

# CR HAMMERS

HAMMERS FOR ALL DRILLING APPLICATIONS



## Durable, Reliable and Productive

Center Rock's CR line of down-the-hole drills are reliable drilling workhorses that stand up to the most demanding conditions you can find. A valveless air cycle provides consistent drilling performance and reliability foot after foot and year after year. Some models are available with integrated jetted backheads as well as bit retainer systems for deep-hole drilling applications.



**Our technology optimizes your impact.**

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**Drill Faster  
Run Harder  
Work Smarter**

GENERAL SPECIFICATIONS	CR50 - STD		CR55 - STD		CR60W - STD		CR65 - STD		CR80-STD		CR88 - STD		CR100 - STD		CR120 - STD	
	IMPERIAL	METRIC	IMPERIAL	METRIC	IMPERIAL	METRIC	IMPERIAL	METRIC	IMPERIAL	METRIC	IMPERIAL	METRIC	IMPERIAL	METRIC	IMPERIAL	METRIC
Connection	3-1/2 API Reg Pin	QL50	3-1/2 API Reg Pin	QL50	3-1/2 API Reg Pin	QQL60	3-1/2 API Reg Pin	QL60	4-1/2 API Reg Pin	QL80	4-1/2 API Reg Pin	CR88	6-5/8 API Reg Pin	N100	6-5/8 API Reg Pin	QL120
Bit Shank	Yes		Yes		Yes		Yes		Yes		Yes		No		No	
Reversible Casing	4.75	120.7	5.00	127.0	5.44	138.2	5.88	149.4	7.13	181.1	7.75	196.9	9.00	228.6	11.20	284.5
Outside Diameter	42.40	1077.7	40.10	1017.3	42.70	1083.8	41.80	1060.7	57.20	1452.6	58.90	1496.1	59.90	1520.2	72.90	1850.6
Length w/o Bit Shoulder to Shoulder	46.60	1184.4	44.60	1132.6	47.80	1214.1	46.00	1169.40	63.70	1618.0	66.80	1697.7	69.00	1753.4	83.60	2124.5
Length w/Bit Extended	45.40	1153.9	43.30	1100.3	46.40	1179.1	44.90	1141.50	61.90	1571.5	64.90	1649.2	67.10	1704.3	81.40	2066.5
Length w/Bit Retracted	145	65.9	153	69.5	186	84.5	219	99.5	443	201.4	518	336.4	740	336.4	1358	617.3
Weight w/o Bit	2 x 3-1/2 AF		1-3/4 x 3-1/2 AF		2-1/2 x 4 AF		2-1/4 x 3-1/2 AF		2-1/2 x 5-7/8 AF		2 x 6-7/16 AF		2-1/2 x 7-1/2 AF		2-1/2 x 9-1/4 AF	
Backhead Across Flats (in.)	5.25	133.4	5.75	146.1	6.00	152.4	6.50	165.1	7.88	200.2	8.75	222.3	9.63	244.6	12.25	311.2
Minimum Bit Size	6.00	152.4	6.00	152.4	6.75	171.5	6.75	171.5	10.00	254.0	11.00	279.4	12.25	311.2	22.00	558.8
Maximum Bit Size	3.890	98.81	4.125	104.78	4.500	114.30	4.750	120.65	5.875	149.23	6.410	162.81	7.540	191.52	9.250	234.95
Bore	31.90	14.5	31.50	14.3	40.00	18.2	45.00	20.5	107.20	48.7	117.00	53.2	178.00	80.9	304.00	138.2
Piston Weight	4.00	101.6	4.00	101.6	4.00	101.6	4.00	101.6	4.00	101.6	4.00	101.6	4.00	101.6	4.00	101.6
Stroke	350.00	24.1	350.0	24.1	350.00	24.1	350.00	24.1	350.00	24.1	350.00	24.1	350.00	24.1	350.00	24.1
Maximum Pressure Differential (psig & bar)	0.50	12.70	0.50	12.70	0.38	9.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum Choke Diameter	5000	6700	5000	6770	6000	8124	6000	8174	8000	10832	9000	12186	10000	13540	12000	16248
Make-up Torque (ft-lb & N-m)	CR50		CR55		CR60W		CR65 & LP		CR80 (8")		CR88 (8")		NUMA 100 (10")		CR120	
AIR CONSUMPTION	CR50		CR55		CR60W		CR65 & LP		CR80 (8")		CR88 (8")		NUMA 100 (10")		CR120	
100 psi/6.9 bar (scfm & m <sup>3</sup> /min)	202	5.7	155	4.4	360	10.2	235	6.6	400	11.3	548	15.5	581	16.4	866	24.5
100 psi (bpm)	1116	1116	1116	1116	1122	1122	1350	1350	968	968	968	968	950	950	585	585
150 psi/10.3 bar (scfm & m <sup>3</sup> /min)	310	8.8	251	7.3	422	11.9	383	10.8	590	16.7	821	23.2	1000	28.2	1292	36.5
150 psi (bpm)	1266	1266	1266	1266	1301	1301	1456	1456	1050	1050	1050	1050	1050	1050	695	695
200 psi/13.8 bar (scfm & m <sup>3</sup> /min)	422	11.9	374	10.6	511	14.4	543	15.3	780	22.0	1093	30.9	1400	39.5	1715	48.5
200 (bpm)	1401	1401	1401	1401	1453	1453	1561	1561	1132	1132	1132	1132	1150	1150	805	805
250 psi/17.2 bar (scfm & m <sup>3</sup> /min)	538	15.2	508	14.3	627	17.7	713	20.1	970	27.4	1366	38.6	1781	50.3	2135	60.3
250 (bpm)	1521	1521	1521	1521	1576	1576	1667	1667	1215	1215	1215	1215	1250	1250	915	915
300 psi/20.7 bar (scfm & m <sup>3</sup> /min)	658	18.6	657	18.6	771	21.8	894	25.3	1160	32.8	1639	46.3	2143	60.5	2551	72.1
300 (bpm)	1626	1626	1626	1626	1671	1671	1773	1773	1297	1297	1297	1297	1350	1350	1025	1025
350 psi/24.1 bar (scfm & m <sup>3</sup> /min)	783	22.1	822	23.2	941	26.6	1086	30.7	1350	38.1	1912	54.0	2486	70.2	2964	83.7
350 (bpm)	1716	1716	1716	1716	1738	1738	1878	1878	1379	1379	1379	1379	1450	1450	1135	1135