

Suggested Cutting Speeds for Drills

A feed per revolution of .004 to .007 for drills $\frac{1}{4}$ inch and smaller, and from .007 to .015 for larger drills is about all that should be required.

This feed is based on a peripheral speed of a drill equal to:

30 feet per minute for steel; 35 feet per minute for

iron; 60 feet per minute for brass.

It may also be found advisable to vary the speed somewhat as the material to be drilled is more or less refractory.

We believe that these speeds should not be exceeded under ordinary circumstances.

Drill Diam., Inches	FEET PER MINUTE										
	15	20	25	30	35	40	45	50	60	70	80
	REVOLUTIONS PER MINUTE										
$\frac{1}{16}$	917.	1223.	1528.	1834.	2140.	2445.	2751.	3057.	3668.	4280.	4891.
$\frac{1}{8}$	459.	611.	764.	917.	1070.	1222.	1375.	1528.	1834.	2139.	2445.
$\frac{3}{16}$	306.	408.	509.	611.	713.	815.	917.	1019.	1222.	1426.	1630.
$\frac{1}{4}$	229.	306.	382.	458.	535.	611.	688.	764.	917.	1070.	1222.
$\frac{5}{16}$	183.	245.	306.	367.	428.	489.	550.	611.	733.	856.	978.
$\frac{3}{8}$	153.	204.	255.	306.	357.	408.	458.	509.	611.	713.	815.
$\frac{7}{16}$	131.	175.	218.	262.	306.	349.	393.	437.	524.	611.	699.
$\frac{1}{2}$	115.	153.	191.	229.	268.	306.	344.	382.	459.	535.	611.
$\frac{5}{8}$	91.8	123.	153.	184.	214.	245.	276.	306.	367.	428.	489.
$\frac{3}{4}$	76.3	102.	127.	153.	178.	203.	229.	254.	306.	357.	408.
$\frac{7}{8}$	65.5	87.3	109.	131.	153.	175.	196.	219.	262.	306.	349.
1	57.3	76.4	95.5	115.	134.	153.	172.	191.	229.	267.	306.
$1\frac{1}{8}$	51.0	68.0	85.0	102.	119.	136.	153.	170.	204.	238.	272.
$1\frac{1}{4}$	45.8	61.2	76.3	91.8	107.	123.	137.	153.	183.	214.	245.
$1\frac{3}{8}$	41.7	55.6	69.5	83.3	97.2	111.	125.	139.	167.	195.	222.
$1\frac{1}{2}$	38.2	50.8	63.7	76.3	89.2	102.	115.	127.	153.	178.	204.
$1\frac{5}{8}$	35.0	47.0	58.8	70.5	82.2	93.9	106.	117.	141.	165.	188.
$1\frac{3}{4}$	32.7	43.6	54.5	65.5	76.4	87.3	98.2	109.	131.	153.	175.
$1\frac{7}{8}$	30.6	40.7	50.9	61.1	71.3	81.5	91.9	102.	122.	143.	163.
2	28.7	38.2	47.8	57.3	66.9	76.4	86.0	95.5	115.	134.	153.
$2\frac{1}{4}$	25.4	34.0	42.4	51.0	59.4	68.0	76.2	85.0	102.	119.	136.
$2\frac{1}{2}$	22.9	30.6	38.2	45.8	53.5	61.2	68.8	76.3	91.7	107.	122.
$2\frac{3}{4}$	20.8	27.8	34.7	41.7	48.6	55.6	62.5	69.5	83.4	97.2	111.
3	19.1	25.5	31.8	38.2	44.6	51.0	57.3	63.7	76.4	89.1	102.