

DTH Equipment Catalogue

We supply drill bits and hammers from most brands such as Sandvik, Mincon etc. (TABLE 1) if you don't wish to try our recommended DrillCore-series. In this compact catalogue you can find information about drill bits & their inserts, drilling rods and DTH-hammers. Our selection includes, but is not limited to: Down the Hole -hammers, Top-Hammers (Drillcom RD-series), pile/casing shoes, drill bits and drilling rods.

SHANK TYPES

	SHANK	BRAND
International Standards	QL	Atlas Copco / Epiroc / Mincon
	SD	Sandvik
	DHD	Atlas Copco / Ingersoll Rand
	COP	Atlas Copco / Epiroc
	M / Mission	Sandvik / Numa
	NUMA	Numa
Non-Standards	ND	China
	DC	Our own design!
	TD	Technidrill (France)
	BR	Bulroc (UK)
	SW	China
	BH	Back Hammer (China)

TABLE 1. Available Shank Types

DRILL BITS

All drill bits are 23CrNi3Mo-steel and carburization depth is 1.5-1.8 mm. You can choose your drill bit profile to your liking and combine it with any insert-type you want (TABLES 2-3). Non-standard options are also available through custom-orders.

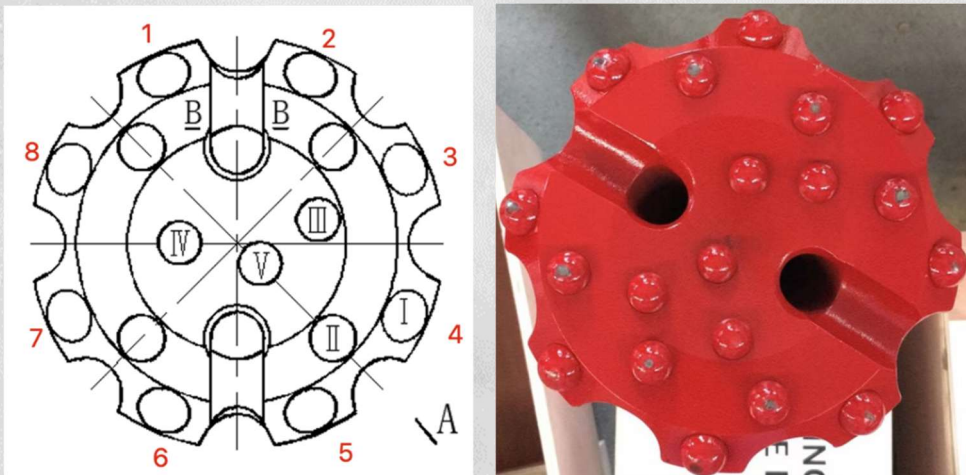
DRILL BIT PROFILES					
FLAT FACE		CONVEX		CONCAVE	
					
CONVEX-CONCAVE		DOUBLE GAUGE		DROP-CENTER	
					
PROTECTION BUTTON		BACKBUTTON		ROCKET	
					

TABLE 2. Drill Bit Profiles

VOLFRAMCARBIDE-INSERTS		
INSERT TYPE	PROFILE	APPLICATION
DOMED		STONE: VERY HARD ABRASION: HIGHEST
PARABOLIC SEMIBALLISTIC		STONE: HARD ABRASION: MEDIUM
BALLISTIC		STONE: MEDIUM HARD ABRASION: MEDIUM (Also for softer stone)
SHARP (FOR HIGH ROTATION SPEED)		STONE: SOFT ABRASION: LOW
FLAT		USED TO PROTECT THE WEAR SURFACE OF THE BIT

TABLE 3. Insert Profiles & Application

All inserts are carbide steel classified as KK30 (Wolfram Carbide-alloy). Quantity of inserts on the outer rim of the drill bits are proportional to the flushing holes in the drill bit (PICTURE 1). Inner rim insert quantities are standards.



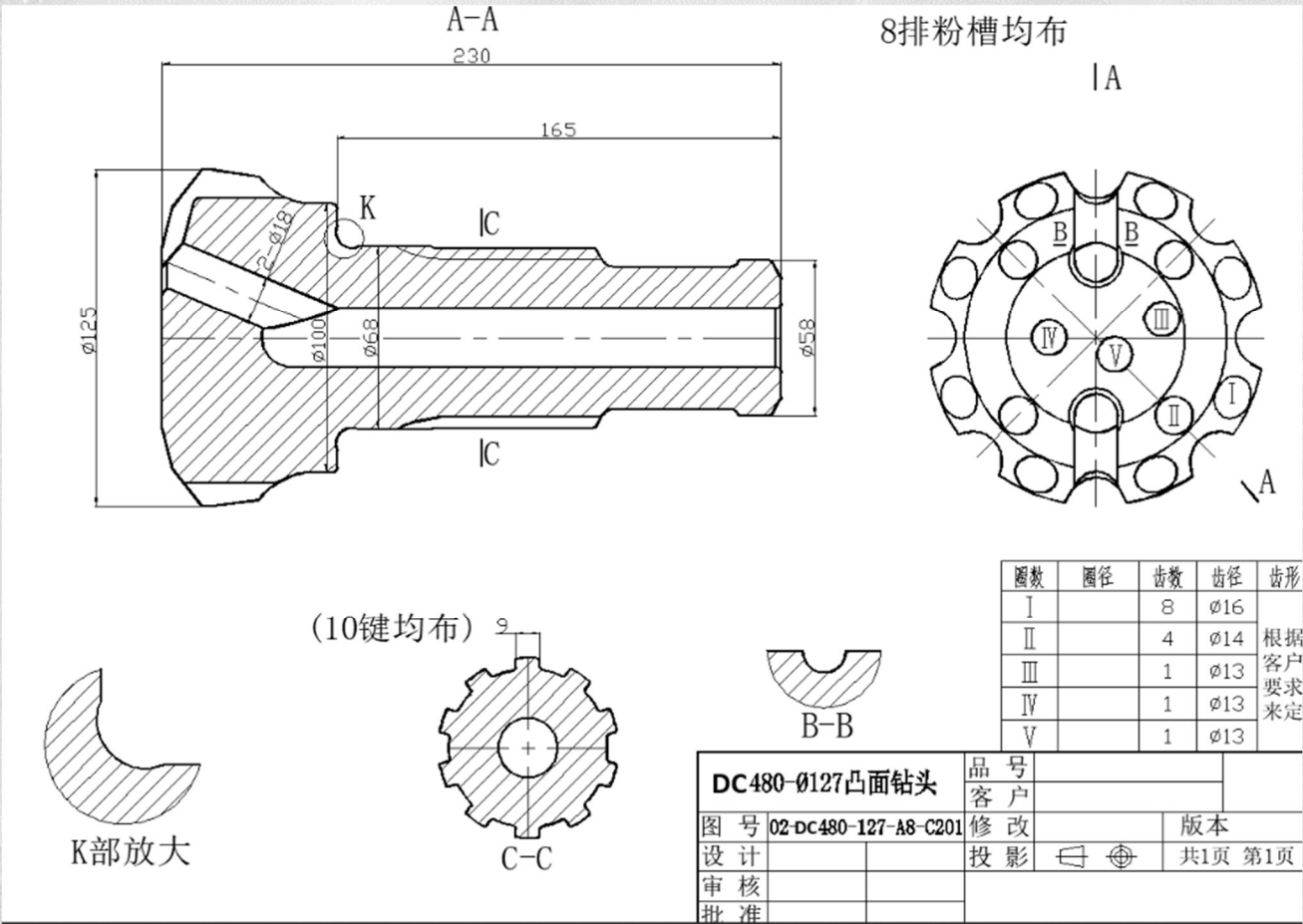
PICTURE 1. Flushing Hole and Insert Count

Protective coating covers the whole bit including the inserts (PICTURE 2).



PICTURE 2. Painting Workshop

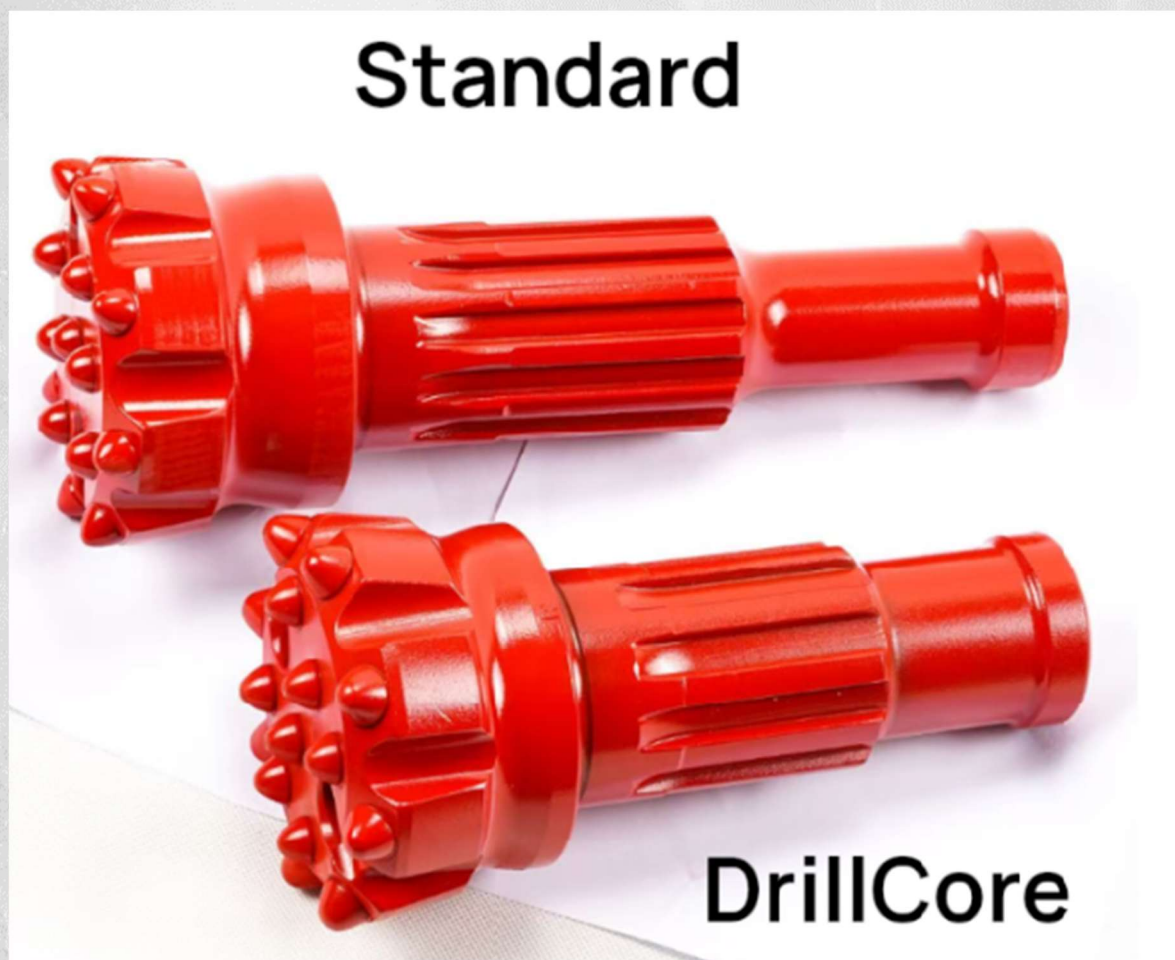
DrillCore -series differs from most other drill bits in having thicker walls and more robust casing overall (PICTURES 3-5).



PICTURE 3. DrillCore -series Drill Bit Design



PICTURE 4. DrillCore -series bits profile



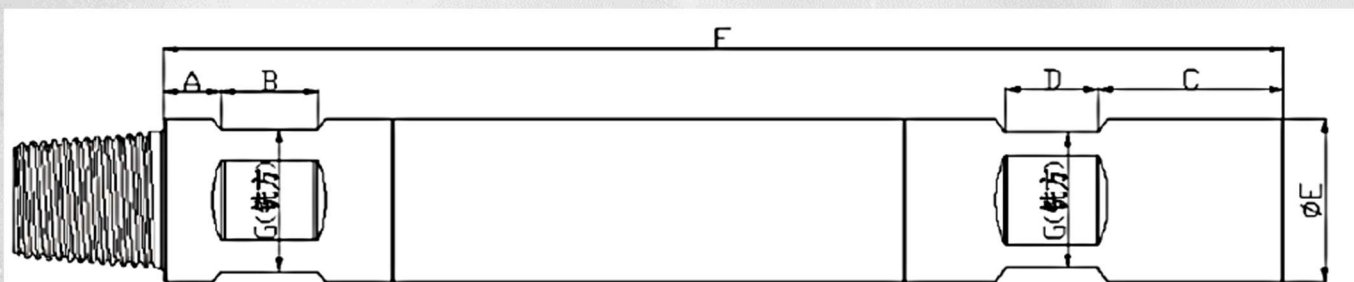
PICTURE 5. Differences Between Standard and DrillCore -series bits

DRILLING RODS

All drilling rod threads have been hardened and nitrided. You can choose between different diameters, wall thicknesses and lengths for your desired outcome (TABLES 4-5).

OUTER DIAMETER (mm)	WALL THICKNESS (mm)	LENGTH (mm)	WEIGHT (KG)
60	4	2000	15
		3000	20
	6	1500	16,5
		2000	21
76	4	3000	29
	5	2000	19
		3000	26,5
		1000	14,5
		1500	19
		2000	24
		3000	31,5
	6	3000	41
	8	3000	49,5
89	6 - 6.35	1000	20
		1500	27
		2000	33
		3000	46,5
	5 - 5.5	1000	19,5
		1500	25
		2000	31
		3000	42
102	8,38	1000	29
		1500	38,5
		2000	48
		3000	66
		6000	122
	6,3	1000	24
		1500	31,5
		2000	38,5
		3000	55
		6000	99
114	8,38	1500	50
		2000	57
		3000	82
		4500	120
		6000	160
127	9,5	1500	54
		3000	94
		6000	172
140	9,19	1500	67
		4500	163
		6000	211

TABLE 4. Drilling Rod Measurements



DRILLING RODS

Ref.	Diameter (thread)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	Wrench Space (mm)
01	Ø64 (6 degrees)	20	50	85	50	Ø	1500	55
02	Ø76 (2-3/8REG)	25	50	100	50	Ø	3000	57
03	Ø76 (2-3/8REG)	25	50	100	50	Ø	3000	64
04	Ø89 (2-3/8IF)	30	45	125	45	Ø	3000	65
05	Ø89 (2-3/8IF)	30	45	125	45	Ø	3000	70
06	Ø102 (2-7/8IF)	35	55	110	55	Ø	3000	85

TABLE 5. Drilling Rod Wrench Space Information

DOWN THE HOLE - HAMMERS

DrillCore -series hammers are designed for urban construction and hard stone types. Combined with DrillCore -drill bits they meet the strict requirements for pile- and foundation works. Whether you need a foot valve or not you can see the table below which models support this option (TABLE 6). List of available hammer sizes can be found below (TABLE 7).

SHANK TYPES

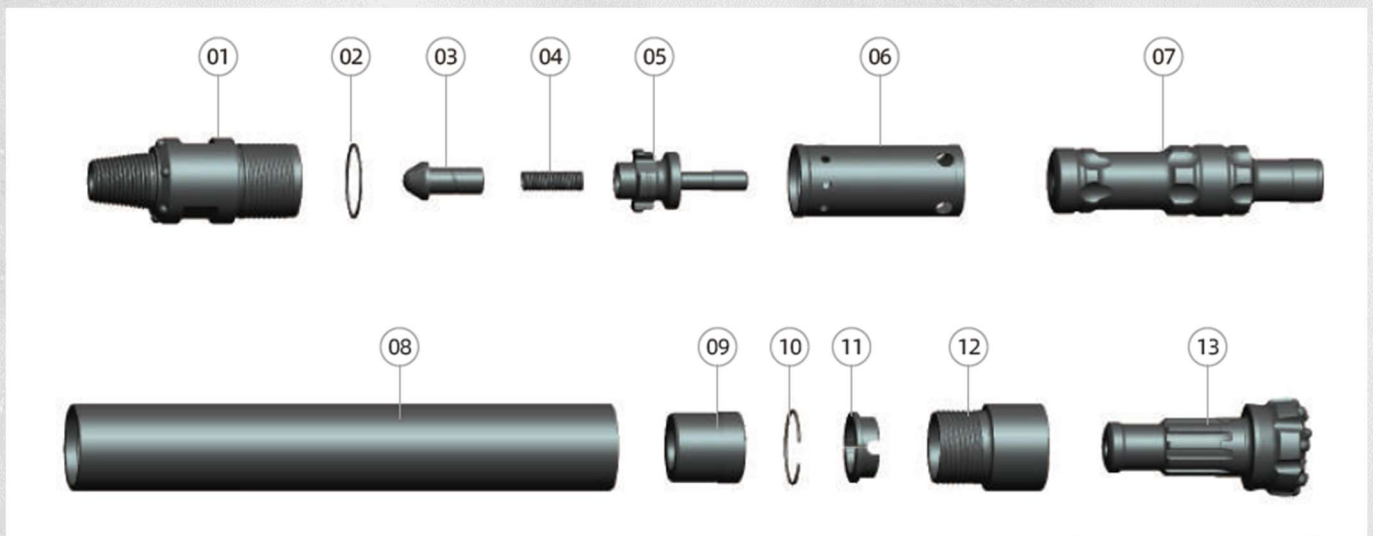
	SHANK	BRAND	FOOT-VALVE (OPTIONAL)
International Standards	QL	Atlas Copco / Epiroc / Mincon	x
	SD	Sandvik	x
	DHD	Atlas Copco / Ingersoll Rand	x
	COP	Atlas Copco / Epiroc	x
	M / Mission	Sandvik / Numa	
	NUMA	Numa	x
Non- Standards	ND	China	
	DC	Our own design!	
	TD	Technidrill (France)	
	BR	Bulroc (UK)	
	SW	China	
	BH	Back Hammer (China)	

TABLE 6. Foot Valve Options

DOWN THE HOLE -HAMMERS	
Size (Inches)	Size (Inches)
2" Drillcore	8" Standard
3" Standard & DrillCore	8" Drillcore
3" Drillcore	10" Standard
4" Standard	10" Drillcore
4" Drillcore	12" Standard
5" Standard	12" Drillcore
5" Drillcore	14" Standard & DrillCore
6" Standard	18" Standard & DrillCore
6" Drillcore	24" Standard & DrillCore
7" Standard & DrillCore	

TABLE 7. Hammer Size Options

4" DC480 DRILLCORE -HAMMER

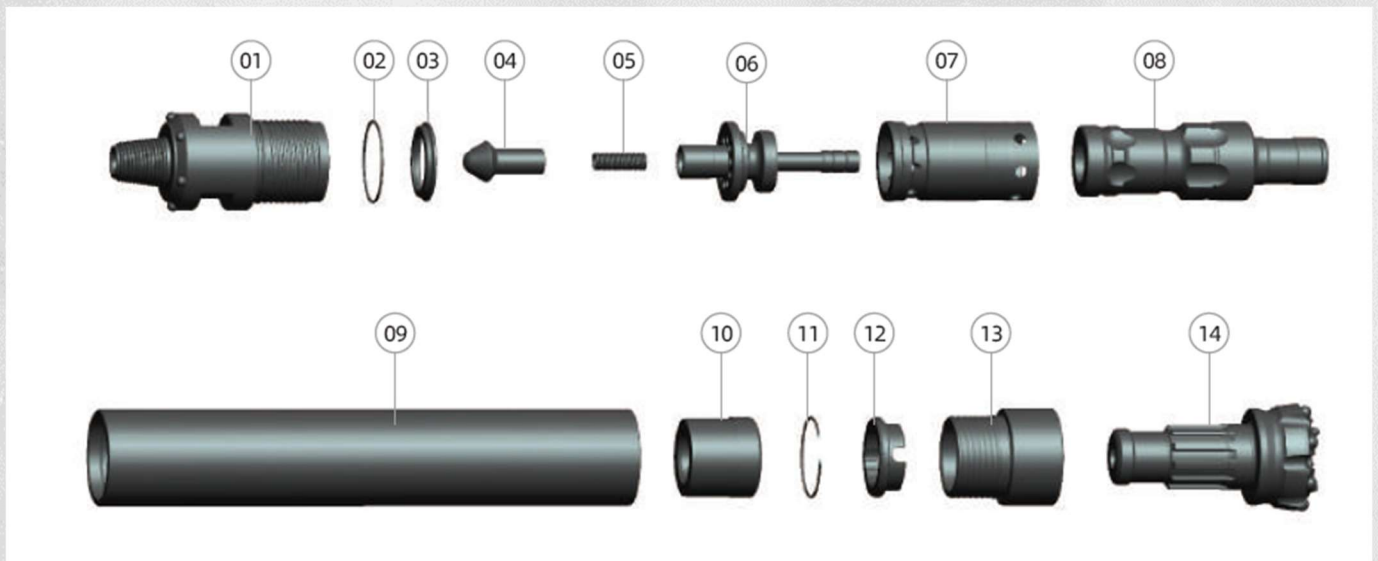


4" HAMMER							
DRILLCORE DC480				DRILLCORE DC480			
Ref.	Part	Weight (kg)	Part No.	Ref.	Part	Weight (kg)	Part No.
01	Top Sub	7.4	01-DC480-01	09	Guide Sleeve	1.5	01-DC480-09
02	O-Ring	0.01	01-DC480-02	10	Check Ring	0.02	01-DC480-10
03	Check Valve	0.3	01-DC480-03	11	Stop Ring	0.34	01-DC480-11
04	Spring	0.04	01-DC480-04	12	Drive Chuck	3.1	01-DC480-12
05	Air Distributor	1	01-DC480-05	13	Drill Bit		01-DC480-13
06	Inner Cylinder	1.5	01-DC480-06				
07	Piston	8	01-DC480-07				
08	External Cylinder	11.6	01-DC480-08				

TECHNICAL PARAMETERS - DRILLCORE DC480					
Without Bit	Weight	Outer Diameter	Connection Thread	Bit Shank	Hole Size
863 mm	35 kg	100 mm	API2 3/8"REG	DC480	108-135 mm

Working Pressure	Recommended Rotation Speed	Air Consumption	
1.0-1.9 Mpa	30-60 r/min	1.0 Mpa	1.8 Mpa
		5.5 m³/min	9.0 m³/min

5" DC580 DRILLCORE -HAMMER

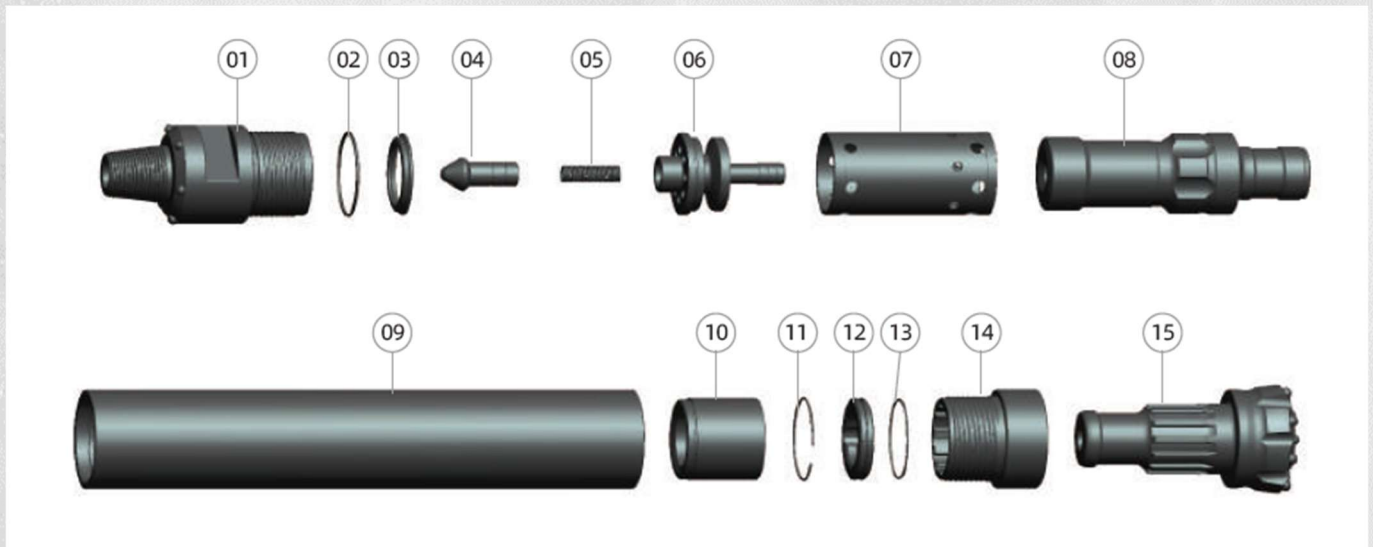


5" HAMMER							
DRILLCORE DC580				DRILLCORE DC580			
Ref.	Part	Weight (kg)	Part No.	Ref.	Part	Weight (kg)	Part No.
01	Top Sub	14.2	01-DC580-01	09	External Cylinder	22.7	01-DC580-09
02	O-Ring	0.01	01-DC580-02	10	Guided Sleeve	3.1	01-DC580-10
03	Disc Spring	0.2	01-DC580-03	11	Check Ring	0.02	01-DC580-11
04	Check Valve	0.4	01-DC580-04	12	Stop Ring	0.7	01-DC580-12
05	Spring	0.02	01-DC580-05	13	Drive Chuck	5.7	01-DC580-13
06	Air Distributor	2.5	01-DC580-06	14	Drill Bit		01-DC580-14
07	Internal Cylinder	2.3	01-DC580-07				
08	Piston	12	01-DC580-08				

TECHNICAL PARAMETERS - DRILLCORE DC580					
Without Bit	Weight	Outer Diameter	Connection Thread	Bit Shank	Hole Size
970 mm	64 kg	126 mm	API2 3/8"REG	DC580	136-155 mm

Working Pressure	Recommended Rotation Speed	Air Consumption	
1.2-2.2 Mpa	30-60 r/min	1.0 Mpa	1.8 Mpa
		7.5 m³/min	12 m³/min

6" DC580 DRILLCORE -HAMMER

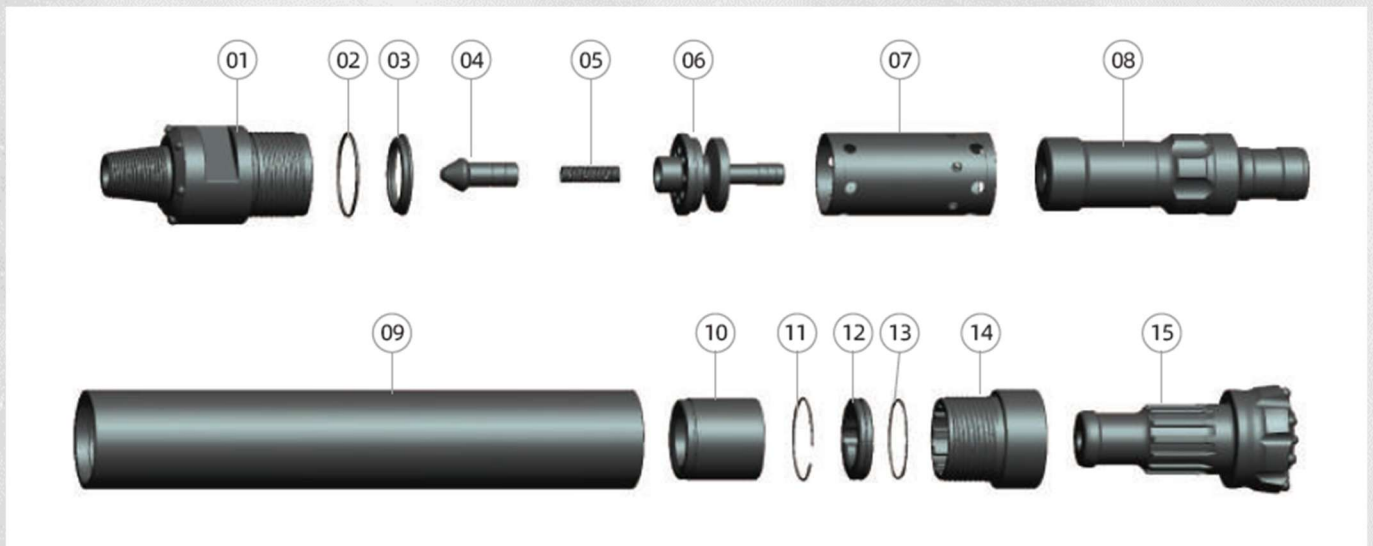


6" HAMMER							
DRILLCORE DC680				DRILLCORE DC680			
Ref.	Part	Weight (kg)	Part No.	Ref.	Part	Weight (kg)	Part No.
01	Top Sub	21.5	01-DC680-01	09	External Cylinder	33	01-DC680-09
02	O-Ring	0.01	01-DC680-02	10	Guided Sleeve	5.5	01-DC680-10
03	Disc Spring	0.34	01-DC680-03	11	Check Ring	0.02	01-DC680-11
04	Check Valve	0.56	01-DC680-04	12	Stop Ring	1	01-DC680-12
05	Spring	0.05	01-DC680-05	13	O-Ring	0.01	01-DC680-13
06	Air Distributor	4.3	01-DC680-06	14	Drive Chuck	7	01-DC680-14
07	Inner Cylinder	4.2	01-DC680-07	15	Drill Bit		01-DC680-15
08	Piston	23	01-DC680-08				

TECHNICAL PARAMETERS - DRILLCORE DC680					
Without Bit	Weight	Outer Diameter	Connection Thread	Bit Shank	Hole Size
1131 mm	100.5 kg	148 mm	API3 1/2"REG	DC680	158-203 mm

Working Pressure	Recommended Rotation Speed	Air Consumption	
1.2-2.7 Mpa	30-60 r/min	1.8 Mpa	2.4 Mpa
		16 m ³ /min	23 m ³ /min

7" DC780 DRILLCORE -HAMMER

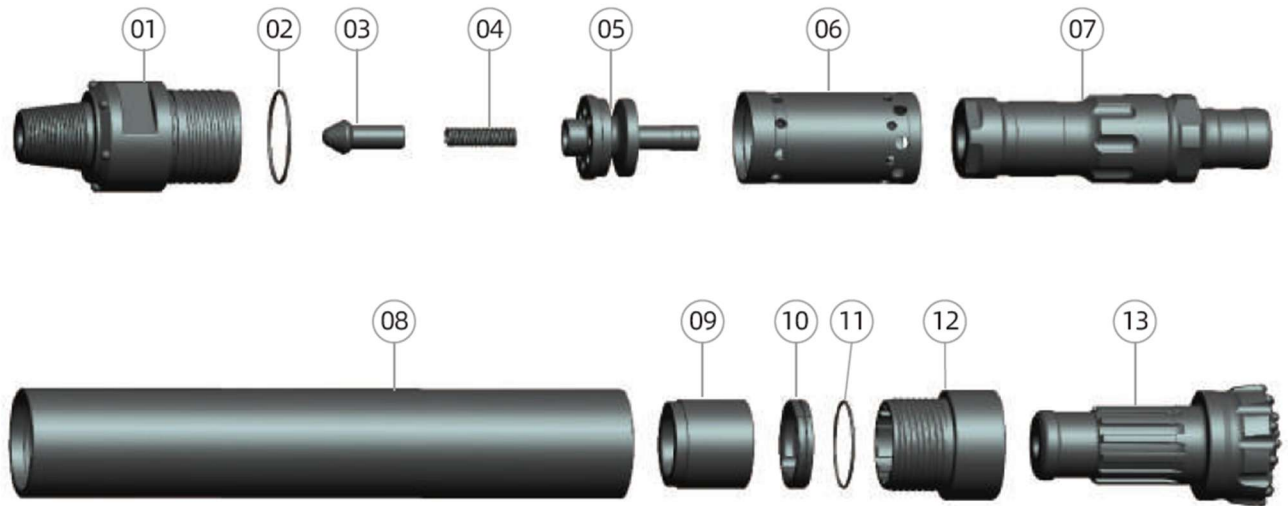


7" HAMMER							
DRILLCORE DC780				DRILLCORE DC780			
Ref.	Part	Weight (kg)	Part No.	Ref.	Part	Weight (kg)	Part No.
01	Top Sub	31.2	01-DC780-01	09	Piston case	44.5	01-DC780-09
02	O-Ring	0.01	01-DC780-02	10	Guided Sleeve	5	01-DC780-10
03	Disc Spring	0.5	01-DC780-03	11	Check Ring	0.03	01-DC780-11
04	Check Valve	0.65	01-DC780-04	12	Retainer Ring	1.5	01-DC780-12
05	Spring	0.09	01-DC780-05	13	Drive Chuck	10.5	01-DC780-13
06	Valve Seat	5.5	01-DC780-06	14	Drill Bit		01-DC780-14
07	Inner Cylinder	5.5	01-DC780-07				
08	Piston	34.5	01-DC780-08				

TECHNICAL PARAMETERS - DRILLCORE DC780					
Without Bit	Weight	Outer Diameter	Connection Thread	Bit Shank	Hole Size
1195 mm	140 kg	165 mm	API3 1/2"REG	DC780	178-216 mm

Working Pressure	Recommended Rotation Speed	Air Consumption	
1.5-2.8 Mpa	30-60 r/min	1.8 Mpa	2.4 Mpa
		21 m ³ /min	28 m ³ /min

8" DC882 DRILLCORE -HAMMER

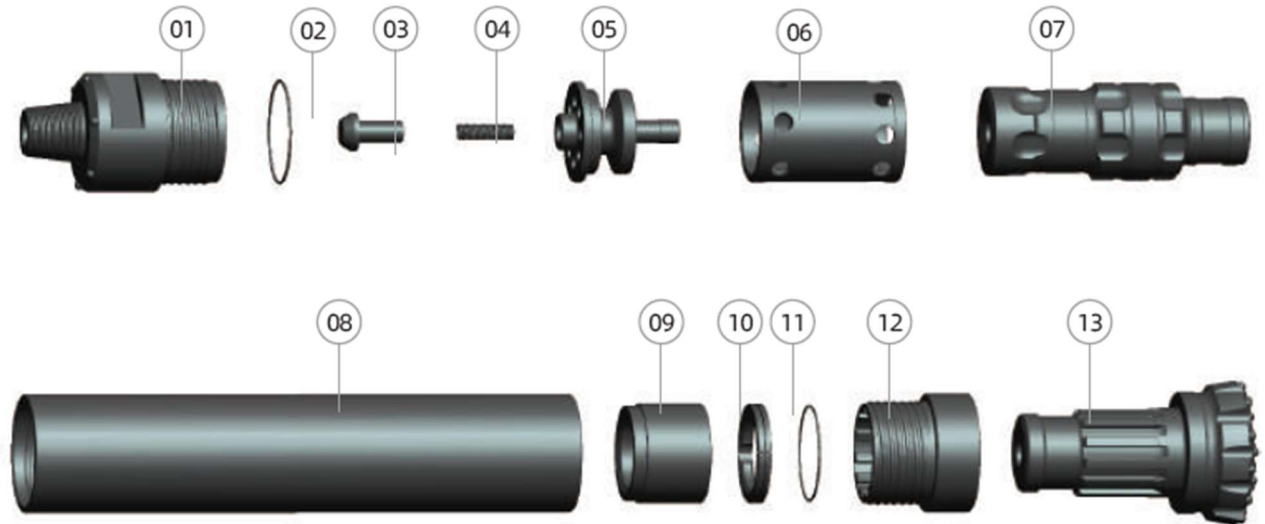


8" HAMMER							
DRILLCORE DC882				DRILLCORE DC882			
Ref.	Part	Weight (kg)	Part No.	Ref.	Part	Weight (kg)	Part No.
01	Top Sub	31.2	01-DC882-01	09	Guide Sleeve	44.5	01-DC882-09
02	O-Ring	0.01	01-DC882-02	10	Retainer Ring	5	01-DC882-10
03	Check Valve	0.5	01-DC882-03	11	O-Ring	0.03	01-DC882-11
04	Spring	0.65	01-DC882-04	12	Drive Chuck	1.5	01-DC882-12
05	Valve Seat	0.09	01-DC882-05	13	Drill Bit	10.5	01-DC882-13
06	Inner Cylinder	5.5	01-DC882-06				
07	Piston	5.5	01-DC882-07				
08	Piston Casing	34.5	01-DC882-08				

TECHNICAL PARAMETERS - DRILLCORE DC882					
Without Bit	Weight	Outer Diameter	Connection Thread	Bit Shank	Hole Size
1264 mm	181 kg	185 mm	API4 1/2" REG	DC882	198-254 mm

Working Pressure	Recommended Rotation Speed	Air Consumption	
1.5-3.3 Mpa	30-60 r/min	1.8 Mpa	2.4 Mpa
		25 m³/min	34 m³/min

10" DC1080 DRILLCORE -HAMMER

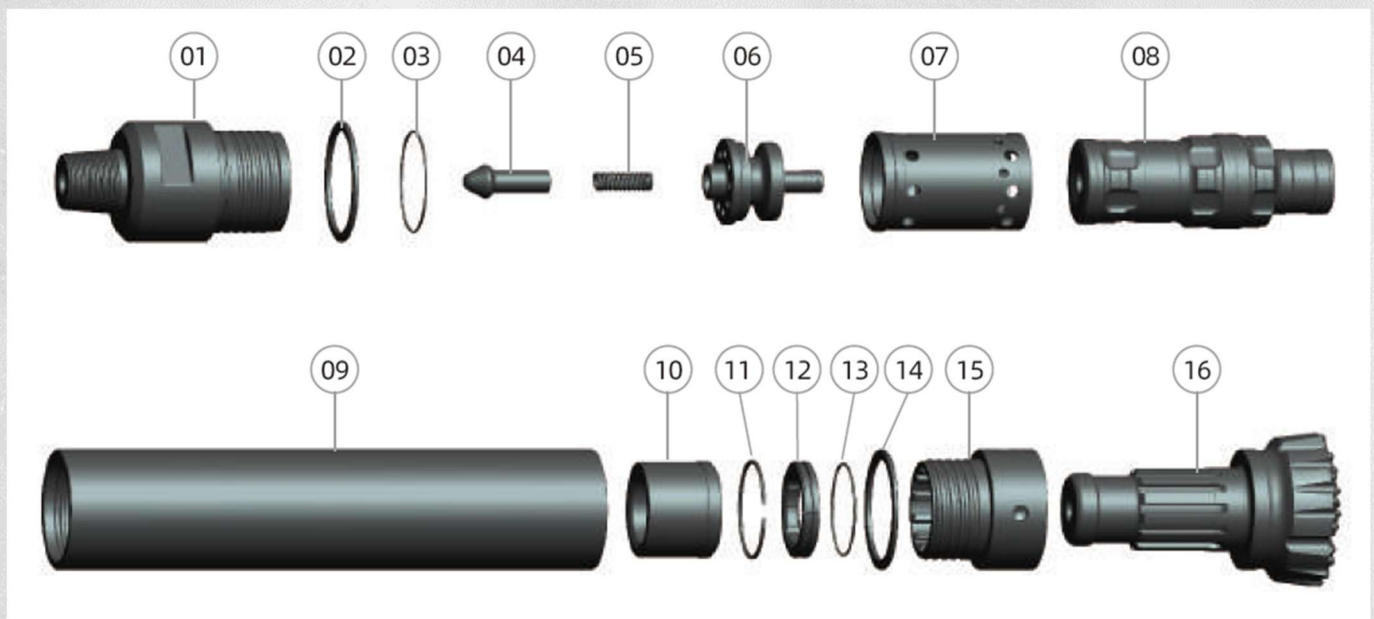


10" HAMMER							
DRILLCORE DC1080				DRILLCORE DC1080			
Ref.	Part	Weight (kg)	Part No.	Ref.	Part	Weight (kg)	Part No.
01	Top Sub	62	01-DC1080-01	09	Guide Sleeve	12.5	01-DC1080-09
02	O-Ring	0.02	01-DC1080-02	10	Retainer Ring	2	01-DC1080-10
03	Check Valve	1.5	01-DC1080-03	11	O-Ring	0.02	01-DC1080-11
04	Spring	0.25	01-DC1080-04	12	Drive Chuck	19.8	01-DC1080-12
05	Valve Seat	13.5	01-DC1080-05	13	Drill Bit		01-DC1080-13
06	Inner Cylinder	13	01-DC1080-06				
07	Piston	71.5	01-DC1080-07				
08	Piston Case	92	01-DC1080-08				

TECHNICAL PARAMETERS - DRILLCORE DC1080					
Without Bit	Weight	Outer Diameter	Connection Thread	Bit Shank	Hole Size
1410 mm	289 kg	225 mm	API5 1/2"REG	DC1080	254-311 mm

Working Pressure	Recommended Rotation Speed	Air Consumption	
1.5-3.3 Mpa	30-55 r/min	1.8 Mpa	2.4 Mpa
		36 m³/min	50 m³/min

12" DC1280 DRILLCORE -HAMMER

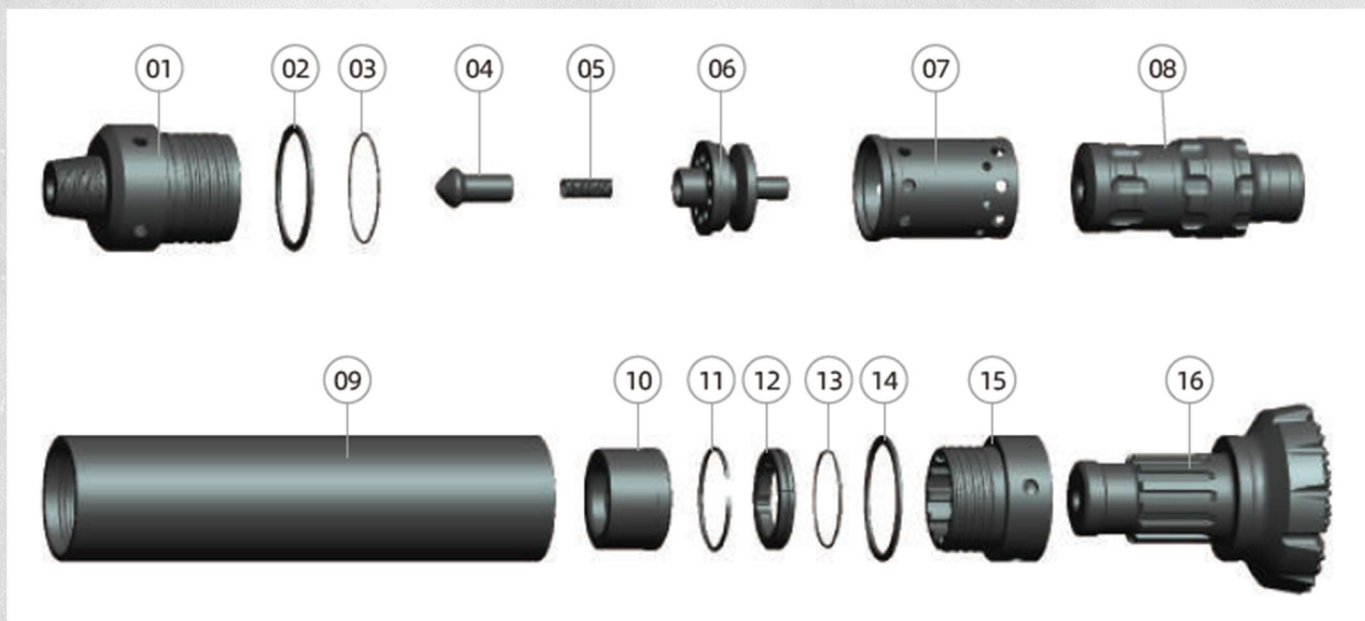


12" HAMMER							
DRILLCORE DC1280				DRILLCORE DC1280			
Ref.	Part	Weight (kg)	Part No.	Ref.	Part	Weight (kg)	Part No.
01	Top Sub	126	01-DC1280-01	09	Piston Case	185.4	01-DC1280-09
02	Adjuster Shim	1.2	01-DC1280-02	10	Guide Sleeve	19	01-DC1280-10
03	O-ring	0.03	01-DC1280-03	11	Check Ring	0.25	01-DC1280-11
04	Check Valve	1.5	01-DC1280-04	12	Retainer Ring	4.5	01-DC1280-12
05	Spring	0.2	01-DC1280-05	13	O-Ring	0.03	01-DC1280-13
06	Valve Seat	18.5	01-DC1280-06	14	Adjuster Shim	1.2	01-DC1280-14
07	Inner Cylinder	22	01-DC1280-07	15	Drive Chuck	42.5	01-DC1280-15
08	Piston	107	01-DC1280-08	16	Drill Bit		01-DC1280-16

TECHNICAL PARAMETERS -DRILLCORE DC1280					
Without Bit	Weight	Outer Diameter	Connection Thread	Bit Shank	Hole Size
1630 mm	530 kg	275 mm	API6 5/8"REG	DC1280	295-400 mm

Working Pressure		Recommended Rotation Speed		Air Consumption	
1.5-3.3 Mpa		25-45 r/min		1.8 Mpa	2.4 Mpa
				45 m ³ /min	58 m ³ /min

14" DC1480 DRILLCORE -HAMMER

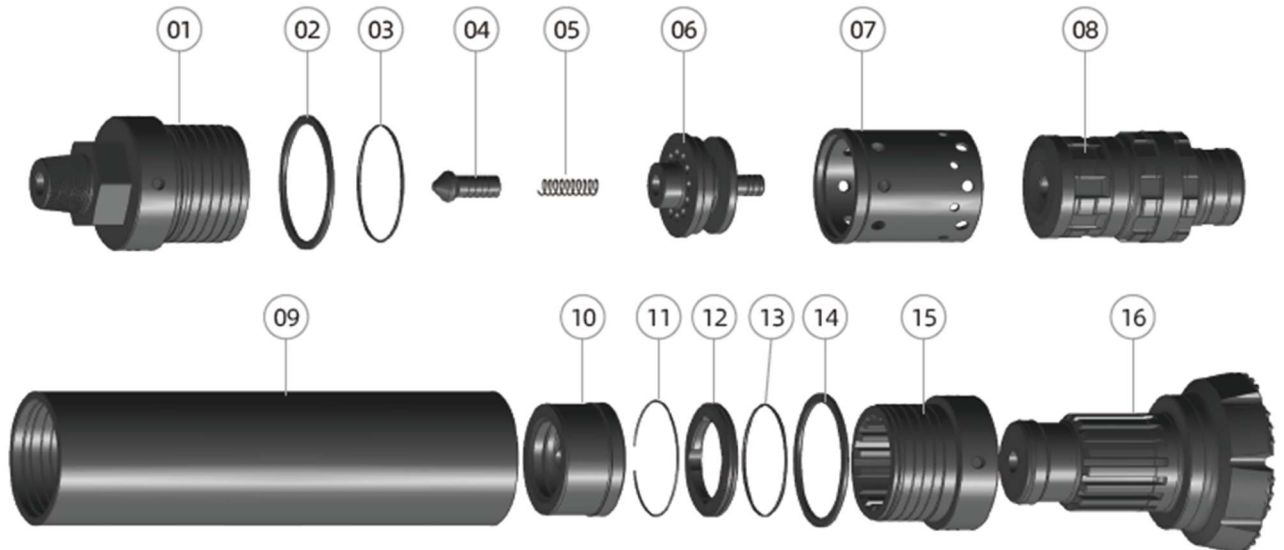


14" HAMMER							
DRILLCORE DC1480				DRILLCORE DC1480			
Ref.	Part	Weight (kg)	Part No.	Ref.	Part	Weight (kg)	Part No.
01	Top Sub	160	01-DC1480-01	09	Piston Case	292	01-DC1480-09
02	Adjuster Shim	1.5	01-DC1480-02	10	Guide Sleeve	31.5	01-DC1480-10
03	O-ring	0.05	01-DC1480-03	11	Check Ring	0.5	01-DC1480-11
04	Check Valve	3.4	01-DC1480-04	12	Retainer Ring	7.6	01-DC1480-12
05	Spring	0.4	01-DC1480-05	13	O-Ring	0.03	01-DC1480-13
06	Valve Seat	31.5	01-DC1480-06	14	Adjuster Shim	1.5	01-DC1480-14
07	Inner Cylinder	28.7	01-DC1480-07	15	Drive Chuck	64	01-DC1480-15
08	Piston	173	01-DC1480-08	16	Drill Bit		01-DC1480-16

TECHNICAL PARAMETERS - DRILLCORE DC1480					
Without Bit	Weight	Outer Diameter	Connection Thread	Bit Shank	Hole Size
1744 mm	796 kg	332 mm	API7 5/8"REG	DC1480	350-550 mm

Working Pressure	Recommended Rotation Speed	Air Consumption	
1.5-3.3 Mpa	25-45 r/min	1.8 Mpa	2.4 Mpa
		53 m³/min	78 m³/min

18" DC1880 DRILLCORE -HAMMER



18" HAMMER							
DRILLCORE DC1880				DRILLCORE DC1880			
Ref.	Part	Weight (kg)	Part No.	Ref.	Part	Weight (kg)	Part No.
01	Top Sub	361.5	01-DC1880-01	09	Piston Case	493	01-DC1880-09
02	Adjuster Shim	4	01-DC1880-02	10	Guide Sleeve	69	01-DC1880-10
03	O-ring	0.1	01-DC1880-03	11	Check Ring	1	01-DC1880-11
04	Check Valve	3.4	01-DC1880-04	12	Retainer Ring	14.8	01-DC1880-12
05	Spring	0.4	01-DC1880-05	13	O-Ring	0.08	01-DC1880-13
06	Valve Seat	76	01-DC1880-06	14	Adjuster Shim	4	01-DC1880-14
07	Inner Cylinder	54.5	01-DC1880-07	15	Drive Chuck	134	01-DC1880-15
08	Piston	366	01-DC1880-08	16	Drill Bit		01-DC1880-16

TECHNICAL PARAMETERS - DRILLCORE DC1880					
Without Bit	Weight	Outer Diameter	Connection Thread	Bit Shank	Hole Size
1957 mm	1582 kg	445 mm	API8 5/8"REG	DC1880	500-680 mm

Working Pressure		Recommended Rotation Speed		Air Consumption	
1.5-3.3 Mpa		20-40 r/min		1.8 Mpa	2.4 Mpa
				73 m³/min	97 m³/min