



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
	1	MSD1201	Top Sub
	2	MSD1202	"O" Ring of Top Sub
	3	MSD1203	Breakout Ring
	4	MSD1204	Check Valve
	5	MSD1205	Spring
	6	MSD1206	Air Distributor
	7	MSD1207	Internal Cylinder
	8	MSD1208	Piston
	9	MSD1209	External Cylinder
	10	MSD1210	"O" Ring of Stop Ring
	11	MSD1211	Stop Ring
	12	MSD1212	Guided Sleeve
	13	MSD1213	Breakout Ring
	14	MSD1214	Drive Chuck
	15	MSD1215	Drill Bit

Technical Parameters

Length(Less bit)	1880mm
Weight(Less bit)	530.00Kg
External Diameter	Ø275mm
Bit Shank	SD12
Hole Range	ø 305- ø 445
Connection Thread	API 6 5/8" 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

MSD12

Decomposition	Item	Part Number	Description
	1	MN12501	Top Sub
	2	MN12502	"O" Ring of Top Sub
	3	MN12503	Breakout Ring
	4	MN12504	Check Valve
	5	MN12505	Spring
	6	MN12506	Compression Buffer
	7	MN12507	Air Distributor
	8	MN12508	Internal Cylinder
	9	MN12509	Piston
	10	MN12510	External Cylinder
	11	MN12511	"O" Ring of Stop Ring
	12	MN12512	Stop Ring
	13	MN12513	Breakout Ring
	14	MN12514	Drive Chuck
	15	MN12515	Drill Bit

Product Number

MN125

Technical Parameters

Length(Less bit)	1900mm
Weight(Less bit)	480.00Kg
External Diameter	Ø275mm
Bit Shank	NUMA125
Hole Range	ø 305- ø 445
Connection Thread	API 6 5/8" 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



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	MD1120A01	Top Sub
	2	MD1120A02	"O" Ring of Top Sub
	3	MD1120A03	Breakout Ring
	4	MD1120A04	Check Valve
	5	MD1120A05	Spring
	6	MD1120A06	Air Distributor
	7	MD1120A07	Internal Cylinder
	8	MD1120A08	Piston
	9	MD1120A09	External Cylinder
	10	MD1120A10	Guided Sleeve
	11	MD1120A11	"O" Ring of Stop Ring
	12	MD1120A12	Stop Ring
	13	MD1120A13	Breakout Ring
	14	MD1120A14	Drive Chuck
	15	MD1120A15	Drill Bit

Technical Parameters

Length(Less bit)	1880mm
Weight(Less bit)	474.00Kg
External Diameter	Ø275mm
Bit Shank	DHD1120
Hole Range	ø 305- ø 445
Connection Thread	API 6 5/8" 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

MD1120A

Decomposition	Item	Part Number	Description
	1	MSD12A01	Top Sub
	2	MSD12A02	"O" Ring of Top Sub
	3	MSD12A03	Breakout Ring
	4	MSD12A04	Check Valve
	5	MSD12A05	Spring
	6	MSD12A06	Air Distributor
	7	MSD12A07	Internal Cylinder
	8	MSD12A08	Piston
	9	MSD12A09	External Cylinder
	10	MSD12A10	Guided Sleeve
	11	MSD12A11	"O" Ring of Stop Ring
	12	MSD12A12	Stop Ring
	13	MSD12A13	Breakout Ring
	14	MSD12A14	Drive Chuck
	15	MSD12A15	Drill Bit

Technical Parameters

Length(Less bit)	1860mm
Weight(Less bit)	530.00Kg
External Diameter	Ø275mm
Bit Shank	SD12
Hole Range	ø 305- ø 445
Connection Thread	API 6 5/8" 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

MSD12A

Decomposition	Item	Part Number	Description
	1	MN125A01	Top Sub
	2	MN125A02	"O" Ring of Top Sub
	3	MN125A03	Breakout Ring
	4	MN125A04	Check Valve
	5	MN125A05	Spring
	6	MN125A06	Air Distributor
	7	MN125A07	Internal Cylinder
	8	MN125A08	Piston
	9	MN125A09	External Cylinder
	10	MN125A10	Guided Sleeve
	11	MN125A11	"O" Ring of Stop Ring
	12	MN125A12	Stop Ring
	13	MN125A13	Breakout Ring
	14	MN125A14	Drive Chuck
	15	MN125A15	Drill Bit

Product Number

MN125A

Technical Parameters

Length(Less bit)	1880mm
Weight(Less bit)	518.00Kg
External Diameter	Ø275mm
Bit Shank	NUMA125
Hole Range	ø 305- ø 445
Connection Thread	API 6 5/8" 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

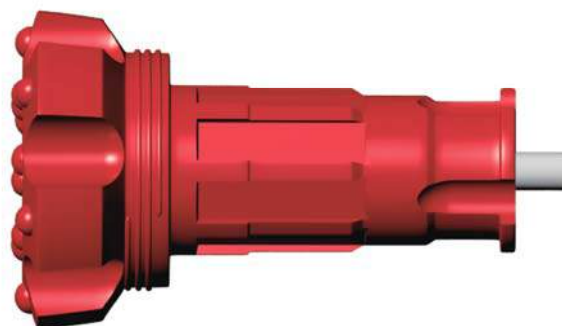
Ballistic buttons are usually used as front buttons of DTH Bits, suitable for medium abrasive and medium hard formations. They can also be used as gauge buttons if the rock is soft.



Sharp Button

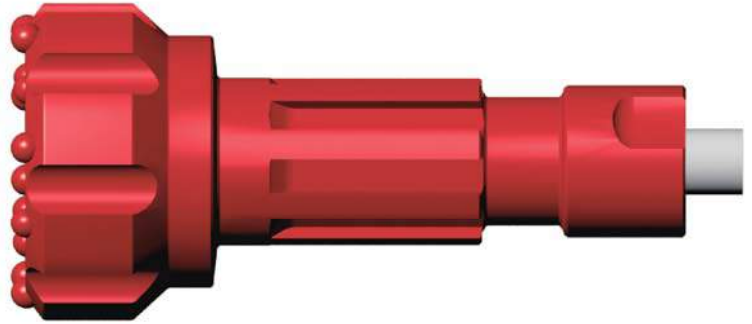
Sharp buttons are usually used as front buttons of DTH Bits for soft formations where fast penetration rates are possible and button breakage is minimal.

SD12



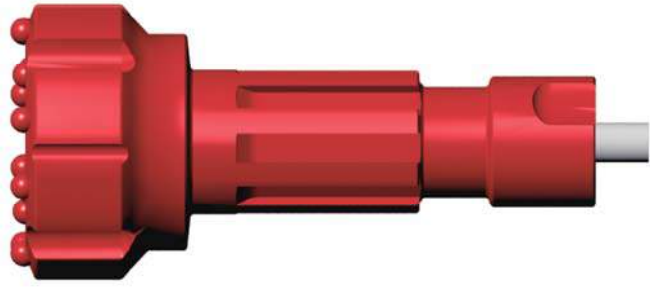
Face	Diameter		Part No.	No. x Button (mm)			Flushing holes	Weight kg
	Dia.	Inch		Outer	Inner	Front		
Concave	305	12	305MSD12CC	15 x φ19	15 x φ19	12 x φ16	3	119
	311	12 1/4	311MSD12CC	15 x φ19	15 x φ19	13 x φ16	3	121
	350	13 3/4	350MSD12CC	15 x φ19	9xφ19+15xφ18	15 x φ16	3	169
	380	15	380MSD12CC	18 x φ19	12xφ19+15xφ18	21 x φ16	3	190
	400	15 3/4	400MSD12CC	18 x φ19	30 x φ19	22 x φ16	3	200

DHD1120



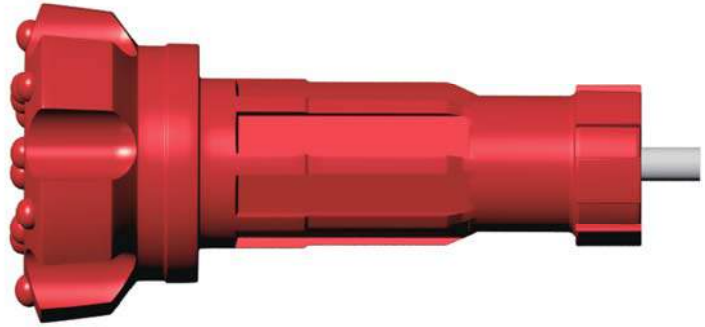
Face	Diameter		Part No.	No. x Button (mm)			Flushing holes	Weight kg
	Dia.	Inch		Outer	Inner	Front		
Concave	305	12	305MD1120CC	15 x \varnothing 19	15 x \varnothing 19	12 x \varnothing 16	3	147
	311	12 1/4	305MD1120CC	15 x \varnothing 19	15 x \varnothing 19	13 x \varnothing 16	3	148
	350	13 3/4	305MD1120CC	15 x \varnothing 19	9x \varnothing 19+15x \varnothing 18	15 x \varnothing 16	3	167
	380	15	305MD1120CC	18 x \varnothing 19	12x \varnothing 19+15x \varnothing 18	21 x \varnothing 16	3	188
	400	15 3/4	305MD1120CC	18 x \varnothing 19	30 x \varnothing 19	22 x \varnothing 16	3	198

NUMA120



Face	Diameter		Part No.	No. x Button (mm)			Flushing holes	Weight
	Dia.	Inch		Outer	Inner	Front		kg
Concave	305	12	305MN120CC	15 x φ19	15 x φ19	12 x φ16	3	154
	311	12 1/4	311MN120CC	15 x φ19	15 x φ19	13 x φ16	3	156
	350	13 3/4	350MN120CC	15 x φ19	9xφ19+15xφ18	15 x φ16	3	174
	380	15	380MN120CC	18 x φ19	12xφ19+15xφ18	21 x φ16	3	195
	400	15 3/4	400MN120CC	18 x φ19	30 x φ19	22 x φ16	3	205

NUMA125



Face	Diameter		Part No.	No. x Button (mm)			Flushing holes	Weight
	Dia.	Inch		Outer	Inner	Front		kg
Concave	305	12	305MN125CC	15 x \varnothing 19	15 x \varnothing 19	12 x \varnothing 16	3	177
	311	12 1/4	305MN125CC	15 x \varnothing 19	15 x \varnothing 19	13 x \varnothing 16	3	179
	350	13 3/4	305MN125CC	15 x \varnothing 19	9x \varnothing 19+15x \varnothing 18	15 x \varnothing 16	3	197
	380	15	305MN125CC	18 x \varnothing 19	12x \varnothing 19+15x \varnothing 18	21 x \varnothing 16	3	218
	400	15 3/4	305MN125CC	18 x \varnothing 19	30 x \varnothing 19	22 x \varnothing 16	3	228



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