- ▶ [ RCDHH ] Features
- Bolt together design allows rotation in both directions
- Quick Change Bit system allows quick access to Bit without removing the Hammer from the drill string
- Oversized center return allows effective large debris removal for faster penetration
- Designed to be easy to take apart and reassemble—using hand tools
- Bit Shroud keeps cuttings out of the gap between the Bit and Hammer.
- Drill Straighter holes—the Bit Shroud design minimizes Bit slip when drilling non-uniform hardness rock
- Key drive eliminates Bit weight and length offering better Piston/Bit weight ratio
- Check valves at the bottom of hammer reduce the possibility of debris from entering the hammer

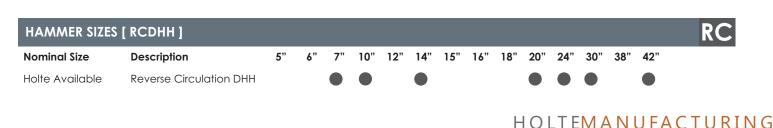


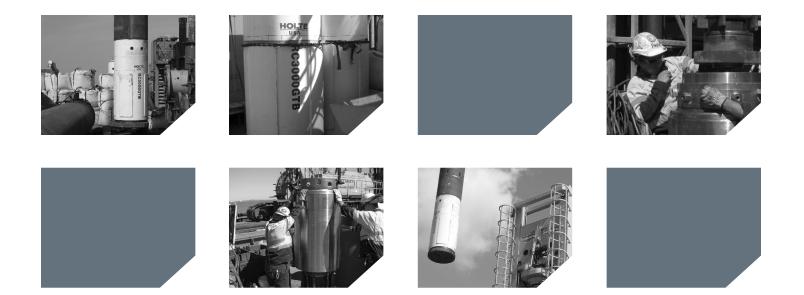
## **REVERSE CIRCULATION DOWN HOLE HAMMERS [ RCDHH ]**

Reverse Circulation Hammer Technology comes from experience. Designing and manufacturing with our customers to meet specific job needs, we have been able to incorporate innovative solutions and develop some of the most efficient, durable tooling available. Our large diameter hammers continue to set the benchmark for the industry.

Holte's Reverse Circulation Grout Through Hammers have proven successful in drilling down the hole, then grouting through the bit face on the way out by simply switching a valve

We can manufacture and heat treat, in-house, any hammer up to 43" (1092mm) to ensure balance between strength and durability of materials.





Standard Reverse Circulation Down Hole Hammers [RCDHH]					
		RC10	RC14	RC20	RC24
	1				
Standard Diameter	in (mm)	9 (229)	14 (356)	20 (508)	24 (610)
Length w/o Bit <sup>**</sup>	in (mm)	41.6 (1057)	56.6 (1438)	60.3 (1532)	56.0 (1422)
Weight w/o Bit	lb (kg)	605 (274)	2235 (1014)	3685 (1672)	4690 (2127)
Cylinder Bore	in (mm)	7 (178)	10 (254)	14 (356)	16.8 (427)
Stroke	in (mm)	4.0 (103)	4.4 (112)	4.7 (119)	4.8 (122)
Center Bore	in (mm)	3.4 (86)	4 (102)	6.2 (156)	6.2 (156)
Piston Weight	lb (kg)	88 (39.9)	335 (152)	735 (333)	1207 (547)
Working Pressure	psi (bar)	100-300 (7-21)	100-300 (7-21)	100-300 (7-21)	100-300 (7-21)
Maximum Working Pressure	psi (bar)	350 (24.1)	350 (24.1)	350 (24.1)	350 (24.1)
Min-Max CFM Required <sup>†</sup>	cfm	480-1600	800-1600	1275-2600	1275-4250
Standard Top Sub $^{\dagger\dagger}$		5.4 RC Hex	9.4 RC Hex	11.2 RC Hex	9.4 RC Hex
Min/Max Bit	in (mm)	10-14 (254-356)	14-18 (356-457)	18-25 (457-635)	24-36 (610-914)

Specifications subject to change without notice. Specifications for sizes not shown available with order.

\* Minimum outer barrel size available. Larger sizes can be accommodated to meet most specifications.

\*\*Length from tool joint shoulder to hammer bottom.

<sup>†</sup>@200 psi. Min for 6000 ft/min velocity in largest I.D. drill pipe combo, Max for 20,000 ft/min velocity in smallest I.D.

<sup>tt</sup>Additional top sub connections available.

Call or email Holte for pricing or custom sizes at +1 541.935.5054 or sales@drilling.com.

A driller in the Reno Retrack Project was drilling one of many 400' deep holes through gravel and boulders. Partway through one hole he stopped advancing—but having HOLTE's Hex Drive joints throughout his RC system allowed him to simply change the direction of rotation and quickly complete his drilling to the specified depth.