

RECOMMENDED DRILLING SPEEDS FOR DIAMOND CORE BITS

DIAMETER	WET		DRY
	MINIMUM RPM	MAXIMUM RPM	MAXIMUM RPM
3/8"	2000	7650	
1/2"	1950	5450	
5/8"	1880	4770	
3/4"	1850	3800	
7/8"	1800	3470	
1"	1750	3050	2200
1 1/8"	1590	2540	1900
1 1/4"	1490	2380	1800
1 1/2"	1250	2000	1800
1 3/4"	1070	1700	1700
1 7/8"	1000	1600	
2"	920	1470	1600
2 1/2"	750	1220	1500
3"	610	980	800
4"	470	750	700
5"	380	600	680
6"	300	500	600
7"	270	430	
8"	240	380	
10"	190	300	
12"	160	250	
14"	140	220	

If you are running a size in between 4" and 5", subtract the higher size from the smaller size and divide that by 2. That will give you approximately the right rpm. The biggest problem customers seem to have is over rpm, too much down pressure and too much water. This is especially true with dry core bits – too many rpm's and not enough cooling time. The problem with a dry core bit causing it to burn up is that it has a 5/8" thread on it and everyone uses a right angle grinder which they turn 7000 to 10,000 rpm. You don't see any core bits listed above that turn that fast.

If we didn't care about saving your company money, we wouldn't care how fast you ran the core bits. But we do care. Because when you succeed, we succeed.