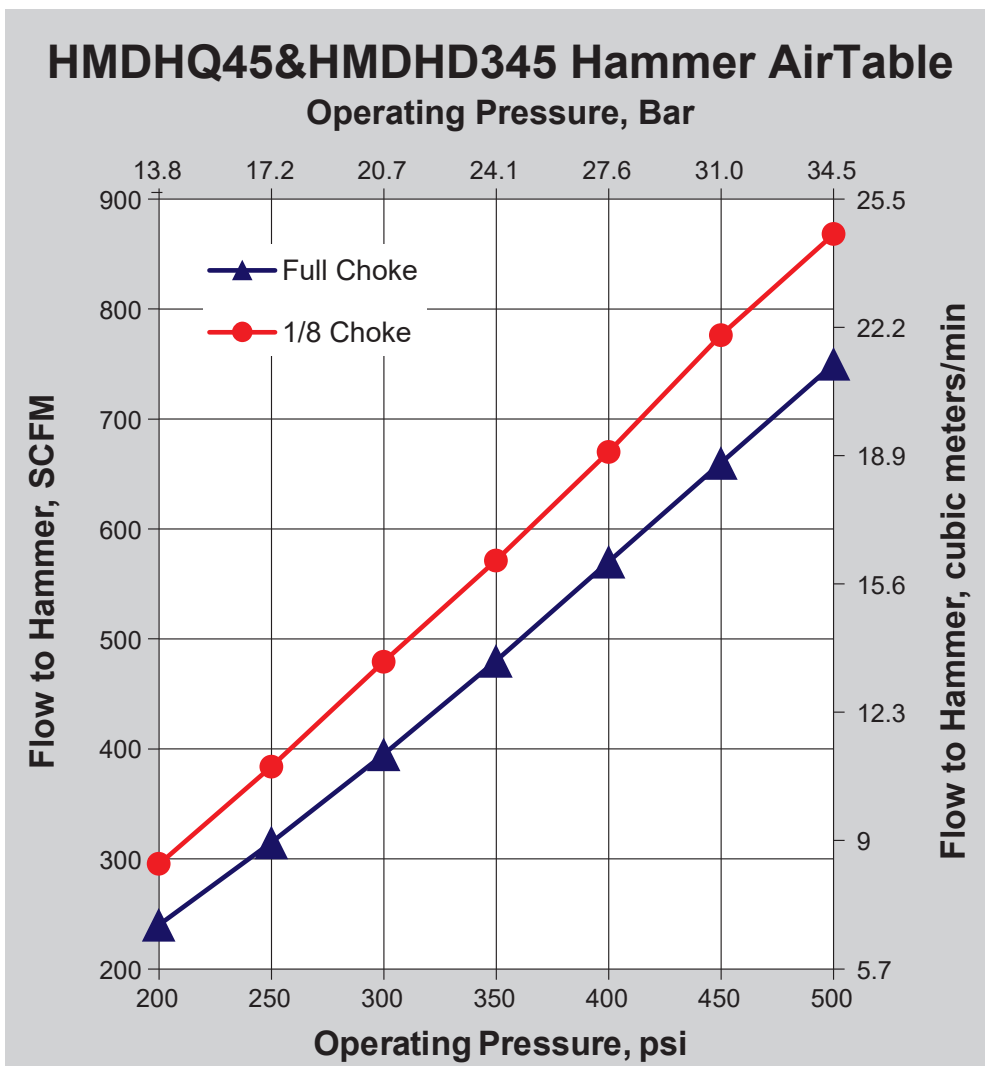


4.5" 340 MD HAMMER—HMDHD345

HMDHD345:

This High Performance Hammer was designed with production drilling in mind. It is best suited for blast hole applications. The **HMDHD345'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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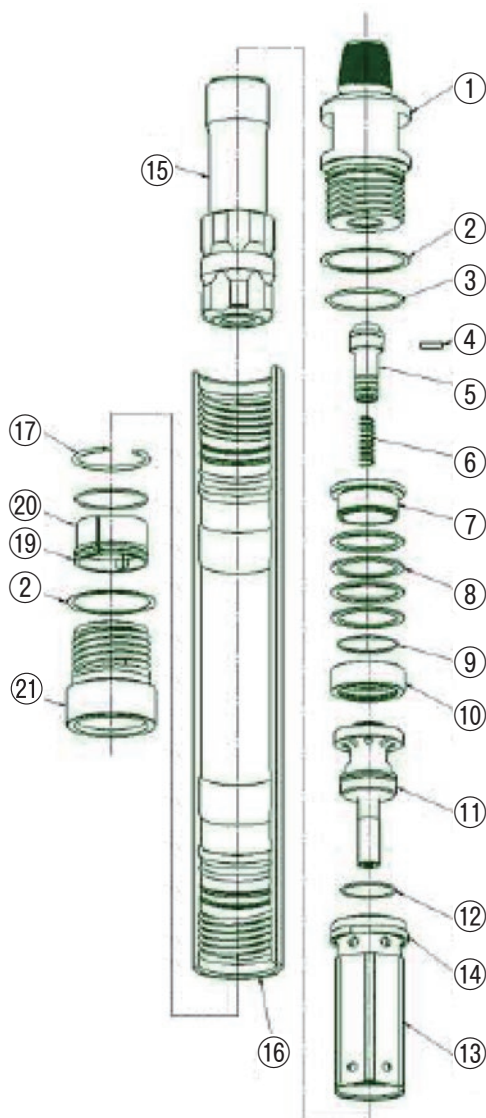
Hammer Specification

	English	Metric
Outside Dia	4.1 in	104 mm
Overall Length Without Bit		
HMDHQ45 models	40.4 in	1026 mm
HMDHD345 models	40.8 in	1036 mm
Operating Length API shoulder to Bit Face		
HMDHQ45 models	40.5 in	1029 mm
HMDHD345 models	40.9 in	1039 mm
Total Weight	112 lbs	51 kg
Bore Size	3.3 in	83.8 mm
Piston Weight	22 lbs	10 kg
Drillpipe Connect	2-3/8 Reg API Pin Up others available upon request	
Wrench Flats	3 in	76 mm
Hole Size Range	4-1/2 in to 5-1/8 in 114 mm to 130 mm	
Bit Shank Required	Q40 (QLX40)	
HMDHQ45 models	340	
HMDHD345 models		
Minimum Air Volume Required	150 cfm	4 cmm
Maximum Operating Pressure	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.

Model HMDHD345



ITEM No	PART No	QTY REQD	PART NAME	WEIGHT		SPARE PARTS ON HAND		
				LBS	KGS	LEVEL 1	LEVEL 2	LEVEL 3
1	HP-BKH-MD459-0012	1	Back Head, 2 3/8" API Reg. Pin-Up	21	9.5	—	—	1
2	HP-BOW-0044	2	Washer, Breakout	0.03	0	—	2	4
3	HP-ORG/BKH-0100	1	O-Ring, Backhead	0.01		1	2	4
4	HP-CST-0053	1	Choke Set	0.01		—	—	—
5	HP-CKV-RH45-0047	1	Check Valve Body	0.58	0.26	—	—	1
6	HP-CVS-0052	1	Spring, Check Valve	0.3	0.14	—	1	2
7	HP-GUR-0086	1	Guide Ring	0.9	0.41	—	—	—
8	HP-DSC-0081	4	Disc Spring	0.25	0.11	—	—	4
9	HP-ORG/GUR-0115	1	O-Ring, Guide Ring	0.01		—	1	2
10	HP-SPT-0148	1	Spacer Ring	1.4	0.64	—	—	—
11	HP-ADB-MD45-0003	1	Air Distributor	4.5	2.05	—	—	1
12	HP-ORG/ADB-0093	1	O-Ring, Air Distributor	0.01		2	4	6
13	HP-CLD-MD45-0071	1	Cylinder Assy (including Cyl Ret Ring)	7	3.2	—	1	2
13	HP-CLDB-MD45-0169	1	Cylinder Body	—	—	—	—	—
14	HP-RRG/CLD-0208	1	Retaining Ring, Cylinder	0.45	0.2	—	—	—
15	HP-PST-MD45-0121	1	Piston	30	13.6	—	1	1
16	HP-WSV-MD45-0158	1	Wear Sleeve	39	17.7	1	2	3
17	HP-RRG/PST-0141	1	Retaining Ring, Piston	0.14	0.064	—	—	—
18	part not used in this hammer							
19	HP-BRR-0035	1	Retaining Ring, Bit 340	0.65	0.295	—	1	1
20	HP-ORG/BRR-0106	1	O-Ring, Bit Retaining Ring	0.01		1	2	4
21	HP-CHK-MD45R-0058	1	Chuck, 340	11	5	2	4	6

THE FOLLOWING PARTS ARE SOLD SEPARATE

—	HP-MUW-0205	Washer, Make-up						1
—	HP-RBDKIT-MD45-0185	Rebuild Kit 340						

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