

TWIST DRILL SPEED CONVERSION CHARTS

Letter Sizes

No. Size	Revolutions per Minute						
	20 Feet	40 Feet	60 Feet	80 Feet	100 Feet	120 Feet	140 Feet
A	326	654	982	1309	1636	1959	2285
B	321	642	963	1284	1605	1926	2247
C	316	631	947	1262	1578	1894	2210
D	311	622	934	1245	1556	1863	2174
E	306	611	917	1222	1528	1834	2139
F	297	594	892	1189	1486	1784	2081
G	293	585	878	1170	1463	1756	2049
H	287	574	862	1149	1436	1723	2010
I	281	562	842	1123	1404	1685	1966
J	276	552	827	1103	1279	1655	1930
K	272	554	815	1087	1359	1631	1903
L	263	527	790	1054	1317	1581	1844
M	259	518	777	1036	1295	1554	1813
N	253	506	759	1012	1265	1518	1771
O	242	484	725	967	1209	1450	1692
P	237	473	710	946	1183	1419	1657
Q	230	460	690	920	1150	1384	1611
R	225	451	676	902	1127	1355	1577
S	220	439	659	878	1098	1317	1537
T	213	426	640	853	1066	1280	1494
U	208	415	623	830	1038	1246	1453
V	203	405	608	810	1013	1219	1418
W	198	396	594	792	989	1188	1385
X	192	385	576	769	962	1155	1347
Y	189	378	567	756	945	1135	1324
Z	185	370	555	740	925	1110	1295

TWIST DRILL FEEDS CHART

Recommended Feeds for Various Diameter Drills	
Diameter of Drills	Feed Inches per Revolution
Under 1/8	.001 to .003
1/8 to 1/4	.002 to .006
1/4 to 1/2	.004 to .010
1/2 to 1	.007 to .015
1 inch and over	.015 to .025

Note: It is best to start with a moderate speed and feed, increasing either one, or both, after observing the action and condition of the drill.

Formulas for Drilling Applications

$$\text{RPM} = (3.8197 / \text{Drill Diameter}) \times \text{S.F.M.}$$

$$\text{SFM} = 0.2618 \times \text{Drill Diameter} \times \text{R.P.M.}$$

$$\text{IPM} = \text{IPR (feed)} \times \text{RPM (speed)}$$

$$\text{Machine Time (seconds)} = (60 \times \text{Feed - Stroke}) / \text{IPM}$$

RPM = Revolutions per Minute

SFM = Surface Feet per Minute

IPM = Inches per Minute

IPR = Inches per Revolution

Feed Stroke = Drill Depth + 1/3 Drill Diameter + Approach and Over Travel Distance