

## APPENDIX B

### THE METRIC SYSTEM AND METRIC UNIT CONVERSION CHARTS

The Metric System simply and logically coordinates the measurements of length, area, volume, and mass into one decimalized system. United States currency, with its unexcelled convenience, was the first large scale national use of a decimal system. The ratio between the units of the series - dollars, dimes, cents, and mills - is ten. Additions and other numerical operations are simple. Calculations with metric units require on conversion from unit to unit, as for example between inches and feet or ounces and pounds.

In the Metric System there is one series of units for length, one for area, one for volume or capacity, and one for mass (tables B-1, B-3, B-5, and B-6).

**LENGTH** - The common metric units of length are the millimeter (mm) for small dimensions (tables B-2 and B-4), the centimeter (cm) for daily practical use, the meter (m) for expressing dimensions of larger objects and short distances, and the kilometer (km) for longer distances. The centimeter is about four tenths of an inch. The meter is about forty inches and the kilometer about six tenths of a mile (figure B-1). When drawing to metric scale, engineering and product dimensions are in millimeters. Architectural drawings can be in millimeters or centimeters. On land surveys the unit is the meter. On maps the kilometer is the unit of measurement.

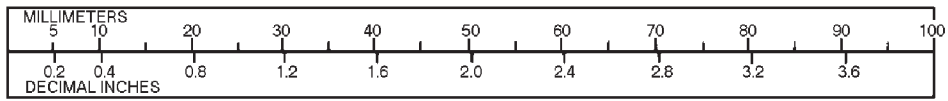
**AREA** - Small areas are usually measured in square centimeters ( $\text{cm}^2$ ). In building and construction the square meter ( $\text{m}^2$ ) and is about 20 percent larger than a square yard. The hectare (ha) is used for land surveys and is about 2.5 acres.

**VOLUME** - For volume the most convenient unit is the cubic decimeter ( $\text{dm}^3$ ), referred to as the liter (l). The liter is slightly larger than the U.S. liquid quart but smaller than the U.S. dry quart and the British Imperial quart. The preferred unit for dispensing drugs and for scientific work is the cubic centimeter or milliliter (ml) as it is also called. For measuring amounts of concrete and excavations the cubic meter is used.

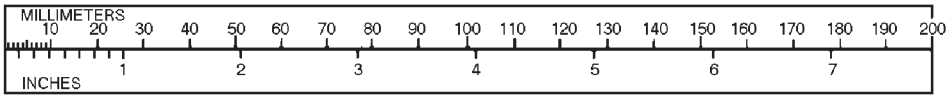
**MASS** - In pharmaceutical and scientific work the gram (g) is the most convenient unit. There are slightly less than 30 grams in one avoirdupois ounce. For most other uses the kilogram (kg) is convenient and is approximately 2.2 pounds. The metric ton (t), 1000 kg, is used for farm commodities, minerals, and large shipments. It is convenient that a liter of pure water at standard temperature and pressure has a mass of one kilogram (discrepancy less than one part in 10,000). This relationship makes it easy to determine the mass of any known volume of water, or of any other liquid if its specific gravity is known.

**TEMPERATURE** - All countries using the Metric System of weights and measures also use the Celsius (C) scale (formerly called centigrade) for ordinary measurement of temperature. On the Celsius scale pure water at standard atmospheric pressure freezes at 0 degrees and boils at 100 degrees. Normal human body temperature is 37 degrees, while a comfortable room temperature is about 22 degrees. The preferred temperature scale for engineering and physics is the kelvin (K) which has the same units as the Celsius and where the freezing point of pure water is 273.15 K.

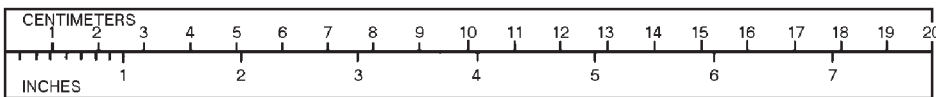
**NAVAIR 13-1-6.5**



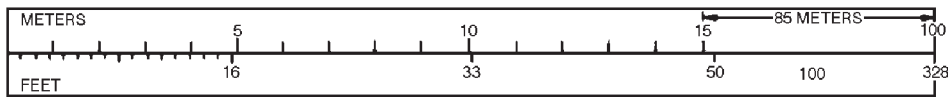
**1 Millimeter = 0.03937 Inch** **Scale - 1 Centimeter = 5 Millimeters**



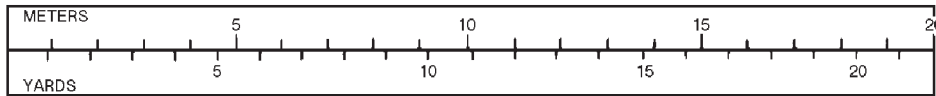
**1 Inch = 25.4 Millimeters** **Scale - 1 Centimeter = 10 Millimeters**



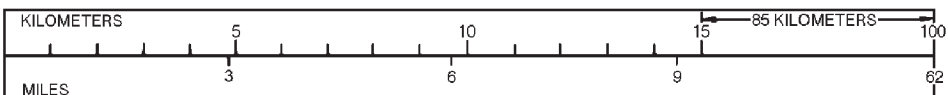
**1 Centimeter = 0.39370 Inch** **Scale - 1 Centimeter = 1 Centimeters**  
**1 Inch = 2.54 Centimeters**



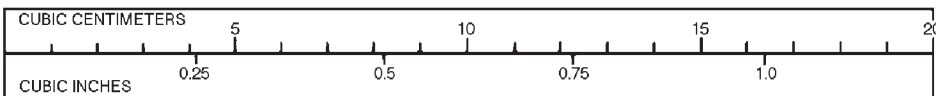
**Scale - 1 Centimeter = 1 Meter** **1 Foot = 0.3048 Meter**  
**1 Meter = 3.28083 Feet (39.37 Inches - Act of Congress 1866)**



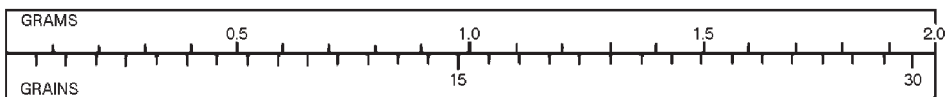
**1 Meter = 1.09361 Yards** **1 Yard = 0.9144 Meter** **Scale - 1 Centimeter = 1 Meter**



**1 Kilometer = 0.62137 Mile** **Scale - 1 Centimeter = 1 Kilometer**  
**Mile = 1.6093 Kilometers**



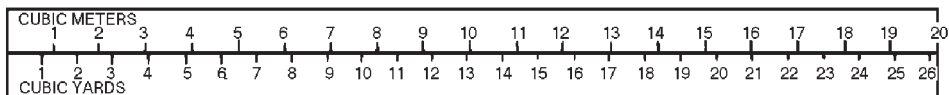
**1 Cubic Centimeter = 0.061 Cubic Inch** **Scale - 1 Centimeter = 1 Cubic Centimeter**



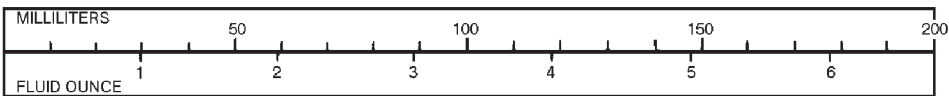
**1 Gram = 15.4324 Grains** **Scale - 1 Centimeter = 0.1 Gram**

b001-1

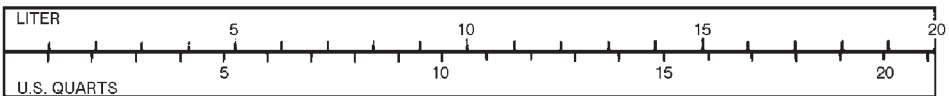
**Figure B-1. Reference Conversion Charts (Sheet 1 of 2)**



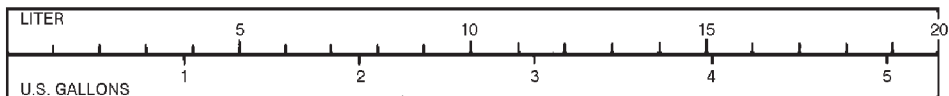
**1 Cubic Meter = 1.30795 Cubic meter**      **Scale - 1 Centimeter = 1 Cubic Meter**  
**1 Cubic Yard = 0.76455 Cubic meter**



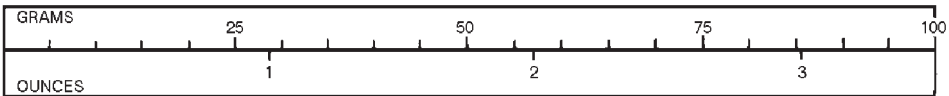
**1 Milliliter = 0.03381 Fluid Ounce**      **Scale - 1 Centimeter = 10 Milliliter**  
**1 Fluid Ounce = 29.57 Milliliters**



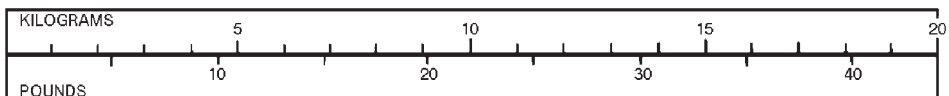
**1 Liter = 1.0567 U.S. Quarts**    **1 U.S. Quart = 0.9463 Liter**    **Scale - 1 Centimeter = 1 Liter**



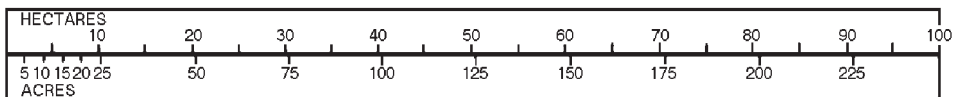
**1 Liter = 0.26418 U.S. Gallon**      **Scale - 1 Centimeter = 1 Liter**  
**1 U.S. Gallon = 3.7853 Liters**



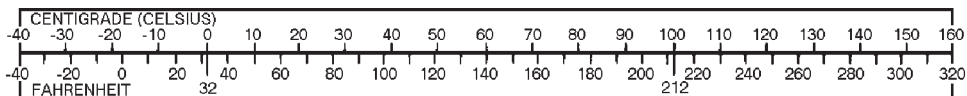
**1 Avoirdupois ounce = 28.3495 Grams**      **Scale - 1 Centimeter = 5 Grams**



**1 Kilogram = 2.2045 Pounds**      **Scale - 1 Centimeter = 1 Kilogram**  
**1 Pound = 0.45359 Kilogram**



**1 Hectare = 2.47105 Acres**      **Scale - 1 Centimeter = 5 Hectares**  
**1 Acres = 0.40489 Hectares**      **40 Acres = 16.19 Hectares**



**Fahrenheit = 9/5 Centigrade plus 32**      **Scale - 1 Centigrade = 10° Centigrade**  
**Centigrade = Fahrenheit minus 32 x 5/9**

b001-2

Figure B-1. Reference Conversion Charts (Sheet 2 of 2)

TABLE B-1. SYMBOLS AND RELATIONSHIPS OF METRIC UNITS

Quantity	Unit (Note 2)	Symbol	Relationship Of Units
Length	millimeter centimeter decimeter meter (Note1) kilometer	mm cm dm m km	1 mm = 0.001 m 1 cm = 10 mm 1 dm = 10 cm 1 m = 100 cm 1 km = 1000 m
Area	square centimeter square decimeter square meter (Note1) are hectare square kilometer	cm <sup>2</sup> dm <sup>2</sup> m <sup>2</sup> a ha km <sup>2</sup>	1 cm <sup>2</sup> = 100 mm <sup>2</sup> 1 dm <sup>2</sup> = 100 cm <sup>2</sup> 1 m <sup>2</sup> = 100 dm <sup>2</sup> 1 a = 100 m <sup>2</sup> 1 ha = 100 a 1 km <sup>2</sup> = 100 ha
Volume	{ cubic centimeter millimeter cubic decimeter liter cubic meter (Note1)	cm <sup>3</sup> ml dm <sup>3</sup> l m <sup>3</sup>	1 cm <sup>3</sup> } = 0.001 l 1 ml } 1 dm <sup>3</sup> } = 1000 ml 1 l } 1 m <sup>3</sup> = 1000 l
Mass*	milligram gram kilogram (Note1) metric ton	mg g kg t	1 mg = 0.001 g 1 g = 1000 mg 1 kg = 1000 g 1 t = 1000 kg

\*Mass is the quantity of matter. Weight is a force Earth's attraction for a given mass. Generally the term mass is meant when we use weight.

Notes: 1. The underlined units in this table are basic or derived units of the International System of Units (SI).

2. The three main units; meter liter and gram can be changed to more convenient sized units for specific purposes by means of several well known prefixes. Milli means 1/1000. Centi means 1/100. Deci means 1/10. Kilo means 1000. One merely learns the main units and the value of the most commonly used prefixes. The symbols for metric units are the same for single and plural amounts and are not followed by a period. Rates are usually shown by use of the slash as in m/s.

**Table B-2. Inches to Millimeters Conversion Chart**

Inch		mm		Inch		mm		Inch		mm		Inch		mm	
.001	0.0254	.051	1.2954	.101	2.5654	.151	3.8354	.201	5.1054	.251	6.3754	.301	7.6454	.351	8.9154
.002	0.0508	.052	1.3208	.102	2.5908	.152	3.8608	.202	5.1308	.252	6.4008	.302	7.6708	.352	8.9408
.003	0.0762	.053	1.3462	.103	2.6162	.153	3.8862	.203	5.1562	.253	6.4262	.303	7.6962	.353	8.9662
.004	0.1016	.054	1.3716	.104	2.6416	.154	3.9116	.204	5.1816	.254	6.4516	.304	7.7216	.354	8.9916
.005	0.1270	.055	1.3970	.105	2.6670	.155	3.9370	.205	5.2070	.255	6.4770	.305	7.7470	.355	9.0170
.006	0.1524	.056	1.4224	.106	2.6924	.156	3.9624	.206	5.2324	.256	6.5024	.306	7.7724	.356	9.0424
.007	0.1778	.057	1.4478	.107	2.7178	.157	3.9878	.207	5.2578	.257	6.5278	.307	7.7978	.357	9.0678
.008	0.2032	.058	1.4732	.108	2.7432	.158	4.0132	.208	5.2832	.258	6.5532	.308	7.8232	.358	9.0932
.009	0.2286	.059	1.4986	.109	2.7686	.159	4.0386	.209	5.3086	.259	6.5786	.309	7.8486	.359	9.1186
.010	0.2540	.060	1.5240	.110	2.7940	.160	4.0640	.210	5.3340	.260	6.6040	.310	7.8740	.360	9.1440
.011	0.2794	.061	1.5494	.111	2.8194	.161	4.0894	.211	5.3594	.261	6.6294	.311	7.8994	.361	9.1694
.012	0.3048	.062	1.5748	.112	2.8448	.162	4.1148	.212	5.3848	.262	6.6548	.312	7.9248	.362	9.1948
.013	0.3302	.063	1.6002	.113	2.8702	.163	4.1402	.213	5.4102	.263	6.6802	.313	7.9502	.363	9.2202
.014	0.3556	.064	1.6256	.114	2.8956	.164	4.1656	.214	5.4356	.264	6.7056	.314	7.9756	.364	9.2456
.015	0.3810	.065	1.6510	.115	2.9210	.165	4.1910	.215	5.4610	.265	6.7310	.315	8.0010	.365	9.2710
.016	0.4064	.066	1.6764	.116	2.9464	.166	4.2164	.216	5.4864	.266	6.7564	.316	8.0264	.366	9.2964
.017	0.4318	.067	1.7018	.117	2.9718	.167	4.2418	.217	5.5118	.267	6.7818	.317	8.0518	.367	9.3218
.018	0.4572	.068	1.7272	.118	2.9972	.168	4.2672	.218	5.5372	.268	6.8072	.318	8.0772	.368	9.3472
.019	0.4826	.069	1.7526	.119	3.0226	.169	4.2926	.219	5.5626	.269	6.8326	.319	8.1026	.369	9.3726
.020	0.5080	.070	1.7780	.120	3.0480	.170	4.3180	.220	5.5880	.270	6.8580	.320	8.1280	.370	9.3980
.021	0.5334	.071	1.8034	.121	3.0734	.171	4.3434	.221	5.6134	.271	6.8834	.321	8.1534	.371	9.4234
.022	0.5588	.072	1.8288	.122	3.0988	.172	4.3688	.222	5.6388	.272	6.9088	.322	8.1788	.372	9.4488
.023	0.5842	.073	1.8542	.123	3.1242	.173	4.3942	.223	5.6642	.273	6.9342	.323	8.2042	.373	9.4742
.024	0.6096	.074	1.8796	.124	3.1496	.174	4.4196	.224	5.6896	.274	6.9596	.324	8.2296	.374	9.4996
.025	0.6350	.075	1.9050	.125	3.1750	.175	4.4450	.225	5.7150	.275	6.9850	.325	8.2550	.375	9.5250
.026	0.6604	.076	1.9304	.126	3.2004	.176	4.4704	.226	5.7404	.276	7.0104	.326	8.2804	.376	9.5504
.027	0.6858	.077	1.9558	.127	3.2258	.177	4.4958	.227	5.7658	.277	7.0358	.327	8.3058	.377	9.5758
.028	0.7112	.078	1.9812	.128	3.2512	.178	4.5212	.228	5.7912	.278	7.0612	.328	8.3312	.378	9.6012
.029	0.7366	.079	2.0066	.129	3.2766	.179	4.5466	.229	5.8166	.279	7.0866	.329	8.3566	.379	9.6266
.030	0.7620	.080	2.0320	.130	3.3020	.180	4.5720	.230	5.8420	.280	7.1120	.330	8.3820	.380	9.6520
.031	0.7874	.081	2.0574	.131	3.3274	.181	4.5974	.231	5.8674	.281	7.1374	.331	8.4074	.381	9.6774
.032	0.8128	.082	2.0828	.132	3.3528	.182	4.6228	.232	5.8928	.282	7.1628	.332	8.4328	.382	9.7028
.033	0.8382	.083	2.1082	.133	3.3782	.183	4.6482	.233	5.9182	.283	7.1882	.333	8.4582	.383	9.7282
.034	0.8636	.084	2.1336	.134	3.4036	.184	4.6736	.234	5.9436	.284	7.2136	.334	8.4836	.384	9.7536
.035	0.8890	.085	2.1590	.135	3.4290	.185	4.6990	.235	5.9690	.285	7.2390	.335	8.5090	.385	9.7790
.036	0.9144	.086	2.1844	.136	3.4544	.186	4.7244	.236	5.9944	.286	7.2644	.336	8.5344	.386	9.8044
.037	0.9398	.087	2.2098	.137	3.4798	.187	4.7498	.237	6.0198	.287	7.2898	.337	8.5598	.387	9.8298
.038	0.9652	.088	2.2352	.138	3.5052	.188	4.7752	.238	6.0452	.288	7.3152	.338	8.5852	.388	9.8552
.039	0.9906	.089	2.2606	.139	3.5306	.189	4.8006	.239	6.0706	.289	7.3406	.339	8.6106	.389	9.8806
.040	1.0160	.090	2.2860	.140	3.5560	.190	4.8260	.240	6.0960	.290	7.3660	.340	8.6360	.390	9.9060
.041	1.0414	.091	2.3114	.141	3.5814	.191	4.8514	.241	6.1214	.291	7.3914	.341	8.6614	.391	9.9314
.042	1.0668	.092	2.3368	.142	3.6068	.192	4.8768	.242	6.1468	.292	7.4168	.342	8.6868	.392	9.9568
.043	1.0922	.093	2.3622	.143	3.6322	.193	4.9022	.243	6.1722	.293	7.4422	.343	8.7122	.393	9.9822
.044	1.1176	.094	2.3876	.144	3.6576	.194	4.9276	.244	6.1976	.294	7.4676	.344	8.7376	.394	10.0076
.045	1.1430	.095	2.4130	.145	3.6830	.195	4.9530	.245	6.2230	.295	7.4930	.345	8.7630	.395	10.0330
.046	1.1684	.096	2.4384	.146	3.7084	.196	4.9784	.246	6.2484	.296	7.5184	.346	8.7884	.396	10.0584
.047	1.1938	.097	2.4638	.147	3.7338	.197	5.0038	.247	6.2738	.297	7.5438	.347	8.8138	.397	10.0838
.048	1.2192	.098	2.4892	.148	3.7592	.198	5.0292	.248	6.2992	.298	7.5692	.348	8.8392	.398	10.1092
.049	1.2446	.099	2.5146	.149	3.7846	.199	5.0546	.249	6.3246	.299	7.5946	.349	8.8646	.399	10.1346
.050	1.2700	.100	2.5400	.150	3.8100	.200	5.0800	.250	6.3500	.300	7.6200	.350	8.8900	.400	10.1600

**Table B-3. International System of Units (SI)**

Quantity	Unit	Symbol
Elemental units		
Length	meter	m
Mass	kilogram	kg
Time	second	s
Electric current	ampere	A
Temperature	degree Kelvin	°K
Luminous intensity	candela	cd
Supplementary units		
Plane angle	radian	rad
Solid angle	steradian	sr
Derived units		
Area	square meter	m <sup>2</sup>
Volume	cubic meter	m <sup>3</sup>
Frequency	hertz	Hz (s <sup>-1</sup> )
Density	kilogram per cubic meter	kg/m <sup>3</sup>
Velocity	meter per second	m/s
Angular velocity	radian per second	rad/s
Acceleration	meter per second squared	m/s <sup>2</sup>
Angular acceleration	radian per second squared	rad/s <sup>2</sup>
Force	newton	N (kg m/s <sup>2</sup> )
Pressure	newton per square meter	N/m <sup>2</sup>
Kinematic viscosity	square meter per second	m <sup>2</sup> /s
Dynamic viscosity	newton-second per square meter	N s/m <sup>2</sup>
Work, energy, quantity of heat	joule	J (N m)
Power	watt	W (J/s)
Electric charge	coulomb	C (A s)
Voltage, potential difference, electro motive force	volt	V (W/A)
Electric field strength	volt per meter	V/m
Electric resistance	ohm	Ω (V/A)
Electric capacitance	farad	F (A s/V)
Magnetic flux	weber	Wb (V s)
Inductance	henry	H (V s/A)
Magnetic flux density	tesla	T (Wb/m <sup>2</sup> )
Magnetic field strength	ampere per meter	A/m
Magnetomotive force	ampere	A
Luminous flux	lumen	lm (cd sr)
Luminance	candela per square meter	cd/m <sup>2</sup>
Illumination	lux	lx (lm/m <sup>2</sup> )

USE OF TABLES

Following are step by step directions for the solution to an example conversion problem. The example is: Convert 12 3/4 inches to centimeters.

1. Convert all fractions to decimals. (Refer to [table B-4.](#))

$$12 \frac{3}{4} = 12.75$$

2. Refer to [table B-5](#) and find the column for the unit which you have. This would be the column labeled "INCHES" in the "Length" table.

3. Locate the numeral 1 in the column labeled "INCHES."

4. Locate the column labeled "CENTIMETERS."

5. Read the number in the CENTIMETERS column that is in direct line with the numeral 1 located in the INCHES column.

Read 2.540

6. Multiply the number of inches of this example by the conversion factor to obtain the number of centimeters.

$$2.540 \text{ times } 12.75 \text{ equals } 32.385$$

7. Round off the answer to not over four significant figures ( four numbers counting from the first non-zero number on the left. Fewer significant figures may be used de-pending on the accuracy of measurement and the toler-ances allowed. For most work in this manual, centime-ters would be expressed as three significant figures.

$$12 \frac{3}{4} \text{ inches} = 32.4 \text{ centimeters}$$

Table B-4. Fraction/Decimal/Millimeter Conversion Chart

Fractions	Dec Equiv	mm Equiv	Fractions	Dec Equiv	mm Equiv
1/64 .....	0.01562	0.397	33/64 .....	0.515625	13.097
1/32 .....	0.03125	0.794	17/32 .....	0.53125	13.494
3/64 .....	0.04688	1.191	35/64 .....	0.546875	13.891
1/16 .....	0.0625	1.588	9/16 .....	0.5625	14.288
5/64 .....	0.078125	1.984	37/64 .....	0.578125	14.684
3/32 .....	0.09375	2.381	19/32 .....	0.59375	15.081
7/64 .....	0.109375	2.778	39/64 .....	0.609375	15.478
1/8 .....	0.125	3.175	5/8 .....	0.625	15.875
9/64 .....	0.140625	3.572	41/64 .....	0.640625	16.272
5/32 .....	0.15625	3.969	21/32 .....	0.65625	16.669
11/64 .....	0.171875	4.366	43/64 .....	0.671875	17.066
3/16 .....	0.1875	4.762	11/16 .....	0.6875	17.462
13/64 .....	0.203125	5.159	45/64 .....	0.703125	17.859
7/32 .....	0.21875	5.556	23/32 .....	0.71875	18.256
15/64 .....	0.234375	5.953	47/64 .....	0.734375	18.653
1/4 .....	0.25	6.350	3/4 .....	0.75	19.050
17/64 .....	0.265625	6.747	49/64 .....	0.765625	19.447
9/32 .....	0.28125	7.144	25/32 .....	0.78125	19.844
19/64 .....	0.296875	7.541	51/64 .....	0.796875	20.241
5/16 .....	0.3125	7.938	13/16 .....	0.8125	20.638
21/64 .....	0.328125	8.334	53/64 .....	0.828125	21.034
11/32 .....	0.34375	8.731	27/32 .....	0.84375	21.431
23/64 .....	0.359375	9.128	55/64 .....	0.859375	21.828
3/8 .....	0.375	9.525	7/8 .....	0.875	22.225
25/64 .....	0.390625	9.922	57/64 .....	0.890625	22.622
13/32 .....	0.40625	10.319	29/32 .....	0.90625	23.019
27/64 .....	0.421875	10.716	59/64 .....	0.921875	23.416
7/16 .....	0.4375	11.112	15/16 .....	0.9375	23.812
29/64 .....	0.453125	11.509	61/64 .....	0.953125	24.209
15/32 .....	0.46875	11.906	31/32 .....	0.96875	24.606
31/64 .....	0.484375	12.303	63/64 .....	0.984375	25.003
1/2 .....	0.5	12.700	1 .....	1.0	25.400

**Table B-5. Metric Unit Conversions**

<u>Length</u>								
Millimeters	Centimeters	Inches	Feet	Yards	Meters			
1.0	0.1000	0.03937	0.003281	0.001094	0.001000			
10.0	1.0	0.3937	0.03281	0.01094	0.01000			
25.40	2.540	1.0	0.08333	0.02778	0.0254			
304.8	30.48	12.0	1.0	0.3333	0.3048			
914.4	91.44	36.0	3.000	1.0	0.9144			
1000.0	100.0	39.37	3.281	1.094	1.0			
<u>Weight</u>								
Grams	Kilograms	Grains	Ounces Avoirdupois	Pounds Avoirdupois				
1000.0	1.0	15,432.0	35.27	2.205				
1.0	0.0010	15,432	0.03527	0.002205				
0.06480	0.00006480	1.0	0.002286	0.0001429				
28.35	0.02835	437.5	1.0	0.0625				
453.6	0.4536	7,000.0	16.0	1.0				
<u>Velocity</u>								
Meters/Sec	Kilometers/Hr	Feet/Sec	Miles/Hr	Knots				
1.0	3.600	3.281	2.237	1.944				
0.2778	1.0	0.9113	0.6214	0.5400				
0.3048	1.097	1.0	0.6818	0.5925				
0.4470	1.609	1.467	1.0	0.8690				
0.5144	1.852	1.688	1.1511	1.0				
<u>Pressure</u>								
Bars (Mega- baryes)	Kilograms/ square cm	Pounds/ square inch	Atmos- pheres	Columns of Mercury (0°C)		Columns of Water (15°C)		
				Meters	Inches	Meters	Inches	Feet
1.0	1.0197	14.50	0.9869	0.7501	29.53	10.21	401.8	33.49
0.9807	1.0	14.22	0.9678	0.7356	28.96	10.01	394.1	32.84
0.06895	0.07031	1.0	0.06805	0.05171	2.036	0.7037	27.70	2.309
1.0133	1.0332	14.70	1.0	0.7600	29.92	10.34	407.1	33.93
1.3332	1.3595	19.34	1.316	1.0	39.37	13.61	535.7	44.64
0.03386	0.03453	0.4912	0.03342	0.02540	1.0	0.3456	13.61	1.134
0.09798	0.09991	1.421	0.09670	0.07349	2.893	1.0	39.37	3.281
0.002489	0.002538	0.03609	0.002456	0.001867	0.0739	0.02540	1.0	0.08333
0.02986	0.03045	0.4331	0.02947	0.02240	0.8819	0.3048	12.0	1.0
<u>Area</u>								
Square Meters	Square Centimeters	Square Inches	Square Feet	Square Yards				
1.0	10,000.0	1,550.0	10.76	1.196				
0.0001	1.0	0.1550	0.001076	0.0001196				
0.0006452	6,452.0	1.0	0.006944	0.0007716				
0.9290	929.0	144.0	1.0	0.1111				
0.8361	8,361.0	1,296.0	9.0000	1.0				
<u>Volume</u>								
Cubic Inches	Cubic Feet	Cubic Yards	Gallons (U.S.)	Quarts (U.S.)	Liters (Cubic Decimeters)	Cubic Meters	Milliliters (Cubic Centimeters)	
1.0	0.0005787	0.00002143	0.004329	0.01732	0.01639	0.00001639	16.39	
1,728.0	1.0	0.03704	7.481	29.92	28.32	0.02832	28,320	
46,656.0	27.0	1.0	202.2	807.9	764.6	0.7646	764,600	
231.0	0.1337	0.004951	1.0	4.000	3.785	0.003785	3,785	
57.75	0.03342	0.001238	0.2500	1.0	0.9464	0.0009464	946.4	
61.02	0.03531	0.001308	0.2642	1.057	1.0	0.001	1,000	
61020	353.1	1.308	264.2	1057	1000.0	1	1,000,000	
0.06102	0.00003531	0.000001308	0.0002642	0.001057	0.001	0.000001	1	



**Table B-6. Alphabetical Index of Metric Unit Conversions**

TO CONVERT	INTO	MULTIPLY BY	TO CONVERT	INTO	MULTIPLY BY
<b>A</b>			<b>B (Cont)</b>		
Abcoulomb	Statcoulombs	2.998 X 10 <sup>10</sup>	Baryl	Dyne/sq. cm.	1.000
Acre	Sq. chain (Gunters)	10	Bolt (US Cloth)	Meters	36.576
Acre	Rods	160	BTU	Liter-Atmosphere	10.409
Acre	Square links (Gunters)	1 x 10 <sup>5</sup>	Btu	ergs	1.0550 X 10 <sup>10</sup>
Acre	Hectare or		Btu	foot-lbs	778.3
	sq.hectometer	0.4047	Btu	gram-calories	252.0
acres	sq feet	43,560.0	Btu	horsepower-hrs	3.931 X 10 <sup>-4</sup>
acres	sq meters	4,047.	Btu	joules	1,054.8
acres	sq miles	1.562 X 10 <sup>-3</sup>	Btu	kilogram-calories	0.2520
acres	sq yards	4,840.	Btu	kilogram-meters	107.5
acre-feet	cu feet	43,560.0	Btu	kilowatt-hrs	2.928 X 10 <sup>-4</sup>
acre-feet	gallons	3.259 X 10 <sup>4</sup>	Btu/hr	foot-pounds/sec	0.2162
amperes/sq cm	amps/sq in.	6.452	Btu/hr	gram-cal/sec	0.0700
amperes/sq cm	amps/sq meter	10 <sup>4</sup>	Btu/hr	horsepower-hrs	3.929 X 10 <sup>-4</sup>
amperes/sq in.	amps/sq cm	0.1550	Btu/hr	watts	0.2931
amperes/sq in.	amps/sq meter	1,550.0	Btu/min	foot-lbs/sec	12.96
amperes/sq meter	amps/sq cm	10 <sup>-4</sup>	Btu/min	horsepower	0.02356
amperes/sq meter	amps/sq in.	6.452 X 10 <sup>-4</sup>	Btu/min	kilowatts	0.01757
ampere-hours	coulombs	3,600.0	Btu/min	watts	17.57
ampere-hours	faradays	0.03731	Btu/sq ft/min	watts/sq in.	0.1221
ampere-turns	gilberts	1.257	Bucket (Br. dry)	Cubic Cm.	1.818 X 10 <sup>4</sup>
ampere turns/cm	amp-turns/in.	2.540	bushels	cu ft	1.2445
ampere-turns/cm	amp-turns/meter	100.0	bushels	cu in.	2,150.4
ampere-turns/cm	gilberts/cm	1.257	bushels	cu meters	0.03524
ampere-turns/in.	amp-turns/cm	0.3937	bushels	liters	35.24
ampere-turns/in.	amp-turns/meter	39.37	bushels	pecks	4.0
ampere-turns/in.	gilberts/cm	0.4950	bushels	pints (dry)	64.0
ampere-turns/meter	amp/turns/cm	0.01	bushels	quarts (dry)	32.0
ampere-turns/meter	amp-turns/in.	0.0254			
ampere-turns/meter	gilberts/cm	0.01257	<b>C</b>		
Angstrom unit	Inch	3937 X 10 <sup>-9</sup>	Calories, gram(mean)	B.T.U. (mean)	3.9685 X 10 <sup>-3</sup>
Angstrom unit	Meter	1 X 10 <sup>-10</sup>	Candle/sq. cm	Lamberts	3.142
Angstrom unit	Micron or (Mu)	1 X 10 <sup>-4</sup>	Candle/sq. inch	Lamberts	0.4870
Are	Acre (US)	0.02471	Centares (centiares)	sq meters	1.0
Ares	sq. yards	119.60	Centigrade	Fahrenheit	(C° X 9/5) + 32
ares	acres	0.02471	centigrams	grams	0.01
ares	sq meters	100.0	Centiliter	Ounce fluid (US)	0.3382
Astronomical Unit	Kilometers	1.495 X 10 <sup>8</sup>	Centiliter	Cubic inch	0.6103
Atmospheres	Ton/sq. inch	0.007348	Centiliter	drams	2.705
atmospheres	cms of mercury	76.0	centiliters	liters	0.01
atmospheres	ft of water (at 4°C)	33.90	centimeters	feet	3.281 X 10 <sup>-2</sup>
atmospheres	in. of mercury (at 0°C)	29.92	centimeters	inches	0.3937
atmospheres	kgs/sq cm	1.0333	centimeters	kilometers	10 <sup>-5</sup>
atmospheres	kgs/sq meter	10,332	centimeters	meters	0.01
atmospheres	pounds/sq in.	14.70	centimeters	miles	6.214 X 10 <sup>-8</sup>
atmospheres	tons/sq ft	1.058	centimeters	millimeters	10.0
			centimeters	mils	393.7
			centimeters	yards	1.024 X 10 <sup>-2</sup>
			centimeter-dynes	cm-grams	1.020 X 10 <sup>-3</sup>
			centimeter-dynes	meter-kgs	1.020 X 10 <sup>-8</sup>
			centimeter-dynes	pound-foot	7.376 X 10 <sup>-8</sup>
			centimeter-grams	cm-dynes	980.7
			centimeter-grams	meter-kgs	10 <sup>-5</sup>
			centimeter-grams	pound-feet	7.233 X 10 <sup>-5</sup>
			centimeters of mercury	atmospheres	0.01316
			centimeters of mercury	feet of water	0.4461
			centimeters of mercury	kgs/sq meter	136.0
<b>B</b>					
Barrels (U.S., dry)	cu. inches	7056.0			
Barrels (U.S., dry)	quarts (dry)	105.0			
Barrels (U.S., liquid)	gallons	31.5			
barrels (oil)	gallons (oil)	42.0			
bars	atmospheres	0.9869			
bars	dynes/sq cm	10 <sup>4</sup>			
bars	kgs/sq meter	1.020 X 10 <sup>4</sup>			
bars	pounds/sq ft	2,089.0			
bars	pounds/sq in.	14.50			

**Table B-6. Alphabetical Index of Metric Unit Conversions (Cont)**

TO CONVERT	INTO	MULTIPLY BY	TO CONVERT	INTO	MULTIPLY BY
<b>C (Cont)</b>			<b>C (Cont)</b>		
centimeters of mercury	pounds/sq ft	27.85	cubic inches	pints(U.S. liq.)	0.03463
centimeters of mercury	pounds/sq in.	0.1934	cubic inches	quarts(U.S. liq.)	0.01732
centimeters/sec	feet/min	1.1969	cubic meters	bushels (dry)	28.38
centimeters/sec	feet/sec	0.03281	cubic meters	cu cms	10 <sup>4</sup>
centimeters/sec	kilometers/hr	0.036	cubic meters	cu feet	35.31
centimeters/sec	knots	0.1943	cubic meters	cu inches	61,023.0
centimeters/sec	meters/min	0.6	cubic meters	cu yards	1.308
centimeters/sec	miles/hr	0.02237	cubic meters	gallons (U.S. liq.)	264.2
centimeters/sec	miles/min	3.728 X 10 <sup>-4</sup>	cubic meters	liters	1,000.0
centimeters/sec/sec	feet/sec/sec	0.03281	cubic meters	pints(U.S. liq.)	2,113.0
centimeters/sec/sec	kms/hr/sec	0.036	cubic meters	quarts (U.S. liq.)	1,057.0
centimeters/sec/sec	meters/sec/sec	0.01	cubic meters	cu cms	7.646 X 10 <sup>5</sup>
centimeters/sec/sec	miles/hr/sec	0.02237	cubic yards	cu feet	27.0
Chain	Inches	792.00	cubic yards	cu inches	46,656.0
Chain	meters	20.12	cubic yards	cu meters	0.7646
Chains (surveyors' or Gunter's)	yards	22.00	cubic yards	gallons (U.S. liq.)	202.0
circular mils	sq cms	5.067 X 10 <sup>-6</sup>	cubic yards	liters	764.6
circular mils	sq mils	0.7854	cubic yards	pints (U.S. liq.)	1,615.9
Circumference	Radians	6.283	cubic yards	quarts (U.S. liq.)	807.9
circular mils	sq inches	7.854 X 10 <sup>-7</sup>	cubic yards/min	cubic ft/sec	0.45
Cords	cord feet	8	cubic yards/min	gallons/sec	3.367
Cord feet	cu. feet	16	cubic yards/min	liters/sec	12.74
Coulomb	Statcoulombs	2.998 X 10 <sup>9</sup>	<b>D</b>		
coulombs	faradays	1.036 X 10 <sup>-5</sup>	Dalton	Gram	1.650 X 10 <sup>-24</sup>
coulombs/sq cm	coulombs/sq in.	64.52	days	seconds	86,400.0
coulombs/sq cm	coulombs/sq meter	10 <sup>4</sup>	decigrams	grams	0.1
coulombs/sq in.	coulombs/sq cm	0.1550	deciliters	liters	0.1
coulombs/sq in.	coulombs/sq meter	1,550.0	decimeters	meters	0.1
coulombs/sq meter	coulombs/sq cm	10	degrees (angle)	quadrants	0.01111
coulombs/sq meter	coulombs/sq in.	6.452 X 10 <sup>-4</sup>	degrees (angle)	radians	0.01745
cubic centimeters	cu feet	3.531 X 10 <sup>-5</sup>	degrees (angle)	seconds	3,600.0
cubic centimeters	cu inches	0.06102	degrees/sec	radians/sec	0.01745
cubic centimeters	cu meters	10 <sup>-6</sup>	degrees/sec	revolutions/min	0.1667
cubic centimeters	cu yards	1.308 X 10 <sup>-6</sup>	degrees/sec	revolutions/sec	2.778 X 10 <sup>-3</sup>
cubic centimeters	gallons (U.S. liq.)	2.642 X 10 <sup>-4</sup>	dekagrams	grams	10.0
cubic centimeters	liters	0.001	dekagrams	liters	10.0
cubic centimeters	pints (U.S. liq.)	2.113 X 10 <sup>-3</sup>	dekameters	meters	10.0
cubic centimeters	quarts (U.S. liq.)	1.057 X 10 <sup>-3</sup>	Drams (apothecaries' or troy)	ounces (avoirdupois)	0.1371429
cubic feet	bushels (dry)	0.8036	Drams (apothecaries' or troy)	ounces (troy)	0.125
cubic feet	cu cms	28,320.0	Drams (U.S., fluid or apoth.)	cubic cm.	3.6967
cubic feet	cu inches	1,728.0	drams	grams	1.7718
cubic feet	cu meters	0.02832	drams	grains	27.3437
cubic feet	cu yards	0.03704	drams	ounces	0.0625
cubic feet	gallons (U.S. liq.)	7.48052	Dyne/cm	Erg/sq. millimeter	0.01
cubic feet	liters	28.32	Dyne/sq. cm.	Atmospheres	9.869 X 10 <sup>-7</sup>
cubic feet	pints (U.S. liq.)	59.84	Dyne/sq. cm.	Inch of Mercury at 0°C	2.953 X 10 <sup>-5</sup>
cubic feet	quarts (U.S. liq.)	29.92	Dyne/sq.cm.	Inch of Water at 4°C	4.015 X 10 <sup>-4</sup>
cubic feet/min	cu cms/sec	472.0	dynes	grams	1.020 X 10 <sup>-3</sup>
cubic feet/min	gallons/sec	0.1247	dynes	joules/cm	10 <sup>-7</sup>
cubic feet/min	liters/sec	0.4720	dynes	joules/meter (newtons)	10 <sup>-5</sup>
cubic feet/min	pounds of water/min	62.43	dynes	kilograms	1.020 X 10 <sup>-6</sup>
cubic feet/sec	million gals/day	0.646317	dynes	poundals	7.233 X 10 <sup>-5</sup>
cubic feet/sec	gallons/min	448.831	dynes	pounds	2.248 X 10 <sup>-6</sup>
cubic inches	cu cms	16.39	dynes/sq cm	bars	10 <sup>-6</sup>
cubic inches	cu feet	5.787 X 10 <sup>-4</sup>			
cubic inches	cu meters	1.639 X 10 <sup>-5</sup>			
cubic inches	cu yards	2.143 X 10 <sup>-5</sup>			
cubic inches	gallons	4.329 X 10 <sup>-3</sup>			
cubic inches	liters	0.01639			
cubic inches	mil-feet	1.061 X 10 <sup>5</sup>			

**Table B-6. Alphabetical Index of Metric Unit Conversions (Cont)**

TO CONVERT	INTO	MULTIPLY BY	TO CONVERT	INTO	MULTIPLY BY
<b>E</b>			<b>F (Cont)</b>		
Ell	Cm.	114.30	foot-pounds	ergs	1.356 X 10 <sup>7</sup>
Ell	Inches	45	foot-pounds	gram-calories	0.3238
Em, Pica	Inch	0.167	foot-pounds	hp-hrs	5.050 X 10 <sup>-7</sup>
Em, Pica	Cm.	0.4233	foot-pounds	joules	1.356
Erg/sec	Dyne - cm/sec	1.000	foot-pounds	kg-calories	3.24 X 10 <sup>-4</sup>
ergs	Btu	9.480 X 10 <sup>-11</sup>	foot-pounds	kg-meters	0.1383
ergs	dyne-centimeters	1.0	foot-pounds	kilowatt-hrs	3.766 X 10 <sup>-7</sup>
ergs	foot-pounds	7.367 X 10 <sup>-8</sup>	foot-pounds/min	Btu/min	1.286 X 10 <sup>-3</sup>
ergs	gram-calories	0.2389 X 10 <sup>-7</sup>	foot-pounds/min	foot-pounds/sec	0.01667
ergs	gram-cms	1.020 X 10 <sup>-3</sup>	foot-pounds/min	horsepower	3.030 X 10 <sup>-5</sup>
ergs	horsepower-hrs	3.7250 X 10 <sup>-14</sup>	foot-pounds/min	kg-calories/min	3.24 X 10 <sup>-4</sup>
ergs	joules	10 <sup>-7</sup>	foot-pounds/min	kilowatts	2.260 X 10 <sup>-5</sup>
ergs	kg-calories	2.389 X 10 <sup>-11</sup>	foot-pounds/min	Btu/hr	4.6263
ergs	kg-meters	1.020 X 10 <sup>-8</sup>	foot-pounds/sec	Btu/min	0.07717
ergs	kilowatt-hrs	0.2778 X 10 <sup>-13</sup>	foot-pounds/sec	horsepower	1.818 X 10 <sup>-3</sup>
ergs	watt-hours	0.2778 X 10 <sup>-18</sup>	foot-pounds/sec	kg-calories/min	0.01945
ergs/sec	Btu/min	5.688 X 10 <sup>-6</sup>	foot-pounds/sec	kilowatts	1.356 X 10 <sup>-3</sup>
ergs/sec	ft-lbs/min	4.427 X 10 <sup>-6</sup>	Furlongs	miles(U.S.)	0.125
ergs/sec	ft-lbs/sec	7.3756 X 10 <sup>-8</sup>	furlongs	rods	40.0
ergs/sec	horsepower	1.341 X 10 <sup>-10</sup>	furlongs	feet	660.0
ergs/sec	kg-calories/min	1.433 X 10 <sup>-9</sup>			
ergs/sec	kilowatts	10 <sup>-10</sup>			
<b>F</b>			<b>G</b>		
farads	microfarads	10 <sup>6</sup>	gallons	cu cms	3,785.0
Faraday/sec	Ampere (absolute)	9.6500 X 10 <sup>4</sup>	gallons	cu feet	0.1337
faradays	ampere-hours	26.80	gallons	cu inches	231.0
faradays	coulombs	9.649 X 10 <sup>4</sup>	gallons	cu meters	3.785 X 10 <sup>-3</sup>
Fathom	Meter	1.828804	gallons	cu yards	4.951 X 10 <sup>-3</sup>
fathoms	feet	6.0	gallons	liters	3.785
feet	centimeters	30.48	gallons (liq Br. Imp.)	gallons (U.S. liq )	1.20095
feet	kilometers	3.048 X 10 <sup>-4</sup>	gallons (U.S.)	gallons (Imp.)	0.83267
feet	meters	0.3048	gallons of water	pounds of water	8.3453
feet	miles (naut.)	1.645 X 10 <sup>-4</sup>	gallons/min	cu ft/sec	2.228 X 10 <sup>-3</sup>
feet	miles (stat.)	1.894 X 10 <sup>-4</sup>	gallons/min	liters/sec	0.06308
feet	millimeters	304.8	gallons/min	cu ft/hr	8.0208
feet	mils	1.2 X 10 <sup>4</sup>	gausses	lines/sq in.	6.452
feet of water	atmospheres	0.02950	gausses	webers/sq cm	10 <sup>-8</sup>
feet of water	in. of mercury	0.8826	gausses	webers/sq in.	6.452 X 10 <sup>-8</sup>
feet of water	kgs/sq cm	0.03048	gausses	webers/sq meter	10 <sup>-4</sup>
feet of water	kgs/sq meter	304.8	gilberts	ampere-turns	0.7958
feet of water	pounds/sq ft	62.43	gilberts/cm	amp-turns/cm	0.7958
feet of water	pounds/sq in	0.4335	gilberts/cm	amp-turns/in	2.021
feet/min	cms/sec	0.5080	gilberts/cm	amp-turns/meter	79.58
feet/min	feet/sec	0.01667	Gills (British)	cubic cm.	142.07
feet/min	kms/hr	0.01829	gills	liters	0.1183
feet/min	meters/min	0.3048	gills	pints (liq.)	0.25
feet/min	miles/hr	0.01136	Grade	Radian	0.01571
feet/sec	cms/sec	30.48	Grains	drams (avoirdupois)	0.03657143
feet/sec	kms/hr	1.097	grains (troy)	grains (avdp)	1.0
feet/sec	knots	0.5921	grains (troy)	grams	0.06480
feet/sec	meters/min	18.29	grains (troy)	ounces (avdp)	2.0833 X 10 <sup>-3</sup>
feet/sec	miles/hr	0.6818	grains (troy)	pennyweight (troy)	0.04167
feet/sec	miles/min	0.01136	grains/U.S. gal	parts/million	17.118
feet/sec/sec	cms/sec/sec	30.48	grains/U.S. gal	pounds/million gal	142.86
feet/sec/sec	kms/hr/sec	1.097	grains/Imp. gal	parts/million	14.286
feet/sec/sec	meters/sec/sec	0.3048	grams	dynes	980.7
feet/sec/sec	miles/hr/sec	0.6818	grams	grains	15.43
feet/100 feet	per cent grade	1.0	grams	joules/cm	9.807 X 10 <sup>-5</sup>
Foot - candle	Lumen/sq. meter	10.764	grams	joules/meter (newtons)	9.807 X 10 <sup>-3</sup>
foot-pounds	Btu	1.286 X 10 <sup>-3</sup>	grams	kilograms	0.001

Table B-6. Alphabetical Index of Metric Unit Conversions (Cont)

TO CONVERT	INTO	MULTIPLY BY	TO CONVERT	INTO	MULTIPLY BY
<b>G (Cont)</b>			<b>H (Cont)</b>		
grams	milligrams	1.000.0	hours	weeks	5.952 X 10 <sup>-3</sup>
grams	ounces (avdp)	0.03527	Hundredweights (long)	pounds	112
grams	ounces (troy)	0.03215	Hundredweights (long)	tons (long)	0.05
grams	poundals	0.07093	Hundredweights (short)	ounces (avoirdupois)	1600
grams	pounds	2.205 X 10 <sup>-3</sup>	Hundredweights (short)	pounds	100
grams/cm	pounds/inch	5.600 X 10 <sup>-3</sup>	Hundredweights (short)	tons (metric)	0.0453592
grams/cu cm	pounds/cu ft	62.43	Hundredweights (short)	tons (long)	0.0446429
grams/cu cm	pounds/cu in	0.03613	<b>I</b>		
grams/cu cm	pounds/mil-foot	3.405 X 10 <sup>-7</sup>	inches	centimeters	2.540
grams/liter	grains/gal	58.417	inches	meters	2.540 X 10 <sup>-2</sup>
grams/liter	pounds/1.000 gal	8.345	inches	miles	1.578 X 10 <sup>-5</sup>
grams/liter	pounds/cu ft	0.062427	inches	millimeters	25.40
grams/liter	parts/million	1,000.0	inches	mils	1,000.0
grams/sq cm	pounds/sq ft	2.0481	inches	yards	2.778 X 10 <sup>-2</sup>
gram-calories	Btu	3.9683 X 10 <sup>-3</sup>	inches of mercury	atmospheres	0.03342
gram-calories	ergs	4.1868 X 10 <sup>7</sup>	inches of mercury	feet of water	1.133
gram-calories	foot-pounds	3.0880	inches of mercury	kgs/sq cm	0303453
gram-calories	horsepower-hrs	1.5596 X 10 <sup>-6</sup>	inches of mercury	kgs sq meter	345.3
gram-calories	kilowatt-hrs	1.1630 X 10 <sup>-6</sup>	inches of mercury	pounds/sq ft	70.73
gram-calories	watt-hrs	1.1630 X 10 <sup>-3</sup>	inches of mercury	pounds/sq in.	0.4912
grams-calories/sec	Btu/hr	14.286	inches of water (at 4°C)	atmospheres	2.458 X 10 <sup>-3</sup>
gram-centimeters	Btu	9.297 X 10 <sup>-8</sup>	inches of water (at 4°C)	inches of mercury	0.07355
gram-centimeters	ergs	980.7	inches of water (at 4°C)	kgs/sq cm	2.540 X 10 <sup>-3</sup>
gram-centimeters	joules	9.807 X 10 <sup>-5</sup>	inches of water (at 4°C)	ounces/sq in.	0.5781
gram-centimeters	kg-cal	2.343 X 10 <sup>-8</sup>	inches of water (at 4°C)	pounds/sq ft	5.204
gram-centimeters	kg-meters	10 <sup>-5</sup>	inches of water (at 4°C)	pounds/sq in.	0.03613
<b>H</b>			International Ampere	Ampere (absolute)	0.9998
Hand	Cm.	10.16	International Volt	Volts (absolute)	1.0003
hetacres	acres	2.471	International volt	Joules (absolute)	1-593 X 10 <sup>-19</sup>
hectares	sq feet	1.076 X 10 <sup>5</sup>	International volt	Joules	9.654 X 10 <sup>4</sup>
hectograms	grams	100.0	<b>J</b>		
hectoliters	liters	100.0	joules	Btu	9.480 X 10 <sup>-4</sup>
hectometers	meters	100.0	joules	ergs	10 <sup>7</sup>
hectowatts	watts	100.0	joules	foot-pounds	0.7376
henries	millihenries	1,000.0	joules	kg calories	2.389 X 10 <sup>-4</sup>
Hogsheads (British)	cubic ft.	10.114	joules	kg-meters	0.1020
Hogsheads (U.S.)	cubic ft.	8.42184	joules	watt-hrs	2.778 X 10 <sup>-4</sup>
Hogsheads (U.S.)	gallons (U.S.)	63	joules/cm	grams	1.020 X 10 <sup>4</sup>
horsepower	Btu/min	42.44	joules/cm	dynes	10 <sup>7</sup>
horsepower	foot-lbs/min	33,000.0	joules/cm	joules/meter (newtons)	100.0
horsepower	foot-lbs/sec	550.0	joules/cm	poundals	723.3
horsepower (metric)	horsepower	0.9863	joules/cm	pounds	22.48
(542.5 ft lb/sec)	(550 ft lb/sec)		<b>K</b>		
horsepower	horsepower (metric)	1.014	kilograms	dynes	980,665.0
(550 ft lb/sec)	(542.5 ft lb/sec)		kilograms	grams	1,000.0
horsepower	kg-calories/min	10.68	kilograms	joules/cm	0.09807
horsepower	kilowatts	0.7457	kilograms	joules/meter (newtons)	9.807
horsepower	watts	745.7	kilograms	poundals	70.93
horsepower (boiler)	Btu/hr	33.479	kilograms	pounds	2.205
horsepower (boiler)	kilowatts	9.803	kilograms	tons (long)	9.842 X 10 <sup>-4</sup>
horsepower-hrs	Btu	2,547.0	kilograms	tons (short)	1.102 X 10 <sup>-3</sup>
horsepower-hrs	ergs	2.6845 X 10 <sup>13</sup>	kilograms/cu meter	grams/cu cm	0.001
horsepower-hrs	foot-lbs	1.98 X 10 <sup>4</sup>	kilograms/cu meter	pounds/cu ft	0.06243
horsepower-hrs	gram-calories	641,190.0	kilograms/cu meter	pounds/cu in.	3.613 X 10 <sup>-5</sup>
horsepower-hrs	joules	2.684 X 10 <sup>4</sup>			
horsepower-hrs	kg-calories	641.1			
horsepower-hrs	kg-meters	2.737 X 10 <sup>5</sup>			
horsepower-hrs	kilowatts-hrs	0.7457			
hours	days	4.167 X 10 <sup>-2</sup>			

**Table B-6. Alphabetical Index of Metric Unit Conversions (Cont)**

TO CONVERT	INTO	MULTIPLY BY	TO CONVERT	INTO	MULTIPLY BY
<b>K (Cont)</b>			<b>K (Cont)</b>		
kilograms/cu meter	pounds/mil-foot	3.405 X 10 <sup>-10</sup>	kilowatt-hrs	kg-meters	3.671 X 10 <sup>5</sup>
kilograms/meter	pounds/ft	0.6720	kilowatt-hrs	pounds of water evaporated from and at 212°F	3.53
Kilogram/sq. cm.	Dynes	980,665	kilowatt-hrs	pounds of water raised from 62° to 212°F	22.75
kilograms/sq cm	atmospheres	0.9678		feet/hr	6,080.0
kilograms/sq cm	feet of water	32.81	knots	kilometers/hr	1.8532
kilograms/sq cm	inches of mercury	28.96	knots	nautical miles/hr	1.0
kilograms/sq cm	pounds/sq ft	2,048.0	knots	statute miles/hr	1.151
kilograms/sq cm	pounds/sq in.	14.22	knots	yards/hr	2,027.0
kilograms/sq meter	atmospheres	9.678 X 10 <sup>-5</sup>	knots	feet/sec	1.689
kilograms/sq meter	bars	98.07 X 10 <sup>-6</sup>	<b>L</b>		
kilograms/sq meter	feet of water	3.281 X 10 <sup>-3</sup>	league	miles(approx.)	3.0
kilograms/sq meter	inches of mercury	2.896 X 10 <sup>-3</sup>	Light year	Miles	5.9 X 10 <sup>12</sup>
kilograms/sq meter	pounds/sq ft	0.2048	Light year	Kilometers	9.46091 X 10 <sup>12</sup>
kilograms/sq meter	pounds/sq in.	1.422 X 10 <sup>-3</sup>	lines/sq cm	gausses	1.0
kilograms/sq mm	kgs/sq meter	10 <sup>6</sup>	lines/sq in.	gausses	0.1550
kilogram-calories	Btu	3.968	lines/sq in.	webers/sq cm	1.550 X 10 <sup>-9</sup>
kilogram-calories	foot-pounds	3,088	lines/sq in.	webers/sq in.	10 <sup>-8</sup>
kilogram-calories	hp-hrs	1.560 X 10 <sup>-3</sup>	links (engineer's)	webers/sq meter	1.550 X 10 <sup>-5</sup>
kilogram-calories	joules	4,186	links (surveyor's)	inches	12.0
kilogram-calories	kg-meters	426.9	liters	inches	7.92
kilogram-calories	kilojoules	4.186	liters	bushels (U.S. dry)	0.02838
kilogram-calories	kilowatt-hrs	1.163 X 10 <sup>-3</sup>	liters	cu cm	1,000.0
kilogram meters	Btu	9.294 X 10 <sup>-3</sup>	liters	cu inches	61.02
kilogram meters	ergs	9.804 X 10 <sup>7</sup>	liters	cu meters	0.001
kilogram meters	foot-pounds	7.233	liters	cu yards	1.308 X 10 <sup>-3</sup>
kilogram meters	joules	9.804	liters	gallons (U.S. liq.)	0.2642
kilogram meters	kg-calories	2.342 X 10 <sup>-3</sup>	liters	pints (U.S. liq.)	2.113
kilogram meters	kilowatt-hrs	2.723 X 10 <sup>-6</sup>	liters	quarts (U.S. liq.)	1.057
kilolines	maxwells	1,000.0	liters/min	cu ft/sec	5.886 X 10 <sup>-4</sup>
kiloliters	liters	1,000.0	liters/min	gals/sec	4.403 X 10 <sup>-3</sup>
kilometers	centimeters	10 <sup>5</sup>	lumens/sq ft	foot-candles	1.0
kilometers	feet	3,281.0	Lumen	Spherical candle power	0.07958
kilometers	inches	3.937 X 10 <sup>4</sup>	Lumen	Watt	0.001496
kilometers	meters	1,000.0	Lumen/sq. ft.	Lumen/sq. meter	10.76
kilometers	miles	0.6214	lux	foot-candles	0.0929
kilometers	millimeters	10 <sup>6</sup>	<b>M</b>		
kilometers	yards	1,094.0	maxwells	kilolines	0.001
kilometers/hr	cms/sec	27.78	maxwells	webers	10 <sup>-3</sup>
kilometers/hr	feet/min	54.68	megalines	maxwells	10 <sup>4</sup>
kilometers/hr	feet/sec	0.9113	megohms	microhms	10 <sup>12</sup>
kilometers/hr	knots	0.5396	megohms	ohms	10 <sup>6</sup>
kilometers/hr	meters/min	16.67	meters	centimeters	100.0
kilometers/hr	miles/hr	0.6214	meters	feet	3.281
kilometers/hr/sec	cms/sec/sec	27.78	meters	inches	39.37
kilometers/hr/sec	ft/sec/sec	0.9113	meters	kilometers	0.001
kilometers/hr/sec	meters/sec/sec	0.2778	meters	miles (stat.)	6.214 X 10 <sup>-4</sup>
kilometers/hr/sec	miles/hr/sec	0.6214	meters	millimeters	1,000.0
kilowatts	Btu/min	56.92	meters	yards	1.094
kilowatts	foot-lbs/min	4.426 X 10 <sup>4</sup>	meters	yards	1.179
kilowatts	foot-lbs/sec	737.6	meters/min	cms/sec	1.667
kilowatts	horsepower	1.341			
kilowatts	kg-calories/min	14.34			
kilowatts	watts	1,000.0			
kilowatt-hrs	Btu	3,413.0			
kilowatt-hrs	ergs	3.600 X 10 <sup>13</sup>			
kilowatt-hrs	foot-lbs	2.655 X 10 <sup>4</sup>			
kilowatt-hrs	gram-calories	859,850.0			
kilowatt-hrs	horsepower-hrs	1.341			
kilowatt-hrs	joules	3.6 X 10 <sup>4</sup>			
kilowatt-hrs	kg-calories	860.5			

**Table B-6. Alphabetical Index of Metric Unit Conversions (Cont)**

TO CONVERT	INTO	MULTIPLY BY	TO CONVERT	INTO	MULTIPLY BY
<b>M (Cont)</b>			<b>M (Cont)</b>		
meters/min	feet/min	3.281	milliliters	liters	0.001
meters/min	feet/sec	0.05468	millimeters	centimeters	0.1
meters/min	kms/hr	0.06	millimeters	feet	3.281 X 10 <sup>-3</sup>
meters/min	knots	0.03238	millimeters	inches	0.03937
meters/min	miles/hr	0.03728	millimeters	kilometers	10 <sup>-6</sup>
meters/sec	feet/min	196.8	millimeters	meters	0.001
meters/sec	feet/sec	3.281	millimeters	miles	6.214 X 10 <sup>-7</sup>
meters/sec	kilometers/hr	3.6	millimeters	mils	39.37
meters/sec	kilometers/min	0.06	millimeters	yards	1.094 X 10 <sup>-3</sup>
meters/sec	miles/hr	2.237	million gals/day	cu ft/sec	1.54723
meters/sec	miles/min	0.03728	mils	centimeters	2.540 X 10 <sup>-3</sup>
meters/sec/sec	cms/sec/sec	100.0	mils	feet	8.333 X 10 <sup>-5</sup>
meters/sec/sec	ft/sec/sec	3.281	mils	inches	0.001
meters/sec/sec	kms/hr/sec	3.6	mils	kilometers	2.540 X 10 <sup>-8</sup>
meters/sec/sec	miles/hr/sec	2.237	mils	yards	2.778 X 10 <sup>-5</sup>
meter-kilograms	cm-dynes	9.807 X 10 <sup>7</sup>	miner's inches	cu ft/min	1.5
meter-kilograms	cm-grams	10 <sup>5</sup>	Minims (British)	cubic cm.	0.059192
meter-kilograms	pound-feet	7.233	Minims (U.S., fluid)	cubic cm.	0.061612
microfarad	farads	10 <sup>-6</sup>	minutes (angles)	degrees	0.01667
micrograms	grams	10 <sup>-6</sup>	minutes (angles)	quadrants	1.852 X 10 <sup>-4</sup>
microhms	megohms	10 <sup>-12</sup>	minutes (angles)	radians	2.909 X 10 <sup>-4</sup>
microhms	ohms	10 <sup>-6</sup>	minutes (angles)	seconds	60.0
microliters	liters	10 <sup>-6</sup>	myriagrams	kilograms	10.0
Microns	meters	1 X 10 <sup>-6</sup>	myriameters	kilometers	10.0
miles (naut.)	feet	6,080.27	myriawatts	kilowatts	10.0
miles (naut.)	kilometers	1.853			
miles (naut.)	meters	1,853.0		<b>N</b>	
miles (naut.)	miles (statute)	1.1516	nepers	decibels	8.686
miles (naut.)	yards	2,027.0	Newton	Dynes	1 X 10 <sup>5</sup>
miles (statute)	centimeters	1.609 X 10 <sup>5</sup>		<b>O</b>	
miles (statute)	feet	5,280.0	OHM (International)	OHM (absolute)	1.0005
miles (statute)	inches	6.336 X 10 <sup>4</sup>	ohms	megohms	10 <sup>-6</sup>
miles (statute)	kilometers	1.609	ohms	microhms	10 <sup>6</sup>
miles (statute)	meters	1,609.0	ounces	drams	16.0
miles (statute)	miles (naut)	0.8684	ounces	grains	437.5
miles (statute)	yards	1,760.0	ounces	grams	28.349527
miles/hr	cms/sec.	44.70	ounces	pounds	0.0625
miles/hr	feet/min	88.0	ounces	ounces (troy)	0.9115
miles/hr	feet/sec	1.467	ounces	tons (long)	2.790 X 10 <sup>-5</sup>
miles/hr	kms/hr	1.609	ounces	tons (metric)	2.835 X 10 <sup>-5</sup>
miles/hr	kms/min	0.02682	ounces (fluid)	cu inches	1.805
miles/hr	kms/min	0.02682	ounces (fluid)	liters	0.02957
miles/hr	knots	0.8684	ounces (troy)	grains	480.0
miles/hr	meters/min	26.82	ounces (troy)	grams	31.103481
miles/hr	miles/min	0.1667	ounces (troy)	ounces (avdp)	1.09714
miles/hr/sec	cms/sec/sec	44.70	ounces (troy)	pennyweights (troy)	20.0
miles/hr/sec	feet/sec/sec	1.467	ounces (troy)	pounds (troy)	0.08333
miles/hr/sec	kms/hr/sec	1.609	Ounce/sq. inch	Dynes/sq cm	0.4309
miles/hr/sec	meters/sec/sec	0.4470	ounces/sq in.	pounds/sq in.	0.0625
miles/min	cms/sec	2,682.0		<b>P</b>	
miles/min	feet/sec	88.0	Parsec	Miles	19 X 10 <sup>12</sup>
miles/min	kms/minn	1.609	Parsec	Kilometers	3.084 X 10 <sup>13</sup>
miles/min	knots/min	0.8684	part-/million	grains/U.S. gal	0.0584
miles/min	miles/hr	60.0	parts/million	grains/Imp. gal	0.07016
mil-feet	cu inches	9.425 X 10 <sup>-6</sup>			
milliers	kilograms	1,000.0			
Millimicrons	meters	1 X 10 <sup>-9</sup>			
Milligrams	grains	0.01543236			
milligrams	grams	0.001			
milligrams/liter	parts/million	1.0			
millihenries	henries	0.001			

**Table B-6. Alphabetical Index of Metric Unit Conversions (Cont)**

TO CONVERT	INTO	MULTIPLY BY	TO CONVERT	INTO	MULTIPLY BY
<b>P (Cont)</b>			<b>P (Cont)</b>		
parts/million	pounds/million gal	8.345	pounds/cu in.	kgs/cu meter	2.768 X 10 <sup>4</sup>
Pecks (British)	cubic inches	554.6	pounds/cu in.	pounds/cu ft	1,728.0
Pecks (British)	liters	9.091901	pounds/cu in.	pounds/mil-foot	9.425 X 10 <sup>-6</sup>
Pecks (U.S.)	bushels	0.25	pounds/ft	kgs-meter	1.488
Pecks (U.S.)	cubic inches	37.605	pounds/in.	gms/cm	178.6
Pecks (U.S.)	liters	8.809582	pounds/mil-foot	gms/cu cm	2.306 X 10 <sup>6</sup>
Pecks (U.S.)	quarts (dry)	8	pounds/sq ft	atmospheres	4.725 X 10 <sup>-4</sup>
pennyweights (troy)	grains	24.0	pounds/sq ft	feet of water	0.01602
pennyweights (troy)	ounces (troy)	0.05	pounds/sq ft	inches of mercury	0.01414
pennyweights (troy)	grams	1.55517	pounds/sq ft	kgs/sq meter	4.882
pennyweights (troy)	pounds (troy)	4.1667 X 10 <sup>-3</sup>	pounds/sq ft	pounds/sq in.	6.944 X 10 <sup>-3</sup>
pints (dry)	cu inches	33.60	pounds/sq. in.	atmospheres	0.06804
pints (liq.)	cu cms.	473.2	pounds/sq in.	feet of water	2.307
pints (liq.)	cu feet	0.01671	pounds/sq in.	inches of mercury	2.036
pints (liq.)	cu inches	28.87	pounds/sq in.	kgs/sq meter	703.1
pints (liq.)	cu meters	4.732 X 10 <sup>-4</sup>	pounds/sq in.	pounds/sq ft	144.0
pints (liq.)	cu yards	6.189 X 10 <sup>-4</sup>			
pints (liq.)	gallons	0.125	<b>Q</b>		
pints (liq.)	liters	0.4732	quadrants (angle)	degrees	90.0
pints (liq.)	quarts (liq.)	0.5	quadrants (angle)	minutes	5,400.0
Planck's quantum	Erg second	6.624 X 10 <sup>-27</sup>	quadrants (angle)	radians	1.571
Poise	Gram/cm. sec.	1.00	quadrants (angle)	seconds	3.24 X 10 <sup>5</sup>
Pounds (avoirdupois)	ounces (troy)	14.5833	quadrants (angle)	cu inches	67.20
poundals	dynes	13,826.0	quarts (dry)	cu cms	946.4
poundals	grams	14.10	quarts (liq.)	cu feet	0.03342
poundals	joules/cm	1.383 X 10 <sup>-3</sup>	quarts (liq.)	cu inches	57.75
poundals	joules/meter (newtons)	0.1383	quarts (liq.)	cu meters	9.464 X 10 <sup>-4</sup>
poundals	kilograms	0.01410	quarts (liq.)	cu yards	1.238 X 10 <sup>-3</sup>
poundals	pounds	0.03108	quarts (liq.)	gallons	0.25
pounds	drams	256.0	quarts (liq.)	liters	0.9463
pounds	dynes	44.4823 X 10 <sup>4</sup>			
pounds	grains	7,000.0	<b>R</b>		
pounds	grams	453.5924	radians	degrees	57.30
pounds	joules/cm	0.04448	radians	minutes	3,438.0
pounds	joules/meter (newtons)	4.448	radians	quadrants	0.6366
pounds	kilograms	0.4536	radians	seconds	2.063 X 10 <sup>5</sup>
pounds	ounces	16.0	radians/sec	degrees/sec	57.30
pounds	ounces (troy)	14.5833	radians/sec	revolutions/min	9.549
pounds	poundals	32.17	radians/sec	revolutions/sec	0.1592
pounds	pounds (troy)	1.21528	radians/sec/sec	revs/min/min	573.0
pounds	tons (short)	0.0005	radians/sec/sec	revs/min/sec	9.549
pounds (troy)	grains	5,760.0	radians/sec/sec	revs/sec/sec	0.1592
pounds (troy)	grams	373.24177	revolutions	degrees	360.0
pounds (troy)	ounces (avdp.)	13.1657	revolutions	quadrants	4.0
pounds (troy)	pennyweights (troy)	240.0	revolutions	radians	6.283
pounds (troy)	pounds (avdp.)	0.822857	revolutions/min	degrees/sec	6.0
pounds (troy)	tons (long)	3.6735 X 10 <sup>-4</sup>	revolutions/min	radians/sec	0.1047
pounds (troy)	tons (metric)	3.7324 X 10 <sup>-4</sup>	revolutions/min	revs/sec	0.01667
pounds (troy)	tons (short)	4.1143 X 10 <sup>-4</sup>	revolutions/min	radians/sec/sec	1.745 X 10 <sup>-3</sup>
pounds of water	cu feet	0.01602	revolutions/min	revs/min/sec	0.01667
pounds of water	cu inches	27.68	revolutions/min	revs/sec/sec	2.778 X 10 <sup>-4</sup>
pounds of water/min	cu ft/sec	2.670 X 10 <sup>-4</sup>	revolutions/min	degrees/sec	360.0
pound-foot	cm-dynes	1.356 X 10 <sup>7</sup>	revolutions/min	radians/sec	6.283
pound-foot	cm-grams	13,825.0	revolutions/min	revs/min	60.0
pound-foot	meter-kgs	0.1383	revolutions/min	radians/sec/sec	6.283
pounds/cu ft	grams/cu cm	0.01602	revolutions/min	revs/min/min	3,600.0
pounds/cu ft	kgs/cu meter	16.02	revolutions/min	revs/min/sec	60.0
pounds/cu ft	pounds/cu in.	5.787 X 10 <sup>-4</sup>	revolutions/min	degrees/sec	360.0
pounds/cu ft	pounds/mil-loot	5.456 X 10 <sup>-9</sup>	revolutions/min	radians/sec	6.283
pounds/cu in.	gms/cu cm	27.68	revolutions/min	revs/min/min	3,600.0
			revolutions/min	revs/min/sec	60.0

**Table B-6. Alphabetical Index of Metric Unit Conversions (Cont)**

TO CONVERT	INTO	MULTIPLY BY	TO CONVERT	INTO	MULTIPLY BY
<b>R (Cont)</b>			<b>S (Cont)</b>		
Rod	Chain (Gunthers)	0.25	square mils	sq cms	6.452 X 10 <sup>6</sup>
Rod	Meters	5.029	square mils	sq inches	10 <sup>-6</sup>
Rods (Surveyors' meas.)	yards	5.5	square yards	acres	2.066 X 10 <sup>-4</sup>
rods	feet	16.5	square yards	sq cms	8,361.0
			square yards	sq feet	9.0
			square yards	sq inches	1,296.0
			square yards	sq meters	0.8361
			square yards	sq miles	3.228 X 10 <sup>-7</sup>
			square yards	sq millimeters	8,361 X 10 <sup>5</sup>
<b>S</b>			<b>T</b>		
Scruples	grains	20	temperature (°C) +273	absolute	1.0
seconds (angle)	degrees	2.778 X 10 <sup>-4</sup>	temperature (°C) +17.78	temperature (°C)	1.8
seconds (angle)	minutes	0.01667	temperature (°F) +460	absolute	1.0
seconds (angle)	quadrants	3.087 X 10 <sup>-6</sup>	temperature (°F) 32	temperature (°F)	5/9
seconds (angle)	radians	4.848 X 10 <sup>-6</sup>	tons (long)	kilograms	1,016.0
Slug	Kilogram	14.59	tons (long)	pounds	2,240.0
Slug	Pounds	32.17	tons (long)	tons (short)	1.120
Sphere	Steradians	12.57	tons (metric)	kilograms	1,000.0
square centimeters	circular mils	1.973 X 10 <sup>5</sup>	tons (metric)	pounds	2,205.0
square centimeters	sq feet	1.076 X 10 <sup>-3</sup>	tons (short)	kilograms	907.1848
square centimeters	sq inches	0.1550	tons (short)	ounces	32,000.0
square centimeters	sq meters	0.0001	tons (short)	ounces (troy)	29,166.66
square centimeters	sq miles	3.861 X 10 <sup>-11</sup>	tons (short)	pounds	2,000.0
square centimeters	sq millimeters	100.0	tons (short)	pounds (troy)	2,430.56
square centimeters	sq yards	1.196 X 10 <sup>-4</sup>	tons (short)	tons (long)	0.89287
square feet	acres	2.296 X 10 <sup>-5</sup>	tons (short)	tons (metric)	0.9078
square feet	sq cms	929.0	tons (short)/sq ft	kgs/sq meter	9,765.0
square feet	sq inches	144.0	tons (short)/sq ft	pounds/sq in.	2,000.0
square feet	sq meters	0.09290	tons of water/24 hrs	pounds of water/hr	83.333
square feet	sq miles	3.587 X 10 <sup>-6</sup>	tons of water/24 hrs	gallons/min	0.16643
square feet	sq millimeters	9.290 X 10 <sup>4</sup>	tons of water/24 hrs	cu ft/hr	1.3349
square feet	sq yards	0.1111			
square inches	circular mils	1.273 X 10 <sup>6</sup>	<b>V</b>		
square inches	sq cms	6.452	Volt/inch	Volt/cm.	0.39370
square inches	sq feet	6.944 X 10 <sup>-3</sup>	Volt (absolute)	Statvolts	0.003336
square inches	sq millimeters	645.2	<b>W</b>		
square inches	sq mils	10 6	watts	Btu/hr	3.4129
square inches	sq yards	7.716 X 10 <sup>-4</sup>	watts	Btu/min	0.05688
square kilometers	acres	247.1	Watts	ergs/sec	107.0
square kilometers	sq cms	10 10	watts	foot-lbs/min	44.27
square kilometers	sq ft	10.76 X 10 <sup>6</sup>	watts	foot-lbs/sec	0.7378
square kilometers	sq inches	1.550 X 10 <sup>9</sup>	watts	horsepower	1.341 X 10 <sup>-3</sup>
square kilometers	sq meters	10 <sup>6</sup>	watts	horsepower (metric)	1.360 X 10 <sup>-3</sup>
square kilometers	sq miles	0.3861	watts	kg-calories/min	0.01433
square kilometers	sq yards	1.196 X 10 <sup>6</sup>	watts	kilowatts	0.001
square meters	acres	2.471 X 10 <sup>-4</sup>	Watts (Abs.)	B.T.U. (mean)/min.	0.056884
square meters	sq cms	10 <sup>4</sup>	Watts (Abs.)	joules/sec.	1
square meters	sq feet	10.76	watt-hours	Btu	3.413
square meters	sq inches	1,550.0	watt-hours	ergs	3.60 X 10 <sup>10</sup>
square meters	sq miles	3.861 X 10 <sup>-7</sup>	watt-hours	foot-pounds	2,656.0
square meters	sq millimeters	10 <sup>6</sup>	watt-hours	gram-calories	859.85
square meters	sq yards	1.196			
square meters	acres	640.0			
square miles	sq feet	27.88 X 10 <sup>6</sup>			
square miles	sq kms	2.590			
square miles	sq meters	2.590 X 10 <sup>6</sup>			
square miles	sq yards	3.098 X 10 <sup>6</sup>			
square millimeters	circular mils	1,973.0			
square millimeters	sq cms	0.01			
square millimeters	sq feet	1.076 X 10 <sup>-5</sup>			
square millimeters	sq inches	1.550 X 10 <sup>-3</sup>			
square millimeters	circular mils	1.273			



**Table B-6. Alphabetical Index of Metric Unit Conversions (Cont)**

TO CONVERT	INTO	MULTIPLY BY	TO CONVERT	INTO	MULTIPLY BY
<b>W (Cont)</b>			<b>W (Cont)</b>		
watt-hours	horsepower-hrs	1.341 X 10 <sup>-3</sup>	webers/sq meter	lines/sq in.	6.452 X 10 <sup>4</sup>
watt-hours	kilogram-calories	0.8605	webers/sq meter	webers/sq cm	10 <sup>-4</sup>
watt-hours	kilogram-meters	367.2	webers/sq meter	webers/sq in.	6.452 X 10 <sup>-4</sup>
watt-hours	kilowatt-hrs	0.001			
Watt (International)	Watt (absolute)	1.0002	<b>Y</b>		
webers	maxwells	10 <sup>8</sup>	yards	centimeters	91.44
webers	kilolines	10 <sup>5</sup>	yards	kilometers	9.144 X 10 <sup>-4</sup>
webers/sq in.	gausses	1.550 X 10 <sup>7</sup>	yards	meters	0.9144 X 10 <sup>-4</sup>
webers/sq in.	lines/sq in.	10 <sup>8</sup>	yards	miles (naut.)	4.934 X 10 <sup>-4</sup>
webers/sq in.	webers/sq cm	0.1550	yards	miles (stat.)	5.682 X 10 <sup>-4</sup>
webers/sq in.	webers/sq meter	1,550.0	yards	millimeters	914.4
webers/sq meter	gausses	10 <sup>4</sup>			