MSD | Your Trusted Partner for Rock Drilling Solutions

Drill Faster. Drill Longer. Drill Smarter.

The MSD name stands for "More Meters, More Value." This is our promise to you—a commitment built on a foundation of manufacturing excellence and material science. We are dedicated to providing tools that deliver superior performance, a long and reliable service life, and an exceptional return on investment for our clients.

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DTH DRILLING TOOLS

MSD DOWN-THE-HOLE DRILLING TOOLS

Relentless Power in Every Blow

UNWAVERING DURABILITY THROUGH THE ROCK

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Drilling Too | MSD IS A BRAND OF ZHUZHOU JINGDE MACHINERY CO.,LTD.

THE PROFESSIONAL'S CHOICE FOR ROCK DRILLING SOLUTIONS

BRAND INTRODUCTION

At MSD, we believe true performance is engineered from the inside out. Our story begins with a deep legacy in tungsten carbide science—a two-decade commitment that has culminated in our proprietary technology. From this scientific foundation, our meticulous manufacturing process forges strength into steel, ensuring every tool we create embodies a single, uncompromising standard of excellence.

We are more than a supplier; we are a team of engineers and problem-solvers. This expertise is demonstrated across our complete toolkit—from our industry-leading Overburden Casing Systems to our full range of DTH and Top Hammer tools. We don't just sell products; we deliver intelligent solutions designed to conquer the world's most challenging geological conditions.

Ultimately, all our science and engineering expertise is focused on a single commitment to you: More Meters, More Value. This isn't just our promise; it's a proven reality, trusted by leading mining corporations, quarries, and drilling contractors in over 50 countries worldwide.

PLANT AND EQUIPMENT

At MSD, our promise of quality is forged in steel. Our state-of-the-art facility is equipped with over 55 sets of professional equipment, headlined by advanced Turn-mill machining centers. This technology empowers us to machine every component with absolute precision, ensuring the flawless performance and reliability that our brand stands for.

Precision is matched by immense production power. With 50 machining centers operating concurrently at peak capacity, we possess the scale to handle orders of any size without compromising on quality. This massive capacity translates directly into our commitment to you: fast turnaround, on-time delivery, and the unwavering reliability you need to keep your projects moving forward.

THE PROFESSIONAL'S CHOICE FOR ROCK DRILLING SOLUTIONS

FACE DESIGN SELECTION GUIDE

CENTER DROP FACE

An excellent all-around face design, particularly for ensuring straight holes. It provides a high penetration rate in soft to medium-hard rock formations and offers superior control against hole deviation, even in fractured ground. Recommended for low to medium air pressure applications.

CONCAVE FACE

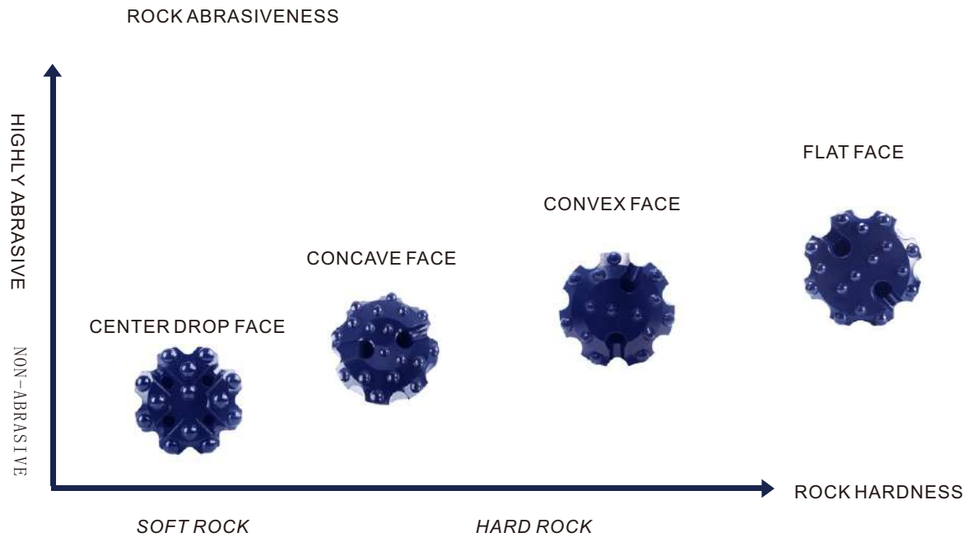
The most versatile face shape, suitable for almost all rock conditions. It excels in medium-hard and homogeneous rock, offering a superior combination of good penetration rates, excellent hole straightness, and efficient flushing.

CONVEX FACE

Engineered for maximum penetration rates in soft to medium-hard, non-abrasive rock formations. The domed design reduces the load on the gauge buttons, minimizing wear and making it the ideal choice for fast drilling with low to medium air pressure.

FLAT FACE

The ultimate choice for durability and wear resistance. The Flat Face design is highly effective in very hard, abrasive, and fractured rock. It is the preferred design for high air pressure applications, providing excellent service life and a good penetration rate.



MSD
THE PROFESSIONAL'S CHOICE FOR ROCK DRILLING SOLUTIONS

CARBIDE BUTTON SHAPE SELECTION GUIDE

Domed/
Spherical Button

Parabolic Button

Ballistic Button

Conical/Sharp Button

DOMED/SPHERICAL BUTTON

Primarily used as gauge buttons on DTH bits due to their maximum resistance to wear. Spherical buttons are the ideal choice for drilling in highly abrasive and very hard rock formations.

PARABOLIC BUTTON

A versatile, all-around performer used as both gauge and front buttons. Parabolic buttons offer a great balance of speed and wear resistance, making them highly effective in medium-hard to hard formations with moderate abrasiveness.

BALLISTIC BUTTON

Engineered for high penetration rates, Ballistic buttons are primarily used as front buttons in medium-hard and less abrasive rock. In softer formations, they can also be utilized as gauge buttons to maximize drilling speed.

CONICAL/SHARP BUTTON

The most aggressive shape, used as front buttons to achieve the fastest possible penetration rates in soft, non-abrasive rock. It is ideal for applications where speed is the only priority and the risk of button fracture is minimal.

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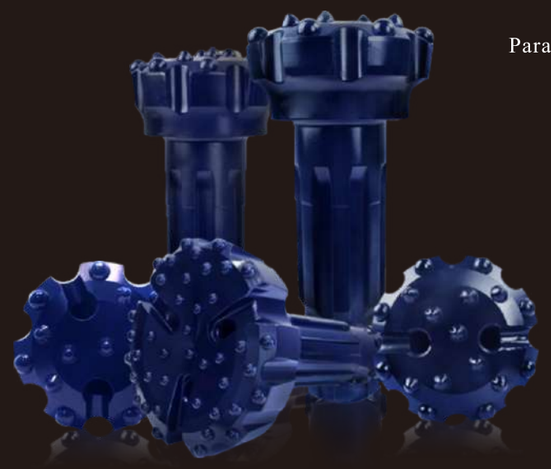
THE PROFESSIONAL'S CHOICE FOR ROCK DRILLING SOLUTIONS

PRODUCT NOMENCLATURE

DHD340-115 D VC 7

- DHD340 — Recommended Hammer
- 115 — Bit diameter(mm)
- D — D-Domed/Round Button; Ballistic Button; Parabolic Button; Conical/Sharp Button
- VC — CD-Center Drop Face; VC-Convex Face; CC-Concave Face; FF-Flat Face
- 7 — Gauge Button Quantity

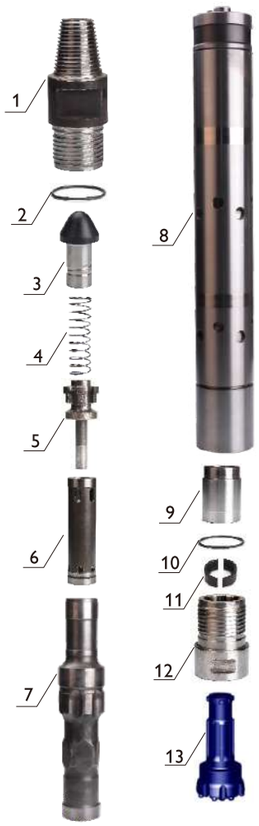


THE PROFESSIONAL'S CHOICE FOR ROCK DRILLING SOLUTIONS

HIGH AIR PRESSURE DTH SOLUTIONS

DHD SERIES DTH HAMMERS

DRILL FASTER. DRILL LONGER. DRILL SMARTER



Item Description	Weight(kg)				
	DHD3.5	DHD340	DHD350	DHD360	DHD380
Top Sub	4.20	6.50	13.70	20.00	34.00
Top Sub O-Ring	0.01	0.01	0.015	0.02	0.015
Check Valve	0.20	0.35	0.70	0.70	1.20
Spring	0.02	0.05	0.10	0.10	0.10
Air Distributor	0.80	1.50	2.00	3.50	6.00
inner cylinder	1.30	2.10	2.80	4.20	6.50
Piston	5.50	8.50	15.00	23.00	42.50
outer casing	9.50	15.20	24.00	31.50	60.00
Wear sleeve	1.00	1.30	2.60	6.50	5.30
Retaining Ring O-Ring	0.05	0.01	0.01	0.01	0.01
Retaining ring	0.15	0.30	0.50	0.60	1.20
Dirve Chuck	1.90	3.40	6.50	6.00	17.50
Drill Bit	5.00	9.00	16.00	26.00	40.00

Technical specifications					
	DHD3.5	DHD340	DHD350	DHD360	DHD380
Overall length	888mm	1011mm	1110mm	1238mm	1359mm
Weight	25kg	43.2kg	69kg	98kg	175kg
Outer diameter(OD)	Φ82mm	Φ99mm	Φ126mm	Φ142/Φ146mm	Φ180/Φ185mm
Shank type	IR3.5	COP44/DHD340	COP54/DHD350	COP64/DHD360	COP84/DHD380
Hole Range	Φ90-Φ115mm	Φ110-Φ135mm	Φ135-Φ155mm	Φ155-Φ203mm	Φ195-Φ254mm
Top sub thread	API2 3/8"Reg	API2 3/8"Reg	API2 3/8"Reg API3 ½"Reg API2 7/8"RegA 2 7/8"IF	API3 ½"Reg	API4 ½"Reg
Working Pressure	1.0-1.5Mpa	1.2-2.0Mpa	1.3-2.3Mpa	1.5-3.0Mpa	1.5-3.0Mpa
Working air pressure	25HZ	30HZ	28HZ	25HZ	22HZ
Recommended penetration rate	25-40r/min	22-35r/min	20-35r/min	20-30r/min	15-25r/min
Air Consumption	1.0Mpa:3.8m3/min 1.5Mpa:7.5m3/min	1.0Mpa:6m3/min 1.8Mpa:10m3/min 2.4Mpa:15m3/min	1.0Mpa:7m3/min 1.8Mpa:14m3/min 2.4Mpa:19m3/min	1.0Mpa:9m3/min 1.8Mpa:18m3/min 2.4Mpa:26m3/min	1.0Mpa:12m3/min 1.8Mpa:22m3/min 2.4Mpa:28m3/min

DHD SERIES DTH DRILL BITS

EFFICIENT PILING BIT EXPERT

DHD3.5 Drill bits for DHD3.5 hammers

Schema	Diameter		No × Button diameter,mm		Button Angel°	Air holes	Weight (KG)	Part No
	mm	inch	Gauge	Front				
	90	3 9/16	8×12	7×11	38	2	4.6	DHD3.5-90BFF8
	95	3 3/4	8×12	7×11	38	2	4.7	DHD3.5-95BVC8
	100	3 15/16	8×12	7×12	38	2	4.8	DHD3.5-100BVC8
	105	4 1/8	8×14	7×12	38	2	5	DHD3.5-105BVC8

DHD340 Drill bits for DHD340 hammers

105	4 1/8	7×16	6×14	38	2	7.6	DHD340-105DVC7
110	4 5/16	7×16	6×14	38	2	7.8	DHD340-110DVC7
115	4 1/2	7×16	6×14	38	2	8.2	DHD340-115DVC7
120	4 3/4	8×16	8×13	38	2	8.7	DHD340-120DVC8
125	4 15/16	8×16	10×13	38	2	8.9	DHD340-125DVC8
130	5 1/8	8×16	8×14	38	2	9.4	DHD340-130DVC8

DHD350 Drill bits for DHD350 hammers

138	5 1/2	7×18	7×15	38	2	15.6	DHD350-138DVC7
146	5 3/4	7×18	7×15	38	2	16.1	DHD350-146DVC7
152	6	8×16	8×15	38	2	17	DHD350-152DFF8
165	6 1/2	8×18	8×16	38	2	18	DHD350-165DFF8
178	7	8×18	10×16	38	2	24	DHD350-178DFF8
185	7 1/4	8×18	10×16	38	2	26	DHD350-185DFF8
203	8	10×18	8×18+6×16	38	2	31	DHD350-203DCC8

DHD360 Drill bits for DHD360 hammers

Schema	Diameter		No × Button diameter,mm		Button Angel°	Air holes	Weight (KG)	Part No
	mm	inch	Gauge	Front				
	152	6	8×18	4×16+4×14	38	2	23	DHD360-152DCC8
	165	6 1/2	8×18	8×16	38	2	24	DHD360-165DFF8
	178	7	8×18	10×16	38	2	26	DHD360-178DFF8
	185	7 1/4	8×18	10×16	38	2	26.8	DHD360-185DFF8
	194	7 1/2	10×18	13×16	38	2	27.5	DHD360-194DFF8
	203	8	10×18	8×18+6×16	38	2	31	DHD360-203DCC8
	216	8 1/2	10×18	8×18+6×16	38	2	47	DHD360-216DCC8
	235	9 1/4	12×18	30×16	38	2	54	DHD360-235DFF8
	254	10	12×18	12×18+8×16	38	2	65	DHD360-254DCC8

DHD380 Drill bits for DHD380 hammers

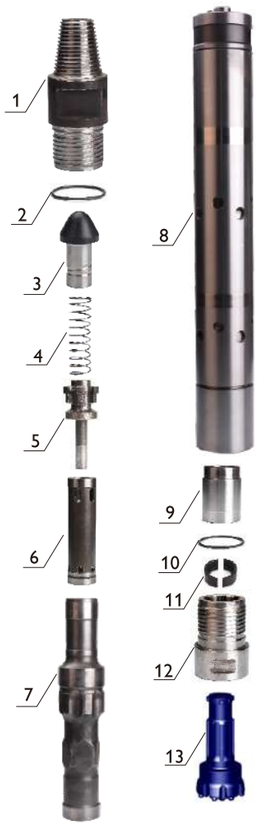
203	8	10×18	8×18+6×16	38	2	47	DHD380-203DCC8
216	8 1/2	10×18	8×18+6×16	38	2	53	DHD380-216DCC8
235	9 1/4	12×18	30×16	38	2	57.5	DHD380-235DFF12
254	10	12×18	12×18+8×16	38	2	61	DHD380-254DCC12
275	11	12×18	20×18+9×16	38	2	71	DHD380-275DCC12
305	12	12×18	20×18+9×16	38	2	95	DHD380-305DCC12

THE PROFESSIONAL'S CHOICE FOR ROCK DRILLING SOLUTIONS

HIGH AIR PRESSURE DTH HAMMERS AND DRILL BITS

MISSION SERIES DTH HAMMERS

EFFICIENT PILING BIT EXPERT



Item Description	weight(kg)			
	M40	M50	M60	M80
Top Sub	6.50	13.70	20.00	34.00
"O"Ring of Top Sub	0.10	0.015	0.015	0.015
Check Valve	0.35	0.70	0.70	1.20
Spring	0.05	0.10	0.10	0.10
Air Distributor	1.50	2.00	3.50	6.00
Internal Cylinder	2.10	2.80	4.20	6.50
Piston	8.50	15.00	23.00	42.50
External Cylinder	15.20	24.00	30.00	59.00
Guided Sleeve	1.80	3.00	4.00	6.30
"O"ing of Stop Ring	0.005	0.01	0.01	0.01
Stop Ring	0.20	0.40	0.60	1.40
Dirve Chuck	3.20	4.50	5.50	13.00
Drill Bit	9.00	16.00	25.00	35.00

Technical Data				
	M40	M50	M60	M80
Length	1005mm	1110mm	1161mm	1338mm
Weight	40kg	68.5kg	90kg	176kg
External Diameter	Φ99mm	Φ126mm	Φ142mmΦ144mm Φ146mmΦ148mm	Φ180/Φ185mm
Bit Shank	M40	M50	M60	M80
Hole Range	Φ110-Φ135mm	Φ155-Φ190mm	Φ155-Φ203mm	Φ195-Φ254mm
Connection Thread	API2 3/8"Reg	API2 3/8"Reg API3 1/2"Reg API2 7/8"Reg	API2 7/2"Reg API3 1/2"Reg 2 7/8"IF	API4 1/2"Reg
Working Pressure	1.2-2.0Mpa	1.3-2.3Mpa	1.5-2.5Mpa	1.5-3.0Mpa
Impact Rate at 17Bar	30HZ	28HZ	25HZ	22HZ
Recommended Rotation Speed	25-40r/min	20-35r/min	20-30r/min	15-25r/min
Air Consumption	1.0Mpa:5m3/min 1.8Mpa:9m3/min 2.4Mpa:14m3/min	1.0Mpa:7m3/min 1.8Mpa:14m3/min 2.4Mpa:19m3/min	1.0Mpa:9m3/min 1.8Mpa:18m3/min 2.4Mpa:26m3/min	1.0Mpa:12m3/min 1.8Mpa:22m3/min 2.4Mpa:28m3/min

MSD

THE PROFESSIONAL'S CHOICE FOR ROCK DRILLING SOLUTIONS

HIGH AIR PRESSURE DTH HAMMERS AND DRILL BITS

MISSION *SERIES DTH* DRILL BITS

EFFICIENT PILING BIT EXPERT

M40 DRILL BITS FOR M40 HAMMERS

Schema	Diameter		No × Button diameter,mm		Button Angel°	Air holes	Weight (KG)	Part No
	mm	inch	Gauge	Front				
	105	4 1/8	7×16	6×14	38	2	6.0	M40-105BVC7
	110	4 5/16	7×16	6×14	38	2	6.2	M40-110BVC7
	115	4 1/2	7×16	6×14	38	2	6.6	M40-115BVC7
	120	4 3/4	8×16	8×13	38	2	7.0	M40-120BVC8
	125	4 15/16	8×16	10×13	38	2	7.4	M40-125BVC8
	130	5 1/8	8×16	8×14	38	2	8.0	M40-130DVC8

M50 DRILL BITS FOR M50 HAMMERS

	138	5 1/2	7×18	7×15	38	2	13	M50-138DVC7
	146	5 3/4	7×18	7×15	38	2	14	M50-146DVC7
	152	6	8×16	8×15	38	2	14.4	M50-152DFF8
	165	6 1/2	8×18	8×16	38	2	15.6	M50-165DFF8
	178	7	8×18	10×16	38	2	18.2	M50-178DFF8
	185	7 1/4	8×18	10×16	38	2	24	M50-185DFF8

M60 DRILL BITS FOR M60 HAMMERS

Schema	Diameter		No × Button diameter,mm		Button Angel°	Air holes	Weight (KG)	Part No
	mm	inch	Gauge	Front				
	152	6	8×18	4×16+4×14	38	2	22	M60-152DCC8
	165	6 1/2	8×18	8×16	38	2	24	M60-165DFF8
	178	7	8×18	10×16	38	2	24	M60-178DFF8
	185	7 1/4	8×18	10×16	38	2	25	M60-185DFF8
	194	7 1/2	10×18	13×16	38	2	26	M60-194DFF10
	203	8	10×18	8×18+6×16	38	2	28	M60-203DCC10
	216	8 1/2	10×18	8×18+6×16	38	2	47	M60-216DCC10
	235	9 1/4	12×18	30×16	38	2	55	M60-235DFF12
	254	10	12×18	12×18+8×16	38	2	63	M60-254DCC12

M80 DRILL BITS FORM80 HAMMERS

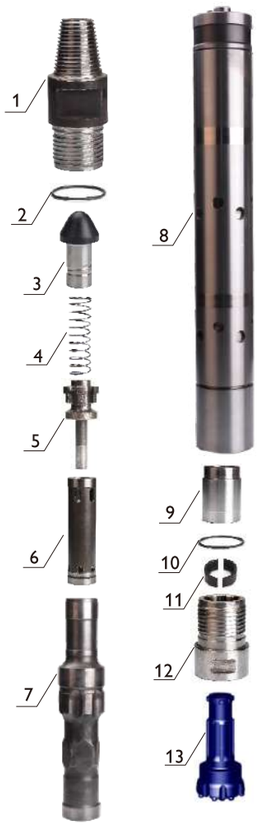
	203	8	10×18	8×18+6×16	38	2	35	M80-203DCC10
	216	8 1/2	10×18	8×18+6×16	38	2	40	M80-216DCC10
	235	9 1/4	12×18	30×16	38	2	50	M80-235DFF12
	254	10	12×18	12×18+8×16	38	2	57	M80-254DCC12
	275	11	12×18	20×18+9×16	38	2	68	M80-275DCC12
	305	12	12×18	20×18+9×16	38	2	77	M80-305DCC12

THE PROFESSIONAL'S CHOICE FOR ROCK DRILLING SOLUTIONS

HIGH AIR PRESSURE DTH HAMMERS AND DRILL BITS

QL SERIES DTH HAMMERS

EFFICIENT PILING BIT EXPERT



Item Description	weight(kg)			
	QL40	QL50	QL60	QL80
Top Sub	6.50	13.70	20.00	34.00
"O"Ring of Top Sub	0.10	0.015	0.015	0.015
Check Valve	0.35	0.70	0.70	1.20
Spring	0.05	0.10	0.10	0.10
Air Distributor	1.50	2.00	3.50	6.00
Internal Cylinder	2.10	2.80	4.20	6.50
Piston	8.50	15.00	23.00	42.50
External Cylinder	15.20	24.00	30.00	59.00
Guided Sleeve	1.80	3.00	4.00	6.30
"O"ing of Stop Ring	0.005	0.01	0.01	0.01
Stop Ring	0.20	0.40	0.60	1.40
Dirve Chuck	3.20	4.50	5.50	13.00
Drill Bit	9.00	16.00	25.00	35.00

Technical Data				
	QL40	QL50	QL60	QL80
Length	1070mm	1090mm	1183mm	1330mm
Weight	40kg	67kg	92kg	171kg
External Diameter	Φ99mm	Φ126mm	Φ146mmΦ148mm	Φ180Φ185mm
Bit Shank	QL40	QL50	QL60	QL80
Hole Range	Φ110-Φ135mm	Φ135-Φ155mm	Φ155-Φ203mm	Φ195-Φ254mm
Connection Thread	API2 3/8"Reg	API2 3/8"Reg API3 1/2"Reg API2 7/8"Reg	API3 1/2"Reg	API4 1/2"Reg
Working Pressure	1.2-2.0Mpa	1.3-2.3Mpa	1.5-2.5Mpa	1.5-3.0Mpa
Impact Rate at 17Bar	30HZ	28HZ	25HZ	22HZ
Recommende Rotation Speed	20-30r/min	20-35r/min	20-30r/min	15-25r/min
Air Consumption	1.0Mpa:5m3/min 1.8Mpa:9m3/min 2.4Mpa:14m3/min	1.0Mpa:7m3/min 1.8Mpa:14m3/min 2.4Mpa:19m3/min	1.0Mpa:9m3/min 1.8Mpa:18m3/min 2.4Mpa:26m3/min	1.0Mpa:12m3/min 1.8Mpa:22m3/min 2.4Mpa:28m3/min

THE PROFESSIONAL'S CHOICE FOR ROCK DRILLING SOLUTIONS

HIGH AIR PRESSURE DTH HAMMERS AND DRILL BITS

QL *SERIES DTH* DRILL BITS

EFFICIENT PILING BIT EXPERT

Technical Data				
			QL60	QL80
Length	1070mm	1090mm	1183mm	1330mm
Weight	40kg	67kg	92kg	171kg
External Diameter	Φ99mm	Φ126mm	Φ146mmΦ148mm	Φ180Φ185mm
Bit Shank	QL40	QL50	QL60	QL80
Hole Range	Φ110-Φ135mm	Φ135-Φ155mm	Φ155-Φ203mm	Φ195-Φ254mm
Connection Thread	API2 3/8"Reg	API2 3/8"Reg API3 1/2"Reg API2 7/8"Reg	API3 1/2"Reg	API4 1/2"Reg
Working Pressure	1.2-2.0Mpa	1.3-2.3Mpa	1.5-2.5Mpa	1.5-3.0Mpa
Impact Rate at 17Bar	30HZ	28HZ	25HZ	22HZ
Recommended Rotation Speed	20-30r/min	20-35r/min	20-30r/min	15-25r/min
Air Consumption	1.0Mpa:5m3/min 1.8Mpa:9m3/min 2.4Mpa:14m3/min	1.0Mpa:7m3/min 1.8Mpa:14m3/min 2.4Mpa:19m3/min	1.0Mpa:9m3/min 1.8Mpa:18m3/min 2.4Mpa:26m3/min	1.0Mpa:12m3/min 1.8Mpa:22m3/min 2.4Mpa:28m3/min

Schema	Diameter		No × Button diameter,mm		Button Angel°	Air holes	Weight (KG)	Part No
	mm	inch	Gauge	Front				
Drill bits for QL60 hammers								
	152	6	8×18	4×16+4×14	38	2	24	QL60-152DCC8
	165	6 1/2	8×18	8×16	38	2	25	QL60-165DFF8
	178	7	8×18	10×16	38	2	27	QL60-178DFF8
	185	7 1/4	8×18	10×16	38	2	28	QL60-185DFF8
	194	7 1/2	10×18	13×16	38	2	29	QL60-194DFF10
	203	8	10×18	8×18+6×16	38	2	33	QL60-203DCC10
	216	8 1/2	10×18	8×18+6×16	38	2	51	QL60-216DCC10
	235	9 1/4	12×18	30×16	38	2	60	QL60-235DFF12
	254	10	12×18	12×18+8×16	38	2	69	QL60-254DCC12
Drill bits for QL80 hammers								
	203	8	10×18	8×18+6×16	38	2	35	QL80-203DCC8
	216	8 1/2	10×18	8×18+6×16	38	2	49	QL80-216DCC10
	235	9 1/4	12×18	30×16	38	2	58	QL80-235DFF12
	254	10	12×18	12×18+8×16	38	2	71	QL80-254DCC12
	275	11	12×18	20×18+9×16	38	2	85	QL80-275DCC12
	305	12	12×18	20×18+9×16	38	2	95	QL80-305DCC12

THE PROFESSIONAL'S CHOICE FOR ROCK DRILLING SOLUTIONS

HIGH AIR PRESSURE DTH HAMMERS AND DRILL BITS

SD SERIES DTH HAMMERS

EFFICIENT PILING BIT EXPERT

Item Description	weight(kg)					
	SD4	SD5	SD6	SD8	SD10	SD12
Top Sub	6.50	13.70	20.00	34.00	59.00	70.00
"O"Ring of Top Sub	0.10	0.015	0.015	0.015	0.03	0.04
Check Valve	0.35	0.70	0.70	1.20	1.40	2.00
Spring	0.05	0.10	0.10	0.10	0.30	0.10
Air Distributor	1.50	2.00	3.50	6.00	10.50	16.00
Internal Cylinder	2.10	2.80	4.20	6.50	12.50	25.00
Piston	8.50	15.00	23.00	42.50	77.00	113.00
External Cylinder	15.30	24.00	30.00	59.00	110.00	175.00
Guided Sleeve	1.30	2.60	2.50	6.00	11.50	25.00
"O"ing of Stop Ring	0.005	0.01	0.01	0.01	0.01	0.01
Stop Ring	0.20	0.50	0.50	1.20	1.50	4.50
Dirve Chuck	4.00	7.50	7.50	16.00	31.50	48.00
Drill Bit	9.80	16.00	27.00	37.00	108.00	165.00

Technical Data						
	SD4	SD5	SD6	SD8	SD10	SD12
Length	1012mm	1090mm	1182mm	1330mm	1525mm	1860mm
Weight	40kg	67kg	90kg	174kg	316kg	480kg
External Diameter	Φ99mm	Φ126mm	Φ146mm	Φ180/Φ185mm	Φ226mm	Φ275mm
Bit Shank	SD4	SD5	SD6	SD8	SD10	SD12
Hole Range	Φ110-Φ135mm	Φ155-Φ190mm	Φ155-Φ203mm	Φ195-Φ254mm	Φ254-Φ311mm	Φ305-Φ445mm
Connection Thread	API2 3/8"Reg	API2 3/8"Reg API3 1/2"Reg API2 7/8"Reg	API3 1/2"Reg	API4 1/2"Reg	API6 5/8"Reg	API6 5/8"Reg
Working Pressure	1.2-2.0Mpa	1.3-2.3Mpa	1.5-2.5Mpa	1.5-3.0Mpa	2.0-3.5Mpa	2.0-3.5Mpa
Impact Rate at 17Bar	30HZ	28HZ	25HZ	22HZ	20HZ	20HZ
Recommended Rotation Speed	25-40r/min	20-35r/min	20-30r/min	15-25r/min	20-35r/min	15-25r/min
Air Consumption	1.0Mpa:6m3/min 1.8Mpa:9m3/min 2.4Mpa:14m3/min	1.0Mpa:7m3/min 1.8Mpa:14m3/min 2.4Mpa:19m3/min	1.0Mpa:9m3/min 1.8Mpa:18m3/min 2.4Mpa:26m3/min	1.0Mpa:12m3/min 1.8Mpa:22m3/min 2.4Mpa:28m3/min	1.0Mpa:18m3/min 1.8Mpa:40m3/min 2.4Mpa:65m3/min	1.0Mpa:28m3/min 1.8Mpa:50m3/min 2.4Mpa:71m3/min

MSD

THE PROFESSIONAL'S CHOICE FOR ROCK DRILLING SOLUTIONS

HIGH AIR PRESSURE DTH HAMMERS AND DRILL BITS

SD SERIES DTH DRILL BITS

EFFICIENT PILING BIT EXPERT

Schema	Diameter		No × Button diameter,mm		Button Angel°	Air holes	Weight (KG)	Part No
	mm	inch	Gauge	Front				
Drill bits for SD4 hammers								
	105	4 1/8	7×16	6×14	38	2	9.0	SD4-105BVC7
	110	4 5/16	7×16	6×14	38	2	9.5	SD4-110BVC7
	115	4 1/2	7×16	6×14	38	2	9.8	SD4-115BVC7
	120	4 3/4	8×16	8×13	38	2	11.5	SD4-120BVC8
	125	4 15/16	8×16	10×13	38	2	12.3	SD4-125BVC8
	130	5 1/8	8×16	8×14	38	2	13.0	SD4-130BVC8
Drill Bits For SD5 Hammers								
	138	5 1/2	7×18	7×15	38	2	15.6	SD5-138DFF7
	146	5 3/4	7×18	7×15	38	2	16.5	SD5-146DFF7
	152	6	8×16	8×15	38	2	17	SD5-152DFF7
	165	6 1/2	8×18	8×16	38	2	18	SD5-165DFF8
	178	7	8×18	10×16	38	2	21	SD5-178DFF8
Drill Bits For SD6Hammers								
	152	6	8×18	4×16+4×14	38	2	26	SD6-152DCC8
	165	6 1/2	8×18	8×16	38	2	27	SD6-165DFF8
	178	7	8×18	10×16	38	2	29	SD6-178DFF8
	185	7 1/4	8×18	10×16	38	2	31	SD6-185DFF8
	194	7 1/2	10×18	13×16	38	2	32	SD6-194DFF10
	203	8	10×18	8×18+6×16	38	2	34	SD6-203DCC10
	216	8 1/2	10×18	8×18+6×16	38	2	44	SD6-216DCC10

Schema	Diameter		No × Button diameter,mm		Button Angel°	Air holes	Weight (KG)	Part No
	mm	inch	Gauge	Front				
Drill bits for SD8 hammers								
	194	7 1/2	10×18	13×16	38	2	35	SD8-194DFF10
	203	8	10×18	8×18+6×16	38	2	37	SD8-203DCC10
	216	8 1/2	10×18	8×18+6×16	38	2	48	SD8-216DCC10
	235	9 1/4	12×18	30×16	38	2	60	SD8-235DFF10
	254	10	12×18	12×18+8×16	38	2	70	SD8-254DCC12
	275	11	12×18	20×18+9×16	38	2	85	SD8-275DCC12
	305	12	12×18	20×18+9×16	38	2	94	SD8-305DCC12
Drill bits for SD10 hammers								
	254	10	12×18	12×18+8×16	38	2	108	SD10-254DCC12
	275	11	12×18	20×18+9×16	38	2	115	SD10-275DCC12
	305	12	12×18	20×18+15×16	38	2	125	SD10-305DCC12
	311	12 1/4	12×18	20×18+16×16	38	2	130	SD10-311DCC12
	318	12 1/2	12×18	20×18+18×16	38	2	142	SD10-318DCC12
	330	13	16×18	20×18+22×16	38	2	155	SD10-330DCC16
Drill bits for SD12 hammers								
	305	12	12×18	20×18+15×16	38	4	156	SD12-305DCC12
	311	12 1/4	12×18	20×18+16×16	38	4	161	SD12-311DCC12
	318	12 1/2	12×18	20×18+18×16	38	4	172	SD12-318DCC12
	330	13	16×18	20×18+22×16	38	4	185	SD12-330DCC16
	356	14	16×18	20×18+26×16	38	4	191	SD12-356DCC16
	381	15	16×18	20×18+28×16	38	4	200	SD12-381DCC16

THE PROFESSIONAL'S CHOICE FOR ROCK DRILLING SOLUTIONS

HEAVY DUTY & LARGE DIAMETER DTH SYSTEMS

MSD SERIES LARGE DIAMETER DRILL BITS

EFFICIENT PILING BIT EXPERT

Drill bits for 12 inch hammers

Schema	Diameter		No × Button diameter,mm			Air holes	Weight (KG)	Part No
	mm	inch	Gauge	Front	Back			
	311	12 1/4	15×18	15×18+15×16	12×12	3	140	MSD12-311-15-42
	330	13	18×18	9×18+15×18+9×16	9×16	3	145	MSD12-330-18-42
	357	14	18×18	12×18+18×18+21×16	9×14	3	230	MSD12-357-18-60
	400	15 3/4	18×19	12×19+18×19+29×16	12×12	3	245	MSD12-400-18-71
	445	17 1/2	18×19	12×19+21×19+34×16	54×12	3	275	MSD12-445-18-121

Drill bits for 14 inch hammers

Schema	Diameter		No × Button diameter,mm			Air holes	Weight (KG)	Part No
	mm	inch	Gauge	Front	Back			
	400	15 3/4	18×19	12×19+18×19+29×16	12×12	3	255	MSD14-400-18-71
	508	20	24×19	15×19+48×19+29×16	12×12	3	360	MSD14-508-24-104
	550	21 2/3	24×20	20×20+36×19+33×16	12×12	3	420	MSD14-550-24-101
	600	23 5/8	24×20	19×20+60×19+55×16	24×16+14×12	3	550	MSD14-600-24-172

Drill bits for 18 inch hammers

Schema	Diameter		No × Button diameter,mm			Air holes	Weight (KG)	Part No
	mm	inch	Gauge	Front	Back			
	550	21 2/3	24×20	20×20+36×19+33×16	12×12	6	460	MSD18-550-24-101
	600	23 5/8	24×20	24×20+60×20+56×16	24×14	6	570	MSD18-600-24-164
	700	27 5/9	48×20	48×20+60×19+73×18	48×16	6	630	MSD18-700-48-229

Drill bits for 24 inch hammers

Schema	Diameter		No × Button diameter,mm			Air holes	Weight (KG)	Part No
	mm	inch	Gauge	Front	Back			
	800	31 1/2	30×20	24×20+60×20+90×18	12×16	6	680	MSD24-800-30-186
	1000	39 3/8	48×20	36×20+192×20+81×18	18×16	6	984	MSD24-1000-48-327

MSD

THE PROFESSIONAL'S CHOICE FOR ROCK DRILLING SOLUTIONS

LOW TO MEDIUM AIR PRESSURE DTH SYSTEMS

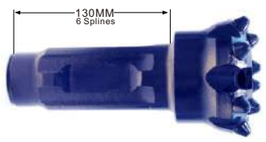
CIR SERIES DTH DRILL BITS

EFFICIENT PILING BIT EXPERT

Drill bits for CIR76 hammers

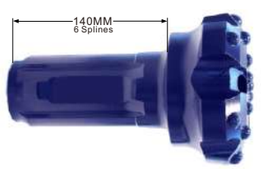
Schema	Diameter		No × Button diameter,mm		Button Angel°	Air holes	Weight (KG)	Part No
	mm	inch	Gauge	Front				
	76	3	5×13	3×12	45	2	2.2	CIR76A-76BFF5
	80	3 1/5	5×13	3×12	45	2	2.5	CIR76A-80BFF5

Drill bits for CIR90A hammers



90	3 1/2	6×14	2×13+2×12	45	3	3.6	CIR90A-90BVC6
100	4	6×14	3×13+2×12	45	3	4.0	CIR90A-100BVC6
110	4 1/3	6×14	3×13+3×12	45	3	4.7	CIR90A-110BVC6
120	4 3/4	6×14	3×13+4×12	45	3	5.2	CIR90A-120BVC6
130	5 1/8	6×14	3×14+4×12	45	3	6.2	CIR90A-130BVC6
140	5 ½	9×14	3×14+5×12	45	3	7.8	CIR90A-140BVC9
150	6	9×14	3×14+5×12	45	3	8.4	CIR90A-150BVC9

Drill bits for CIR110 hammers



Schema	Diameter		No × Button diameter,mm		Button Angel°	Air holes	Weight (KG)	Part No
	mm	inch	Gauge	Front				
	110	4 1/3	6×14	3×13+3×12	45	3	6.0	CIR110A-110BVC6
	120	4 3/4	6×14	3×13+4×12	45	3	6.5	CIR110A-120BVC6
	130	5 1/8	6×14	3×14+4×12	45	3	6.9	CIR110A-130BVC6
	140	5 1/2	9×14	3×14+5×12	45	3	8.5	CIR110A-140BVC9
	150	6	9×14	3×14+5×12	45	3	9.1	CIR110A-150BVC9
	165	6 ½	9×14	3×14+6×12	45	3	9.9	CIR110A-165BVC9
	175	7	9×14	3×14+6×12	45	3	11.2	CIR110A-175BVC9

Drill bits for CIR150 hammers

155	6 1/5	9×16	6×16+3×14	45	3	16.6	CIR150A-155DVC9
165	6 1/2	9×16	6×16+4×14	45	3	18.6	CIR150A-165DVC9
180	7	9×16	9×16+4×14	45	3	20.8	CIR150A-180DVC9
200	8	9×16	9×16+4×14	45	3	23	CIR150A-200DVC9

MSD

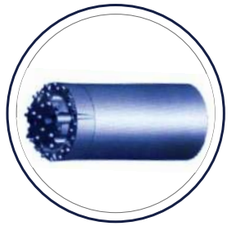
THE PROFESSIONAL'S CHOICE FOR ROCK DRILLING SOLUTIONS

DUPLEX ROTARY PERCUSSION DRILLING SYSTEM

SYSTEM COMPOSITION & PARAMETERS

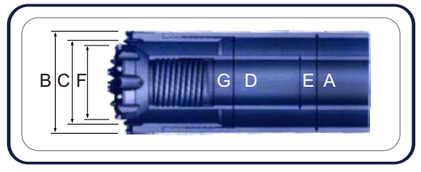
EFFICIENT PILING BIT EXPERT

CASING BIT



ASSEMBLY

PILOT BIT



RECOMMENDED MODEL SPECIFICATIONS

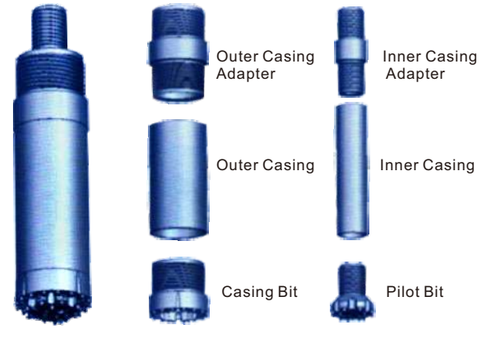
Casing OD(A)	Reamed Dia.(B)	Casing Bit ID (c)	Thread Size (D)	Drill Rod Dia.(E)	Pilot Bit Dia.(F)	Thead Type.(G)
mm	mm	mm	mm	mm	mm	
118	125	88	104.5	76	83	R56
133	140	108	122	76	102	R56
146	152	120	134	89	116	R78
168	172	133	146.5	114	128	R83
216	225	178	203	114	165	R102

Ordering Parameters

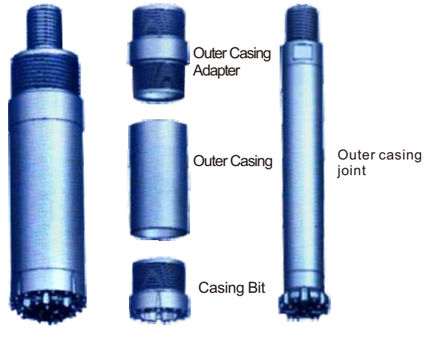
Please specify the following to configure your Duplex Drilling System:

(A) Casing OD + (B) Reaming Dia. + (C) Casing Bit ID + (D) Thread Size + (E) Drill Rod Dia. + (F) Pilot Bit Dia. + (G) Thread Type

STRUCTURE



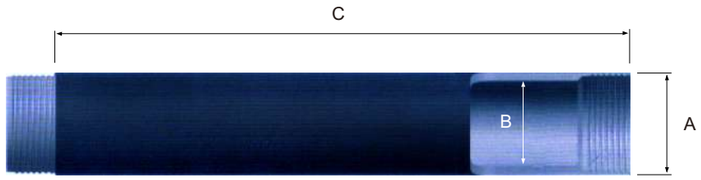
CONNECTION FOR TOP HAMMER DRILL STRING



CONNECTION FOR DTH HAMMER

TECHNICAL PARAMETERS

EFFICIENT PILING BIT EXPERT



(A)Casing Outer Diameter (OD)	(B)Reaming Diameter	(C)Casing Bit Inner Diameter (ID)	(D)Thread Size			
mm	mm	mm	mm			
108	96	96	1000	1500	2000	3000
114	102	102	1000	1500	2000	3000
127	109	109	1000	1500	2000	3000
140	128	128	1000	1500	2000	3000
146	126	126	1000	1500	2000	3000
168	148	148	1000	1500	2000	3000
178	158	158	1000	1500	2000	3000
183	163	163	1000	1500	2000	3000
194	174	174	1000	1500	2000	3000
219	199	199	1000	1500	2000	3000
245	225	225	1000	1500	2000	3000
273	253	253	1000	1500	2000	3000
323	303	303	1000	1500	2000	3000
406	382	382	1000	1500	2000	3000

How to Order MSD Casing Tubes

To ensure we provide the precise casing tube for your application, please specify the following parameters:

- Outer Diameter (OD)
- Inner Diameter (ID) or Wall Thickness
- Length
- Thread Type (This parameter is not required for welded casing tubes)

1. For Threaded Casing Tubes:
* Please specify: OD (A) + ID (B) + Length (C) + Thread Type (T)

2. For Welded Casing Tubes:
* Please specify: OD (A) + ID (B) + Length ©