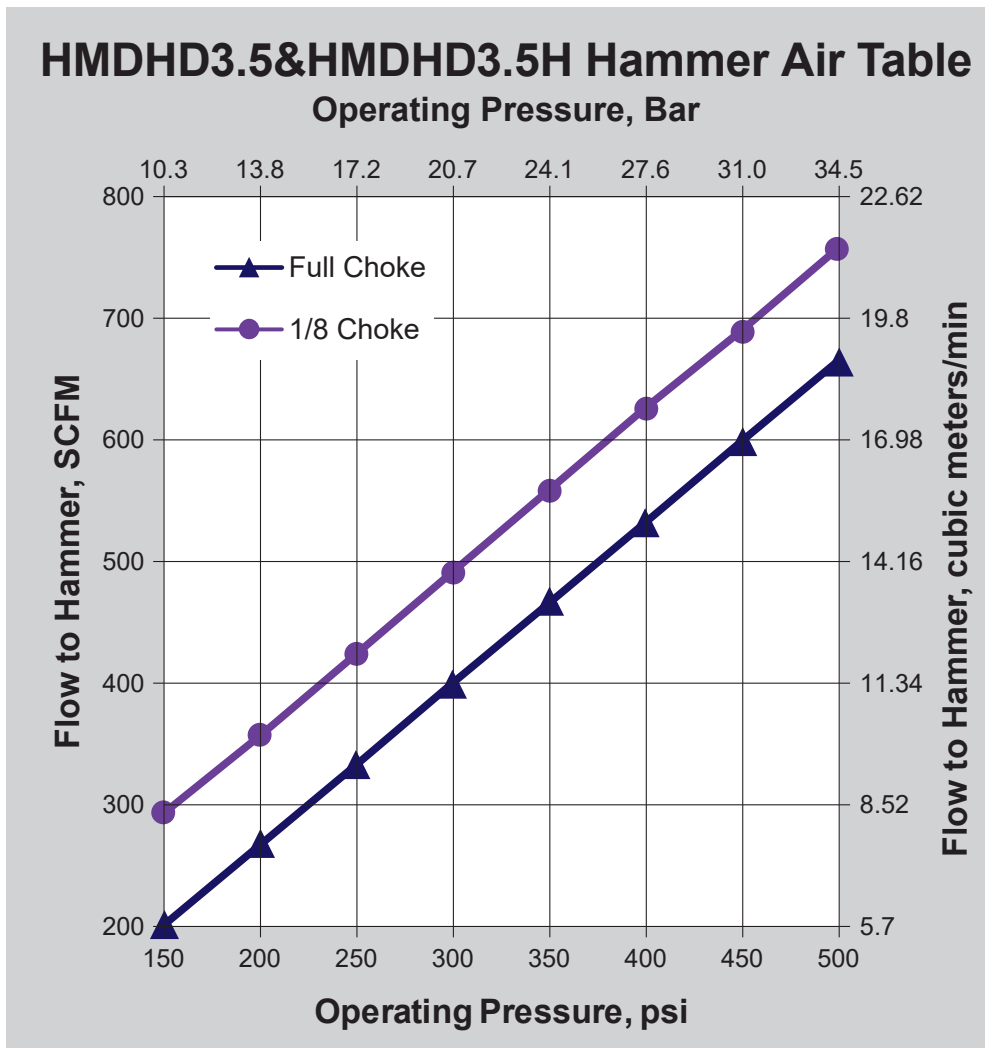


# 3.5" 305 MD HAMMER-HMDHD3.5&HMDHD3.5H

## HMDHD3.5&HMDHD3.5H:

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 **HMDHD3.5&HMDHD3.5H'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.

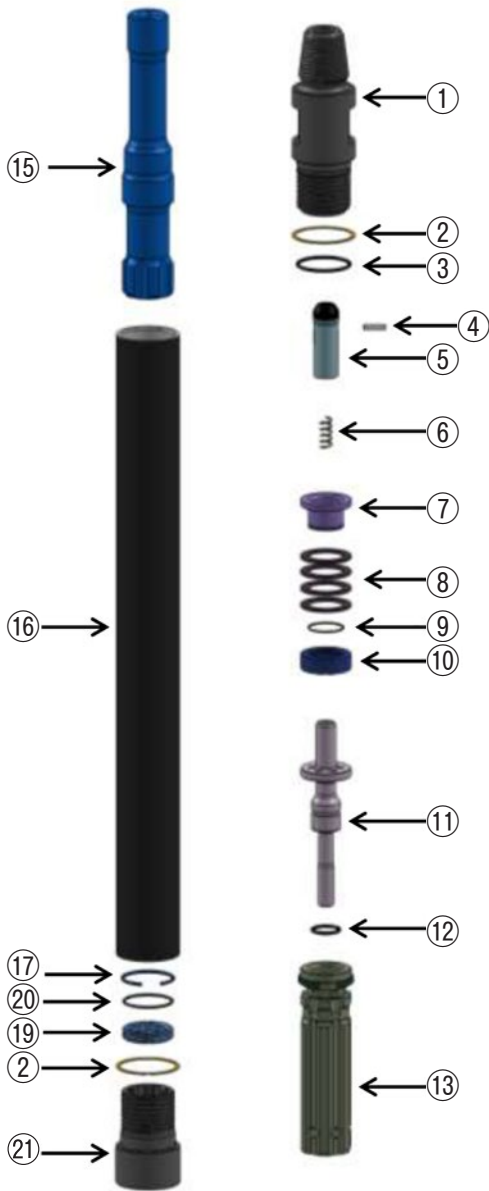


**MMC RYOTEC Corporation**

A Group Company of MITSUBISHI MATERIALS

# Hammer Specification

	English	Metric
<b>Outside Dia</b>		
Regular Mode	3.1 in	78.7 mm
Heavy Duty Model	3.35 in	85.1 mm
<b>Overall Length Without Bit</b>	40.0 in	1016 mm
<b>Operating Length</b> API shoulder to Bit Face	39.6 in	1006 mm
<b>Total Weight</b>	56 lbs	25.4 kg
<b>Bore Size</b>	2.5 in	63.5 mm
<b>Piston Weight</b>	11.7 lbs	5.31 kg
<b>Drillpipe Connect</b>	2-3/8 Reg API Pin Up others available upon request	
<b>Wrench Flats</b>	2.5 in	63.5 mm
<b>Hole Size Range</b>	3.5 in to 4.25 in	89 mm to 108 mm
<b>Bit Shank Required</b>	305 (IR 3.5)	
<b>Minimum Air Volume Required</b>	150 cfm	4.3cmm
<b>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.

HMDHD3.5 & HMDHD3.5H

ITEM No	PART No	QTY REQD	PART NAME	WEIGHT		SPARE PARTS ON HAND		
				LBS	KGS	LEVEL 1	LEVEL 2	LEVEL 3
1	HP-BKH-MD359-0010	1	Backhead, 2 3/8" API Reg. Pin Up	11.1	5	—	—	1
1	HP-BKH-MD35H-0219	1	H.D. Backhead, 2 3/8" API Reg. Pin Up	11.1	5	—	—	1
2	HP-BOW-0045	2	Breakout Washer	0.03	0	—	2	4
3	HP-ORG/BKH-0098	1	O-Ring, Back Head	0.01		1	2	4
4	HP-CST-0053	1	Set of (2) Chokes	0.01		—	—	—
5	HP-CKV-RH4-0046	1	Check Valve Assembly	0.17	0.08	—	—	1
6	HP-CVS-0052	1	Spring, Check Valve	0.03	0.01	—	1	2
7	HP-GUR-0088	1	Guide Ring, Disc Spring	0.42	0.19	—	—	—
8	HP-DSC-0082	4	Disc Spring	0.09	0.04	—	—	4
9	HP-SPT-0150	1	Spacer Ring, Disc Spring	0.01		—	1	2
10	HP-ORG/GUR-0113	1	O-Ring, Disc Spring Pack	0.5	0.23	—	—	—
11	HP-ADB-MD35-0001	1	Air Distributor	2.16	0.98	—	—	1
12	HP-ORG/ADB-0091	1	O-Ring, Air Distributor	0.01		2	4	6
13	HP-CLD-MD35-0069	1	Cylinder Assembly	3.7	1.7	—	1	2
14	HP-RRG/CLD-0134	1	Retaining Ring, Cylinder	0.11	0.1	—	—	—
15	HP-PST-MD35-0119	1	Piston	11.7	5.3	—	1	1
16	HP-WSV-MD35-0156	1	Wear Sleeve	21.9	10	1	2	3
16	HP-WSV-MD35H-0221	1	Heavy Duty Wear Sleeve			1	2	3
17	HP-RRG/PST-0143	1	Retaining Ring, Piston	0.02	0.009	—	—	—
18	part not used in this hammer							
19	HP-BRR-0136	1	Retaining Ring, Bit	0.24	0.109	—	1	1
20	HP-ORG/BRR-0104	1	O-Ring, Bit Retaining Ring	0.01		1	2	4
21	HP-CHK-MD35R-0055	1	Chuck	3.9	1.8	2	4	6
21	HP-CHK-MD35H-0220	1	Heavy Duty Chuck			2	4	6

THE FOLLOWING PARTS ARE SOLD SEPARATE

—	HP-MUW-0176	Make Up Washer						1
—	HP-RBDKIT-MD35-0183	Rebuild Kit						1
—	HP-RBDKIT-MD35H-0222	Heavy Duty Rebuild Kit						1

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