



COREMARK
METALS

CONVERSION CHARTS

DRILL BIT CONVERSIONS

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FRACTIONAL / NUMBER / LETTER DRILL & TAP SIZES

METRIC TAP DRILL SIZES

DRILL SIZE	DECIMAL (IN)	TAP SIZE
80	0.0135	
79	0.0145	
1/64	0.0156	
78	0.0160	
77	0.0180	
76	0.0200	
75	0.0210	
74	0.0225	
73	0.0240	
72	0.0250	
71	0.0260	
70	0.0280	
69	0.0292	
68	0.0310	
1/32	0.0312	
67	0.0320	
66	0.0330	
65	0.0350	
64	0.0360	
63	0.0370	
62	0.0380	
61	0.0390	
60	0.0400	
59	0.0410	
58	0.0420	
57	0.0430	
56	0.0465	
3/64	0.0469	0-80
55	0.0520	
54	0.0550	
53	0.0595	1-64, 72
1/16	0.0625	
52	0.0635	
51	0.0670	
50	0.0700	2-56, 64
49	0.0730	
48	0.0760	
5/64	0.0781	
47	0.0785	3-48
46	0.0810	
45	0.0820	3-56
44	0.0860	
43	0.0890	4-40
42	0.0935	4-48
3/32	0.0938	
41	0.0960	
40	0.0980	
39	0.0995	
38	0.1015	5-40
37	0.1040	5-44
36	0.1065	6-32
7/64	0.1094	
35	0.1100	
34	0.1110	
33	0.1130	6-40
32	0.1160	
31	0.1200	
1/8	0.1250	
30	0.1285	
29	0.1360	8-32, 36

DRILL SIZE	DECIMAL (IN)	TAP SIZE
28	0.1405	
9/64	0.1406	
27	0.1440	
26	0.1470	
25	0.1495	10-24
24	0.1520	
23	0.1540	
5/32	0.1562	
22	0.1570	
21	0.1590	10-32
20	0.1610	
19	0.1660	
18	0.1695	
11/64	0.1719	
17	0.1730	
16	0.1770	12-24
15	0.1800	
14	0.1820	12-28
13	0.1850	
3/16	0.1875	
12	0.1890	
11	0.1910	
10	0.1935	
9	0.1960	
8	0.1990	
7	0.2010	1/4-20
13/64	0.2031	
6	0.2040	
5	0.2055	
4	0.2090	
3	0.2130	1/4-28
7/32	0.2188	
2	0.2210	
1	0.2280	
A	0.2340	
15/64	0.2344	
B	0.2380	
C	0.2420	
D	0.2460	
1/4	E 0.2500	
F	0.2570	5/16-18
G	0.2610	
17/64	0.2656	
H	0.2660	
I	0.2720	5/16-24
J	0.2770	
K	0.2810	
9/32	0.2812	
L	0.2900	
M	0.2950	
19/64	0.2969	
N	0.3020	
5/16	0.3125	3/8-16
O	0.3160	
P	0.3230	
21/64	0.3281	
Q	0.3320	3/8-24
R	0.3390	
11/32	0.3438	
S	0.3480	

DRILL SIZE	DECIMAL (IN)	TAP SIZE
T	0.3580	
23/64	0.3594	
U	0.3680	7/16-14
3/8	0.3750	
V	0.3770	
W	0.3860	
25/64	0.3906	7/16-20
X	0.3970	
Y	0.4040	
13/32	0.4062	
Z	0.4130	
27/64	0.4219	1/2-13
7/16	0.4375	
29/64	0.4531	1/2-20
15/32	0.4688	
31/64	0.4844	9/16-12
1/2	0.5000	
33/64	0.5156	9/16-18
17/32	0.5312	5/8-11
35/64	0.5469	
9/16	0.5625	
37/64	0.5781	5/8-18
19/32	0.5938	
39/64	0.6094	
5/8	0.6250	
41/64	0.6406	
21/32	0.6562	3/4-10
43/64	0.6719	
11/16	0.6875	3/4-16
45/64	0.7031	
23/32	0.7188	
47/64	0.7344	
3/4	0.7500	
49/64	0.7656	7/8-9
25/32	0.7812	
51/64	0.7969	
13/16	0.8125	7/8-14
53/64	0.8281	
27/32	0.8438	
55/64	0.8594	
7/8	0.8750	1-8
57/64	0.8906	
29/32	0.9062	
59/64	0.9219	1-12
15/16	0.9375	1-14
61/64	0.9531	
31/32	0.9688	
63/64	0.9844	1-1/8-7
1	1.0000	
1-3/64	1.0469	1-1/8-12
1-7/64	1.1094	1-1/4-7
1-1/8	1.1250	
1-11/64	1.1719	1-1/4-12
1-7/32	1.2188	1-3/8-6
1-1/4	1.2500	
1-19/64	1.2969	1-3/8-12
1-11/32	1.3438	1-1/2-6
1-3/8	1.3750	
1-27/64	1.4219	1-1/2-12
1-1/2	1.5000	

METRIC TAP	TAP DRILL (MM)	DECIMAL (IN)
M1.6 x 0.35	1.25	0.0492
M1.8 x 0.35	1.45	0.0571
M2 x 0.4	1.60	0.0630
M2.2 x 0.45	1.75	0.0689
M2.5 x 0.45	2.05	0.0807
M3 x 0.5	2.50	0.0984
M3.5 x 0.6	2.90	0.1142
M4 x 0.7	3.30	0.1299
M4.5 x 0.75	3.70	0.1457
M5 x 0.8	4.20	0.1654
M6 x 1	5.00	0.1968
M7 x 1	6.00	0.2362
M8 x 1.25	6.70	0.2638
M8 x 1	7.00	0.2756
M10 x 1.5	8.50	0.3346
M10 x 1.25	8.70	0.3425
M12 x 1.75	10.20	0.4016
M12 x 1.25	10.80	0.4252
M14 x 2	12.00	0.4724
M14 x 1.5	12.50	0.4921
M16 x 2	14.00	0.5512
M16 x 1.5	14.50	0.5709
M18 x 2.5	15.50	0.6102
M18 x 1.5	16.50	0.6496
M20 x 2.5	17.50	0.6890
M20 x 1.5	18.50	0.7283
M22 x 2.5	19.50	0.7677
M22 x 1.5	20.50	0.8071
M24 x 3	21.00	0.8268
M24 x 2	22.00	0.8661
M27 x 3	24.00	0.9449
M27 x 2	25.00	0.9843
M30 x 3.5	26.50	1.0433
M30 x 2	28.00	1.1024
M33 x 3.5	29.50	1.1614
M33 x 2	31.00	1.2205
M36 x 4	32.00	1.2598
M36 x 3	33.00	1.2992
M39 x 4	35.00	1.3780
M39 x 3	36.00	1.4173

PIPE THREAD SIZES

THREAD	DRILL
1/8- 27	11/32
1/4- 18	7/16
3/8- 18	37/64
1/2- 14	23/32
3/4- 14	59/64
1- 11-1/2	1-5/32
1-1/4- 11-1/2	1-1/2
1-1/2- 11-1/2	1-3/4
2- 11-1/2	2-7/32
2-1/2- 8	2-21/32
3- 8	3-1/4
3-1/2- 8	3-3/4
4- 8	4-1/4



FRACTION CONVERSIONS

FRACTION	DECIMAL (IN.)	MILLIMETERS	FRACTION	DECIMAL (IN.)	MILLIMETERS
1/64	0.0156	0.3969	1/2	0.5000	12.7000
1/32	0.0312	0.7938	33/64	0.5156	13.0969
3/64	0.0469	1.1906	17/32	0.5313	13.4938
1/16	0.0625	1.5875	35/64	0.5469	13.8906
5/64	0.0781	1.9844	9/16	0.5625	14.2875
3/32	0.0938	2.3813	37/64	0.5781	14.6844
7/64	0.1094	2.7781	19/32	0.5938	15.0813
1/8	0.1250	3.1750	39/64	0.6094	15.4781
9/64	0.1408	3.5719	5/8	0.6250	15.8750
5/32	0.1562	3.9688	41/64	0.6406	16.2719
11/64	0.1719	4.3656	21/32	0.6563	16.6688
3/16	0.1875	4.7625	43/64	0.6719	17.0656
13/64	0.2031	5.1594	11/16	0.6875	17.4625
7/32	0.2188	5.5563	45/64	0.7031	17.8594
15/64	0.2344	5.9531	23/32	0.7188	18.2563
1/4	0.2500	6.3500	47/64	0.7344	18.6531
17/64	0.2656	6.7469	3/4	0.7500	19.0500
9/32	0.2812	7.1438	49/64	0.7656	19.4469
19/64	0.2980	7.5406	25/32	0.7813	19.8438
5/16	0.3125	7.9375	51/64	0.7969	20.2406
21/64	0.3261	8.3344	13/16	0.8125	20.6375
11/32	0.3438	8.7313	53/64	0.8281	21.0344
23/64	0.3594	9.1281	27/32	0.8478	21.4313
3/8	0.3750	9.5250	55/64	0.8594	21.8281
25/64	0.3906	9.9219	7/8	0.8750	22.2250
13/32	0.4062	10.3188	57/64	0.8906	22.6219
27/64	0.4212	10.7156	29/32	0.9063	23.0188
7/16	0.4375	11.1125	59/64	0.9219	23.4156
29/64	0.4531	11.5094	15/16	0.9375	23.8125
15/32	0.4688	11.9063	61/64	0.9531	24.2094
31/64	0.4844	12.3031	63/64	0.9844	25.0031



HARDNESS CONVERSIONS

BRINELL HARDNESS (CARBIDE BALL)	ROCKWELL HARDNESS					TENSILE STRENGTH	
	C SCALE	A SCALE	15N SCALE SUPERFICIAL	B SCALE	30T SCALE SUPERFICIAL	KSI	MPA
-	66	84.5	92.5	-	-	-	-
722	64	83.4	91.8	-	-	-	-
688	62	82.3	91.1	-	-	-	-
654	60	81.2	90.2	-	-	-	-
615	58	80.1	89.3	-	-	-	-
577	56	79	88.3	-	-	313	2160
543	54	78	87.4	-	-	292	2010
512	52	76.8	86.4	-	-	273	1880
481	50	75.9	85.5	-	-	255	1760
455	48	74.7	84.5	-	-	238	1640
443	47	74.1	83.9	-	-	229	1580
432	46	73.6	83.5	-	-	221	1520
421	45	73.1	83	-	-	215	1480
409	44	72.5	82.5	-	-	208	1430
400	43	72	82	-	-	201	1390
390	42	71.5	81.5	-	-	194	1340
381	41	70.9	80.9	-	-	188	1300
371	40	70.4	80.4	-	-	182	1250
362	39	69.9	79.9	-	-	177	1220
353	38	69.4	79.4	-	-	171	1180
344	37	68.9	78.8	-	-	166	1140
336	36	68.4	78.3	-	-	161	1110
327	35	67.9	77.7	-	-	156	1080
319	34	67.4	77.2	-	-	153	1050
311	33	66.8	76.6	-	-	149	1030
301	32	66.3	76.1	-	-	146	1010
294	31	65.8	75.6	-	-	141	970
286	30	65.3	75	-	-	138	950
279	29	64.6	74.5	-	-	135	930
271	28	64.3	73.9	-	-	131	900
264	27	63.8	73.3	-	-	128	880
258	26	63.3	72.8	-	-	125	860
253	25	62.8	72.2	-	-	123	850
247	24	62.4	71.6	-	-	119	820
243	23	62	71	-	-	117	810
240	-	-	-	100	83.1	116	800
234	-	-	-	99	82.5	114	785
222	-	-	-	97	81.1	104	715
210	-	-	-	95	79.8	100	690
200	-	-	-	93	78.4	94	650
195	-	-	-	92	77.8	92	635
185	-	-	-	90	76.4	89	615
176	-	-	-	88	75.1	86	590
169	-	-	-	86	73.8	83	570
162	-	-	-	84	72.4	81	560
156	-	-	-	82	71.1	77	530
150	-	-	-	80	69.7	72	495
144	-	-	-	78	68.4	69	475
139	-	-	-	76	67.1	67	460
135	-	-	-	74	65.7	65	450
130	-	-	-	72	64.4	63	435
125	-	-	-	70	63.1	61	420
121	-	-	-	68	61.7	59	405
117	-	-	-	66	60.4	57	395
114	-	-	-	64	59.0	-	-



COREMARK™

METALS

GAUGE CONVERSIONS

NON-FERROUS			STEEL SHEETS		GAUGE NO.	STRIP & TUBING		BASIC STEEL WIRE	
WEIGHT LBS PER SQ FT 1100 6061 ALUMINUM	GAUGE DECIMAL (IN)	WEIGHT LBS PER SQ FT ALLOY 260 BRASS	GAUGE DECIMAL (IN)	WEIGHT LBS PER SQ FT SHEET STEEL		GAUGE DECIMAL (IN)	WEIGHT LBS PER SQ FT STEEL STRIP	GAUGE DECIMAL (IN)	WEIGHT LBS PER 100 FT STEEL WIRE
	0.5800				000000			0.4615	56.870
	0.5165				00000	0.500	20.400	0.4305	49.480
	0.4600				0000	0.454	18.520	0.3938	41.410
	0.4096				000	0.425	17.340	0.3625	35.090
	0.3648				00	0.380	15.500	0.3310	29.250
	0.3249				0	0.340	13.870	0.3065	25.080
	0.2893				1	0.300	12.240	0.2830	21.380
	0.2576				2	0.284	11.590	0.2625	18.400
	0.2294		0.2391	10.000	3	0.259	10.570	0.2437	15.860
	0.2043		0.2242	9.375	4	0.238	9.710	0.2253	13.550
	0.1819		0.2092	8.750	5	0.220	8.975	0.2070	11.440
2.286	0.1620	7.185	0.1943	8.125	6	0.203	8.281	0.1920	9.840
2.036	0.1443	6.400	0.1793	7.500	7	0.180	7.343	0.1770	8.360
1.813	0.1285	5.699	0.1644	6.875	8	0.165	6.731	0.1620	7.010
1.614	0.1144	5.074	0.1495	6.250	9	0.148	6.038	0.1483	5.870
1.438	0.1019	4.520	0.1345	5.625	10	0.134	5.467	0.1350	4.870
1.280	0.0907	4.023	0.1196	5.000	11	0.120	4.895	0.1205	3.880
1.140	0.0808	3.584	0.1046	4.375	12	0.109	4.447	0.1055	2.970
1.016	0.0720	3.193	0.0897	3.750	13	0.095	3.876	0.0915	2.240
0.905	0.0641	2.843	0.0747	3.125	14	0.083	3.386	0.0800	1.710
0.806	0.0571	2.535	0.0673	2.813	15	0.072	2.937	0.0720	1.380
0.717	0.0508	2.253	0.0598	2.500	16	0.065	2.652	0.0625	1.040
0.639	0.0453	2.009	0.0538	2.250	17	0.058	2.366	0.0540	0.780
0.569	0.0403	1.787	0.0478	2.000	18	0.049	1.999	0.0475	0.600
0.507	0.0359	1.592	0.0418	1.750	19	0.042	1.713	0.0410	0.450
0.452	0.0320	1.419	0.0359	1.500	20	0.035	1.428	0.0348	0.320
0.402	0.0285	1.264	0.0329	1.375	21	0.032	1.305	0.0317	0.270
0.357	0.0253	1.122	0.0299	1.250	22	0.028	1.142	0.0286	0.220
0.319	0.0226	1.002	0.0269	1.125	23	0.025	1.020	0.0258	0.180
0.284	0.0201	0.892	0.0239	1.000	24	0.022	0.898	0.0230	0.140
0.253	0.0179	0.794	0.0209	0.875	25	0.020	0.816	0.0204	0.110
0.224	0.0159	0.705	0.0179	0.750	26	0.018	0.734	0.0181	0.090
0.200	0.0142	0.630	0.0164	0.688	27	0.016	0.653	0.0173	0.080
0.178	0.0126	0.559	0.0149	0.625	28	0.014	0.571	0.0162	0.070
0.160	0.0113	0.501	0.0135	0.563	29	0.013	0.530	0.0150	0.060
0.141	0.0100	0.444	0.0120	0.500	30	0.012	0.490	0.0140	0.052
0.126	0.0089	0.395	0.0105	0.438	31	0.010	0.408	0.0132	0.047
0.113	0.0080	0.355	0.0097	0.406	32	0.009	0.367	0.0128	0.044
0.100	0.0071	0.315	0.0090	0.375	33	0.008	0.326	0.0118	0.037
0.089	0.0063	0.279	0.0082	0.344	34	0.007	0.286	0.0104	0.029
	0.0056	0.248	0.0075	0.313	35	0.005	0.204	0.0095	0.024
	0.0050	0.222	0.0067	0.281	36	0.004	0.163	0.0090	0.022
	0.0045	0.200	0.0064	0.266	37			0.0085	0.019
	0.0040	0.177	0.0060	0.250	38			0.0080	0.017