

ENGINEERING INFORMATION

COMMON METRIC CONVERSIONS

Kilograms \times 2.2046 = pounds
 Pounds \times .4536 = kilograms
 25.4 mm. = 1 English inch
 Millimeters \times .03937 = inches
 1 Kg/cm² = 14 lbs./sq. inch
 1 Atmosphere = 14.7 lbs.
 Meters \times 39.37 = inches
 Sq. Millimeters \times .00155 = sq. inches
 Sq. Meters \times 10.764 = sq. feet
 Cubic Centimeters \div 16.383 = cubic inches
 1 oz. = 28.35 grams

DECIMAL EQUIVALENTS

1/64 = .0156	11/32 = .34375	11/16 = .6875
1/32 = .03125	3/8 = .375	23/32 = .71875
1/16 = .0625	13/32 = .40625	3/4 = .75
3/32 = .09375	7/16 = .4375	25/32 = .78125
1/8 = .1250	15/32 = .46875	13/16 = .8125
5/32 = .15625	1/2 = .5	27/32 = .84375
3/16 = .1875	17/32 = .53125	7/8 = .875
7/32 = .21875	9/16 = .5625	29/32 = .90625
1/4 = .25	19/32 = .59375	15/16 = .9375
9/32 = .28125	5/8 = .625	31/32 = .96875
5/16 = .3125	21/32 = .65625	1 = 1.

AREAS OF CIRCLES (ϕ = DIAMETER)

ϕ	AREA	ϕ	AREA	ϕ	AREA
1/4	.04909	4	12.57	12	113.1
5/16	.07670	1/8	13.36	1/4	117.9
3/8	.1104	1/4	14.19	1/2	122.7
7/16	.1503	3/8	15.03	3/4	127.7
1/2	.1963	1/2	15.90	13	132.7
9/16	.2485	5/8	16.80	1/4	137.9
5/8	.3068	3/4	17.72	1/2	143.1
11/16	.3712	7/8	18.67	3/4	148.5
3/4	.4418	5	19.63	14	153.9
13/16	.5185	1/8	20.63	1/4	159.5
7/8	.6013	1/4	21.65	1/2	165.1
15/16	.6903	3/8	22.69	3/4	170.9
1	.7854	1/2	23.76	15	176.7
1/16	.8866	5/8	24.85	1/4	182.7
1/8	.9940	3/4	25.97	1/2	188.7
3/16	1.108	7/8	27.11	3/4	194.8
1/4	1.227	6	28.27	16	201.1
15/16	1.353	1/4	30.68	1/4	207.4
3/8	1.485	1/2	33.18	1/2	213.8
7/16	1.623	3/4	35.78	3/4	220.4
1/2	1.767	7	38.48	17	227.0
5/8	2.074	1/4	41.28	1/4	233.7
3/4	2.405	1/2	44.18	1/2	240.5
7/8	2.761	3/4	47.17	3/4	247.4
2	3.142	8	50.27	18	254.5
1/8	3.547	1/4	53.46	1/2	268.8
1/4	3.976	1/2	56.74	19	283.5
3/8	4.430	3/4	60.13	1/2	298.6
1/2	4.909	9	63.62	20	314.2
5/8	5.412	1/4	67.20	1/2	330.1
3/4	5.940	1/2	70.88	21	346.4
7/8	6.492	3/4	74.66	1/2	363.1
3	7.069	10	78.54	22	380.1
1/8	7.670	1/4	82.52	1/2	397.6
1/4	8.296	1/2	86.59	23	415.5
3/8	8.946	3/4	90.76	1/2	433.7
1/2	9.621	11	95.03	24	452.4
5/8	10.32	1/4	99.40	25	490.9
3/4	11.04	1/2	103.9	26	530.9
7/8	11.79	3/4	108.4	27	572.6

PRESSURE VS TEMPERATURE OF SATURATED STEAM

Absolute Pressure (psi)	Gauge Pressure (psig)	Saturated Steam Temperature	
		$^{\circ}$ F	$^{\circ}$ C
1	-13.7	101.76	38.72
2	-12.7	126.10	52.23
3	-11.7	141.40	60.72
4	-10.7	152.99	67.15
5	-9.7	162.25	72.29
6	-8.7	170.07	76.63
7	-7.7	176.85	80.39
8	-6.7	182.87	83.73
9	-5.7	188.28	86.74
10	-4.7	193.21	89.47
15	0.3	213.03	100.47
20	5.3	227.96	108.76
30	15.3	250.34	121.18
40	25.3	267.24	130.56
50	35.3	281.01	138.20
60	45.3	292.71	144.69
70	55.3	302.92	150.36
80	65.3	312.03	155.42
90	75.3	320.27	160.15
100	85.3	327.83	164.19
120	105.3	341.25	171.63
130	115.3	347.32	175.00
140	125.3	353.02	178.17
150	135.3	358.42	181.16
200	185.3	381.79	194.13
250	235.3	400.95	204.77
300	285.3	417.33	213.86
500	485.3	467.01	241.43
600	585.3	486.21	252.09
700	685.3	503.10	261.46
900	885.3	531.98	277.49
1200	1185.3	567.22	297.05
2000	1985.3	635.82	335.12
3000	2985.3	695.36	368.16
3226	3211.3	706.10	374.12