 "O"Ring	0.02 Kg	01-RE004-03	17	O形圈 "O"Ring	0.02 Kg	08-RE004-17
04	适配管 Adapter Tube	1.0 Kg	01-RE004-04	18	O形圈 "O"Ring	0.02 Kg	08-RE004-18
05	O形圈 "O"Ring	0.02 Kg	01-RE004-05	19	采集管 Sample Tube	2.6 Kg	08-RE004-19
06	O形圈 "O"Ring	0.02 Kg	01-RE004-06	20	活塞 Piston	10.5 Kg	08-RE004-20
07	接头 Top Sub	7.9 Kg	01-RE004-07	21	外缸 Piston Case	18 Kg	08-RE004-21
08	Y形圈 "Y"Ring	0.02 Kg	01-RE004-08	22	衬套 Guided Sleeve	1.8 Kg	08-RE004-22
09	逆止阀 Check Valve	0.5 Kg	01-RE004-09	23	卡环 Retainer Ring	0.3 Kg	08-RE004-23
10	弹簧 Spring	0.1 Kg	01-RE004-10	24	O形圈 "O"Ring	0.02 Kg	08-RE004-24
11	连接管 Sample Tube Upper	1.1 Kg	01-RE004-11	25	卡钎套 Drive Chuck	3.2 Kg	08-RE004-25
12	碟簧 Disc Spring	0.15 Kg	01-RE004-12	26	耐磨套 Shroud	1.1 Kg	08-RE004-26
13	配气座 Valve Seat	2.0 Kg	01-RE004-13	27	钻头 Drill Bit		08-RE004-27
14	O形圈 "O"Ring	0.02 Kg	01-RE004-14				

## 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1252mm	53 Kg	φ 107mm	4"Remet	RE004	φ 112- φ 127mm
适用气压 Work Pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
1.2-2.5		30 ~ 60 r/min		1.8Mpa	2.4Mpa
1.2-2.5		30 ~ 60 r/min		8.5m <sup>3</sup> /min	12m <sup>3</sup> /min

# RE542

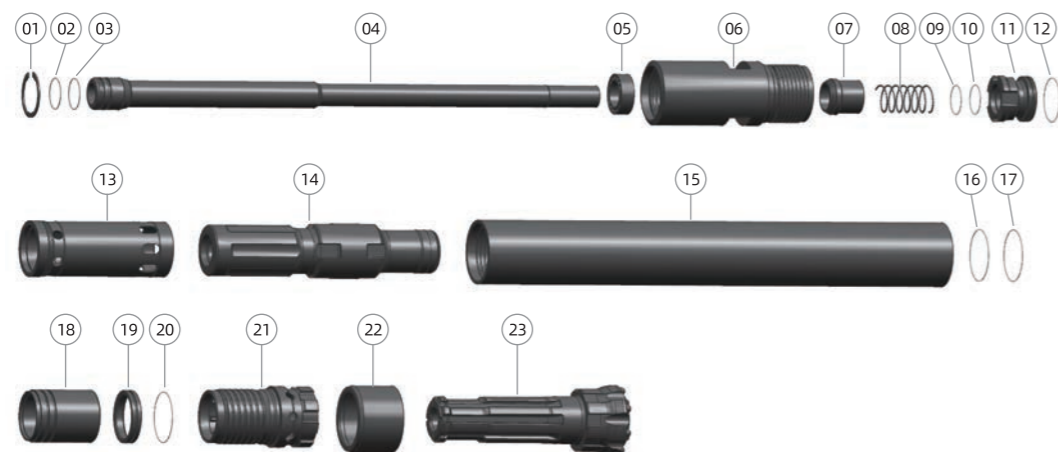


Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	卡簧 Circlip	0.03	08-RE542-01	17	限位轴套 Sample Tube Retainer	0.88	08-RE542-17
02	O形圈 "O" ring	0.02	08-RE542-02	18	O形圈 "O" ring	0.02	08-RE542-18
03	O形圈 "O" ring	0.02	08-RE542-03	19	O形圈 "O" ring	0.02	08-RE542-19
04	适配管 Adapter Tube	2.83	08-RE542-04	20	O形圈 "O" ring	0.02	08-RE542-20
05	O形圈 "O" ring	0.02	08-RE542-05	21	内缸 Inner Cylinder	6.6	08-RE542-21
06	O形圈 "O" ring	0.02	08-RE542-06	22	O形圈 "O" ring	0.02	08-RE542-22
07	接头 Top Sub	9	08-RE542-07	23	活塞 Piston	11.6	08-RE542-23
08	过滤网 Air Screen	0.1	08-RE542-08	24	外缸 Piston Case	13.7	08-RE542-24
09	挡环 Piston Retaining Ring	0.05	08-RE542-09	25	衬套 Guide Sleeve	2.4	08-RE542-25
10	配气座 Air Distributer	0.6	08-RE542-10	26	O形圈 "O" ring	0.02	08-RE542-26
11	O形圈 "O" ring	0.02	08-RE542-11	27	O形圈 "O" ring	0.02	08-RE542-27
12	采集管 Sample Tube	3.1	08-RE542-12	28	挡环 Sleeve Retainer Ring	0.05	08-RE542-28
13	O形圈 "O" ring	0.02	08-RE542-13	29	卡环 Retainer Ring	0.29	08-RE542-29
14	逆止阀 Check Valve	0.4	08-RE542-14	30	O形圈 "O" ring	0.02	08-RE542-30
15	逆止阀橡胶圈 Rubber Ring	0.02	08-RE542-15	31	卡钎套 Chuck Drive	2.85	08-RE542-31
16	逆止阀弹簧 Check Valve Spring	0.1	08-RE542-16	32	耐磨套 Shroud		08-RE542-32

## 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 (不含钻头) Weight(Less bit)	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	可配钻头钎柄 Bit Shank	钻孔范围 Hole Range
1192mm	55Kg	φ 110mm	4" Remet螺纹 (可选)	RE542	φ 113- φ 130mm
适用气压 Work Pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
1.2-2.5 Mpa		30 ~ 60 r/min		1.8Mpa	2.4Mpa
1.2-2.5 Mpa		30 ~ 60 r/min		12m <sup>3</sup> /min	18m <sup>3</sup> /min

# PR52

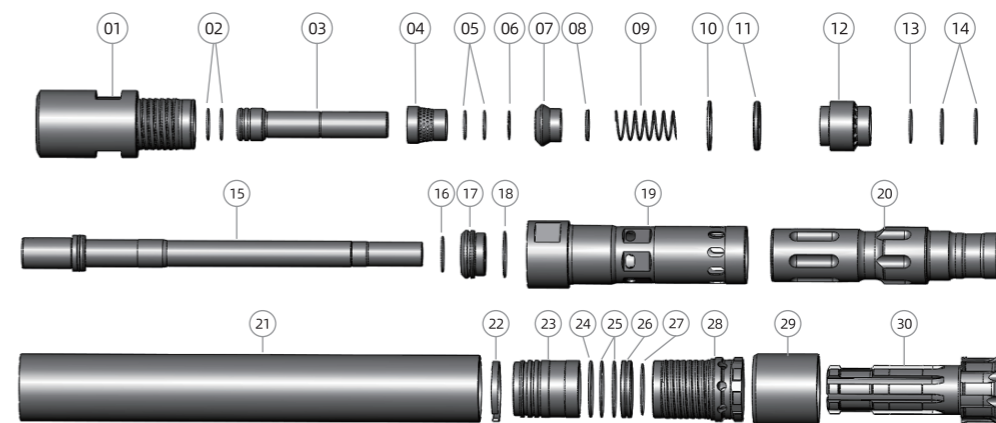


Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	卡簧 Circlip	0.03 Kg	08-PR52-01	13	内缸 Inner Tube	3 Kg	08-PR52-13
02	O形圈 "O" Ring	0.02 Kg	08-PR52-02	14	活塞 Piston	18 Kg	08-PR52-14
03	O形圈 "O" Ring	0.02 Kg	08-PR52-03	15	外缸 Piston Case	22.5 Kg	08-PR52-15
04	采集管 Sample Tube	7.2 Kg	08-PR52-04	16	O形圈 "O" Ring	0.02 Kg	08-PR52-16
05	过滤筛 Air Screen	0.14 Kg	08-PR52-05	17	O形圈 "O" Ring	0.02 Kg	08-PR52-17
06	接头 Top Sub	13.5 Kg	08-PR52-06	18	衬套 Guided Sleeve	1.9 Kg	08-PR52-18
07	逆止阀 Check Valve	0.6 Kg	08-PR52-07	19	卡环 Retainer Ring	0.3 Kg	08-PR52-19
08	弹簧 Spring	0.1 Kg	08-PR52-08	20	O形圈 "O" Ring	0.02 Kg	08-PR52-20
09	O形圈 "O" Ring	0.02 Kg	08-PR52-09	21	卡钎套 Drive Chuck	4.1 Kg	08-PR52-21
10	O形圈 "O" Ring	0.02 Kg	08-PR52-10	22	耐磨套 Shroud	1.6 Kg	08-PR52-22
11	配气座 Valve Seat	1.4 Kg	08-PR52-11	23	钻头 Drill Bit		08-PR52-23
12	O形圈 "O" Ring	0.02 Kg	08-PR52-12				

## 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1208mm	75.2Kg	φ 126mm	4 1/2"Remet	PR52	φ 130- φ 146mm
适用气压 Work Pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
1.5-3.0 Mpa		30 ~ 60 r/min		1.8Mpa	2.4Mpa
1.5-3.0 Mpa		30 ~ 60 r/min		16m <sup>3</sup> /min	22m <sup>3</sup> /min

# PR54R



Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	接头 Top Sub	11.5	08-PR54R-01	16	O形圈 "O" ring	0.02	08-PR54R-16
02	O形圈 ("O" ring) X2	0.02X2	08-PR54R-02	17	限位轴套 Sample Tube Retainer	1	08-PR54R-17
03	联接管 Adapter Tube	2.27	08-PR54R-03	18	O形圈 "O" ring	0.02	08-PR54R-18
04	过滤筛 Air Screen	0.39	08-PR54R-04	19	内缸 Inner Cylinder	8.25	08-PR54R-19
05	O形圈 ("O" ring) X2	0.02X2	08-PR54R-05	20	活塞 Piston	16.7	08-PR54R-20
06	卡簧 Circlip	0.03	08-PR54R-06	21	外缸 Piston Case	23.5	08-PR54R-21
07	逆止阀 Check Valve	0.4	08-PR54R-07	22	挡环 Piston Retaining Ring	0.1	08-PR54R-22
08	逆止阀胶圈 Rubber Spacer	0.1	08-PR54R-08	23	衬套 Guide Sleeve	2.5	08-PR54R-23
09	逆止阀弹簧 Check Valve Spring	0.1	08-PR54R-09	24	O形圈 "O" ring	0.02	08-PR54R-24
10	垫圈 Gasket	0.1	08-PR54R-10	25	O形圈 ("O" ring) X2	0.02X2	08-PR54R-25
11	橡胶垫圈 Rubber Spacer	0.1	08-PR54R-11	26	卡环 Retainer Ring	0.4	08-PR54R-26
12	配气座 Air Distributer	1.58	08-PR54R-12	27	O形圈 "O" ring	0.02	08-PR54R-27
13	O形圈 "O" ring	0.02	08-PR54R-13	28	卡钎套 Chuck Drive	4.1	08-PR54R-28
14	O形圈 ("O" ring) X2	0.02X2	08-PR54R-14	29	耐磨套 Shroud		08-PR54R-29
15	采集管 Shroud	7.43	08-PR54R-15				

## 技术参数 / Technical Parameters


总长 (不含钻头) Length(Less bit)	总重 (不含钻头) Weight(Less bit)	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	可配钻头钎柄 Bit Shank	钻孔范围 Hole Range
1294mm	81Kg	φ 130mm	4 1/2 "Remet螺纹 (可选)	PR54R	φ 135- φ 150mm
适用气压 Work Pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
1.5-3.0 Mpa		30 ~ 60 r/min		1.8Mpa	2.4Mpa
1.5-3.0 Mpa		30 ~ 60 r/min		16m <sup>3</sup> /min	22m <sup>3</sup> /min




# Reverse Circulation Drill Bits

## 反循环钻头

### RE004系列钻头/RE004 Drill Bit

头部规格 Specification 钻头规格 Specifications	头部形状 Head Shape	钻头头部直径 Head Diameter (mm)	尾柄长度 Shank Length	花键数 Spline	排气孔数量 Port holes	合金数量X直径 Button qty.pcs X dia.mm			重量 Weight (Kg)
						齿型 Button Type (选购件 Optional)	边齿 Gauge Buttons	芯齿 Front buttons	
<b>RE004</b>									
	中心下陷 Drop-Center Face	115	271	8	2	球齿 Domed Button	8XØ14	4XØ14+4XØ13	11.5
	中心下陷 Drop-Center Face	121	271	8	2	球齿 Domed Button	8XØ14	4XØ14+4XØ13	12.1
	中心下陷 Drop-Center Face	124	271	8	2	球齿 Domed Button	8XØ16	4XØ14+2X14	12.3
	中心下陷 Drop-Center Face	127	271	8	2	球齿 Domed Button	8XØ16	4XØ14+2X14	12.5

### RE542系列钻头/RE542 Drill Bit

头部规格 Specification 钻头规格 Specifications	头部形状 Head Shape	钻头头部直径 Head Diameter (mm)	尾柄长度 Shank Length	花键数 Spline	排气孔数量 Port holes	合金数量X直径 Button qty.pcs X dia.mm			重量 Weight (Kg)
						齿型 Button Type (选购件 Optional)	边齿 Gauge Buttons	芯齿 Front buttons	
<b>RE542</b>									
	中心下陷 Drop-Center Face	121	225	8	2	球齿 Domed Button	8XØ14	4XØ14+4XØ13	10.7
	中心下陷 Drop-Center Face	124	225	8	2	球齿 Domed Button	8XØ14	4XØ14+4XØ13	11
	中心下陷 Drop-Center Face	127	225	8	2	球齿 Domed Button	8XØ16	4XØ14+2X14	11.2
	中心下陷 Drop-Center Face	133	225	8	2	球齿 Domed Button	8XØ16	4XØ14+2X14	11.4

### PR52系列钻头/PR52 Drill Bit

头部规格 Specification 钻头规格 Specifications	头部形状 Head Shape	钻头头部直径 Head Diameter (mm)	尾柄长度 Shank Length	花键数 Spline	排气孔数量 Port holes	合金数量X直径 Button qty.pcs X dia.mm			重量 Weight (Kg)
						齿型 Button Type (选购件 Optional)	边齿 Gauge Buttons	芯齿 Front buttons	
<b>PR52</b>									
	中心下陷 Drop-Center Face	133	282	8	2	球齿 Domed Button	8XØ16	6XØ16+2XØ14	16.5
	中心下陷 Drop-Center Face	136	282	8	2	球齿 Domed Button	8XØ16	6XØ16+2XØ14	16.7
	中心下陷 Drop-Center Face	140	282	8	2	球齿 Domed Button	8XØ16	6XØ16+3XØ14	16.9
	中心下陷 Drop-Center Face	143	282	8	2	球齿 Domed Button	8XØ16	6XØ16+3XØ14	17.1

### PR54R系列钻头/PR54R Drill Bit

头部规格 Specification 钻头规格 Specifications	头部形状 Head Shape	钻头头部直径 Head Diameter (mm)	尾柄长度 Shank Length	花键数 Spline	排气孔数量 Port holes	合金数量X直径 Button qty.pcs X dia.mm			重量 Weight (Kg)
						齿型 Button Type (选购件 Optional)	边齿 Gauge Buttons	芯齿 Front buttons	
<b>PR54R</b>									
	中心下陷 Drop-Center Face	136	261	8	2	球齿 Domed Button	8XØ16	6XØ16+2XØ14	18.3
	中心下陷 Drop-Center Face	140	261	8	2	球齿 Domed Button	8XØ16	6XØ16+3XØ14	18.5
	中心下陷 Drop-Center Face	143	261	8	2	球齿 Domed Button	8XØ16	6XØ16+3XØ14	18.7
	中心下陷 Drop-Center Face	146	261	8	2	球齿 Domed Button	8XØ16	6XØ16+3XØ14	18.9
	中心下陷 Drop-Center Face	165	261	8	2	球齿 Domed Button	8XØ18	6XØ16+4XØ16	21
	中心下陷 Drop-Center Face	178	261	8	2	球齿 Domed Button	8XØ18	6XØ16+4XØ16	22.5





# 06

## ADAPTER TUBE AND DRILL PIPE 过渡接头与钻杆

### 过渡接头、钻杆

过渡接头是钻具链的一部分，包括公-公接头，公-母接头和母-母接头。

钻杆是尾部带有螺纹的钢管，用于连接钻机地表设备和位于钻井底端钻磨设备或底孔装置。

### Drill Rod Adapter Tube and DTH Drill Rod

Adapter Tube is a part of the drill string, it includes pin-pin adapter, pin-box adapter and box-box adapter.

A drill pipe is a seamless steel pipe with the API thread connection, which is used for connecting the drill rig equipment.





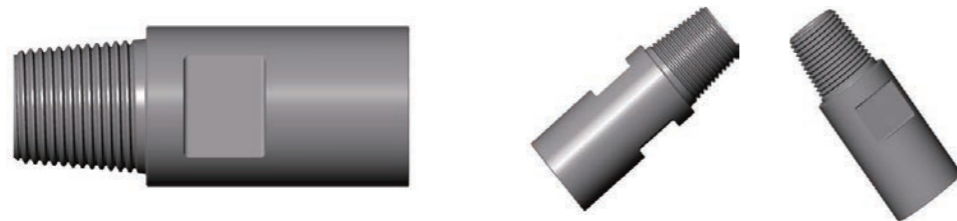
# Drill Rod Adapter Tube

## 过渡接头

过渡接头可以根据客户要求定制

adapter sub can be manufactured by customer specifications

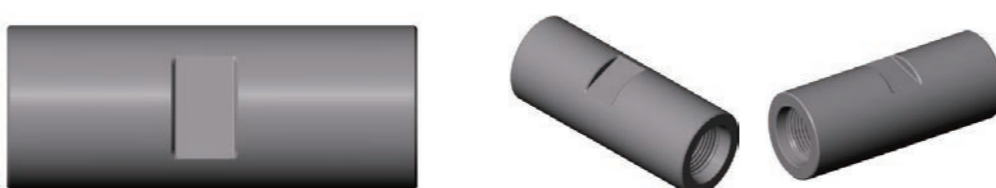
### Pin-Box Adapter Tube 公母接头



### Pin-Pin Adapter Tube 公公接头



### Box-Box Adapter Tube 母母接头



### 公母接头规格/Pin-Box Adapter Tubes

编号 number	接头型号	尺寸A (mm) Size A	尺寸B (mm) Size A	尺寸C (mm) Size A	铣方尺寸D (mm) Wrench Flat
1	2-3/8公-2-3/8母过渡接头	25	45	ø78	57
2	2-3/8IF公-2-3/8母过渡接头	25	45	ø89	70
3	2-3/8IF公-2-3/8IF母过渡接头	25	45	ø89	70
4	2-3/8公-2-7/8母过渡接头	25	45	ø102	70
5	2-7/8IF公-2-7/8IF母过渡接头	25	45	ø108	85
6	3-1/2公-3-1/2母过渡接头	25	50	ø114	95



### 公公接头规格/Pin-Pin Adapter Tubes

编号 number	接头型号	尺寸A (mm) Size A	尺寸B (mm) Size A	尺寸C (mm) Size A	铣方尺寸D (mm) Wrench Flat
1	2-3/8公-2-3/8公过渡接头	21	45	ø89	70
2	3-1/2公-3-1/2公过渡接头	23	50	ø114	95
3	3-1/2公-4-1/2公过渡接头	30	50	ø140	102
4	4-1/2公-4-1/2公过渡接头	30	50	ø140	102



### 母母接头规格/Box-Box Adapter Tubes

编号 number	接头型号	尺寸A (mm) Size A	尺寸B (mm) Size A	尺寸C (mm) Size A	铣方尺寸D (mm) Wrench Flat
1	2-3/8母-2-3/8母过渡接头	97	45	ø89	70
2	2-3/8母-2-7/8母过渡接头	115	50	ø102	85
3	2-3/8IF母-3-1/2母过渡接头	102	50	ø114	95
4	2-7/8母-3-1/2母过渡接头	122	50	ø114	95



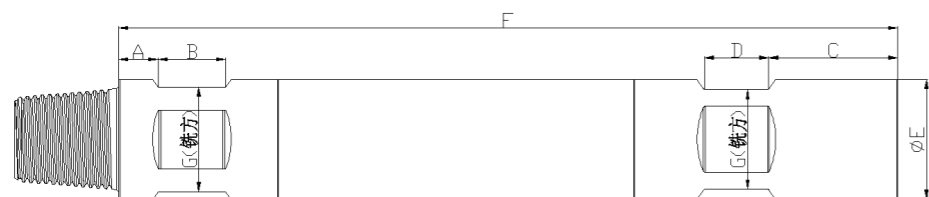
## Drill Rod Adapter

钻杆



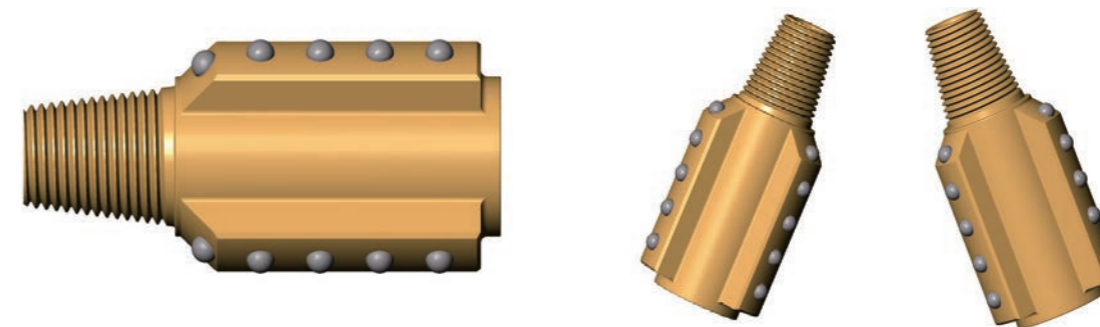
### 钻杆规格/

编号 Number	接头型号 Adapter	尺寸A Size A (mm)	尺寸B Size B (mm)	尺寸C Size C (mm)	尺寸D Size D (mm)	尺寸E Size E (mm)	尺寸F Size F (mm)	铣方尺寸G Wrench Flat (mm)
1	ø64钻杆 (6度螺纹)	20	50	85	50	ø64	1500	55
2	ø76钻杆 (2-3/8REG)	25	50	100	50	ø76	3000	57
3	ø76钻杆 (2-3/8REG)	25	50	100	50	ø76	3000	64
4	ø89钻杆 (2-3/8IF)	30	50	125	50	ø89	3000	65
5	ø89钻杆 (2-3/8IF)	30	50	125	50	ø89	3000	70
6	ø102钻杆 (2-7/8IF)	35	55	110	55	ø102	3000	85
7	ø108钻杆 (2-7/8IF)	35	55	110	55	ø108	3000	85



## Stablizer

钻杆扶正器示意图





# 07

## CONSTRUCTION & PILING BIG HOLE DRILLING PRODUCT

### 桩基用大孔径产品

这种类型的大孔径是我公司针对水井、建筑桩基和尤其钻井的特点，自行设计开发和制造的。

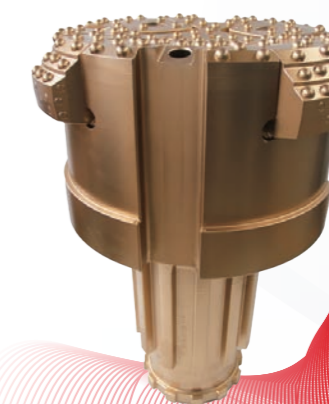
This type of big hole drilling product is designed and developed by our company in accordance with the characteristics of water wells, building foundation piles and especially for water wells.

#### 大孔径的优势

- ① 采用先进的凿岩理论，优化内部结构和配气尺寸，使冲击器获得理想的能源传递。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 使用中如需要加强排渣，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。

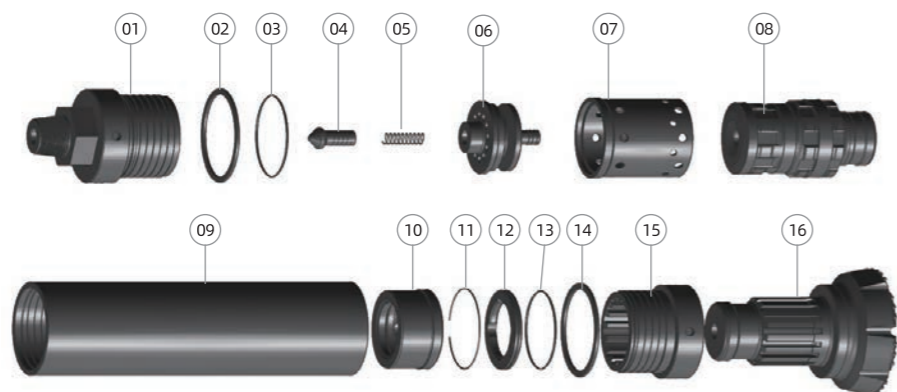
#### Advantages of Big Hole Drilling Product

- ① Adopt advanced rock drilling theory to optimize internal structure and gas distribution size to make hammer device to achieve ideal energy transfer. Therefore, the drilling speed is fast and the air consumption is low.
- ② In this kind of engineering projects, after drill bit breaks, it will be very difficult to salvage, it is specially designed safe and reliable bit anti-falling device.
- ③ If you need to strengthen the slag discharge during use, you can replace the check valve of the air regulating hole of different sizes to achieve the goal.
- ④ The special thread of the top sub and the drive chuck can be easily disassembled.





# SP1880

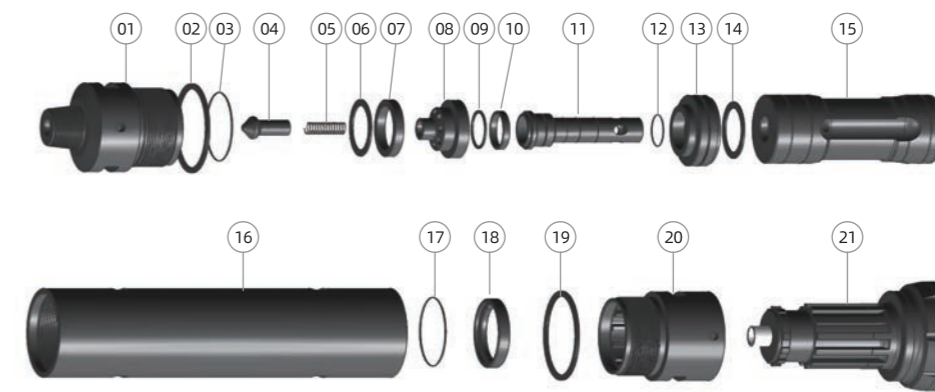


Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	接头 Top Sub	361.5Kg	01-SP1880-01	09	外缸 Piston Case	493 Kg	01-SP1880-09
02	垫片 Adjuster Shim	4 Kg	01-SP1880-02	10	衬套 Guided Sleeve	69 Kg	01-SP1880-10
03	O形圈 "O"Ring	0.1 Kg	01-SP1880-03	11	挡圈 Check Ring	1 Kg	01-SP1880-11
04	逆止阀 Check Valve	3.4 Kg	01-SP1880-04	12	卡环 Retainer Ring	14.8 Kg	01-SP1880-12
05	弹簧 Spring	0.4 Kg	01-SP1880-05	13	O形圈 "O"Ring	0.08 Kg	01-SP1880-13
06	配气座 Valve Seat	76 Kg	01-SP1880-06	14	垫片 Adjuster Shim	4 Kg	01-SP1880-14
07	内缸 Inner Cylinder	54.5 Kg	01-SP1880-07	15	卡钎套 Drive Chuck	134 Kg	01-SP1880-15
08	活塞 Piston	366 Kg	01-SP1880-08	16	钻头 Drill Bit		01-SP1880-16

## 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
1957mm	1582Kg	φ 445mm	API8 5/8"REG	SP1880	φ 500- φ 680mm
适用气压 Work Pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
				1.8Mpa	2.4Mpa
1.5-3.3 Mpa		20-40 r/min		73m <sup>3</sup> /min	97m <sup>3</sup> /min

# ND180



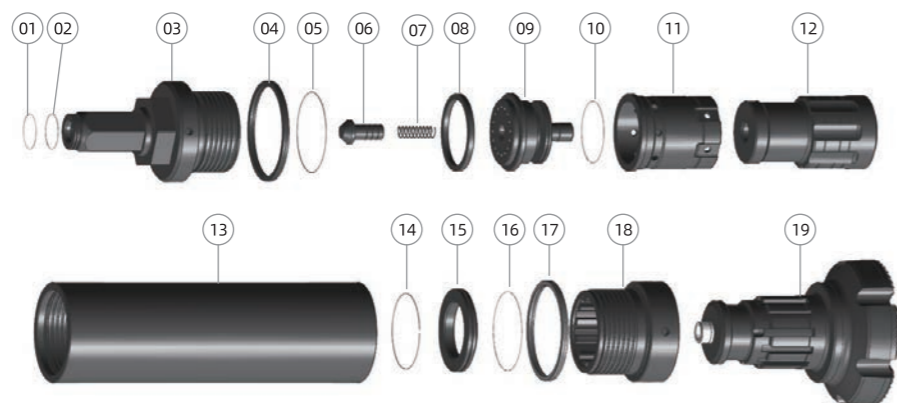
Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	接头 Top Sub	274 Kg	01-YC410-01	11	配气杆 Rigid Valve	22.3 Kg	01-YC410-11
02	垫片 Adjuster Shim	2.9 Kg	01-YC410-02	12	O形圈 "O"Ring	0.03 Kg	01-YC410-12
03	O形圈 "O"Ring	0.03 Kg	01-YC410-03	13	杆座 Valve Seat	50 Kg	01-YC410-13
04	逆止阀 Check Valve	3.4 Kg	01-YC410-04	14	O形圈 "O"Ring	0.03 Kg	01-YC410-14
05	弹簧 Spring	0.3 Kg	01-YC410-05	15	活塞 Piston	347 Kg	01-YC410-15
06	调整圈 Adjuster Ring	1.5 Kg	01-YC410-06	16	外缸 Piston Case	562 Kg	01-YC410-16
07	尼龙垫 Nylon washer	1.2 Kg	01-YC410-07	17	挡圈 Check Ring	0.3 Kg	01-YC410-17
08	配气座 Valve Seat	26.4 Kg	01-YC410-08	18	卡环 Retainer Ring	10 Kg	01-YC410-18
09	调整圈 Regulate ring	0.4 Kg	01-YC410-09	19	垫片 Adjuster Shim	2.9 Kg	01-YC410-19
10	橡胶垫 Rubber Buffer	0.3 Kg	01-YC410-10	20	卡钎套 Drive Chuck	155 Kg	01-YC410-20

## 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
2162mm	1460Kg	φ 410mm	API8 5/8"REG	ND180	φ 295- φ 400mm
适用气压 Work Pressure		推荐转速 Recommended rotation speed		耗风量/Air Consumption	
				1.8Mpa	2.4Mpa
1.5-3.5 Mpa		25 ~ 40 r/min		63m <sup>3</sup> /min	85m <sup>3</sup> /min



# SW530

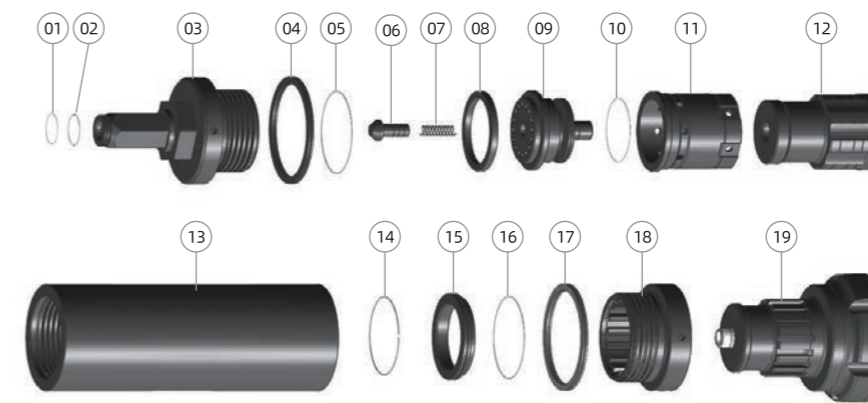


Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	O形圈 "O"Ring	0.05 Kg	01-SW530-01	11	内缸 Inner Cylinder	93 Kg	01-SW530-11
02	O形圈 "O"Ring	0.05 Kg	01-SW530-02	12	活塞 Piston	454.5 Kg	01-SW530-12
03	接头 Top Sub	534 Kg	01-SW530-03	13	外缸 Piston Case	1139.5Kg	01-SW530-13
04	垫片 Adjuster Shim	8 Kg	01-SW530-04	14	挡圈 Piston Retaining Ring	0.3 Kg	01-SW530-14
05	O形圈 "O"Ring	0.1 Kg	01-SW530-05	15	卡环 Retainer Ring	33 Kg	01-SW530-15
06	逆止阀 Check Valve	7.5 Kg	01-SW530-06	16	O形圈 "O"Ring	0.1 Kg	01-SW530-16
07	弹簧 Spring	0.4 Kg	01-SW530-07	17	垫片 Adjuster Shim	8 Kg	01-SW530-17
08	橡胶垫 Rubber Buffer	1.5 Kg	01-SW530-08	18	卡钎套 Driver Chuck	246.8Kg	01-SW530-18
09	配气座 Valve Seat	134 Kg	01-SW530-09	19	钻头 Drill Bit		01-SW530-19
10	O形圈 "O"Ring	0.1 Kg	01-SW530-10				

## 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
2438mm	2660.5Kg	φ 530mm	320 六方	SW530	φ 600- φ 800mm
适用气压 Work Pressure	1.5-3.5 Mpa	推荐转速 Recommended rotation speed	15 ~ 30 r/min	耗风量/Air Consumption	
				1.8Mpa	2.4Mpa
				85m <sup>3</sup> /min	110m <sup>3</sup> /min

# SW640



Ref.	部件 Parts	单重 Weight	件号 Part No	Ref.	部件 Parts	单重 Weight	件号 Part No
01	O形圈 "O"Ring	0.05 Kg	01-SW640-01	11	内缸 Innr Cylinder	137.6Kg	01-SW640-11
02	O形圈 "O"Ring	0.05 Kg	01-SW640-02	12	活塞 Piston	626.3Kg	01-SW640-12
03	接头 Top Sub	705.5Kg	01-SW640-03	13	外缸 Piston Case	1797 Kg	01-SW640-13
04	垫片 Adjuster Shim	15.4 Kg	01-SW640-04	14	挡圈 Piston Retaining Ring	0.4 Kg	01-SW640-14
05	O形圈 "O"Ring	0.2 Kg	01-SW640-05	15	卡环 Retainer Ring	42.3 Kg	01-SW640-15
06	逆止阀 Check Valve	7.5 Kg	01-SW640-06	16	O形圈 "O"Ring	0.2 Kg	01-SW640-16
07	弹簧 Spring	0.4 Kg	01-SW640-07	17	垫片 Adjuster Shim	15.4 Kg	01-SW640-17
08	橡胶垫 Rubber Buffer	3 Kg	01-SW640-08	18	卡钎套 Drive Chuck	240.4 Kg	01-SW640-18
09	配气座 Valve Seat	203.6Kg	01-SW640-09	19	钻头 Drill Bit		01-SW640-19
10	O形圈 "O"Ring	0.2 Kg	01-SW640-10				

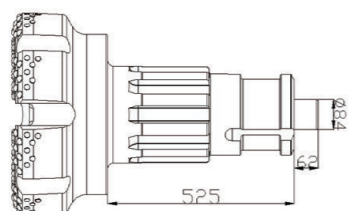
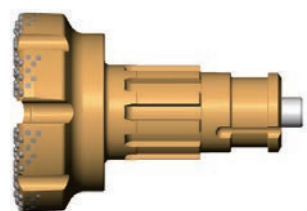
## 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	钻头钎柄 Bit Shank	钻孔范围 Hole Range
2390mm	3795.5Kg	φ 640mm	320 六方	SW640	φ 720- φ 1000mm
适用气压 Work Pressure	1.5-3.5 Mpa	推荐转速 Recommended rotation speed	15 ~ 30 r/min	耗风量/Air Consumption	
				1.8Mpa	2.4Mpa
				92m <sup>3</sup> /min	122m <sup>3</sup> /min

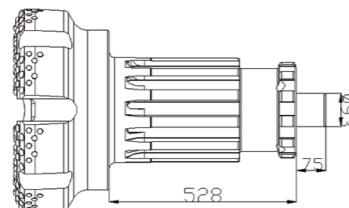
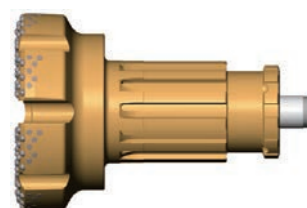
# Piling Bits

## 大孔径钻头

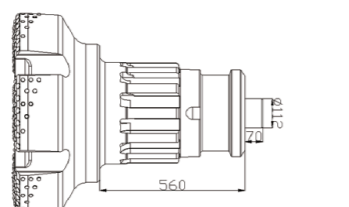
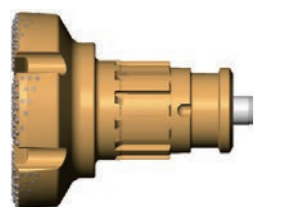
### 桩孔系列钻头/Piling Drill Bit



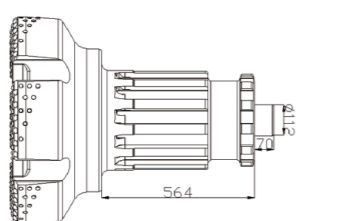
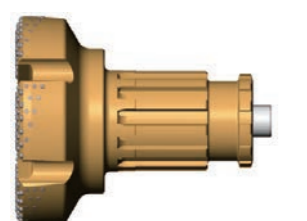
型号 Model	花键数 Spline	尾部长 Tail length
SW370	10	525
钻孔范围 Hole range		450-600mm



型号 Model	花键数 Spline	尾部长 Tail length
SW410	12	528
钻孔范围 Hole range		500-800mm

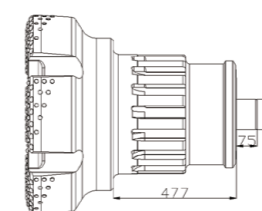
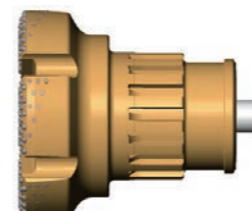


型号 Model	花键数 Spline	尾部长 Tail length
SW530	12	560
钻孔范围 Hole range		600-1000mm

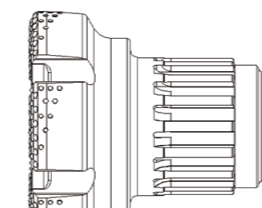
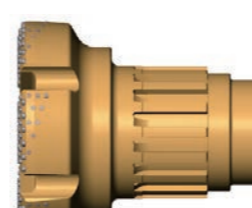


型号 Model	花键数 Spline	尾部长 Tail length
N240	12	564
钻孔范围 Hole range		600-1000mm

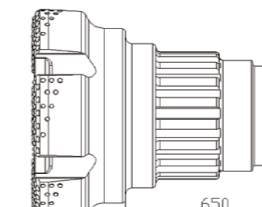
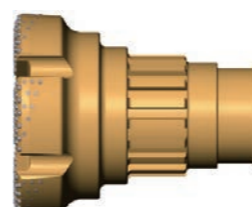
### 桩孔系列钻头/Piling Drill Bit



型号 Model	花键数 Spline	尾部长 Tail length
SW640	16	477
钻孔范围 Hole range		700-1200mm



型号 Model	花键数 Spline	尾部长 Tail length
640SN	16	600
钻孔范围 Hole range		700-1200mm



型号 Model	花键数 Spline	尾部长 Tail length
SW800S	18	650
钻孔范围 Hole range		900-1250mm







# 08

OTHER PARTS  
其他工具与配件

# Back Hammer

## 反打冲击器

### BH140

BH140反打冲击器/Back Hammer		Ref.	部件 Parts	单重 Weight	件号 Part No.
	01	芯轴 Mandrel	16.5 Kg	20-BH140-01	
	02	活塞 Piston	8.7 Kg	20-BH140-02	
	03	撞块 Bumping Block	2 Kg	20-BH140-03	
	04	外套管Outer Casing	6.7 Kg	20-BH140-04	

#### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	接头螺纹 Connection Thread
420mm	34Kg	φ 155mm	API2 3/8"REG	0.8-1.7 Mpa

### BH170

BH170反打冲击器/Back Hammer		Ref.	部件 Parts	单重 Weight	件号 Part No.
	01	芯轴 Mandrel	32 Kg	20-BH170-01	
	02	活塞 Piston	18 Kg	20-BH170-02	
	03	撞块 Bumping Block	2.5 Kg	20-BH170-03	
	04	外套管Outer Casing	9 Kg	20-BH170-04	
	05	平键 Flat Key	0.1 Kg	20-BH170-05	
	06	垫块 Cushion Block	2.7 Kg	20-BH170-06	

#### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	接头螺纹 Connection Thread
606 mm	64.5 Kg	φ 190mm	API3 1/2"REG	0.8-2.5 Mpa

### BH190

BH190反打冲击器/Back Hammer		Ref.	部件 Parts	单重 Weight	件号 Part No.
	01	芯轴 Mandrel	42.5 Kg	20-BH190-01	
	02	活塞 Piston	25.2 KG	20-BH190-02	
	03	撞块 Bumping Block	3.4 Kg	20-BH190-03	
	04	外套管Outer Casing	13.5 Kg	20-BH190-04	

#### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	接头螺纹 Connection Thread
560 mm	84.5 Kg	φ 220mm	API3 1/2"REG	0.8-3.0 Mpa

### BH240

BH240反打冲击器/Back Hammer		Ref.	部件 Parts	单重 Weight	件号 Part No.
	01	芯轴 Mandrel	71.5 Kg	20-BH240-01	
	02	活塞 Piston	44.3 KG	20-BH240-02	
	03	撞块 Bumping Block	7.8 Kg	20-BH240-03	

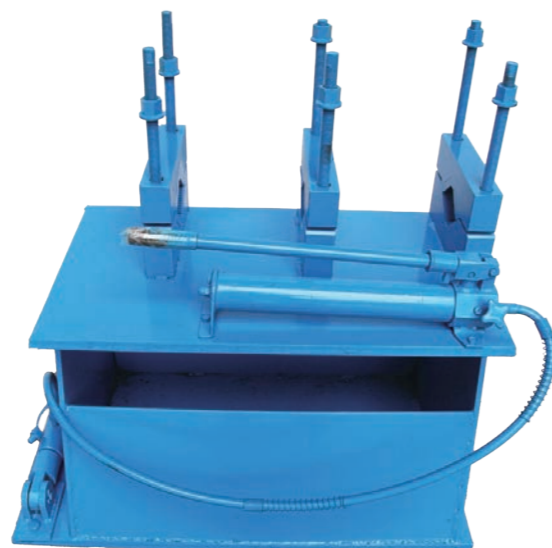
#### 技术参数 / Technical Parameters

总长 (不含钻头) Length(Less bit)	总重 Weight	冲击器外径 Outer Diameter	接头螺纹 Connection Thread	接头螺纹 Connection Thread
600mm	123.5 Kg	φ 240mm	API4 1/2"REG	0.8-3.0 Mpa



## Breakout Bench

拆卸台



### 冲击器拆卸工作台使用方法:

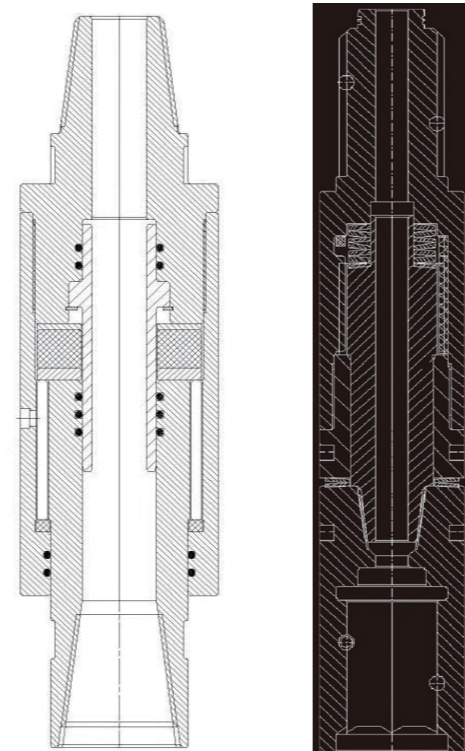
1. 把冲击器放进卸钎器里边。
2. 调节冲击器和扳手的位置，使扳手卡住接头方口处，并与千斤顶处于同一平面内。
3. 用螺丝固定好K形座。
4. 用相应螺丝将扳手固定紧。
5. 缓慢上下摇动千斤顶把手，将冲击器慢慢卸开。
6. 接头拆卸完毕后，将千斤顶回油，回油完毕后，松开螺丝，放下扳手，卸下K形座，将冲击器调头。
7. 调节冲击器和扳手的位置，使扳手卡住卡钳套并与千斤顶处于同一平面内。
8. 调整冲击器。
9. 放入K形座，并用螺丝将K形座及扳手固定好。
10. 缓慢上下摇动千斤顶把手，将冲击器慢慢卸开。

### 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.

## Shock Absorber

缓冲器



名称 Name	接头规格 Adapter	直径*长度(mm) Diameter*Length
12寸缓冲器	6-5/8REG	270*795
14寸缓冲器	273hexagonal	355*882
18寸缓冲器	273hexagonal	457*1110
24寸缓冲器	320hexagonal	600*1344
28寸缓冲器	320hexagonal	640*1540

## Drilling Accessories

钻机配件



钻机孔套  
Rig Deck Bush



钻杆拆卸扳手  
Rod Spanner

