

Barry Stoodley Pty Ltd

METRIC CONVERSIONS LENGTH

INCH FRACTIONS TO MILLIMETRES

GAUGE	INCHES		M/M.	INCHES		M/M.	INCHES		M/M.	INCHES		M/M.
		$\frac{1}{64}$	.01		$\frac{17}{64}$	6.5		$\frac{49}{64}$	.76		$\frac{1}{16}$	.76
			.254			6.604			19.304			
26	.0196	$\frac{1}{32}$	.015625	$\frac{17}{64}$	.26	6.7469	$\frac{33}{64}$	.51	12.954	$\frac{25}{32}$	.77	19.4469
			.3969		.265625	6.858		.52	13.0969		.78	19.558
			.019685		.27	7.112		.53	13.208		.79	19.812
24	.0247	$\frac{1}{32}$	.02		.275591	7.1437	$\frac{17}{32}$	.54	13.462		.80	19.8437
22	.0312	$\frac{1}{32}$	.03		.28125	7.366	$\frac{35}{64}$	.55	13.4937	$\frac{51}{64}$	.81	20.066
20	.0392	$\frac{1}{16}$	.04		.29	7.5406		.56	13.970		.82	20.320
			1.016		.295276	7.620		.57	14.224		.83	20.066
18	.0495	$\frac{3}{64}$	.046875	$\frac{19}{64}$	.3	7.874	$\frac{9}{16}$	.58	14.2875	$\frac{13}{16}$	.84	20.2406
			1.1906		.31	8.128		.59	14.478		.85	20.320
			1.270		.32	8.3344		.60	14.6844		.86	20.320
			.059055		.33	8.382		.61	14.732		.87	20.828
16	.0625	$\frac{1}{16}$	.06		.34	8.636		.62	14.986		.88	20.828
			1.524		.35	8.890		.63	15.240		.89	21.336
			1.5875		.36	9.1281		.64	15.494		.90	21.336
			.078125		.37	9.398		.65	15.748		.91	21.590
14	.0785	$\frac{5}{64}$	.078740	$\frac{21}{64}$	.38	9.5250	$\frac{37}{64}$	.66	15.8750	$\frac{53}{64}$	.92	21.590
			1.9844		.39	9.652		.67	16.002		.93	21.8281
			.087740		.4	9.906		.68	16.256		.94	21.844
			.059055		.41	9.9219		.69	16.510		.95	22.098
			1.524		.42	10.160		.7	16.764		.96	22.098
12	.0991	$\frac{3}{32}$	.09375	$\frac{11}{32}$	.43	10.3187	$\frac{19}{32}$	.71	17.018	$\frac{27}{32}$	.97	22.250
			2.032		.44	10.668		.72	17.272		.98	22.352
			2.286		.45	10.922		.73	17.526		.99	22.352
			.098425		.46	11.176		.74	17.780		1	22.606
			2.540		.47	11.430		.75	18.034		1	22.606
			2.7781		.48	11.684		1	18.288		1	22.6219
			2.794		.49	11.938		1	18.542		1	22.860
			.118110		.5	12.192		1	18.796		1	22.860
			3.048		.51	12.446		1	19.050		1	23.0187
10	.1250	$\frac{1}{8}$	3.1750	$\frac{3}{8}$	.52	12.700	$\frac{5}{8}$	1		$\frac{7}{8}$	1	23.0187
			3.302		.53			1			1	23.114
			.137795		.54			1			1	23.368
			3.556		.55			1			1	23.4156
			3.5719		.56			1			1	23.5
			3.810		.57			1			1	23.622
8	.1570	$\frac{5}{32}$	.15625	$\frac{13}{32}$	.58			1			1	23.8125
			3.9687		.59			1			1	23.876
			.157480		.6			1			1	24
			4.064		.61			1			1	24.130
			4.318		.62			1			1	24.2094
			.171875		.63			1			1	24.384
			4.3656		.64			1			1	24.5
			.177165		.65			1			1	24.638
			4.572		.66			1			1	24.892
			4.7625		.67			1			1	25
			4.826		.68			1			1	25.0031
			.196851		.69			1			1	25.146
			5		.7			1			1	25.40
			5.080		.71			1			1	
6	.1980	$\frac{3}{16}$	.203125	$\frac{13}{64}$	.72			1			1	
			5.1594		.73			1			1	
			5.334		.74			1			1	
			.216536		.75			1			1	
			5.5562		.76			1			1	
			5.588		.77			1			1	
			5.842		.78			1			1	
			.234375		.79			1			1	
			5.9531		.8			1			1	
			.236221		.81			1			1	
			6		.82			1			1	
			6.096		.83			1			1	
4	.250	$\frac{1}{4}$	6.350	$\frac{1}{2}$	.84			1			1	
					.85			1			1	
					.86			1			1	
					.87			1			1	
					.88			1			1	
					.89			1			1	
					.9			1			1	
					.91			1			1	
					.92			1			1	
					.93			1			1	
					.94			1			1	
					.95			1			1	
					.96			1			1	
					.97			1			1	
					.98			1			1	
					.99			1			1	
					1			1			1	

Barry Stoodley Pty Ltd

METRIC CONVERSIONS VOLUME

CUBIC YARDS TO CUBIC METRES.

CUB. YDS.	M ³	CUB. YDS.	M ³
1	0.7646	51	38.992
2	1.5291	52	39.757
3	2.2937	53	40.521
4	3.0582	54	41.286
5	3.8228	55	42.051
6	4.5873	56	42.816
7	5.3519	57	43.580
8	6.1164	58	44.344
9	6.8810	59	45.109
10	7.6455	60	45.873
11	8.4101	61	46.638
12	9.1747	62	47.402
13	9.9392	63	48.167
14	10.704	64	48.932
15	11.468	65	49.696
16	12.233	66	50.461
17	12.997	67	51.225
18	13.762	68	51.990
19	14.527	69	52.754
20	15.291	70	53.519
21	16.056	71	54.283
22	16.820	72	55.048
23	17.585	73	55.813
24	18.349	74	56.577
25	19.114	75	57.342
26	19.878	76	58.106
27	20.643	77	58.871
28	21.408	78	59.635
29	22.172	79	60.400
30	22.937	80	61.164
31	23.701	81	61.929
32	24.466	82	62.694
33	25.230	83	63.458
34	25.995	84	64.223
35	26.759	85	64.987
36	27.524	86	65.752
37	28.289	87	66.516
38	29.053	88	67.281
39	29.818	89	68.045
40	30.582	90	68.810
41	31.347	91	69.574
42	32.111	92	70.339
43	32.876	93	71.104
44	33.640	94	71.868
45	34.405	95	72.633
46	35.170	96	73.397
47	35.934	97	74.162
48	36.699	98	74.926
49	37.463	99	75.691
50	38.228	100	76.455

IMPERIAL GALLONS TO LITRES

GALLS.	LITRES	GALLS.	LITRES
1	4.5461	51	231.85
2	9.0922	52	236.40
3	13.638	53	240.94
4	18.184	54	245.49
5	22.731	55	250.04
6	27.277	56	254.58
7	31.823	57	259.13
8	36.369	58	263.67
9	40.915	59	268.22
10	45.461	60	272.77
11	50.007	61	277.31
12	54.553	62	281.86
13	59.099	63	286.40
14	63.645	64	290.95
15	68.192	65	295.50
16	72.738	66	300.04
17	77.284	67	304.59
18	81.830	68	309.13
19	86.376	69	313.68
20	90.922	70	318.23
21	95.468	71	322.77
22	100.01	72	327.32
23	104.56	73	331.87
24	109.11	74	336.41
25	113.65	75	340.96
26	118.20	76	345.50
27	122.74	77	350.05
28	127.29	78	354.60
29	131.84	79	359.14
30	136.38	80	363.69
31	140.93	81	368.23
32	145.48	82	372.78
33	150.02	83	377.33
34	154.57	84	381.87
35	159.11	85	386.42
36	163.66	86	390.96
37	168.21	87	440.97
38	172.75	88	400.06
39	177.30	89	404.60
40	181.84	90	409.15
41	186.39	91	413.70
42	190.94	92	418.24
43	195.48	93	422.79
44	200.03	94	427.33
45	204.57	95	431.88
46	209.12	96	436.43
47	213.67	97	440.97
48	218.21	98	445.52
49	222.76	99	450.06
50	227.31	100	454.61

Barry Stoodley Pty Ltd

METRIC CONVERSIONS MASS

POUNDS, HUNDREDWEIGHTS, TONS TO KILOGRAMS

LBS.	kg	LBS.	kg	CWTS.	kg	TONS	kg
1	0.4536	51	23.133	1	50.8	30	30 482
2	0.9072	52	23.587	2	101.6	31	31 498
3	1.3608	53	24.040	3	152.4	32	32 514
4	1.8144	54	24.494	4	203.2	33	33 530
5	2.2680	55	24.948	5	254.0	34	34 546
6	2.7216	56	25.401	6	304.8	35	35 562
7	3.1752	57	25.855	7	355.6	36	36 578
8	3.6287	58	26.308	8	406.4	37	37 594
9	4.0823	59	26.762	9	457.2	38	38 610
10	4.5359	60	27.216	10	508.0	39	39 626
11	4.9895	61	27.669	11	558.8	40	40 642
12	5.4431	62	28.123	12	609.6	41	41 658
13	5.8967	63	28.576	13	660.4	42	42 674
14	6.3503	64	29.030	14	711.2	43	43 690
15	6.8039	65	29.484	15	762.0	44	44 706
16	7.2575	66	29.937	16	812.8	45	45 722
17	7.7111	67	30.391	17	863.6	46	46 738
18	8.1647	68	30.844	18	914.4	47	47 754
19	8.6183	69	31.298	19	965.2	48	48 770
20	9.0719	70	31.752			49	49 786
21	9.5254	71	32.205	TONS	kg	50	50 802
22	9.9790	72	32.659	1	1016.0	51	51 819
23	10.433	73	33.112	2	2032.1	52	52 835
24	10.886	74	33.566	3	3048.1	53	53 851
25	11.340	75	34.019	4	4064.2	54	54 867
26	11.793	76	34.473	5	5080.2	55	55 883
27	12.247	77	34.927	6	6096.3	56	56 899
28	12.701	78	35.380	7	7112.3	57	57 915
29	13.154	79	35.834	8	8128.4	58	58 931
30	13.608	80	36.287	9	9144.4	59	59 947
31	14.061	81	36.741	10	10 161	60	60 963
32	14.515	82	37.195	11	11 177	61	61 979
33	14.969	83	37.648	12	12 193	62	62 995
34	15.422	84	38.102	13	13 209	63	64 011
35	15.876	85	38.555	14	14 225	64	65 027
36	16.329	86	39.009	15	15 241	65	66 043
37	16.783	87	39.463	16	16 257	66	67 059
38	17.237	88	39.916	17	17 273	67	68 075
39	17.690	89	40.370	18	18 289	68	69 091
40	18.144	90	40.823	19	19 305	69	70 107
41	18.597	91	41.277	20	20 321	70	71 123
42	19.051	92	41.731	21	21 337	71	72 140
43	19.505	93	42.184	22	22 353	72	73 156
44	19.958	94	42.638	23	23 369	73	74 172
45	20.412	95	43.091	24	24 385	74	75 188
46	20.865	96	43.545	25	25 401	75	76 204
47	21.319	97	43.999	26	26 417	76	77 220
48	21.772	98	44.452	27	27 433	77	78 236
49	22.226	99	44.906	28	28 449	78	79 252
50	22.680	100	45.359	29	29 465	79	80 268

Barry Stoodley Pty Ltd

METRIC CONVERSIONS PRESSURE

P.S.I TO KILOPASCALS

lbf/in ²	kPa	lbf/in ²	kPa	lbf/in ²	kPa	lbf/in ²	kPa
1	6.8948	26	179.26	51	351.63	76	524.00
2	13.790	27	186.16	52	358.53	77	530.90
3	20.684	28	193.05	53	365.42	78	537.79
4	27.579	29	199.95	54	372.32	79	544.69
5	34.474	30	206.84	55	379.21	80	551.58
6	41.369	31	213.74	56	386.11	81	558.48
7	48.263	32	220.63	57	393.00	82	565.37
8	55.158	33	227.53	58	399.90	83	572.27
9	62.053	34	234.42	59	406.79	84	579.16
10	68.948	35	241.32	60	413.69	85	586.05
11	75.842	36	248.21	61	420.58	86	592.95
12	82.737	37	255.11	62	427.48	87	599.84
13	89.632	38	262.00	63	434.37	88	606.74
14	96.527	39	268.90	64	441.26	89	613.63
15	103.42	40	275.79	65	448.16	90	620.53
16	110.32	41	282.69	66	455.05	91	627.42
17	117.21	42	289.58	67	461.95	92	634.32
18	124.11	43	296.48	68	468.84	93	641.21
19	131.00	44	303.37	69	475.74	94	648.11
20	137.90	45	310.26	70	482.63	95	655.00
21	144.79	46	317.16	71	489.53	96	661.90
22	151.69	47	324.05	72	496.42	97	668.79
23	158.58	48	330.95	73	503.32	98	675.69
24	165.47	49	337.84	74	510.21	99	682.58
25	172.37	50	344.74	75	517.11	100	689.48

1 - kPa = 1 kilonewton per square metre = 0.145 lbf/in²

Barry Stoodley Pty Ltd

METRIC CONVERSIONS

ENGINEERING CONVERSION FACTORS

TO CONVERT		INTO		MULTIPLY	RECIPROCAL
AREA					
square inches	in ²	square centimetres	cm ²	6.4516	0.1550
square feet	ft ²	square metres	m ²	0.0929	10.7640
square yards	yd ²	square metres	m ²	0.8361	1.1960
square miles	mile ²	square kilometres	km ²	2589.0000	0.3861
DENSITY					
pounds per cubic inch	lb/in ³	grams per cubic millimetre	g/mm ³	0.0277	36.1270
pounds per cubic foot	lb/ft ³	kilograms per cubic metre	kg/m ³	0.0160	62.4280
ENERGY					
foot pounds force	ft lbf	joules	J	1.3558	0.7376
horsepower	hp	kilowatts	kW	0.7457	1.3410
FORCE					
pounds force	lbf	newtons	N	4.4482	0.2248
LENGTH					
inches	in	millimetres	mm	25.4000	0.0394
feet	ft	metres	m	0.3048	3.2808
yards	yd	metres	m	0.9144	1.0936
miles	mile	kilometres	km	1.6093	0.6214
MASS					
ounces (avoir.)	oz	grams	g	28.3500	0.0353
pounds	lb	kilograms	kg	0.4536	2.2046
hundredweights	cwt	kilograms	kg	50.8020	0.0197
tons (long)	ton UK	tonnes	t	1.0161	0.9842
tons (short)	ton US	tonnes	t	0.9072	1.1023
MASS PER UNIT LENGTH					
pounds per inch	lb/in	kilograms per metre	k/m	17.8580	0.0560
MOMENT OF FORCE					
pound-force foot	lbf ft	newton metre	Nm	1.3558	0.7376
pound-force inch	lbf in	newton metre	Nm	0.1130	8.8508
PRESSURE					
pounds-force square inch	lbf/in ²	kilopascal	kPa	6.8948	0.1450
inch of water	in H ₂ O	pascal	Pa	2.5901	0.3861
inch of mercury	in Hg	pascal	Pa	35.2120	0.0284
STRESS					
UK ton-force per square inch	tonf/in ²	megapascal	Mpa	15.4440	0.6470
VOLUME					
cubic inches	in ³	cubic centimetres	cm ³	16.3870	0.0610
cubic feet	ft ³	cubic metres	m ³	0.0283	35.3150
cubic yards	yd ³	cubic metres	m ³	0.7646	1.3079
UK gallons	UK gal	litres	l	4.5461	0.2200
US gallons	US gal	litres	l	3.7854	0.2642

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METRIC CONVERSIONS

COMMODITY MASS

The following list has been compiled from various sources and is believed to be reliable.
However, no responsibility is accepted for calculations based on this data

PRODUCT	Kg	Per	PRODUCT	Kg	Per
Aluminium	2640	m ³	Marble - Crushed	1530	m ³
Ashes	675	m ³	- Solid	2640	m ³
Asphalt - Paving	1600	m ³	Milk - Bulk	1.03	Litre
Asphalt - Hot	1.14	Litre	Mud - Dry, Close	1520	m ³
Barley	62	m ³	- Wet, Fluid	1920	m ³
Beer - Bottles 12 x 26oz	17.2	carton	Oats	440	m ³
- Bottles 24 x 13oz	14.3	carton	Oil - Crude	0.83	Litre
- Cans 24x 13oz	11.3	carton	- Fuel	0.89	Litre
- Kegs (Steel)	-	-	- Lubricating	0.88	Litre
5 Gall. Full	30.8	each	Ores - Metallic	-	-
Empty	8.16	each	Copper	8840	m ³
10 Gall. Full	57.6	each	Iron - Ordinary	4500	m ³
Empty	12.3	each	iron - Brown	3800	m ³
18 Gall. Full	103	each	Iron - Hematite	5200	m ³
Empty	23.6	each	Iron - Magnetite	5000	m ³
Bluestone	1850	m ³	Lead	7270	m ³
Brass	8330	m ³	Maganese	4150	m ³
Bricks	300	100	Tin	6700	m ³
Calves - Live Average	68	head	Zinc	4650	m ³
Cattle - Live Average	390	head	Petrol	0.73	Litre
Cement - Portland	40	bag	Rock - Crushed	1540	m ³
Cinders	770	m ³	Salt - Coarse	720	m ³
Clay - Dry	1190	m ³	- Fine	800	m ³
- Wet	1900	m ³	Sand - Coarse, Dry	1520	m ³
Coal - Black	880	m ³	- Course, Wet	1920	m ³
- Brown	760	m ³	- Fine, Dry	1760	m ³
Coke	500	m ³	- Fine, Wet	2000	m ³
Concrete - Dry Mix	1600	m ³	Sandstone - Solid	2400	m ³
- Wet Mix	2220	m ³	- Crushed	1360	m ³
Copper	8800	m ³	Sheep - Live	60	head
Earth - Dry	1200	m ³	Slate	2900	m ³
- Wet	1600	m ³	Sorghum	700	m ³
Flour - Loose	450	m ³	Steel - Cast	7850	m ³
Gargage - Dry	570	m ³	- Rolled	7930	m ³
- Wet	740	m ³	Stone - Crushed	1600	m ³
Glass - 1/4" Plate	16	m ³	Straw	160	m ³
Gravel	1760	m ³	Sugar	1600	m ³
Hay - Baled	240	m ³	Superphosphate - Bulk	1030	m ³
Horses - Live	590	head	- Bagged	1130	m ³
Ice	930	m ³	Tar	1070	m ³
Iron - Cast	7200	m ³	Tin	7350	m ³
Kerosene	0.81	Litre	Vinegar	1.02	Litre
Lambs - Live	36	head	Water - Fresh	1000	m ³
Lead	11370	m ³	- Sea	1025	m ³
Lime	950	m ³	Wheat - Bulk	760	m ³
Limestone - Crushed	1560	m ³	Wool - Pressed	1300	m ³
- Solid	2630	m ³	Zinc	7020	m ³

Most commodities and materials vary greatly in mass so it is only possible to list the averages obtained from as many sources as possible.

This information should assist in the initial calculation of load capacities but it is pointed out that only through making tests can actual load capacities be accurately determined