



# DTH Drilling Equipment

## KEMAICO USA CORPORATION



**GLOBAL DRILLING INDUSTRY EXPERTS**



## High Air Pressure DTH Hammer -With Foot Valve Code

### DTH Hammer With Foot Valve ( i.e. MQL5 )

M	QL	5
Our Company: Maxdrill	Bit shank: D- DHD Bit Shank QL5- QL50 Bit Shank SD5-SD5 Bit Shank	Inch: 5" hammer

Decomposition	Item	Part Number	Description
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1	MD8501	Top Sub
2	MD8502	"O" Ring of Top Sub
3	MD8503	Breakout Ring
4	MD8504	Check Valve
5	MD8505	Spring
6	MD8506	Compression Buffer
7	MD8507	Air Distributor
8	MD8508	Internal Cylinder
9	MD8509	Piston
10	MD8510	External Cylinder
11	MD8511	"O" Ring of Stop Ring
12	MD8512	Stop Ring
13	MD8513	Drive Chuck
14	MD8514	Drill Bit

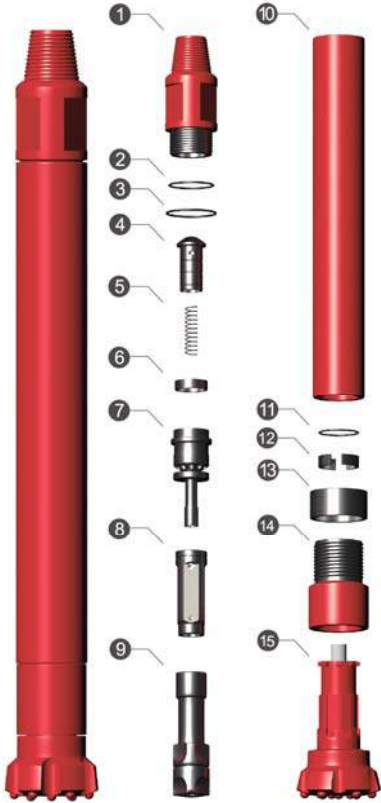
### Technical Parameters

Length(Less bit)	1492mm
Weight(Less bit)	189.00Kg
External Diameter	ø180mm
Bit Shank	Cop84 / DHD380
Hole Range	ø195-ø254
Connection Thread	API 4 1/2" Reg
Working Pressure	1.0-2.5Mpa
Impact Rate at 1.7Mpa	20HZ
Recommended Rotation Speed	15-25r/min
Air Consumption	145-350PSI 836-1150CFM

Product Number

# MD85



Decomposition	Item	Part Number	Description
	1	MSD801	Top Sub
	2	MSD802	"O" Ring of Top Sub
	3	MSD803	Breakout Ring
	4	MSD804	Check Valve
	5	MSD805	Spring
	6	MSD806	Compression Buffer
	7	MSD807	Air Distributor
	8	MSD808	Internal Cylinder
	9	MSD809	Piston
	10	MSD810	External Cylinder
	11	MSD811	"O" Ring of Stop Ring
	12	MSD812	Stop Ring
	13	MSD813	Guided Sleeve
	14	MSD814	Drive Chuck
	15	MSD815	Drill Bit

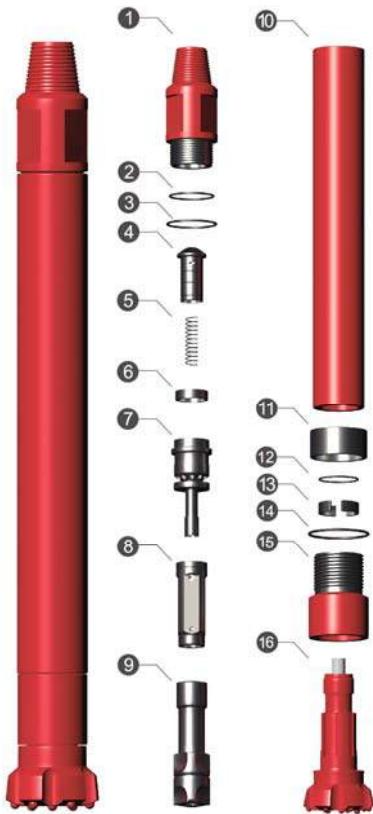
Product Number

# MSD8

## Technical Parameters

Length(Less bit)	1463mm
Weight(Less bit)	192.00Kg
External Diameter	Ø180mm
Bit Shank	SD8
Hole Range	ø195- ø 254
Connection Thread	API 4 1/2" Reg
Working Pressure	1.0-2.5Mpa
Impact Rate at 1.7Mpa	20HZ
Recommended Rotation Speed	15-25r/min
Air Consumption	145-350PSI 836-1150CFM

Decomposition	Item	Part Number	Description
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1	MQL801	Top Sub
2	MQL802	"O" Ring of Top Sub
3	MQL803	Breakout Ring
4	MQL804	Check Valve
5	MQL805	Spring
6	MQL806	Compression Buffer
7	MQL807	Air Distributor
8	MQL808	Internal Cylinder
9	MQL809	Piston
10	MQL810	External Cylinder
11	MQL811	Guided Sleeve
12	MQL812	"O" Ring of Stop Ring
13	MQL813	Stop Ring
14	MQL814	Breakout Ring
15	MQL815	Drive Chuck
16	MQL816	Drill Bit

### Technical Parameters

Length(Less bit)	1465mm
Weight(Less bit)	182.00Kg
External Diameter	Ø185mm
Bit Shank	QL80
Hole Range	ø195- ø 254
Connection Thread	API 4 1/2" Reg
Working Pressure	1.0-2.5Mpa
Impact Rate at 1.7Mpa	20HZ
Recommended Rotation Speed	15-25r/min
Air Consumption	145-350PSI 836-1150CFM

Product Number

# MQL8



## High Air Pressure -Without Foot Valve DTH Hammer Code

### DTH Hammer Without Foot Valve ( i.e. MQL4A )

M	QL	4	A/S
Our Company: Maxdrill	Bit shank: D- DHD Bit Shank QL4- QL40 Bit Shank SD4-SD4 Bit Shank BR1-BR1 Bit Shank M-Mission Bit Shank N-NUMA Bit Shank	Inch: 4" hammer	A-Bit without foot valve S-Smaller size than general DTH Hammer

Decomposition	Item	Part Number	Description
	1	MD85A01	Top Sub
	2	MD85A02	"O" Ring of Top Sub
	3	MD85A03	Breakout Ring
	4	MD85A04	Check Valve
	5	MD85A05	Spring
	6	MD85A06	Air Distributor
	7	MD85A07	Internal Cylinder
	8	MD85A08	Piston
	9	MD85A09	External Cylinder
	10	MD85A10	Guided Sleeve
	11	MD85A11	"O" Ring of Stop Ring
	12	MD85A12	Stop Ring
	13	MD85A13	Breakout Ring
	14	MD85A14	Drive Chuck
	15	MD85A15	Drill Bit

Product Number

**MD85A**

### Technical Parameters

Length(Less bit)	1359mm
Weight(Less bit)	185.00Kg
External Diameter	Ø185mm
Bit Shank	Cop84 / DHD380
Hole Range	ø 195- ø 254
Connection Thread	API 4 1/2" Reg
Working Pressure	1.0-2.5Mpa
Impact Rate at 1.7Mpa	20HZ
Recommended Rotation Speed	15-25r/min
Air Consumption	145-350PSI 836-1150CFM

Decomposition	Item	Part Number	Description
	1	MSD8A01	Top Sub
	2	MSD8A02	"O" Ring of Top Sub
	3	MSD8A03	Breakout Ring
	4	MSD8A04	Check Valve
	5	MSD8A05	Spring
	6	MSD8A06	Air Distributor
	7	MSD8A07	Internal Cylinder
	8	MSD8A08	Piston
	9	MSD8A09	External Cylinder
	10	MSD8A10	Guided Sleeve
	11	MSD8A11	"O" Ring of Stop Ring
	12	MSD8A12	Stop Ring
	13	MSD8A13	Breakout Ring
	14	MSD8A14	Drive Chuck
	15	MSD8A15	Drill Bit

Product Number

**MSD8A**

### Technical Parameters

Length(Less bit)	1330mm
Weight(Less bit)	174.00Kg
External Diameter	Ø180mm
Bit Shank	SD8
Hole Range	ø 195- ø 254
Connection Thread	API 4 1/2" Reg
Working Pressure	1.0-2.5Mpa
Impact Rate at 1.7Mpa	20HZ
Recommended Rotation Speed	15-25r/min
Air Consumption	145-350PSI 836-1150CFM



Decomposition	Item	Part Number	Description
	1	MQL8A01	Top Sub
	2	MQL8A02	"O" Ring of Top Sub
	3	MQL8A03	Breakout Ring
	4	MQL8A04	Check Valve
	5	MQL8A05	Spring
	6	MQL8A06	Air Distributor
	7	MQL8A07	Internal Cylinder
	8	MQL8A08	Piston
	9	MQL8A09	External Cylinder
	10	MQL8A10	Guided Sleeve
	11	MQL8A11	"O" Ring of Stop Ring
	12	MQL8A12	Stop Ring
	13	MQL8A13	Breakout Ring
	14	MQL8A14	Drive Chuck
	15	MQL8A15	Drill Bit

Product Number

**MQL8A**

Technical Parameters

Length(Less bit)	1330mm
Weight(Less bit)	174.00Kg
External Diameter	Ø185mm
Bit Shank	QL80
Hole Range	ø 195- ø 254
Connection Thread	API 4 1/2" Reg
Working Pressure	1.0-2.5Mpa
Impact Rate at 1.7Mpa	20HZ
Recommended Rotation Speed	15-25r/min
Air Consumption	145-350PSI 836-1150CFM

# Bit Face Shape Selection

## Concave Face

The all-round application bit face specifically for medium hard and homogenous rock formations. Good hole deviation control and good flushing capacity.



## Convex Face

For high penetration rates in soft to medium-hard with low to medium air pressures. It is the most resistance to steel wash, and may reduce the load and wear on the gauge buttons, but poor hole deviation control.



## Flat Face

This kind of face shape is suitable for hard to very hard and abrasive rock formations in applications with high air pressures. Good penetration rates and resistance to steel wash.



## DTH Bit Code ( i.e. 150MQL50CC )

150	M	QL50	CC/CV/FF
Bit Diameter: 150mm	Our company: Maxdrill	Bit Shank: QL50-QL50 Bit Shank SD5-SD5 Bit Shank M50-Misson50 Bit Shank D-DHD Bit Shank N-NUMA Bit Shank	Front Design: CC-Concave CV-Convex FF-Flat Face

# Carbide Button Shape Selection



## Domed/ Round Button

Domed / Round buttons are usually used as gauge buttons of DTH Bits, suitable for very abrasive and very hard formations.



## Parabolic/Semi-Ballistic Button

Parabolic buttons are usually used as gauge buttons and front buttons of DTH Bits, suitable for medium abrasive and hard formations.



## Ballistic Button

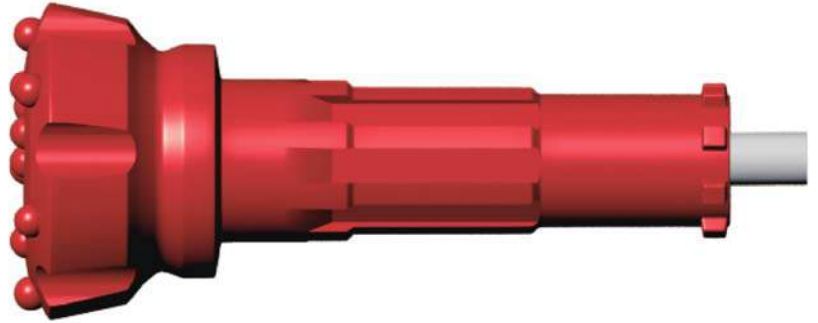
Ballistic buttons are usually used as front buttons of DTH Bits, suitable for medium abrasive and medium hard formations. They can also be used as gauge buttons if the rock is soft.



## Sharp Button

Sharp buttons are usually used as front buttons of DTH Bits for soft formations where fast penetration rates are possible and button breakage is minimal.

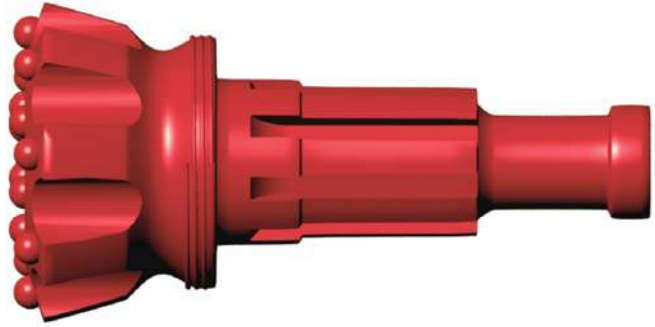
**MD85  
DHD380  
COP84**



Face	Diameter		Part No.	No. x Button (mm)			Flushing holes	Weight
	Dia.	Inch		Outer	Inner	Front		kg
Concave	200	7 7/8	200MD85CC	10 x φ19	8 x φ18	6 x φ16	2	48
	203	8	203MD85CC	10 x φ19	8 x φ18	6 x φ16	2	49
	222	8 3/4	222MD85CC	12 x φ19	9 x φ18	8 x φ16	3	55
	225	8 7/8	225MD85CC	12 x φ19	9 x φ18	8 x φ16	3	56
	240	9 1/2	240MD85CC	12 x φ19	9 x φ18	9 x φ16	3	57
	245	9 2/3	245MD85CC	12 x φ19	9 x φ18	9 x φ16	3	58
	251	9 7/8	251MD85CC	12 x φ19	12 x φ18	10 x φ16	3	60
	254	10	254MD85CC	12 x φ19	12 x φ18	10 x φ16	3	61

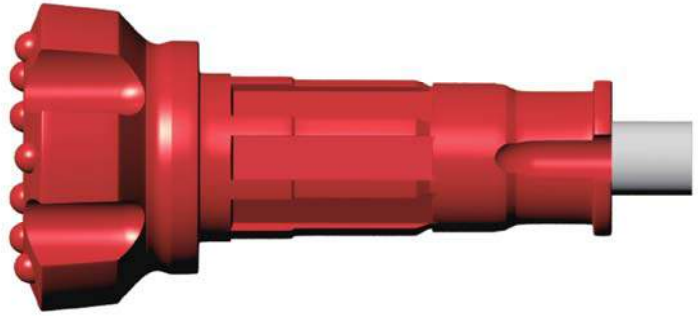


# M80A



Face	Diameter		Part No.	No. x Button (mm)			Flushing holes	Weight
	Dia.	Inch		Outer	Inner	Front		kg
Concave	200	7 7/8	200MM80CC	10 x φ19	8 x φ18	6 x φ16	2	41
	203	8	203MM80CC	10x φ19	8 x φ18	6 x φ16	2	42
	222	8 3/4	222MM80CC	12 x φ19	9 x φ18	8 x φ16	3	48
	225	8 7/8	225MM80CC	12 x φ19	9 x φ18	8 x φ16	3	49
	240	9 1/2	240MM80CC	12 x φ19	9 x φ18	9 x φ16	3	50
	245	9 2/3	245MM80CC	12 x φ19	9 x φ18	9 x φ16	3	51
	251	9 7/8	251MM80CC	12 x φ19	12 x φ18	10 x φ16	3	53
254	10	254MM80CC	12 x φ19	12 x φ18	10 x φ16	3	54	

# SD8



Face	Diameter		Part No.	No. x Button (mm)			Flushing holes	Weight
	Dia.	Inch		Outer	Inner	Front		kg
Concave	200	7 7/8	200MSD8CC	10 x φ19	8 x φ18	6 x φ16	2	41
	203	8	203MSD8CC	10 x φ19	8 x φ18	6 x φ16	2	42
	222	8 3/4	222MSD8CC	12 x φ19	9 x φ18	8 x φ16	3	48
	225	8 7/8	225MSD8CC	12 x φ19	9 x φ18	8 x φ16	3	49
	240	9 1/2	240MSD8CC	12 x φ19	9 x φ18	9 x φ16	3	50
	245	9 2/3	245MSD8CC	12 x φ19	9 x φ18	9 x φ16	3	51
	251	9 7/8	251MSD8CC	12 x φ19	12 x φ18	10 x φ16	3	53
	254	10	254MSD8CC	12 x φ19	12 x φ18	10 x φ16	3	54

# QL80



Face	Diameter		Part No.	No. x Button (mm)			Flushing holes	Weight
	Dia.	Inch		Outer	Inner	Front		kg
Concave	200	7 7/8	200MQL80CC	10 x φ19	8 x φ18	6 x φ16	2	49
	203	8	203MQL80CC	10 x φ19	8 x φ18	6 x φ16	2	50
	222	8 3/4	222MQL80CC	12 x φ19	9 x φ18	8 x φ16	3	56
	225	8 7/8	225MQL80CC	12 x φ19	9 x φ18	8 x φ16	3	57
	240	9 1/2	240MQL80CC	12 x φ19	9 x φ18	9 x φ16	3	58
	245	9 2/3	245MQL80CC	12 x φ19	9 x φ18	9 x φ16	3	59
	251	9 7/8	251MQL80CC	12 x φ19	12 x φ18	10 x φ16	3	61
	254	10	254MQL80CC	12 x φ19	12 x φ18	10 x φ16	3	62



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