

POWER CHART

HP required for Drilling Low Carbon Steel
 Peripheral drill speed of 60 feet per minute

Drill sizes and Feed Rates in inches

Drill Size	Feed/ Rev	Number of Spindles											
		1	2	3	4	5	6	7	8	9	10	11	12
1/8	0.002	0.050	0.100	0.150	0.200	0.250	0.300	0.350	0.400	0.450	0.500	0.550	0.600
3/32	0.003	0.082	0.164	0.246	0.328	0.410	0.492	0.574	0.656	0.738	0.820	0.902	0.984
3/16	0.004	0.121	0.242	0.363	0.484	0.605	0.726	0.847	0.968	1.089	1.210	1.331	1.452
7/32	0.005	0.167	0.334	0.501	0.668	0.835	1.002	1.169	1.336	1.503	1.670	1.837	2.004
1/4	0.005	0.190	0.380	0.570	0.760	0.950	1.140	1.330	1.520	1.710	1.900	2.090	2.280
9/32	0.006	0.247	0.494	0.741	0.988	1.235	1.482	1.729	1.976	2.223	2.470	2.717	2.964
5/16	0.006	0.275	0.550	0.825	1.100	1.375	1.650	1.925	2.200	2.475	2.750	3.025	3.300
3/8	0.007	0.374	0.748	1.122	1.496	1.870	2.244	2.618	2.992	3.366	3.740	4.114	4.488
7/16	0.007	0.437	0.874	1.311	1.748	2.185	2.622	3.059	3.496	3.933	4.370	4.807	5.244
1/2	0.008	0.556	1.112	1.668	2.224	2.780	3.336	3.892	4.448	5.004	5.560	6.116	6.672
9/16	0.008	0.627	1.254	1.881	2.508	3.135	3.762	4.389	5.016	5.643	6.270	6.897	7.524
5/8	0.009	0.770	1.540	2.310	3.080	3.850	4.620	5.390	6.160	6.930	7.700	8.470	9.240
11/16	0.009	0.847	1.694	2.541	3.388	4.235	5.082	5.929	6.776	7.623	8.470	9.317	10.164
3/4	0.010	1.013	2.026	3.039	4.052	5.065	6.078	7.091	8.104	9.117	10.130	11.143	12.156
13/16	0.011	1.193	2.386	3.579	4.772	5.965	7.158	8.351	9.544	10.737	11.930	13.123	14.316
7/8	0.011	1.284	2.568	3.852	5.136	6.420	7.704	8.988	10.272	11.556	12.840	14.124	15.408
15/16	0.012	1.484	2.968	4.452	5.936	7.420	8.904	10.388	11.872	13.356	14.840	16.324	17.808
1	0.012	1.583	3.166	4.749	6.332	7.915	9.498	11.081	12.664	14.247	15.830	17.413	18.996

For light alloy multiply the above figures by 0.4 For cast iron multiply the above figures by 0.8 For Stainless Steel multiply the above figures by 2

KW required for Drilling Low Carbon Steel
 Peripheral drill speed of 18 metres per minute

Drill sizes and Feed Rates in mm

Drill Size	Feed/ Rev	Number of Spindles											
		1	2	3	4	5	6	7	8	9	10	11	12
3	0.050	0.036	0.072	0.108	0.144	0.180	0.216	0.252	0.288	0.324	0.360	0.396	0.432
4	0.075	0.061	0.122	0.183	0.244	0.305	0.366	0.427	0.488	0.549	0.610	0.671	0.732
5	0.100	0.095	0.190	0.285	0.380	0.475	0.570	0.665	0.760	0.855	0.950	1.045	1.140
6	0.125	0.134	0.268	0.402	0.536	0.670	0.804	0.938	1.072	1.206	1.340	1.474	1.608
7	0.125	0.157	0.314	0.471	0.628	0.785	0.942	1.099	1.256	1.413	1.570	1.727	1.884
8	0.150	0.207	0.414	0.621	0.828	1.035	1.242	1.449	1.656	1.863	2.070	2.277	2.484
9	0.150	0.230	0.460	0.690	0.920	1.150	1.380	1.610	1.840	2.070	2.300	2.530	2.760
10	0.175	0.293	0.586	0.879	1.172	1.465	1.758	2.051	2.344	2.637	2.930	3.223	3.516
12	0.175	0.350	0.700	1.050	1.400	1.750	2.100	2.450	2.800	3.150	3.500	3.850	4.200
14	0.200	0.458	0.916	1.374	1.832	2.290	2.748	3.206	3.664	4.122	4.580	5.038	5.496
16	0.200	0.524	1.048	1.572	2.096	2.620	3.144	3.668	4.192	4.716	5.240	5.764	6.288
18	0.225	0.651	1.302	1.953	2.604	3.255	3.906	4.557	5.208	5.859	6.510	7.161	7.812
20	0.250	0.791	1.582	2.373	3.164	3.955	4.746	5.537	6.328	7.119	7.910	8.701	9.492
22	0.275	0.949	1.898	2.847	3.796	4.745	5.694	6.643	7.592	8.541	9.490	10.439	11.388
24	0.300	1.114	2.228	3.342	4.456	5.570	6.684	7.798	8.912	10.026	11.140	12.254	13.368

For light alloy multiply the above figures by 0.4 For cast iron multiply the above figures by 0.8 For Stainless Steel multiply the above figures by 2
 To convert to Horse Power multiply the above figures by 1.34