



TUNGUM

ALLOY TUBING
DESIGNED TO PERFORM

TUNGUM ALLOY TUBING PRESSURE RATING AND SIZE GUIDE



METRIC RANGE

NOTE: The figures shown in these tables are approximate and are intended for estimating purposes only.

OUTSIDE DIAMETER (mm)	WALL SECTION (mm)	MAXIMUM WORKING PRESSURE (Bar)	BORE DIAMETER (mm)	CROSS SECTIONAL BORE AREA (sq. mm)	WEIGHT Kg/M	WEIGHT Kg/ft
3.0	0.80	679	1.40	1.5	.047	.014
	0.50	379	2.00	3.1	.033	.010
3.5	0.80	556	1.90	2.8	.058	.018
	0.50	316	2.50	4.9	.040	.012
4.0	1.00	625	2.00	3.1	.080	.024
	0.80	473	2.40	4.5	.069	.021
	0.50	273	3.00	7.1	.047	.014
6.0	1.25	496	3.50	9.6	.159	.048
	1.00	379	4.00	12.6	.134	.041
	0.80	293	4.40	15.2	.111	.034
8.0	2.00	625	4.00	12.6	.321	.098
	1.50	436	5.00	19.6	.261	.080
	1.25	351	5.50	23.8	.226	.069
	1.00	273	6.00	28.3	.187	.057
	0.80	213	6.40	32.2	.154	.047
10.0	2.00	473	6.00	28.3	.428	.131
	1.50	335	7.00	38.5	.341	.104
	1.00	213	8.00	50.3	.241	.073
12.0	2.50	496	7.00	38.5	.636	.194
	2.00	379	8.00	50.3	.535	.163
	1.60	293	8.80	60.8	.445	.136
	1.20	213	9.60	72.4	.347	.106
	1.00	174	10.00	78.5	.294	.090
15.0	1.60	228	11.80	109.4	.574	.175
16.0	4.00	624	8.00	50.3	1.280	.390
	3.50	526	9.00	63.6	1.162	.354
	3.00	436	10.00	78.5	1.044	.318
	2.50	351	11.00	95.0	.903	.275
	2.00	273	12.00	113.1	.749	.228
	1.60	213	12.80	128.7	.617	.188
	1.00	128	14.00	153.9	.401	.122
20.0	4.00	471	12.00	113.1	1.772	.540
	3.50	401	13.00	132.7	1.546	.417
	3.00	335	14.00	153.9	1.365	.416
	2.50	273	15.00	176.7	1.171	.357
	2.00	213	16.00	201.1	.964	.294
	1.50	155	17.00	227.0	.743	.226
	1.00	101	18.00	254.5	.509	.155
22.00	1.6	150	18.80	277.6	.874	.266
	1.00	91	20.00	314.2	.562	.171



OUTSIDE DIAMETER (mm)	WALL SECTION (mm)	MAXIMUM WORKING PRESSURE (Bar)	BORE DIAMETER (mm)	CROSS SECTIONAL BORE AREA (sq. mm)	WEIGHT Kg/M	WEIGHT Kg/ft
25.0	5.00	471	15.00	176.7	2.677	.815
	4.00	361	17.00	227.0	2.248	.685
	3.50	310	18.00	254.5	2.014	.614
	3.00	260	19.00	283.5	1.747	.538
	2.50	213	20.00	314.2	1.506	.459
	2.00	166	21.00	346.4	1.231	.375
	1.50	123	22.00	380.1	.944	.288
	1.00	80	23.00	415.5	.642	.196
30.0	6.00	471	18.00	254.5	3.850	1.174
	5.00	379	20.00	314.2	3.346	1.020
	4.00	293	22.00	380.1	2.784	.848
	3.50	251	23.00	415.5	2.483	.757
	3.00	213	24.00	452.4	2.168	.661
	2.50	174	25.00	490.9	1.840	.561
	2.00	136	26.00	530.9	1.499	.457
	1.50	101	27.00	572.6	1.144	.349
38.0	6.00	355	26.00	530.9	5.139	1.566
	5.00	289	28.00	615.8	4.416	1.346
	4.00	225	30.00	706.9	3.640	1.110
	3.50	194	31.00	754.8	3.233	.985
	3.00	164	32.00	804.2	2.810	.857
	2.50	135	33.00	855.3	2.376	.724
	2.00	106	34.00	908.0	1.928	.587
	1.50	79	35.00	962.1	1.465	.447
50.0	7.00	310	36.00	1018.0	8.050	2.454
	6.00	260	38.00	1134.2	7.076	2.152
	5.00	213	40.00	1256.6	6.022	1.836
	4.00	166	42.00	1385.4	4.925	1.501
	3.50	144	43.00	1452.2	4.356	1.328
	3.00	123	44.00	1520.5	3.774	1.150
	2.50	101	45.00	1590.6	3.179	.968
	2.00	80	46.00	1662.1	2.570	.782
57.0	7.00	266	43.00	1452.3	9.370	2.853
	6.00	225	45.00	1590.4	8.191	2.496
	5.00	184	47.00	1734.9	6.959	2.121
	3.50	125	50.00	1963.5	5.012	1.528
	2.00	70	53.00	2206.4	2.945	.897
76.1	5.50	149	65.10	3328.5	10.393	3.168
	2.00	51	72.14	4086.9	3.967	1.209

IMPERIAL RANGE

NOTE: The figures shown in these tables are approximate and are intended for estimating purposes only.

OUTSIDE DIAMETER (in)	WALL SECTION		MAXIMUM WORKING PRESSURE (P.S.I.)	BORE DIAMETER (in)	CROSS SECTIONAL BORE AREA (sq. in.)	WEIGHT Kg/M	WEIGHT Kg/ft
	S.W.G.	US IMPERIAL					
1/8"	18	.049	16708	.029	.001	.064	.019
	20	.035	11053	.053	.002	.055	.017
	22	.028	7978	.069	.004	.047	.014
	24	.020	5950	.081	.005	.039	.012
3/16"	18	.049	9469	.092	.007	.116	.035
	20	.035	6599	.115	.010	.094	.029
	22	.028	4905	.132	.014	.077	.024
	24	.020	3733	.143	.016	.063	.019
1/4"	16	.065	9456	.121	.012	.206	.063
	18	.049	6606	.154	.019	.167	.051
	20	.035	4702	.178	.025	.133	.041
	22	.028	3541	.194	.030	.107	.033
	24	.020	2719	.206	.033	.092	.028
5/16"	16	.065	7138	.184	.027	.276	.084
	18	.049	5074	.217	.037	.219	.067
	20	.035	3654	.240	.045	.172	.052
	22	.028	2771	.257	.052	.138	.042
	24	.020	2139	.268	.057	.110	.034
3/8"	12	.109	10509	.167	.022	.487	.148
	14	.083	7510	.215	.036	.408	.124
	16	.065	5733	.246	.048	.345	.105
	18	.049	4118	.279	.061	.271	.083
	20	.035	2986	.303	.072	.211	.064
	22	.028	2276	.319	.080	.168	.051
	24	.020	1762	.331	.086	.136	.041
1/2"	12	.109	7276	.292	.067	.711	.217
	14	.083	5316	.340	.091	.580	.177
	16	.065	4113	.371	.108	.484	.147
	18	.049	2991	.404	.128	.375	.114
	20	.035	2189	.428	.144	.288	.088
	22	.028	1676	.444	.155	.228	.070
	24	.020	1304	.456	.163	.182	.055
5/8"	12	.109	5565	.417	.137	.936	.285
	14	.083	4115	.465	.170	.753	.229
	16	.065	3206	.496	.194	.623	.190
	18	.049	2348	.529	.220	.478	.146
	20	.035	1726	.553	.240	.366	.112
	22	.028	1326	.569	.254	.289	.088
	24	.020	1034	.581	.265	.229	.070

OUTSIDE DIAMETER (in)	WALL SECTION		MAXIMUM WORKING PRESSURE (P.S.I.)	BORE DIAMETER (in)	CROSS SECTIONAL BORE AREA (sq. in.)	WEIGHT Kg/M	WEIGHT Kg/ft
	S.W.G.	US IMPERIAL					
3/4"	10	.120	5735	.494	.192	1.375	.419
	12	.109	4505	.542	.231	1.160	.354
	14	.083	3356	.590	.273	.926	.282
	16	.065	2628	.621	.303	.761	.232
	18	.049	1933	.654	.336	.582	.177
	20	.035	1426	.678	.361	.444	.135
	22	.028	1099	.694	.378	.349	.106
	24	.020	856	.706	.391	.277	.084
1"	8	.156	5316	.680	.363	2.321	.707
	10	.120	4114	.744	.435	1.927	.587
	12	.109	3263	.792	.493	1.609	.490
	14	.083	2451	.840	.554	1.271	.387
	16	.065	1930	.871	.596	1.039	.317
	18	.049	1428	.904	.642	.789	.241
	20	.035	1058	.928	.676	.599	.183
	22	.028	816	.944	.700	.470	.143
1 1/4"	8	.156	4115	.930	.679	3.012	.918
	10	.120	3208	.994	.776	2.480	.756
	12	.109	2558	1.042	.853	2.058	.627
	14	.083	1931	1.090	.933	1.616	.493
	16	.065	1526	1.121	.988	1.317	.401
	18	.049	1131	1.154	1.046	.996	.304
	20	.035	840	1.178	1.090	.755	.230
	22	.028	650	1.194	1.120	.591	.180
1 1/2"	6	.188	4115	1.116	.978	4.337	1.322
	8	.156	3356	1.180	1.094	3.702	1.128
	10	.120	2629	1.244	1.215	3.033	.924
	12	.109	2103	1.292	1.311	2.507	.764
	14	.083	1593	1.340	1.410	1.962	.598
	16	.065	1261	1.371	1.477	1.594	.486
	18	.049	938	1.404	1.548	1.204	.367
1 3/4"	6	.188	3463	1.366	1.466	5.166	1.574
	18	.049	800	1.654	2.149	1.411	.430
2"	6	.188	2989	1.616	2.051	5.995	1.827
	8	.156	2451	1.680	2.217	5.084	1.550
	10	.120	1931	1.744	2.389	4.138	1.261
	12	.109	1551	1.792	2.522	3.405	1.038
	14	.083	1180	1.840	2.659	2.652	.808
	16	.065	936	1.871	2.751	2.149	.655
2 1/2"	6	.188	2346	2.116	3.517	7.652	2.332
	16	.065	745	2.371	4.417	2.705	.824
3"	6	.188	1934	2.616	5.375	9.310	2.838
	14	.083	778	2.840	6.335	4.034	1.230

NOTES ON DESIGNING AND INSTALLING PIPEWORK

- Select the appropriate wall section for the pressure and service.
- Design pipe runs to allow access and easy removal of important equipment.
- Provide adequate and correctly placed supports; to ensure vibration is controlled to an acceptable level.
- Select clamps which are 'kind' to the tube surface, but which grip it tightly.
- Employ bends generously using the same radius throughout. Always allow adequate room for clamping between bends.
- Ensure each pipe fits correctly without imposing additional loads on couplings/pipe joints.
- Protect small diameter pipe runs against being used as ladders or hand hold.

Tungum Ltd. warrant that their products are free from defects in workmanship and material but unless expressly agreed in writing Tungum give no warrant that their products are suitable for any particular purpose or for use under any specific circumstances notwithstanding that such purpose would appear to be covered by this publication.

Tungum accept no liability for any loss, damage or expense whatsoever arising directly from the use of their products. All business undertaken by Tungum is subject to their standard Conditions of Sale, copies of which are available on request.



TUNGUM LTD.
Number One,
Ashchurch Parkway,
Tewkesbury,
Gloucestershire
GL20 8TU

Tel: 01684 271290
Fax: 01684 291714
E-mail: mail@tungum.co.uk
Web Site: www.tungum.co.uk

Tungum is the registered trademark of Tungum Limited
© 2009 Tungum Limited