



# 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	MD3501	Top Sub
	2	MD3502	"O" Ring of Top Sub
	3	MD3503	Check Valve
	4	MD3504	Spring
	5	MD3505	Compression Buffer
	6	MD3506	Air Distributor
	7	MD3507	Internal Cylinder
	8	MD3508	Piston
	9	MD3509	External Cylinder
	10	MD3510	"O" Ring of Stop Ring
	11	MD3511	Stop Ring
	12	MD3512	Drive Chuck
	13	MD3513	Drill Bit

Product Number

**MD35**

Technical Parameters

Length(Less bit)	930mm
Weight(Less bit)	25.00Kg
External Diameter	Ø82mm
Bit Shank	DHD3.5
Hole Range	ø90-ø110
Connection Thread	API 2 3/8" Reg
Working Pressure	1.0-2.5Mpa
Impact Rate at 1.5Mpa	28HZ
Recommended Rotation Speed	25-40r/min
Air Consumption	145-350PSI 200-600CFM



## 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	MD35A01	Top Sub
	2	MD35A02	"O" Ring of Top Sub
	3	MD35A03	Check Valve
	4	MD35A04	Spring
	5	MD35A05	Air Distributor
	6	MD35A06	Internal Cylinder
	7	MD35A07	Piston
	8	MD35A08	External Cylinder
	9	MD35A09	Guided Sleeve
	10	MD35A10	"O" Ring of Stop Ring
	11	MD35A11	Stop Ring
	12	MD35A12	Drive Chuck
	13	MD35A13	Drill Bit

Product Number

**MD35A**

### Technical Parameters

Length(Less bit)	888mm
Weight(Less bit)	25.00Kg
External Diameter	Ø82mm
Bit Shank	IR3.5
Hole Range	ø 90- ø 115
Connection Thread	API 2 3/8" Reg
Working Pressure	1.0-2.5Mpa
Impact Rate at 1.5Mpa	28HZ
Recommended Rotation Speed	25-40r/min
Air Consumption	145-350PSI 200-600CFM

# 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

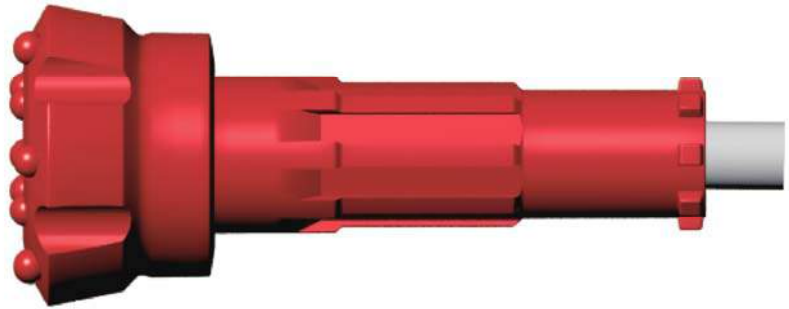
Ballistic buttons are usually used as front buttons of DTH Bits, suitable for medium abrasive and medium hard formations. They can also be used as gauge buttons if the rock is soft.



## 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.

**MD35  
IR3.5  
COP34**



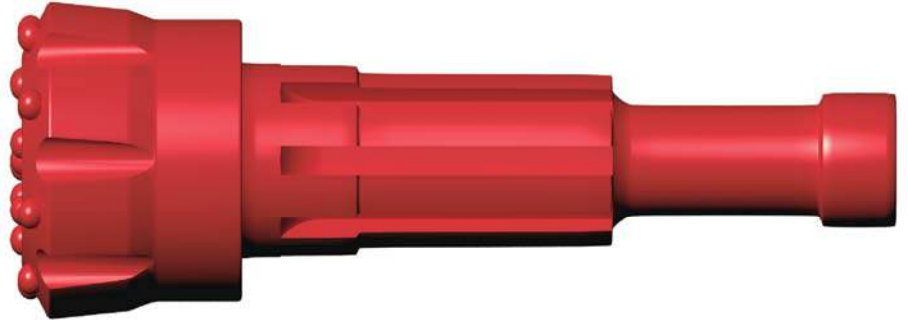
Face	Diameter		Part No.	No. x Button (mm)			Flushing holes	Weight
	Dia.	Inch		Outer	Inner	Front		kg
Flat	85	3 3/8	85MD35FF	7 x φ12		6 x φ11	2	4.9
	90	3 9/16	90MD35FF	7 x φ12		6 x φ11	2	5.0
	95	3 3/4	95MD35FF	7 x φ13		6 x φ12	2	5.1
	100	3 15/16	100MD35FF	7 x φ14		6 x φ13	2	5.3
	105	4 1/8	105MD35FF	7 x φ14		6 x φ13	2	5.5

Face	Diameter		Part No.	No. x Button (mm)			Flushing holes	Weight
	Dia.	Inch		Outer	Inner	Front		kg
Concave	85	3 3/8	85MD35CC	7 x φ12	4 x φ11	2 x φ11	2	4.9
	90	3 9/16	90MD35CC	7 x φ12	4 x φ11	2 x φ11	2	5.0
	95	3 3/4	95MD35CC	7 x φ13	4 x φ12	2 x φ12	2	5.1
	100	3 15/16	100MD35CC	7 x φ14	4 x φ13	2 x φ13	2	5.3
	105	4 1/8	105MD35CC	7 x φ14	4 x φ13	2 x φ13	2	5.5

Face	Diameter		Part No.	No. x Button (mm)			Flushing holes	Weight
	Dia.	Inch		Outer	Inner	Front		kg
Convex	85	3 3/8	85MD35CV	7 x φ12	4 x φ11	2 x φ11	2	4.9
	90	3 9/16	90MD35CV	7 x φ12	4 x φ11	2 x φ11	2	5.0
	95	3 3/4	95MD35CV	7 x φ13	4 x φ12	2 x φ12	2	5.1
	100	3 15/16	100MD35CV	7 x φ14	4 x φ13	2 x φ13	2	5.3
	105	4 1/8	105MD35CV	7 x φ14	4 x φ13	2 x φ13	2	5.5



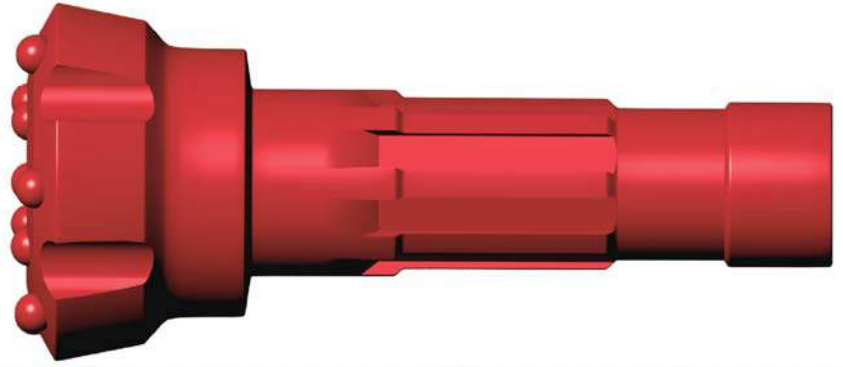
# M30A



Face	Diameter		Part No.	No. x Button (mm)			Flushing holes	Weight
	Dia.	Inch		Outer	Inner	Front		kg
Flat	90	3 1/2	90MM30FF	6 x φ14		4 x φ12	2	4.5
	105	4 1/8	105MM30FF	8 x φ13		6 x φ12	2	5.0

Face	Diameter		Part No.	No. x Button (mm)			Flushing holes	Weight
	Dia.	Inch		Outer	Inner	Front		kg
Convex	90	3 1/2	90MM30CV	6 x φ14	4 x φ12	2 x φ13	2	4.5
	95	3 3/4	95MM30CV	6 x φ14	4 x φ13	2 x φ13	2	4.6
	100	3 15/16	100MM30CV	6 x φ14	4 x φ13	3 x φ13	2	4.8
	105	4 1/8	105MM30CV	6 x φ14	4 x φ13	3 x φ13	2	5.0

# COP32

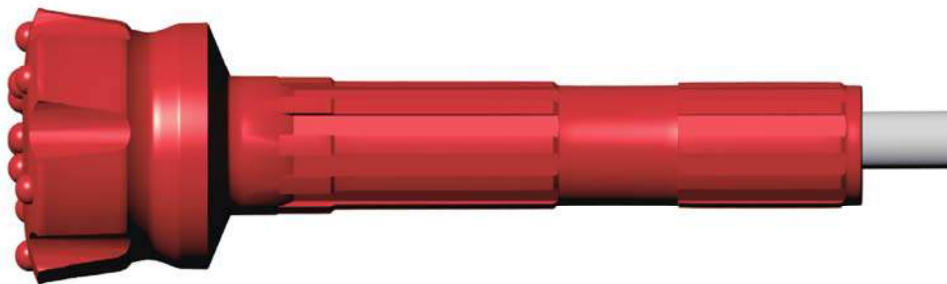


Face	Diameter		Part No.	No. x Button (mm)			Flushing holes	Weight
	Dia.	Inch		Outer	Inner	Front		kg
Flat	85	3 3/8	85MC32FF	7 x φ12		6 x φ11	2	4.2
	90	3 9/16	90MC32FF	7 x φ12		6 x φ11	2	4.3
	95	3 3/4	95MC32FF	7 x φ13		6 x φ12	2	4.4
	100	3 15/16	100MC32FF	7 x φ14		6 x φ13	2	4.6

Face	Diameter		Part No.	No. x Button (mm)			Flushing holes	Weight
	Dia.	Inch		Outer	Inner	Front		kg
Concave	85	3 3/8	85MC32CC	7 x φ12	4 x φ11	2 x φ11	2	4.2
	90	3 9/16	90MC32CC	7 x φ12	4 x φ11	2 x φ11	2	4.3
	95	3 3/4	95MC32CC	7 x φ13	4 x φ12	2 x φ12	2	4.4
	100	3 15/16	100MC32CC	7 x φ14	4 x φ13	2 x φ13	2	4.6

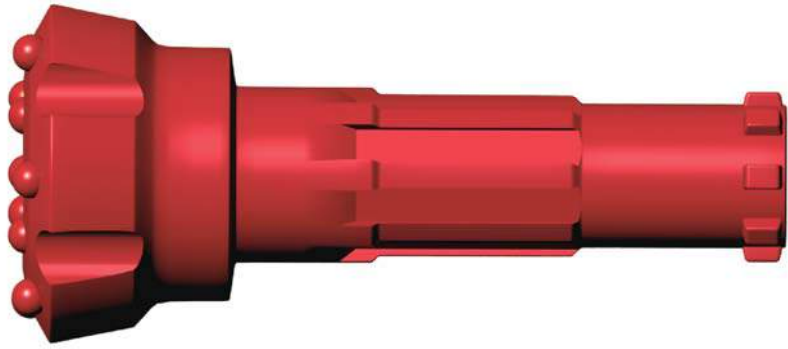
Face	Diameter		Part No.	No. x Button (mm)			Flushing holes	Weight
	Dia.	Inch		Outer	Inner	Front		kg
Convex	85	3 3/8	85MC32CV	7 x φ12	4 x φ11	2 x φ11	2	4.2
	90	3 9/16	90MC32CV	7 x φ12	4 x φ11	2 x φ11	2	4.3
	95	3 3/4	95MC32CV	7 x φ13	4 x φ12	2 x φ12	2	4.4
	100	3 15/16	100MC32CV	7 x φ14	4 x φ13	2 x φ13	2	4.6

# QL30



Face	Diameter		Part No.	No. x Button (mm)			Flushing holes	Weight
	Dia.	Inch		Outer	Inner	Front		kg
Flat	85	3 3/8	85MQL30FF	6 x φ13		4 x φ12	2	4.5
	90	3 1/2	90MQL30FF	6 x φ14		4 x φ12	2	4.7
	95	3 3/4	95MQL30FF	6 x φ14		4 x φ13	2	4.9
	100	3 7/8	100MQL30FF	8 x φ12		6 x φ12	2	5.0
	105	4 1/8	105MQL30FF	8 x φ13		6 x φ12	2	5.5

# BR3



Face	Diameter		Part No.	No. x Button (mm)			Flushing holes	Weight
	Dia.	Inch		Outer	Inner	Front		kg
Flat	85	3 3/8	85MBR3FF	7 x $\phi$ 12		6 x $\phi$ 11	2	3.7
	90	3 9/16	90MBR3FF	7 x $\phi$ 12		6 x $\phi$ 11	2	3.8
	95	3 3/4	95MBR3FF	7 x $\phi$ 13		6 x $\phi$ 12	2	3.9
	100	3 15/16	100MBR3FF	7 x $\phi$ 14		6 x $\phi$ 13	2	4.1
	105	4 1/8	105MBR3FF	7 x $\phi$ 14		6 x $\phi$ 13	2	4.3

Face	Diameter		Part No.	No. x Button (mm)			Flushing holes	Weight
	Dia.	Inch		Outer	Inner	Front		kg
Concave	85	3 3/8	85MBR3CC	7 x $\phi$ 12	4 x $\phi$ 11	2 x $\phi$ 11	2	3.7
	90	3 9/16	90MBR3CC	7 x $\phi$ 12	4 x $\phi$ 11	2 x $\phi$ 11	2	3.8
	95	3 3/4	95MBR3CC	7 x $\phi$ 13	4 x $\phi$ 12	2 x $\phi$ 12	2	3.9
	100	3 15/16	100MBR3CC	7 x $\phi$ 14	4 x $\phi$ 13	2 x $\phi$ 13	2	4.1
	105	4 1/8	105MBR3CC	7 x $\phi$ 14	4 x $\phi$ 13	2 x $\phi$ 13	2	4.3

Face	Diameter		Part No.	No. x Button (mm)			Flushing holes	Weight
	Dia.	Inch		Outer	Inner	Front		kg
Convex	85	3 3/8	85MBR3CV	7 x $\phi$ 12	4 x $\phi$ 11	2 x $\phi$ 11	2	3.7
	90	3 9/16	90MBR3CV	7 x $\phi$ 12	4 x $\phi$ 11	2 x $\phi$ 11	2	3.8
	95	3 3/4	95MBR3CV	7 x $\phi$ 13	4 x $\phi$ 12	2 x $\phi$ 12	2	3.9
	100	3 15/16	100MBR3CV	7 x $\phi$ 14	4 x $\phi$ 13	2 x $\phi$ 13	2	4.1
	105	4 1/8	105MBR3CV	7 x $\phi$ 14	4 x $\phi$ 13	2 x $\phi$ 13	2	4.3



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