

SHAREATE



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DTH Drilling Tools

SHAREATE TOOLS LTD.



ABOUT US

Shareate tools is a multinational corporation engaged in R&D, manufacturing and sales of rock drilling tools and cemented carbide products. The group company serves mining, construction, aerospace, automotive, chemical, textile, agricultural, metal cutting, and machinery manufacturing industries. Over the years, Shareate has been granted 42 invention and 118 utility model patents and was accredited with the API Spec Q1 and ISO 9001. In 2021, Shareate was successfully listed on Shanghai Stock Exchange (688257).

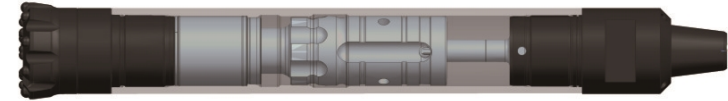
Our rock drilling tools mainly include Rotary Tricone Bits, DTH Hammer & Bits, Top Hammer Tools and HDD products. We are the leading supplier of rock drilling tools in Asia and one of the Top Five globally. Our products are exported across 5 continents and distributed to over 40 countries. We are currently working with Rio Tinto, BHP, Glencore, Barrick, FMG, Vale and Anglo American.

PRODUCT DESCRIPTION

Down-the-hole drilling tools, usually called DTH, are used for blast hole drilling and blasting. Shareate DTH products are mainly applied in mining, quarrying, well drilling and construction projects. Our product line covers all of the popular DTH series in the market. We are continuously improving our services and solutions to meet market demands.

DTH Hammers

DTH (Down The Hole) Hammer is a rock drilling tools which generate impacts at the bottom of the hole during the drilling process. The air passes through the drill pipe and enters the Hammer, pushing the piston to impact the DTH bit directly to drill. The air is then discharged from the DTH bit to bail the rock cuttings from the bottom of the hole.

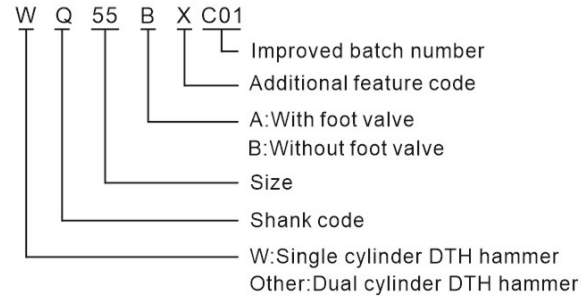


DTH Hammer can be categorized into two types.

- One is composed of parts such as drive chuck, top sub, piston, inner cylinder, air distributor, guide sleeve, check valve, with the top sub, air distributor, inner cylinder, and outer casing forming the air intake passage.
- The other type is composed of parts such as drive chuck, top sub, piston, distributor tube (feed tube), guide sleeve, check valve seat, check valve, with the top sub, distributor tube (feed tube), and piston case forming the air intake passage.



DTH Hammer Codes



Shank	Code(with dual cylinder)	Code(with single cylinder)
DHD	DH	WD
QL	SQ	WQ
Mission	SM	/
SD	SD	/

HAMMER CHARACTERISTICS

Single Cylinder Hammer: Designed without foot valve or inner cylinder.

- Use DTH Bit without foot valve which eliminate time lost caused by the breakage or damage of the foot valve from thermal expansion or contraction.
- Optimized design structure to achieve lower energy loss, high impact frequency, and improved efficiency.
- Simple structure improves product reliability and maintenance simplicity.
- Made from high-quality heat-treated alloy steel, with a long service life.

Dual Cylinder Hammer: High drilling efficiency and low energy consumption.

- Higher operating frequency brings higher drilling efficiency.
- New valve structure brings higher efficiency of energy.
- Made from high-quality heat-treated alloy steel, with a long service life.

Diversified product features: Customization.

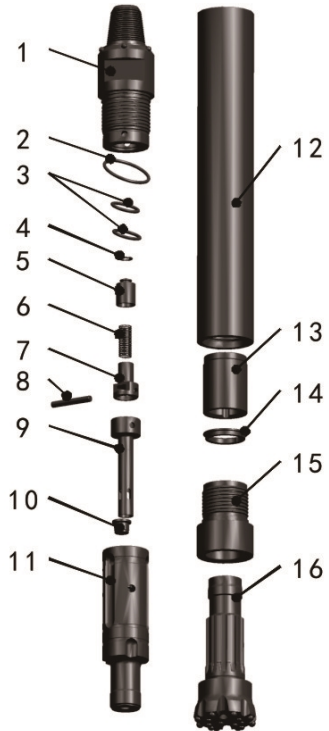
- Different surface treatments meet different wear requirements.
- Different hardfacing processes to meet different work conditions.
- Work with customers on new products.

DTH Hammer Series

Product Series	Product Introduction
WQ	<p>Single Cylinder Hammer: QL50, QL60, QL80</p> <p>Designed to pair with bit without foot valve</p> <p>Suitable for surface mining, quarry blasting and waterwell drilling.</p> <p>Work stably under high wind pressure conditions.</p> <p>Easy disassemble and maintenance.</p>
SQ	<p>Dual Cylinder Hammer: sizes 4" - 8"</p> <p>Designed to pair with QL Series bit with and without foot valve</p> <p>Suitable for surface mining, quarry blasting and waterwell drilling.</p> <p>High efficiency and long service life.</p>
DH	<p>Dual Cylinder Hammer: sizes 4" - 8"</p> <p>Designed to pair with DHD Series bit with and without foot valve</p> <p>Suitable for surface mining, quarry blasting and waterwell drilling.</p> <p>High efficiency and long service life.</p>
SD	<p>Dual Cylinder Hammer: sizes 4" - 8"</p> <p>Designed to pair with SD Series bit with foot valve</p> <p>Suitable for surface mining, quarry blasting and waterwell drilling.</p> <p>High efficiency and long service life.</p>
SM	<p>Dual Cylinder Hammer: sizes 4" - 8"</p> <p>Designed to pair with Mission Series bit</p> <p>Suitable for surface mining, quarry blasting and waterwell drilling.</p> <p>High efficiency and long service life.</p>



WQ55B Single cylinder DTH Hammer QL50 without Foot Value



General Specification

Description	WQ55B Single cylinder DTH HAMMER
Connection Joint	API 3 1/2" REG PIN
Bit Shank	QL50 without Foot Value
Overall Length Without Bit	1065 mm
Outside Diameter	126 mm
Weight Without Bit	69.3 kg
Spanner Flat Size	89 mm A/F
Bit Size	138-156 mm
Operating Air Pressure	1.4-2.5 Mpa

DTH Hammer Parts List

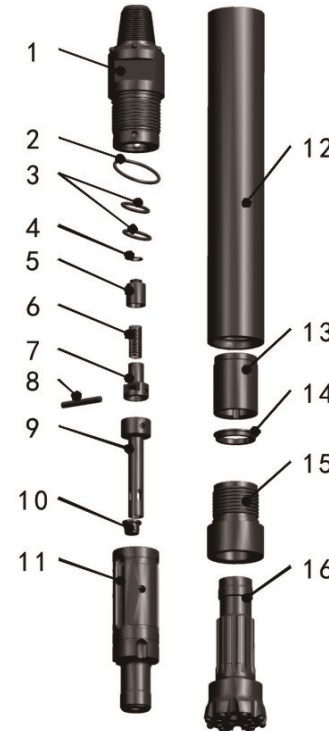
Item	Description	Part No.	Weight(Kg)
1	Top Sub	WQ55B0101	18.5
2	Top Sub Outer O/Ring	F55B0201	0.01
3	Top Sub Inner O/Ring	F45B0901	0.01
4	Quad Ring	WQ55B0401	0.01
5	Check Valve	WQ55B0502	0.3
6	Check Valve Spring	WQ55B0702	0.02
7	Check Valve Holder	WQ55B0602	0.4
8	Dowel Pin	WQ55B0801	0.12
9	Central Control Tube	WQ55B1002	0.8
10	Air Plug	WQ55B1201	0.01
	Air Plug (φ4 hole)	WQ55B1202	0.01
	Air Plug (φ6 hole)	WQ55B1203	0.01
11	Piston	WQ55B1402	15.7
12	Outer Cylinder	WQ55B0302	24.7
13	Guide Sleeve	WQ55B1702	3.1
14	Retaining Ring	WQ55B1904	0.3
15	Drive Sub	WQ55B2003	5.3
16	Drill Bit	QL50 Bit	/

Application Suitability

Blast Hole
Exploration
Water Well
Quarry / Mining
Construction



WQ65B Single cylinder DTH Hammer QL60 without Foot Value



General Specification

Description	WQ65BK Single cylinder DTH HAMMER
Connection Joint	API 3 1/2" REG PIN
Bit Shank	QL60 without Foot Value
Overall Length Without Bit	1100 mm
Outside Diameter	146 mm
Weight Without Bit	95.6 kg
Spanner Flat Size	101 mm A/F
Bit Size	156-203 mm
Operating Air Pressure	1.4-2.5 Mpa

DTH Hammer Parts List

Item	Description	Part No.	Weight(Kg)
1	Top Sub	WQ65BK0101	25.2
2	TS O/Ring	WQ65BK0201	0.01
3	TS O/Ring	WQ65BK0901	0.01
4	Quad Ring	WQ65BK0401	0.01
5	Check Valve	WQ65BK0501	0.5
6	CV Spring	WQ65BK0701	0.06
7	CV Holder	WQ65BK0601	0.5
8	Dowel Pin	WQ65BK0801	0.2
9	Central Control Tube	WQ65BK1001	1.2
10	Air Plug	WQ65BK1201	0.01
	Air Plug (φ5 hole)	WQ65BK1202	0.01
	Air Plug (φ8 hole)	WQ65BK1203	0.01
11	Piston	WQ65BK1401	21.5
12	Outer Cylinder	WQ65BK0301	34.8
13	Guide Sleeve	WQ65BK1703	4.7
14	Retainer Ring	WQ65BK1903	0.6
15	Drive Sub	WQ65BK2001	6.3
16	Drill Bit	QL60 Shank Bit	/

Application Suitability

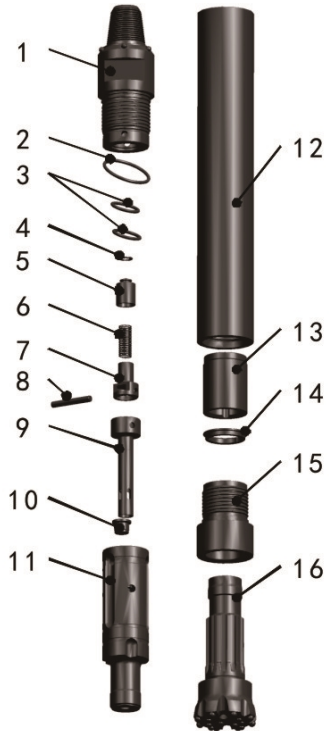
Blast Hole
Exploration
Water Well
Quarry / Mining
Construction

WQ series

DTH structure diagram



WQ85B Single cylinder DTH Hammer QL80 without Foot Value



General Specification

Description	WQ85B Single cylinder DTH HAMMER
Connection Joint	API 4 1/2" REG PIN
Bit Shank	QL80 without Foot Value
Overall Length Without Bit	1377 mm
Outside Diameter	185 mm
Weight Without Bit	192 kg
Spanner Flat Size	140 mm A/F
Bit Size	200-254 mm
Operating Air Pressure	1.5-3.5 Mpa

DTH Hammer Parts List

Item	Description	Part No.	Weight(Kg)
1	Top Sub	WQ85B0101	58.4
2	TS O/Ring	WQ85B0201	0.02
3	TS O/Ring	WQ85B0901	0.02
4	Quad Ring	WQ85B0401	0.7
5	Check Valve	WQ85B0501	0.6
6	CV Spring	WQ85B0701	0.11
7	CV Holder	WQ85B0601	0.8
8	Dowel Pin	WQ85B0801	0.3
9	Central Control Tube	WQ85B1001	1.7
10	Air Plug	WQ85B1201	0.02
	Air Plug (φ5 hole)	WQ85B1202	0.02
	Air Plug (φ10 hole)	WQ85B1203	0.01
11	Piston	WQ85B1401	42
12	Outer Cylinder	WQ85B0301	69.6
13	Guide Sleeve	WQ85B1701	9.2
14	Retainer Ring	WQ85B1901	0.94
15	Drive Sub	WQ85B2001	13.4
16	Drill Bit	QL80 Shank Bit	/

Application Suitability

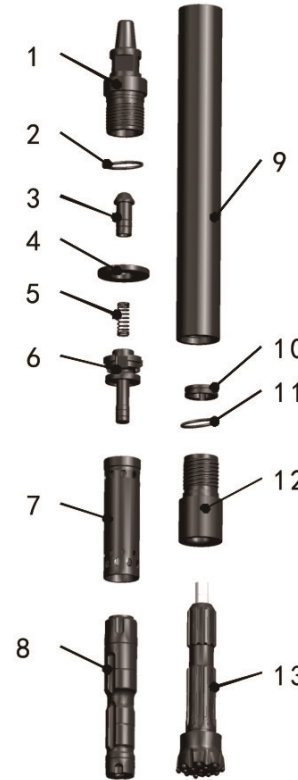
Blast Hole
Exploration
Water Well
Quarry / Mining
Construction

QL series

DTH structure diagram



SQ45A Dual cylinder DTH Hammer QL40 with Foot Value



General Specification

Description	SQ45A Dual cylinder DTH HAMMER
Connection Joint	API 2 3/8" REG PIN
Bit Shank	QL40 with Foot Value
Overall Length Without Bit	1105 mm
Outside Diameter	99 mm
Weight Without Bit	44 kg
Spanner Flat Size	74 mm A/F
Bit Size	110-135 mm
Operating Air Pressure	1.0-2.2 Mpa

DTH Hammer Parts List

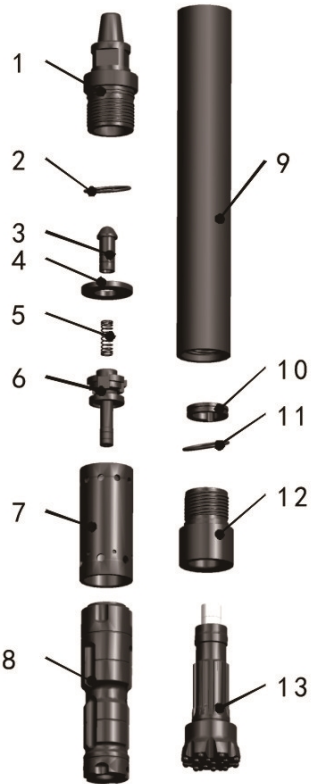
Item	Description	Part No.	Weight(Kg)
1	Top Sub	SQ45A0101	8.8
2	O/Ring	SQ45A0201	0.02
3	Check Valve	SQ45A0501	0.5
4	Rubber Buffer	SQ45A0401	0.2
5	Spring	SQ45A0701	0.04
6	Valve Seat	SQ45A1101	2.1
7	Inner Cylinder	SQ45A1301	2.5
8	Piston	SQ45A1401	8.8
9	Piston Case	SQ45A0301	16.5
10	Retainer Ring	SQ45A1901	0.2
11	O/Ring	SQ45A0201	0.02
12	Driver Chuck	SQ45A2001	3.3
13	Drill Bit	QL40 Shank Bit	/

Application Suitability

Blast Hole
Exploration
Water Well
Quarry / Mining
Construction



SQ55A Dual cylinder DTH Hammer – QL50 with Foot Value



General Specification

Description	SQ55A Dual cylinder DTH HAMMER
Connection Joint	API 2 3/8" REG PIN
Bit Shank	QL50 with Foot Value
Overall Length Without Bit	1105 mm
Outside Diameter	126 mm
Weight Without Bit	70 kg
Spanner Flat Size	89 mm A/F
Bit Size	136-156 mm
Operating Air Pressure	1.0-2.2 Mpa

DTH Hammer Parts List

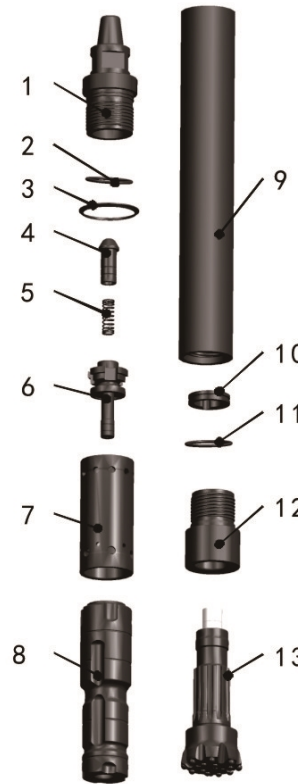
Item	Description	Part No.	Weight(Kg)
1	Top Sub	SQ55A0101	14.7
2	O/Ring	SQ55A0201	0.02
3	Check Valve	SQ55A1101	1
4	Rubber Buffer	SQ55A0401	0.3
5	Spring	SQ55A0701	0.08
6	Valve Seat	SQ55A1101	4.1
7	Inner Cylinder	SQ55A1301	4.4
8	Piston	SQ55A1401	17
9	Piston Case	SQ55A0301	24.8
10	Retainer Ring	SQ55A1901	0.6
11	O/Ring	SQ55A0201	0.02
12	Driver Chuck	SQ55A2001	5.6
13	Drill Bit	QL50 Shank Bit	/

Application Suitability

Blast Hole
Exploration
Water Well
Quarry / Mining
Construction



SQ65A Dual cylinder DTH Hammer QL60 with Foot Value



General Specification

Description	SQ65A Dual cylinder DTH HAMMER
Connection Joint	API 3 1/2" REG PIN
Bit Shank	QL60 with Foot Value
Overall Length Without Bit	1210 mm
Outside Diameter	148 mm
Weight Without Bit	104 kg
Spanner Flat Size	101 mm A/F
Bit Size	158-203 mm
Operating Air Pressure	1.0-2.5 Mpa

DTH Hammer Parts List

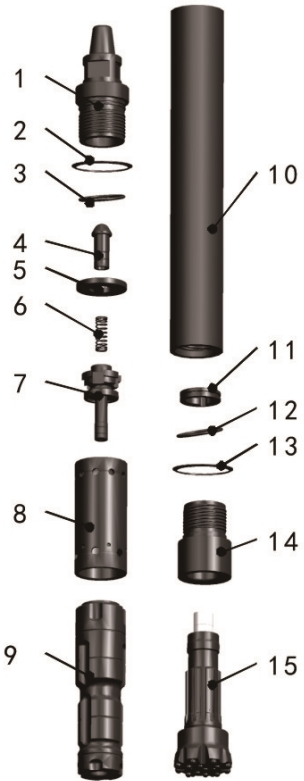
Item	Description	Part No.	Weight(Kg)
1	Top Sub	SQ65A0101	23
2	O/Ring	SQ65A0201	0.02
3	Disc Spring	SQ65B2501	0.34
4	Valve Seat	SQ65A0701	6.2
5	Spring	SQ65A1101	0.08
6	Inner Cylinder	SQ65A1301	5.9
7	Piston	SQ65A1401	23.5
8	Piston Case	SQ65A0301	39
9	Check Ring	SQ65A2801	0.02
10	Retainer Ring	SQ65A1901	0.8
11	O/Ring	SQ65A0201	0.02
12	Driver Chuck	SQ65A2001	6.3
13	Drill Bit	QL60 Shank Bit	/

Application Suitability

Blast Hole
Exploration
Water Well
Quarry / Mining
Construction



SQ85A Dual cylinder DTH Hammer QL80 with Foot Value



General Specification

Description	SQ85A Dual cylinder DTH HAMMER
Connection Joint	API 4 1/2" REG PIN
Bit Shank	QL80 with Foot Value
Overall Length Without Bit	1471 mm
Outside Diameter	180 mm
Weight Without Bit	188 kg
Spanner Flat Size	140 mm A/F
Bit Size	198-254 mm
Operating Air Pressure	1.5-3.3 Mpa

DTH Hammer Parts List

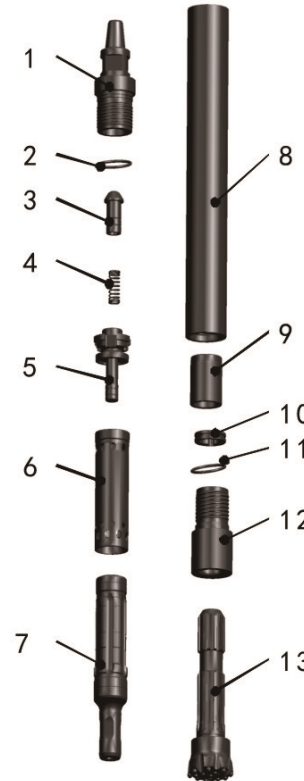
Item	Description	Part No.	Weight(Kg)
1	Top Sub	SQ85A0101	42
2	Adjuster Shim	SQ85A2701	0.2
3	O/Ring	SQ85A0201	0.02
4	Check Valve	SQ85A0501	1.5
5	Rubber Buffer	SQ85A0401	0.4
6	Spring	SQ85A0701	0.1
7	Valve Seat	SQ85A1101	12.8
8	Inner Cylinder	SQ85A1301	9.1
9	Piston	SQ85A1401	41
10	Piston Case	SQ85A0301	64
11	Retainer Ring	SQ85A1901	1.2
12	O/Ring	SQ85A0201	0.02
13	Adjuster Shim	SQ85A2701	0.2
14	Driver Chuck	SQ85A2001	12
15	Drill Bit	QL80 Shank Bit	/

Application Suitability

Blast Hole
Exploration
Water Well
Quarry / Mining
Construction



SQ45B Dual cylinder DTH Hammer QL40 without Foot Value



General Specification

Description	SQ45B Dual cylinder DTH HAMMER
Connection Joint	API 2 3/8" REG PIN
Bit Shank	QL40 without Foot Value
Overall Length Without Bit	1060 mm
Outside Diameter	99 mm
Weight Without Bit	43 kg
Spanner Flat Size	74 mm A/F
Bit Size	110-135 mm
Operating Air Pressure	1.0-2.2 Mpa

DTH Hammer Parts List

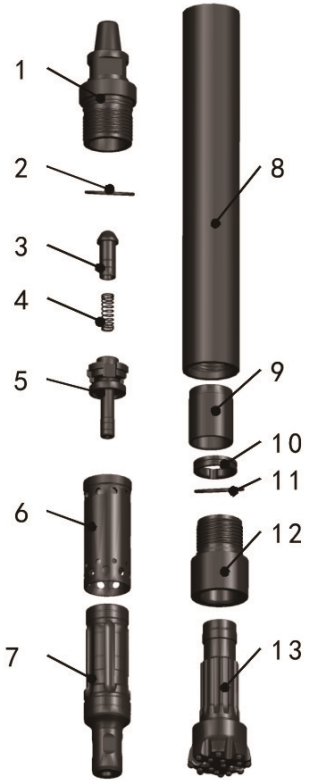
Item	Description	Part No.	Weight(Kg)
1	Top Sub	SQ45B0101	8.3
2	O/Ring	SQ45B0201	0.02
3	Check Valve	SQ45B0501	0.3
4	Spring	SQ45B0701	0.04
5	Valve Seat	SQ45B1101	1.5
6	Inner Cylinder	SQ45B1301	2.1
7	Piston	SQ45B1401	8.4
8	Piston Case	SQ45B0301	16.4
9	Guided Sleeve	SQ45B1701	2.3
10	Retainer Ring	SQ45B1901	0.27
11	O/Ring	SQ45B0201	0.02
12	Driver Chuck	SQ45B2001	3.3
13	Drill Bit	QL40 Shank Bit	/

Application Suitability

Blast Hole
Exploration
Water Well
Quarry / Mining
Construction



SQ55B Dual cylinder DTH Hammer QL50 without Foot Value



General Specification

Description	SQ55B Dual cylinder DTH HAMMER
Connection Joint	API 2 3/8" REG PIN
Bit Shank	QL50 without Foot Value
Overall Length Without Bit	1105 mm
Outside Diameter	126 mm
Weight Without Bit	70 kg
Spanner Flat Size	89 mm A/F
Bit Size	136-156 mm
Operating Air Pressure	1.0-2.2 Mpa

DTH Hammer Parts List

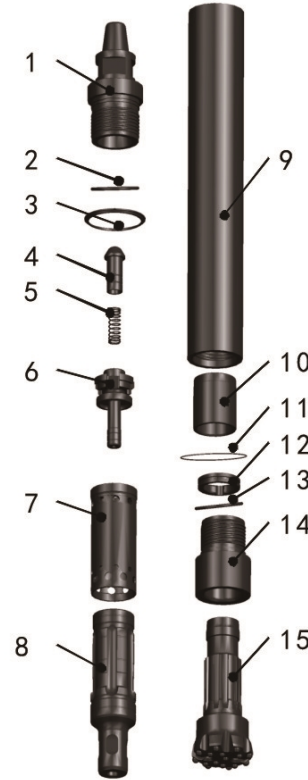
Item	Description	Part No.	Weight(Kg)
1	Top Sub	SQ55B0101	14.2
2	O/Ring	SQ55B0201	0.02
3	Check Valve	SQ55B0501	0.7
4	Spring	SQ55B0701	0.08
5	Valve Seat	SQ55B1101	2.2
6	Inner Cylinder	SQ55B1301	3.3
7	Piston	SQ55B1401	15.5
8	Piston Case	SQ55B0301	24.2
9	Guided Sleeve	SQ55B1701	2.8
10	Retainer Ring	SQ55B1901	0.5
11	O/Ring	SQ55B0201	0.02
12	Driver Chuck	SQ55B2001	5.4
13	Drill Bit	QL50 Shank Bit	/

Application Suitability

Blast Hole
Exploration
Water Well
Quarry / Mining
Construction



SQ65B Dual cylinder DTH Hammer QL60 without Foot Value



General Specification

Description	SQ65B Dual cylinder DTH HAMMER
Connection Joint	API 3 1/2" REG PIN
Bit Shank	QL60 without Foot Value
Overall Length Without Bit	1158 mm
Outside Diameter	148 mm
Weight Without Bit	103.5 kg
Spanner Flat Size	101 mm A/F
Bit Size	158-203 mm
Operating Air Pressure	1.0-2.2 Mpa

DTH Hammer Parts List

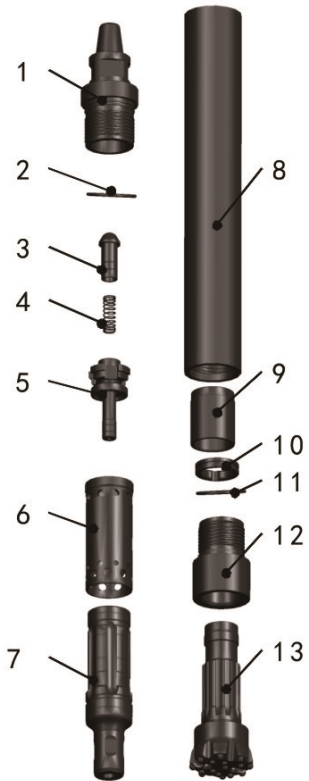
Item	Description	Part No.	Weight(Kg)
1	Top Sub	SQ65B0101	21.5
2	O/Ring	SQ65B0201	0.02
3	Disc Spring	SQ65B2501	0.34
4	Check Valve	SQ65B0501	0.7
5	Spring	SQ65B0701	0.08
6	Valve Seat	SQ65B1101	4.3
7	Inner Cylinder	SQ65B1301	4.2
8	Piston	SQ65B1401	23
9	Piston Case	SQ65B0301	34.3
10	Guide Sleeve	SQ65B1701	5.4
11	Check Ring	SQ65B2801	0.02
12	Retainer Ring	SQ65B1901	0.92
13	O/Ring	SQ65B0201	0.02
14	Driver Chuck	SQ65B2001	7.5
15	Drill Bit	QL60 Shank Bit	/

Application Suitability

Blast Hole
Exploration
Water Well
Quarry / Mining
Construction



SQ85B Dual cylinder DTH Hammer QL80 without Foot Value



General Specification

Description	SQ85B Dual cylinder DTH HAMMER
Connection Joint	API 4 1/2" REG PIN
Bit Shank	QL80 without Foot Value
Overall Length Without Bit	1335 mm
Outside Diameter	185 mm
Weight Without Bit	188 kg
Spanner Flat Size	140 mm A/F
Bit Size	198-254 mm
Operating Air Pressure	1.5-3.3 Mpa

DTH Hammer Parts List

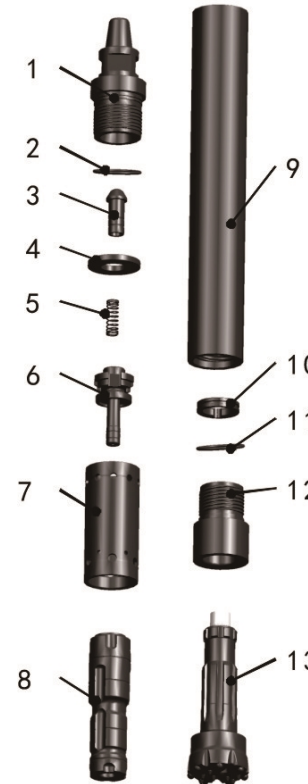
Item	Description	Part No.	Weight(Kg)
1	Top Sub	SQ85B0101	38.8
2	O/Ring	SQ85B0201	0.02
3	Check Valve	SQ85B0501	0.7
4	Spring	SQ85B0701	0.08
5	Valve Seat	SQ85B1101	6.2
6	Inner Cylinder	SQ85B1301	7.4
7	Piston	SQ85B1401	44.5
8	Piston Case	SQ85B0301	65
9	Guide Sleeve	SQ85B1701	10.5
10	Retainer Ring	SQ85B1901	1.2
11	O/Ring	SQ85B0201	0.02
12	Driver Chuck	SQ85B2001	14.5
13	Drill Bit	QL80 Shank Bit	/

Application Suitability

Blast Hole
Exploration
Water Well
Quarry / Mining
Construction



DH45A Dual cylinder DTH Hammer DHD340 with Foot Value



General Specification

Description	DH45A Dual cylinder DTH HAMMER
Connection Joint	API 2 3/8" REG PIN
Bit Shank	DHD340 with Foot Value
Overall Length Without Bit	1034 mm
Outside Diameter	99 mm
Weight Without Bit	44 kg
Spanner Flat Size	74 mm A/F
Bit Size	110-135 mm
Operating Air Pressure	1.0-2.2 Mpa

DTH Hammer Parts List

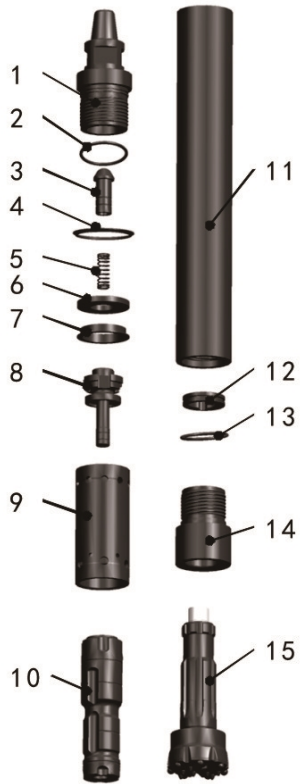
Item	Description	Part No.	Weight(Kg)
1	Top Sub	DH45A0101	8.8
2	O/Ring	DH45A0201	0.02
3	Check Valve	DH45A0501	0.5
4	Rubber Buffer	DH45A0401	0.2
5	Spring	DH45A0701	0.04
6	Valve Seat	DH45A1101	2.1
7	Inner Cylinder	DH45A1301	2.5
8	Piston	DH45A1401	9
9	Piston Case	DH45A0301	16
10	Retainer Ring	DH45A1901	0.2
11	O/Ring	DH45A0201	0.02
12	Driver Chuck	DH45A2001	3.7
13	Drill Bit	DHD340 Shank Bit	/

Application Suitability

Blast Hole
Exploration
Water Well
Quarry / Mining
Construction



DH55A Dual cylinder DTH Hammer DH350 with Foot Value



General Specification

Description	DH55A Dual cylinder DTH HAMMER
Connection Joint	API 2 3/8" REG PIN
Bit Shank	DHD350 with Foot Value
Overall Length Without Bit	1210 mm
Outside Diameter	126 mm
Weight Without Bit	79 kg
Spanner Flat Size	89 mm A/F
Bit Size	136-156 mm
Operating Air Pressure	1.0-2.2 Mpa

DTH Hammer Parts List

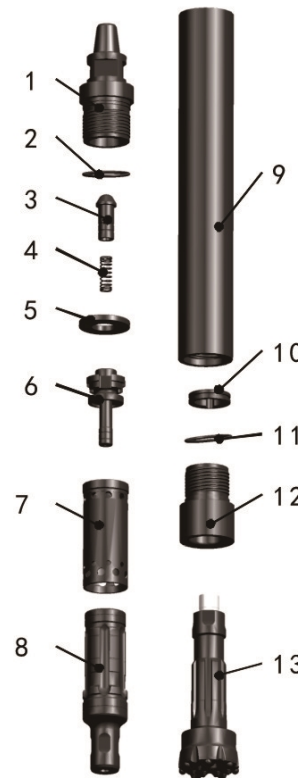
Item	Description	Part No.	Weight(Kg)
1	Top Sub	DH55A0101	14.7
2	O/Ring	DH55A0201	0.02
3	Check Valve	DH55A1101	1
4	Adjuster Ring	DH55A2701	0.1
5	Spring	DH55A0701	0.08
6	Rubber Buffer	DH55A0401	0.3
7	Ring Lock	DH55A2702	0.2
8	Valve Seat	DH55A1101	4.2
9	Inner Cylinder	DH55A1301	4.9
10	Piston	DH55A1401	15.5
11	Piston Case	DH55A0301	30.3
12	Retainer Ring	DH55A1901	0.3
13	O/Ring	DH55A0201	0.02
14	Driver Chuck	DH55A2001	7.1
15	Drill Bit	DHD350 Shank Bit	/

Application Suitability

Blast Hole
Exploration
Water Well
Quarry / Mining
Construction



DH65A Dual cylinder DTH Hammer DHD360 with Foot Value



General Specification

Description	DH65A Dual cylinder DTH HAMMER
Connection Joint	API 3 1/2" REG PIN
Bit Shank	DH360 with Foot Value
Overall Length Without Bit	1210 mm
Outside Diameter	148 mm
Weight Without Bit	104 kg
Spanner Flat Size	101 mm A/F
Bit Size	158-203 mm
Operating Air Pressure	1.0-2.5 Mpa

DTH Hammer Parts List

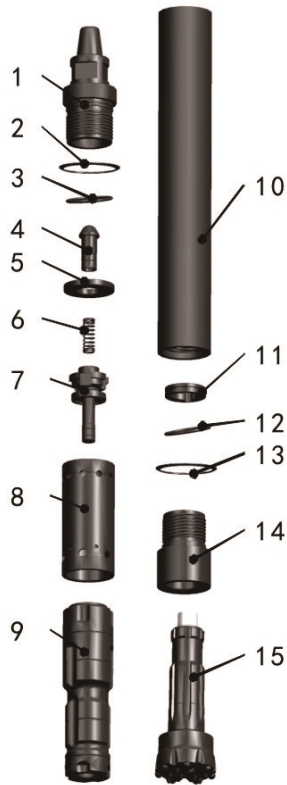
Item	Description	Part No.	Weight(Kg)
1	Top Sub	DH65A0101	21
2	O/Ring	DH65A0201	0.02
3	Check Valve	DH55A1101	0.8
4	Spring	DH65A1101	0.08
5	Rubber Buffer	DH65A0401	0.3
6	Valve Seat	DH65A1101	5
7	Inner Cylinder	DH65A1301	4
8	Piston	DH65A1401	23.5
9	Piston Case	DH65A0301	37.5
10	Retainer Ring	DH65A1901	0.8
11	O/Ring	DH65A0201	0.02
12	Driver Chuck	DH65A2001	6
13	Drill Bit	DHD3S60 Shank Bit	/

Application Suitability

Blast Hole
Exploration
Water Well
Quarry / Mining
Construction



DH85A Dual cylinder DTH Hammer DHD380 with Foot Value



General Specification

Description	DH85A Dual cylinder DTH HAMMER
Connection Joint	API 4 1/2" REG PIN
Bit Shank	DHD380 with Foot Value
Overall Length Without Bit	1471 mm
Outside Diameter	180 mm
Weight Without Bit	188 kg
Spanner Flat Size	140 mm A/F
Bit Size	198-254 mm
Operating Air Pressure	1.5-3.3 Mpa

DTH Hammer Parts List

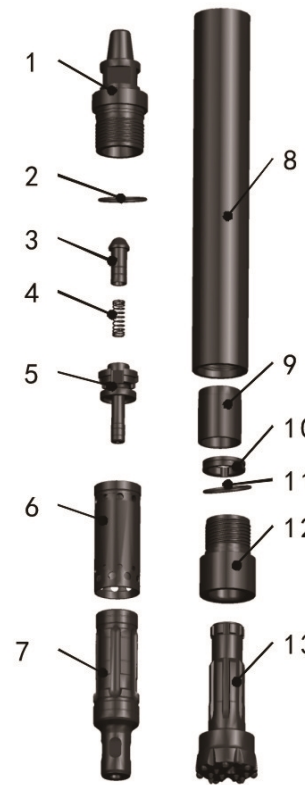
Item	Description	Part No.	Weight(Kg)
1	Top Sub	DH85A0101	42
2	Adjuster Shim	DH85A2701	0.2
3	O/Ring	DH85A0201	0.02
4	Check Valve	DH85A0501	1.5
5	Rubber Buffer	DH85A0401	0.4
6	Spring	DH85A0701	0.1
7	Valve Seat	DH85A1101	13
8	Inner Cylinder	DH85A1301	9.1
9	Piston	DH85A1401	41.5
10	Piston Case	DH85A0301	63
11	Retainer Ring	DH85A1901	1.2
12	O/Ring	DH85A0201	0.03s
13	Adjuster Shim	DH85A2701	0.2
14	Driver Chuck	DH85A2001	18.2
15	Drill Bit	DH380 Shank Bit	/

Application Suitability

Blast Hole
Exploration
Water Well
Quarry / Mining
Construction



DH45B Dual cylinder DTH Hammer DHD340 without Foot Value



General Specification

Description	DH45B Dual cylinder DTH HAMMER
Connection Joint	API 2 3/8" REG PIN
Bit Shank	DHD340 without Foot Value
Overall Length Without Bit	986 mm
Outside Diameter	99 mm
Weight Without Bit	41 kg
Spanner Flat Size	74 mm A/F
Bit Size	110-135 mm
Operating Air Pressure	1.0-2.2 Mpa

DTH Hammer Parts List

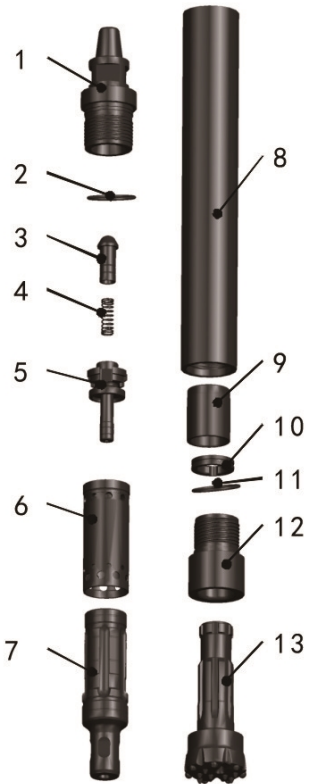
Item	Description	Part No.	Weight(Kg)
1	Top Sub	DH45B0101	8.3
2	O/Ring	DH45B0201	0.02
3	Check Valve	DH45B0501	0.3
4	Spring	DH45B0701	0.04
5	Valve Seat	DH45B1101	1.5
6	Inner Cylinder	DH45B1301	2.1
7	Piston	DH45B1401	8.4
8	Piston Case	DH45B0301	15
9	Guided Sleeve	DH45B1701	1
10	Retainer Ring	DH45B1901	0.23
11	O/Ring	DH45B0201	0.02
12	Driver Chuck	DH45B2001	3.6
13	Drill Bit	DHD340 Shank Bit	/

Application Suitability

Blast Hole
Exploration
Water Well
Quarry / Mining
Construction



DH55B Dual cylinder DTH Hammer DHD350 without Foot Value



General Specification

Description	DH55B Dual cylinder DTH HAMMER
Connection Joint	API 2 3/8" REG PIN
Bit Shank	DHD350 without Foot Value
Overall Length Without Bit	1125 mm
Outside Diameter	126mm
Weight Without Bit	71 kg
Spanner Flat Size	89 mm A/F
Bit Size	136-156 mm
Operating Air Pressure	1.0-2.2 Mpa

DTH Hammer Parts List

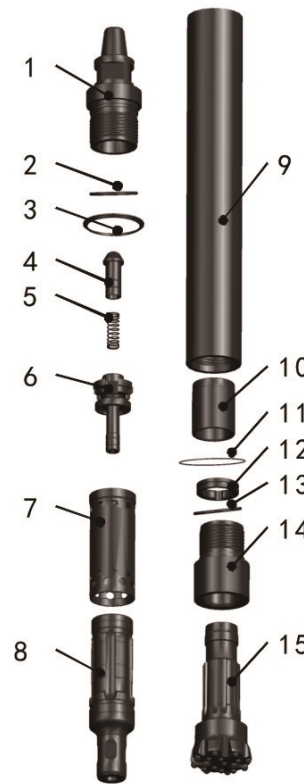
Item	Description	Part No.	Weight(Kg)
1	Top Sub	DH55B0101	14.2
2	O/Ring	DH55B0201	0.02
3	Check Valve	DH55B0501	0.7
4	Spring	DH55B0701	0.08
5	Valve Seat	DH55B1101	2.2
6	Inner Cylinder	DH55B1301	3.3
7	Piston	DH55B1401	15.5
8	Piston Case	DH55B0301	24.4
9	Guided Sleeve	DH55B1701	2.65
10	Retainer Ring	DH55B1901	0.5
11	O/Ring	DH55B0201	0.02
12	Driver Chuck	DH55B2001	7
13	Drill Bit	DH350 Shank Bit	/

Application Suitability

Blast Hole
Exploration
Water Well
Quarry / Mining
Construction



DH65B Dual cylinder DTH Hammer DHD360 without Foot Value



General Specification

Description	DH65B Dual cylinder DTH HAMMER
Connection Joint	API 3 1/2" REG PIN
Bit Shank	DHD360 without Foot Value
Overall Length Without Bit	1210 mm
Outside Diameter	148 mm
Weight Without Bit	106.5 kg
Spanner Flat Size	101 mm A/F
Bit Size	158-203 mm
Operating Air Pressure	1.2-2.5 Mpa

DTH Hammer Parts List

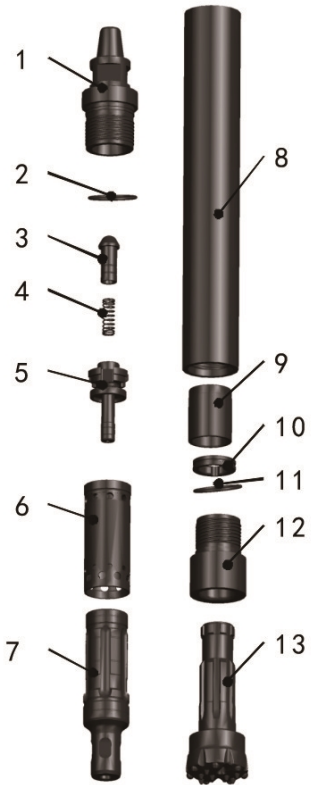
Item	Description	Part No.	Weight(Kg)
1	Top Sub	DH65B0101	21.5
2	O/Ring	DH65B0201	0.02
3	Disc Spring	DH65B2501	0.34
4	Check Valve	DH65B0501	0.6
5	Spring	DH65B0701	0.08
6	Valve Seat	DH65B1101	4.3
7	Inner Cylinder	DH65B1301	4.2
8	Piston	DH65B1401	23
9	Piston Case	DH65B0301	36.5
10	Guide Sleeve	DH65B1701	6.3
11	Check Ring	DH65B2801	0.02
12	Retainer Ring	DH65B1901	1
13	O/Ring	DH65B0201	0.02
14	Driver Chuck	DH65B2001	8.2
15	Drill Bit	DHD360 Shank Bit	/

Application Suitability

Blast Hole
Exploration
Water Well
Quarry / Mining
Construction



DH85B Dual cylinder DTH Hammer DHD380 without Foot Value



General Specification

Description	DH85B Dual cylinder DTH HAMMER
Connection Joint	API 4 1/2" REG PIN
Bit Shank	DHD380 without Foot Value
Overall Length Without Bit	1355 mm
Outside Diameter	185 mm
Weight Without Bit	194 kg
Spanner Flat Size	140 mm A/F
Bit Size	198-254 mm
Operating Air Pressure	1.5-3.3 Mpa

DTH Hammer Parts List

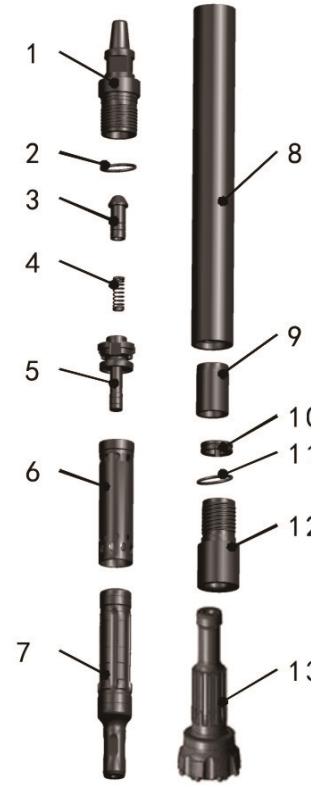
Item	Description	Part No.	Weight(Kg)
1	Top Sub	DH85B0101	38.8
2	O/Ring	DH85B0201	0.02
3	Check Valve	DH85B0501	0.7
4	Spring	DH85B0701	0.08
5	Valve Seat	DH85B1101	6.2
6	Inner Cylinder	DH85B1301	7.4
7	Piston	DH85B1401	44.5
8	Piston Case	DH85B0301	69.5
9	Guide Sleeve	DH85B1701	6.1
10	Retainer Ring	DH85B1901	1.2
11	O/Ring	DH85B0201	0.02
12	Driver Chuck	DH85B2001	19.3
13	Drill Bit	DHD380 Shank Bit	/

Application Suitability

Blast Hole
Exploration
Water Well
Quarry / Mining
Construction



SM45B Dual cylinder DTH Hammer M40



General Specification

Description	SM45B Dual cylinder DTH HAMMER
Connection Joint	API 2 3/8" REG PIN
Bit Shank	M40
Overall Length Without Bit	1004 mm
Outside Diameter	99 mm
Weight Without Bit	41 kg
Spanner Flat Size	74 mm A/F
Bit Size	110-135 mm
Operating Air Pressure	1.0-2.2 Mpa

DTH Hammer Parts List

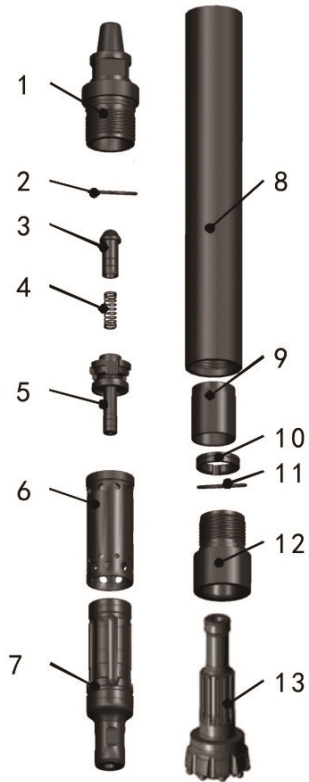
Item	Description	Part No.	Weight(Kg)
1	Top Sub	SM45B0101	8.3
2	O/Ring	SM45B0201	0.02
3	Check Valve	SM45B0501	0.3
4	Spring	SM45B0701	0.1
5	Valve Seat	SM45B1101	1.5
6	Inner Cylinder	SM45B1301	2.1
7	Piston	SM45B1401	8.4
8	Piston Case	SM45B0301	15
9	Guided Sleeve	SM45B1701	1.9
10	Retainer Ring	SM45B1901	0.27
11	O/Ring	SM45B0201	0.02
12	Driver Chuck	SM45B2001	3.9
13	Drill Bit	M40 Shank Bit	/

Application Suitability

Blast Hole
Exploration
Water Well
Quarry / Mining
Construction



SM55B Dual cylinder DTH Hammer M50



General Specification

Description	SM55B Dual cylinder DTH HAMMER
Connection Joint	API 2 3/8" REG PIN
Bit Shank	M50
Overall Length Without Bit	1122 mm
Outside Diameter	126 mm
Weight Without Bit	71 kg
Spanner Flat Size	89 mm A/F
Bit Size	136-156 mm
Operating Air Pressure	1.0-2.2 Mpa

DTH Hammer Parts List

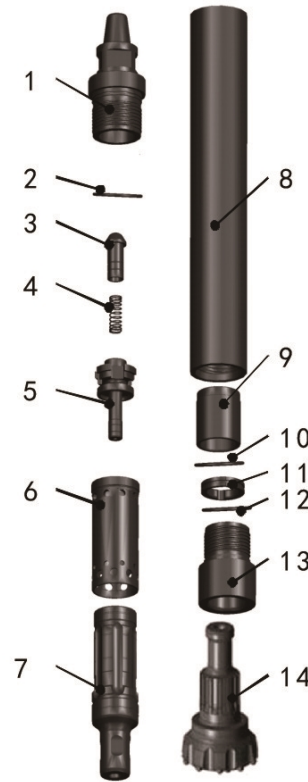
Item	Description	Part No.	Weight(Kg)
1	Top Sub	SM55B0101	13.7
2	O/Ring	SM55B0201	0.02
3	Check Valve	SM55B0501	0.7
4	Spring	SM55B0701	0.1
5	Valve Seat	SM55B1101	2
6	Inner Cylinder	SM55B1301	2.8
7	Piston	SM55B1401	15
8	Piston Case	SM55B0301	24
9	Guided Sleeve	SM55B1701	2.6
10	Retainer Ring	SM55B1901	0.7
11	O/Ring	SM55B0201	0.02
12	Driver Chuck	SM55B2001	7.1
13	Drill Bit	M50 Shank Bit	/

Application Suitability

Blast Hole
Exploration
Water Well
Quarry / Mining
Construction



SM65B Dual cylinder DTH Hammer M60



General Specification

Description	SM65B Dual cylinder DTH HAMMER
Connection Joint	API 3 1/2" REG PIN
Bit Shank	M60
Overall Length Without Bit	1129 mm
Outside Diameter	144 mm
Weight Without Bit	92 kg
Spanner Flat Size	101 mm A/F
Bit Size	152-203 mm
Operating Air Pressure	1.0-2.8 Mpa

DTH Hammer Parts List

Item	Description	Part No.	Weight(Kg)
1	Top Sub	SM65B0101	20
2	O/Ring	SM65B0201	0.02
3	Check Valve	SM65B0501	0.6
4	Spring	SM65B0701	0.1
5	Valve Seat	SM65B1101	3.5
6	Inner Cylinder	SM65B1301	3.9
7	Piston	SM65B1401	21.5
8	Piston Case	SM65B0301	31
9	Guided Sleeve	SM65B1701	4.8
10	O/Ring	SM65B0201	0.02
11	Retainer Ring	SM65B1901	0.9
12	O/Ring	SM65B0201	0.02
13	Driver Chuck	SM65B2001	5.8
14	Drill Bit	M60 Shank Bit	/

Application Suitability

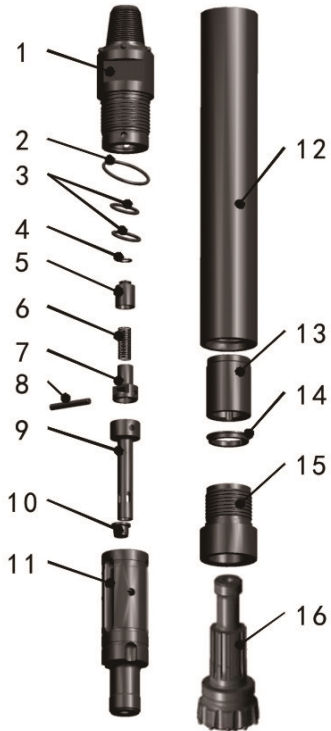
Blast Hole
Exploration
Water Well
Quarry / Mining
Construction

Mission series

DTH structure diagram



WM85B Single cylinder DTH Hammer M80



General Specification

Description	WM85B Single cylinder DTH HAMMER
Connection Joint	API 4 1/2" REG PIN
Bit Shank	M80
Overall Length Without Bit	1333 mm
Outside Diameter	185 mm
Weight Without Bit	190 kg
Spanner Flat Size	140 mm A/F
Bit Size	200-245 mm
Operating Air Pressure	1.5-3.5 Mpa

DTH Hammer Parts List

Item	Description	Part No.	Weight(Kg)
1	Top Sub	WQ85B0101	58.4
2	TS O/Ring	WQ85B0201	0.02
3	TS O/Ring	WQ85B0901	0.02
4	Quad Ring	WQ85B0401	0.7
5	Check Valve	WQ85B0501	0.6
6	CV Spring	WQ85B0701	0.11
7	CV Holder	WQ85B0601	0.8
8	Dowel Pin	WQ85B0801	0.3
9	Central Control Tube	WQ85B1001	1.7
10	Air Plug	WQ85B1201	0.02
	Air Plug (φ5 hole)	WQ85B1202	0.02
	Air Plug (φ10 hole)	WQ85B1203	0.01
11	Piston	WQ85B1401	42
12	Outer Cylinder	WM85B0301	69.6
13	Guide Sleeve	WM85B1701	9.8
14	Retainer Ring	WM85B1901	1.9
15	Drive Sub	WM85B2001	17
16	Drill Bit	M80 Shank Bit	/

Application Suitability

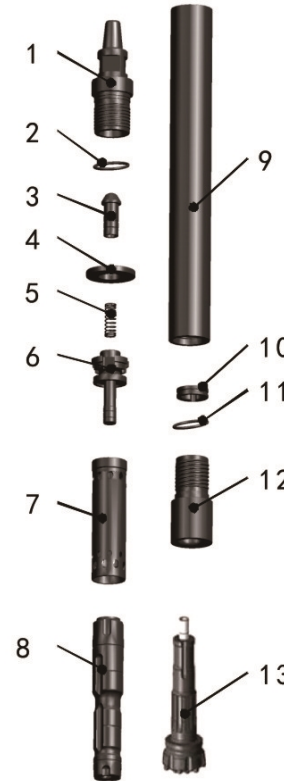
Blast Hole
Exploration
Water Well
Quarry / Mining
Construction

SD series

DTH structure diagram



SD45A Dual cylinder DTH Hammer SD4 with Foot Valve



General Specification

Description	SD45A Dual cylinder DTH HAMMER
Connection Joint	API 2 3/8" REG PIN
Bit Shank	SD4 with Foot Value
Overall Length Without Bit	1082 mm
Outside Diameter	99 mm
Weight Without Bit	44 kg
Spanner Flat Size	74 mm A/F
Bit Size	110-135 mm
Operating Air Pressure	1.0-2.2 Mpa

DTH Hammer Parts List

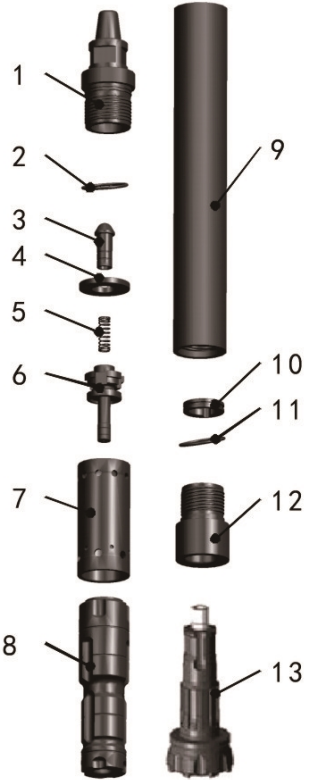
Item	Description	Part No.	Weight(Kg)
1	Top Sub	SD45A0101	8.8
2	O/Ring	SD45A0201	0.02
3	Check Valve	SD45A0501	0.5
4	Rubber Buffer	SD45A0401	0.2
5	Spring	SD45A0701	0.04
6	Valve Seat	SD45A1101	2.1
7	Inner Cylinder	SD45A1301	2.5
8	Piston	SD45A1401	9
9	Piston Case	SD45A0301	15.6
10	Retainer Ring	SD45A1901	0.2
11	O/Ring	SD45A0201	0.02
12	Driver Chuck	SD45A2001	4
13	Drill Bit	SD4 Shank Bit	/

Application Suitability

Blast Hole
Exploration
Water Well
Quarry / Mining
Construction



SD55A Dual cylinder DTH Hammer SD5 with Foot Value



General Specification

Description	SD55A Dual cylinder DTH HAMMER
Connection Joint	API 2 3/8" REG PIN
Bit Shank	SD5 with Foot Value
Overall Length Without Bit	1178 mm
Outside Diameter	126 mm
Weight Without Bit	70 kg
Spanner Flat Size	89 mm A/F
Bit Size	136-156 mm
Operating Air Pressure	1.0-2.5 Mpa

DTH Hammer Parts List

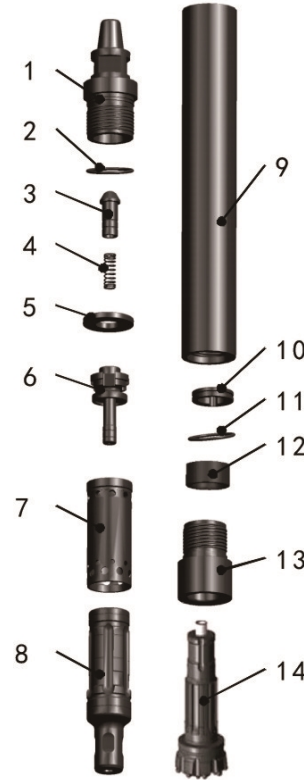
Item	Description	Part No.	Weight(Kg)
1	Top Sub	SD55A0101	14.7
2	O/Ring	SD55A0201	0.02
3	Check Valve	SD55A1101	1
4	Rubber Buffer	SD55A0401	0.3
5	Spring	SD55A0701	0.08
6	Valve Seat	SD55A1101	4.1
7	Inner Cylinder	SD55A1301	4.4
8	Piston	SD55A1401	17.3
9	Piston Case	SD55A0301	23.5
10	Retainer Ring	SD55A1901	0.5
11	O/Ring	SD55A0201	0.02
12	Driver Chuck	SD55A2001	7.8
13	Drill Bit	QL50 Shank Bit	/

Application Suitability

Blast Hole
Exploration
Water Well
Quarry / Mining
Construction



SD65A Dual cylinder DTH Hammer SD6 with Foot Value



General Specification

Description	SD65A Dual cylinder DTH HAMMER
Connection Joint	API 3 1/2" REG PIN
Bit Shank	SD6 with Foot Value
Overall Length Without Bit	1277 mm
Outside Diameter	148 mm
Weight Without Bit	99 kg
Spanner Flat Size	101 mm A/F
Bit Size	158-203 mm
Operating Air Pressure	1.0-2.5 Mpa

DTH Hammer Parts List

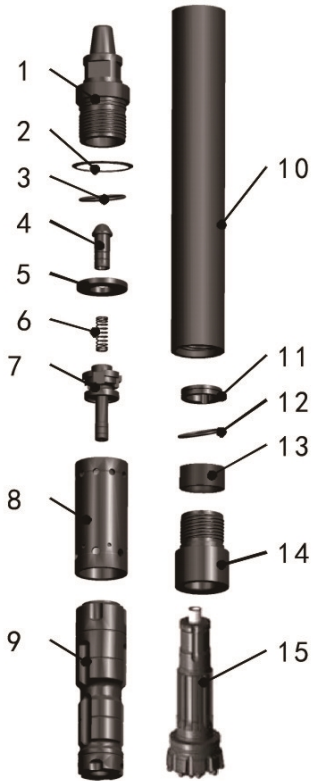
Item	Description	Part No.	Weight(Kg)
1	Top Sub	SD65A0101	21
2	O/Ring	SD65A0201	0.02
3	Check Valve	SD55A1101	0.8
4	Spring	SD65A1101	0.08
5	Rubber Buffer	SD65A0401	0.3
6	Valve Seat	SD65A1101	5
7	Inner Cylinder	SD65A1301	4
8	Piston	SD65A1401	23.5
9	Piston Case	SD65A0301	34.5
10	Retainer Ring	SD65A1901	0.8
11	O/Ring	SD65A0201	0.02
12	Guided Sleeve	SD65B1701	1.6
13	Driver Chuck	SD65A2001	8
14	Drill Bit	SD6 Shank Bit	/

Application Suitability

Blast Hole
Exploration
Water Well
Quarry / Mining
Construction



SD85A Dual cylinder DTH Hammer SD8 with Foot Value



General Specification

Description	SD85A Dual cylinder DTH HAMMER
Connection Joint	API 4 1/2" REG PIN
Bit Shank	SD8 with Foot Value
Overall Length Without Bit	1471 mm
Outside Diameter	180 mm
Weight Without Bit	188 kg
Spanner Flat Size	140 mm A/F
Bit Size	198-254 mm
Operating Air Pressure	1.5-3.3 Mpa

DTH Hammer Parts List

Item	Description	Part No.	Weight(Kg)
1	Top Sub	SD85A0101	42
2	Adjuster Shim	SD85A2701	0.2
3	O/Ring	SD85A0201	0.02
4	Check Valve	SD85A0501	1.5
5	Rubber Buffer	SD65A0401	0.4
6	Spring	SD85A0701	0.1
7	Valve Seat	SD85A1101	12.8
8	Inner Cylinder	SD85A1301	9.1
9	Piston	SD85A1401	43.5
10	Piston Case	SD85A0301	65
11	Retainer Ring	SD85A1901	1.4
12	O/Ring	SD85A0201	0.02
13	Guided Sleeve	SD65B1701	3.4
14	Driver Chuck	SD85A2001	16
	Drill Bit	SD8 Shank Bit	/

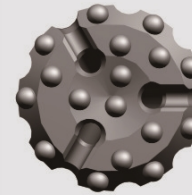
Application Suitability

Blast Hole
Exploration
Water Well
Quarry / Mining
Construction



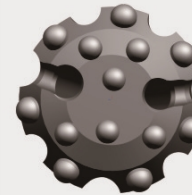
Faces selection guide

Hammer Bits Series



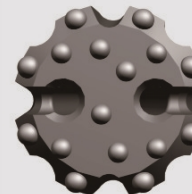
Concave Face

Suitable for most rock formations, most effective in the medium-hard and homogeneous rock formations. The face feature helps to reduce deviation and allows good cutting flushing on bit face.



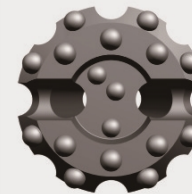
Convex Face

Convex face is suitable for drilling soft-medium hard rock formations under low-medium air pressure. It is designed for fast penetration rate in soft-medium ground formation with a good wear profile; but it has less control on hole deviation.



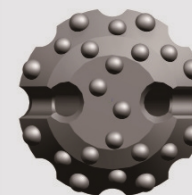
Flat Face

Flat face bits are general purpose bit suitable for drilling extremely hard and abrasive rocks formation with high air pressure. Flat face bits have good penetration rates and good erosion pattern on bit body.



Drop Center Bit

The drop center face design is best suited to the soft-medium hard formation, and formation with broken layers. The drop center bits have good penetration rate, and low hole deviation.



Double Gauge Row

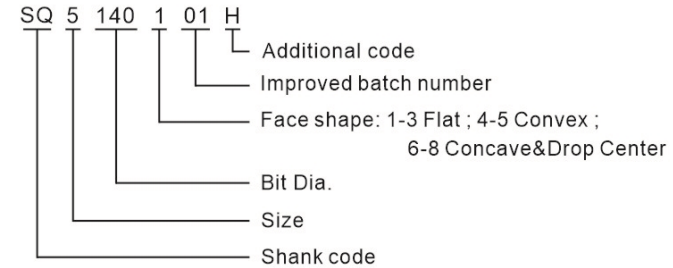
Double gauge row design is best suited for hard-very hard formation. The double gauge row configuration has good penetration and provides excellent wear resistance.

Various series of bits

Schematic diagram and introduction of matching carbide inserts

 SHAREATE TOOLS LTD.	Carbides selection guide	Hammer Bits Series
	<p>Spherical Button</p> <p>Spherical button is the most common shape used on DTH drill bit. It provides excellent penetration in medium, hard and broken formations, suitable in most types of drilling.</p>	
	<p>Ballistic Button</p> <p>Ballistic button has an very aggressive profile that protrudes out farther than most of the other carbide shapes. This button has the highest penetration rate and rock breaking efficiency, and is mostly used in softer formation.</p>	
	<p>Flat Button</p> <p>Flat button is used mainly as an additional protection feature on the DTH bit. It is placed on areas where extreme wear occurs to reduce bit body wear in the area.</p>	
	<p>Ogive Button</p> <p>Ogive button has a higher aggressive profile that protrudes out farther than spherical button . This button has the higher penetration rateand rock breaking efficiency, and is mostly used in softer formation.</p>	

Naming of DTH Bits



Shank	Code
DHD	DH
QL	SQ
Mission	SM
SD	SD

DTH Bit Series	
Product Series	Product Introduction
SQ	<p>QL Series bit with and without foot valve Sizes 4"- 8"</p> <p>Suitable for surface mining, quarry blasting and water well drilling. High efficiency and long service life.</p>
DH	<p>DHD Series bit with and without foot valve Sizes 4"- 8"</p> <p>Suitable for surface mining, quarry blasting and water well drilling. High efficiency and long service life.</p>
SD	<p>SD Series bit with foot valve Sizes 4"- 8"</p> <p>Suitable for surface mining, quarry blasting and water well drilling. High efficiency and long service life.</p>
SM	<p>Mission Series bit Sizes 4"- 8"</p> <p>Suitable for surface mining, quarry blasting and water well drilling. High efficiency and long service life.</p>

DTH Bits List

SHAREATE SHAREATE TOOLS LTD.		SD Series					
							
Bit Specification	Bit Face shape	Bit Dia. (mm)	NO. Air Holes	Gauge Buttons	Front Buttons	Weight (Kg)	Part No.
SD45	Flat Convex Concave Drop Center	105	2	6×φ14	5×φ13	9.0	SD4-105
		110	2	7×φ14	6×φ13	9.5	SD4-110
		115	2	7×φ14	6×φ13	9.8	SD4-115
		120	2	8×φ14	7×φ13	11.5	SD4-120
		127	2	8×φ14	7×φ13	12.3	SD4-127
SD55	Flat Convex Concave Drop Center	135	2	7×φ18	6×φ14	15.7	SD5-135
		140	2	7×φ18	7×φ14	16.0	SD5-140
		146	2	7×φ18	7×φ14	16.5	SD5-146
		152	2	8×φ18	8×φ14	17.0	SD5-152
		156	2	8×φ18	8×φ16	17.3	SD5-156
SD65	Flat Convex Concave Drop Center	165	2	8×φ18	8×φ16	18.0	SD5-165
		152	2	8×φ18	7×φ16	26.0	SD6-156
		165	2	8×φ18	8×φ16	27.0	SD6-165
		171	2	8×φ18	8×φ18	27.8	SD6-171
		190	2	10×φ19	10×φ18	32.0	SD6-190
SD85	Flat Convex Concave Drop Center	203	2	10×φ19	12×φ18	34.0	SD6-203
		203	2	10×φ18	14×φ16	37	SD8-203
		216	2	10×φ18	15×φ16	48.0	SD8-216
		235	2	12×φ18	16×φ18	55	SD8-235
		254	2	12×φ18	18×φ18	70	SD8-254

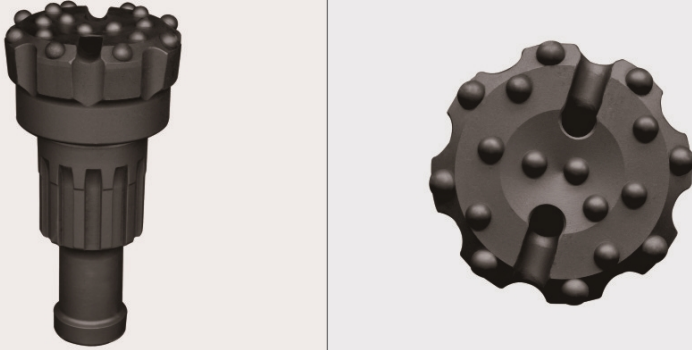
We can add double gauge row button, gauge protection button and back reaming button on the design. Also we do customization on bit diameter, air holes, carbide button shape and face shape according the customer requirements.

DTH Bits List

SHAREATE SHAREATE TOOLS LTD.		QL Series					
							
Bit Specification	Bit Face shape	Bit Dia. (mm)	NO. Air Holes	Gauge Buttons	Front Buttons	Weight (Kg)	Part No.
SQ4	Flat Convex Concave Drop Center	105	2	6×φ14	5×φ13	9.0	SQ4-105
		110	2	7×φ14	6×φ13	9.2	SQ4-110
		115	2	7×φ14	6×φ13	9.5	SQ4-115
		120	2	8×φ14	7×φ13	10.3	SQ4-120
		127	2	8×φ14	7×φ13	11.5	SQ4-127
SQ5	Flat Convex Concave Drop Center	135	2	7×φ18	6×φ14	15.5	SQ5-135
		140	2	7×φ18	7×φ14	16.0	SQ5-140
		146	2	7×φ18	7×φ14	16.5	SQ5-146
		152	2	8×φ18	8×φ14	17.0	SQ5-152
		156	2	8×φ18	8×φ16	17.3	SQ5-156
SQ6	Flat Convex Concave Drop Center	165	2	8×φ18	8×φ16	18.0	SQ5-165
		152	2	8×φ18	7×φ16	26.0	SQ6-156
		165	2	8×φ18	8×φ16	27.0	SQ6-165
		171	2	8×φ18	8×φ18	27.8	SQ6-171
		190	2	10×φ19	10×φ18	32.0	SQ6-190
SQ8	Flat Convex Concave Drop Center	203	2	10×φ19	12×φ18	34.0	SQ6-203
		203	2	10×φ18	14×φ16	41.0	SQ8-203
		216	2	10×φ18	15×φ16	44.0	SQ8-216
		235	2	12×φ18	16×φ18	49.0	SQ8-235
		254	2	12×φ18	18×φ18	53.2	SQ8-254

We can add double gauge row button, gauge protection button and back reaming button on the design. Also we do customization on bit diameter, air holes, carbide button shape and face shape according the customer requirements.

DTH Bits List

SHREATE SHAREATE TOOLS LTD.		MISSION Series					
							
Bit Specification	Bit Face shape	Bit Dia. (mm)	NO. Air Holes	Gauge Buttons	Front Buttons	Weight (Kg)	Part No.
SM45	Flat Convex Concave Drop Center	105	2	6×φ14	5×φ13	9.0	SM4-105
		110	2	7×φ14	6×φ13	9.2	SM4-110
		115	2	7×φ14	6×φ13	9.5	SM4-115
		120	2	8×φ14	7×φ13	10.3	SM4-120
		127	2	8×φ14	7×φ13	11.5	SM4-127
SM55	Flat Convex Concave Drop Center	135	2	7×φ18	6×φ14	15.5	SM5-135
		140	2	7×φ18	7×φ14	16.0	SM5-140
		146	2	7×φ18	7×φ14	16.5	SM5-146
		152	2	8×φ18	8×φ14	17.0	SM5-152
		156	2	8×φ18	8×φ16	17.3	SM5-156
		165	2	8×φ18	8×φ16	18.0	SM5-165
SM65	Flat Convex Concave Drop Center	152	2	8×φ18	7×φ16	26.0	SM6-156
		165	2	8×φ18	8×φ16	27.0	SM6-165
		171	2	8×φ18	8×φ18	27.8	SM6-171
		190	2	10×φ19	10×φ18	32.0	SM6-190
		203	2	10×φ19	12×φ18	34.0	SM6-203
SM85	Flat Convex Concave Drop Center	203	2	10×φ18	14×φ16	41.0	SM8-203
		216	2	10×φ18	15×φ16	44.0	SM8-216
		235	2	12×φ18	16×φ18	49.0	SM8-235
		254	2	12×φ18	18×φ18	53.2	SM8-254

We can add double gauge row button, gauge protection button and back reaming button on the design. Also we do customization on bit diameter, air holes, carbide button shape and face shape according the customer requirements.

DTH Bits List

SHREATE SHAREATE TOOLS LTD.		DHD Series					
							
Bit Specification	Bit Face shape	Bit Dia. (mm)	NO. Air Holes	Gauge Buttons	Front Buttons	Weight (Kg)	Part No.
DH45	Flat Convex Concave Drop Center	105	2	6×φ14	5×φ13	8.5	DH4-105
		110	2	7×φ14	6×φ13	8.8	DH4-110
		115	2	7×φ14	6×φ13	9.0	DH4-115
		120	2	8×φ14	7×φ13	11.0	DH4-120
		127	2	8×φ14	7×φ13	12.1	DH4-127
DH55	Flat Convex Concave Drop Center	135	2	7×φ18	6×φ14	16.0	DH5-135
		140	2	7×φ18	7×φ14	17.5	DH5-140
		146	2	7×φ18	7×φ14	18	DH5-146
		152	2	8×φ18	8×φ14	17.5	DH5-152
		156	2	8×φ18	8×φ16	17.9	DH5-156
		165	2	8×φ18	8×φ16	18.5	DH5-165
DH65	Flat Convex Concave Drop Center	152	2	8×φ18	7×φ16	22.0	DH6-152
		165	2	8×φ18	8×φ16	26	DH6-165
		171	2	8×φ18	8×φ18	27.2	DH6-171
		190	2	10×φ19	10×φ18	29.0	DH6-190
		203	2	10×φ19	12×φ18	30.3	DH6-203
DH85	Flat Convex Concave Drop Center	203	2	10×φ18	14×φ16	40.0	DH8-203
		216	2	10×φ18	15×φ16	49.0	DH8-216
		235	2	12×φ18	16×φ18	58.0	DH8-235
		254	2	12×φ18	18×φ18	71.0	DH8-254

We can add double gauge row button, gauge protection button and back reaming button on the design. Also we do customization on bit diameter, air holes, carbide button shape and face shape according the customer requirements.

COMPENSATION PROVISIONS

DTH bit compensation provisions

Free replacement

- When drilling hard rocks such as granite and quartz sandstone, the wear width of the edge teeth of the bit body is less than 50% of the diameter of the edge teeth.
- When drilling hard rock, the wear width of the side teeth is less than 30% of the diameter of the edge teeth, and there are two or more non adjacent edge teeth losing teeth, broken teeth, local collapse of the bit body, drill tail block, broken neck, broken handle and other failure forms .

No compensation

- The drill body and its alloy have been worn seriously, such as broken body, block, broken tooth and lost tooth.
- Due to improper operation or human factors or special strata, the drill bit teeth are broken, lost teeth, broken body, etc., such as welding bit, drilling geothermal, spontaneous combustion coal seam, drilling reinforced concrete, pebble layer, fracture layer, etc.
- When it is used in weathered rock, limestone rock, coal mine and other soft rock or very hard rock, the fault body, broken tooth and tooth drop appear.
- Any part of the bit is modified by the user (including sharpened).
- In case of any abnormal situation (3 bits of the same type have the same abnormal damage phenomenon) in batch use of our company's bit products, please immediately suspend the use of our company's products of the same type and batch, and contact the company or the supplier in time, and feed back the abnormal situation; if there are problems in the continuous use and cause greater losses, the company will not compensate.
- The company will record the number of the compensated bit and will not compensate for the failure of the compensated bit.
- No one shall be jointly and severally liable for any compensation.

Compensation regulations for DTH Hammer

Free maintenance and replacement

- In the early stage, the hammer appeared slow and stuck, which could be maintained until its performance was restored;
- In the early stage, the main accessories such as outer casing, piston and front joint have cracks and broken bodies, which can compensate the corresponding parts;

No compensation

- No compensation shall be made to the impactor for well drilling, geothermal or underwater operation, if the water, mud, sand, etc. cannot be impacted and the internal wear is too large due to stopping the air pressure or other reasons when changing the drill pipe.
- The impactor has reached the service life, or the outer sleeve has been replaced, or the piston is pulled or broken due to improper operation or lack of oil.
- The air pressure of 4-inch impactor exceeds 20 bar; that of 5-inch impactor exceeds 23 bar; that of 6-inch impactor exceeds 25 bar; that of 8-inch impactor exceeds 35 bar.
- The impactor is not allowed to be welded or baked. Parts deformed due to welding or baking are stuck or the service life is reduced.
- The number of piston, cylinder, rear joint and outer sleeve is inconsistent with the factory record, or the impactor is damaged due to replacement of piston, cylinder and outer sleeve of other manufacturers.
- The hole falling accident of the impactor was caused by the reversal of the impactor.
- The impactor shall not be held jointly and severally liable for compensation.

INSTRUCTIONS FOR DTH

- When the DTH starts drilling, the minimum impact and propulsion force should be used to make the DTH stand on the ground, and the impact air valve should be opened to make the DTH work under impact. At this time, the DTH does not rotate, so that the bit can enter the rock stratum smoothly, and then the impact and propulsion force are gradually increased.
- The DTH thread is a right-hand thread. When the drilling tool is in the hole, the right rotation of the DTH should be kept all the time. It is strictly prohibited to reverse DTH hammer and bit from falling into the well.
- In the process of drilling, there is always no rock slag in the hole. If necessary, the hole should be cleaned by strong blowing. In the process of drilling or lifting the drilling tool, the gas supply shall not be stopped immediately before the drilling is stopped. The drill shall be lifted for strong blowing, and the air can be stopped until there is no more rock slag dust in the hole, so as to prevent rock powder or mud from flowing back into the DTH.
- In the process of replacing the compressed air pipeline and connecting rod, the dirt in the pipeline must be blown away, and the joint of drill pipe should be kept clean to prevent rock slag dust from entering the DTH.
- Reasonable lubrication is the key to ensure the long life and high efficiency of the DTH, otherwise it will accelerate the wear of the DTH, and even lead to the damage of the DTH parts. The lubrication of the DTH is realized by the lubricator on the drilling rig, so oil must be kept in the lubricator at all times. (20 machine oil is generally used)
- In the process of drilling, due to the pollution of dust and lubricating oil brought by high-pressure gas and dust and mud entering the DTH, the performance of the DTH will be reduced and the contact surface of each moving part of the DTH will be damaged. Therefore, regular maintenance of the DTH can ensure its continuous and reliable operation and prolong its service life.

Notes for Drilling Tool Maintenance and Repair

- Under normal drilling conditions, the DTH should be overhauled, cleaned and reassembled once every 100 hours; if the DTH is not used for a long time, it should be overhauled and cleaned immediately after it is out of use, so as to prevent the DTH from rusting and damaging, especially after it is used in water containing environment, timely maintenance and cleaning should be carried out.
- When disassembling the DTH, pay attention to the protection of the DTH itself. Do not use hard smashing, gas welding or fire baking, otherwise the service life of the DTH will be affected.
- Put the removed parts in a clean place, clean the removed parts, blow dry, brush the parts evenly with engine oil, and reassemble them in place.
- Check all parts of parts during maintenance. If there are bumps and scratches, polish them with file and fine oil stone. If cracks and damages are found, they should be replaced.
- Check the wear of the front joint spline, insert a new drill bit into the front joint spline and twist. If the rotation range is too large, replace the front joint.
- Use micrometer and inner diameter gauge to measure the outer circle of piston and inner diameter of cylinder. If the fit clearance is too large, replace the piston or cylinder.