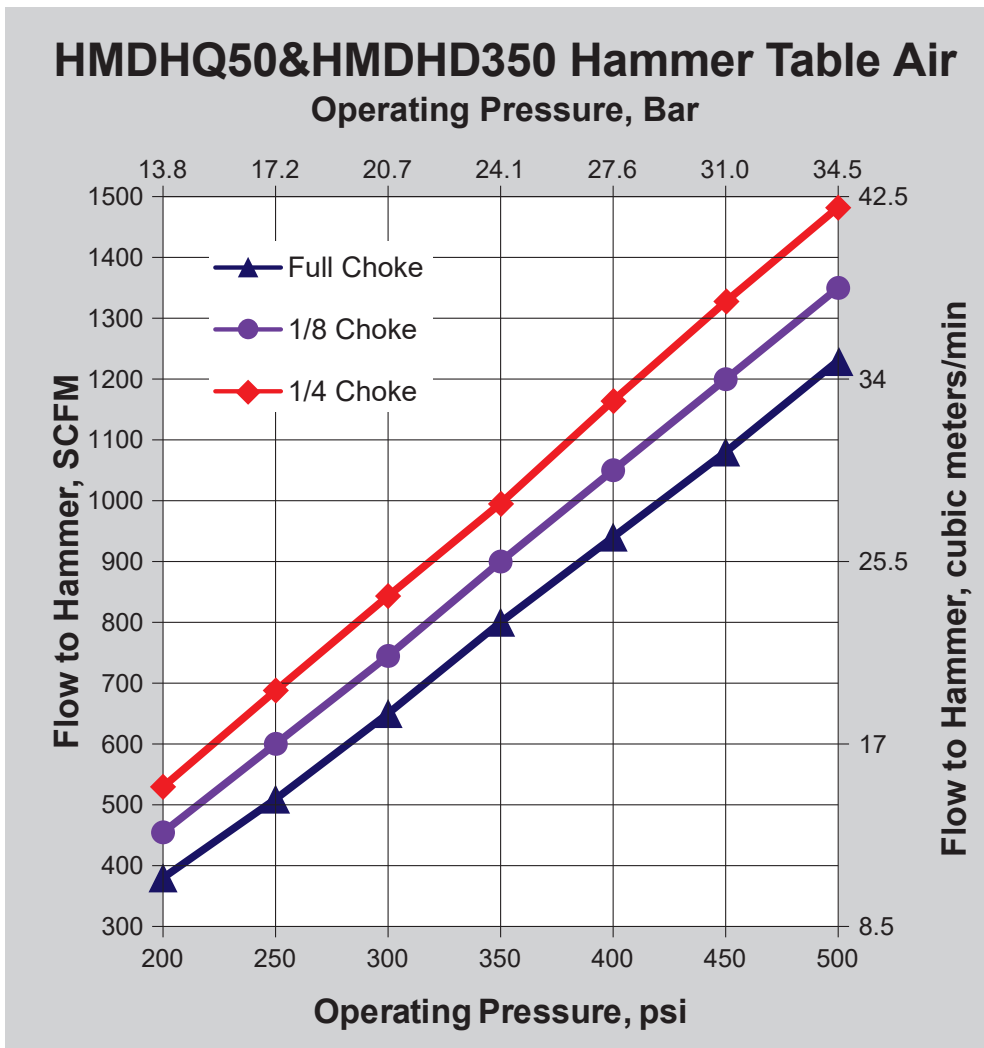


# 5" QL5&350 MD HAMMER-HMDHQ50&HMDHD350

## HMDHQ50&HMDHD350:

This High Performance Hammer was designed with production drilling in mind. It is designed best for Water Well and Geothermal drilling, but can be used in blast hole drilling applications.

The HMDHQ50&HMDHD350's non-ported, air craft quality steel piston is the only moving part in the hammer which limits internal wear and yields maximum penetration rates. Its wearsleeve is reversible and double heat treated for maximum life.



**MMC RYOTEC Corporation**

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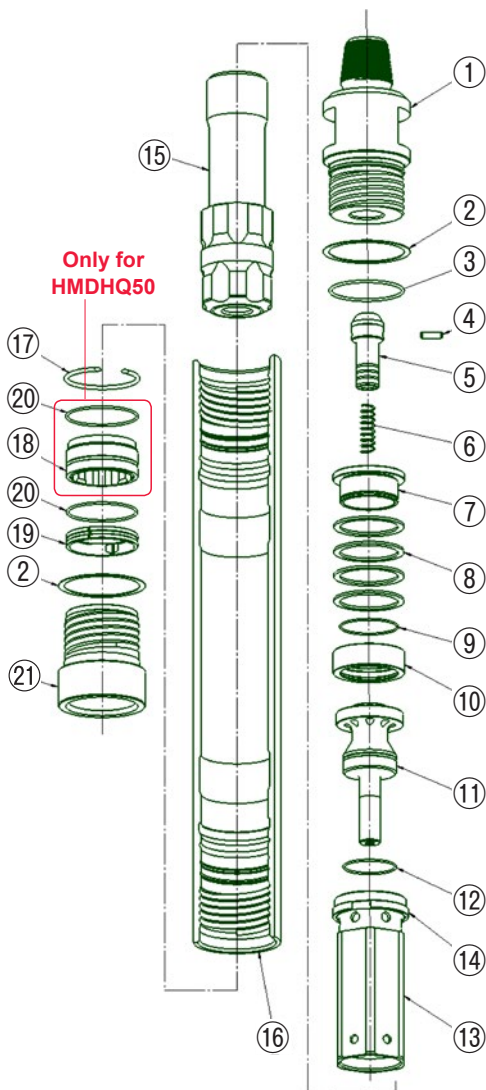
# Hammer Specification

	English	Metric
<b>Outside Dia</b>	4.53 in	115 mm
<b>Overall Length Without Bit</b>		
HMDHQ50	47.2 in	1199 mm
HMDHD350	48.2 in	1222 mm
<b>Operating Length API shoulder to Bit Face</b>		
HMDHQ50	47.1 in	1196 mm
HMDHD350	48.1 in	1222 mm
<b>Total Weight</b>	139 lbs	63 kg
<b>Bore Size</b>	3.71 in	94.2 mm
<b>Piston Weight</b>	30 lbs	13.6 kg
<b>Drillpipe Connect</b>	3-1/2 Reg API Pin Up others available upon request	
<b>Wrench Flats</b>	3.5 in	88.9 mm
<b>Hole Size Range</b>	5 in to 6 in	127 mm to 152 mm
<b>Bit Shank Required</b>		
HMDHQ50	QL50	
HMDHD350	350R	
<b>Minimum Air Volume Required</b>	250 cfm	7 cmm
<b>Maximum Operating Pressure</b>	500 psi	34 bar

## Parts List

Shown at the right side of the chart is the quantity of spare parts that should be kept on hand. Level 1 is for water well drilling, Level 3 is for high production drilling.

HMDHQ50 & HMDHD350



ITEM No	PART No	QTY REQD	PART NAME	WEIGHT		SPARE PARTS ON HAND		
				LBS	KGS	LEVEL 1	LEVEL 2	LEVEL 3
1	HP-BKH-MD5Q1-0014	1	Back Head, 3 1/2" API Reg. Pin-Up	30.5	13.9	—	—	1
2	HP-BOW-0039	2	Breakout Washers	0.03	0	—	2	4
3	HP-ORG/BKH-0101	1	O-Ring, Back Head	0.01		1	2	4
4	HP-CST-0054	1	Choke Set	0.01		—	—	—
5	HP-CKV-RH6-0048	1	Check Valve Assy.	0.58	0.26	—	—	1
6	HP-CVS-0050	1	Spring Check Valve	0.3	0.14	—	1	2
7	HP-GUR-0085	1	Guide Ring	0.9	0.41	—	—	—
8	HP-DSC-0080	4	Disc Spring	0.25	0.11	—	—	4
9	HP-ORG/GUR-0116	1	O-Ring, Guide Ring	0.01		—	1	2
10	HP-SPT-0147	1	Spacer Ring	1.4	0.64	—	—	—
11	HP-ADB-MD50-0004	1	Air Distributor	4.5	2.05	—	—	1
12	HP-ORG/ADB-0094	1	O-Ring, Air Distributor & Bearing	0.01		1	2	4
13	HP-CLD-MD50-0072	1	Cylinder Assy. (Includes Cyl Ret Ring)	7	3.2	—	1	2
14		1	RETAINING RING, COMES ON CYLINDER 13	0.45	0.2	—	—	—
15	HP-PST-MD50-0123	1	Piston for HMDHQ50	30	13.6	—	1	1
15	HP-PST-MD50R-0124	1	Piston for HMDHD350	30	13.6	—	1	1
16	HP-WSV-MD50-0159	1	Wear Sleeve	50	22.7	1	2	3
17	HP-RRG/PST-0145	1	Bearing, Piston Retaining Ring	0.14	0.064	—	—	—
18	HP-BRG-MD50-0026	1	Bearing for HMDHQ50	1	0.455	—	1	1
18	part not used in HMDHD350							
19	HP-BRR-0032	1	Bit Retaining Ring	0.65	0.295	—	1	1
20	HP-BRG-0025	1 or 2	"O-Ring, Bit Retaining Ring 2 for HMDHQ50, 1 for HMDH350"	0.01		1 or 2	2 or 4	3 or 6
21	HP-CHK-MD5Q-0060	1	Chuck for HMDHQ50	7.9	3.6	2	4	6
21	HP-CHK-MD50R-0212	1	Chuck for HMDHD350	11	5	2	4	6
THE FOLLOWING PARTS ARE SOLD SEPARATE								
—	HP-MUW-0178		Make-Up Washer					1
—	HP-RBDKIT-MD50Q-0187		Rebuild Kit for HMDHQ50					1
—	HP-RBDKIT-MD50-0188		Rebuild Kit for HMDHD350					1

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