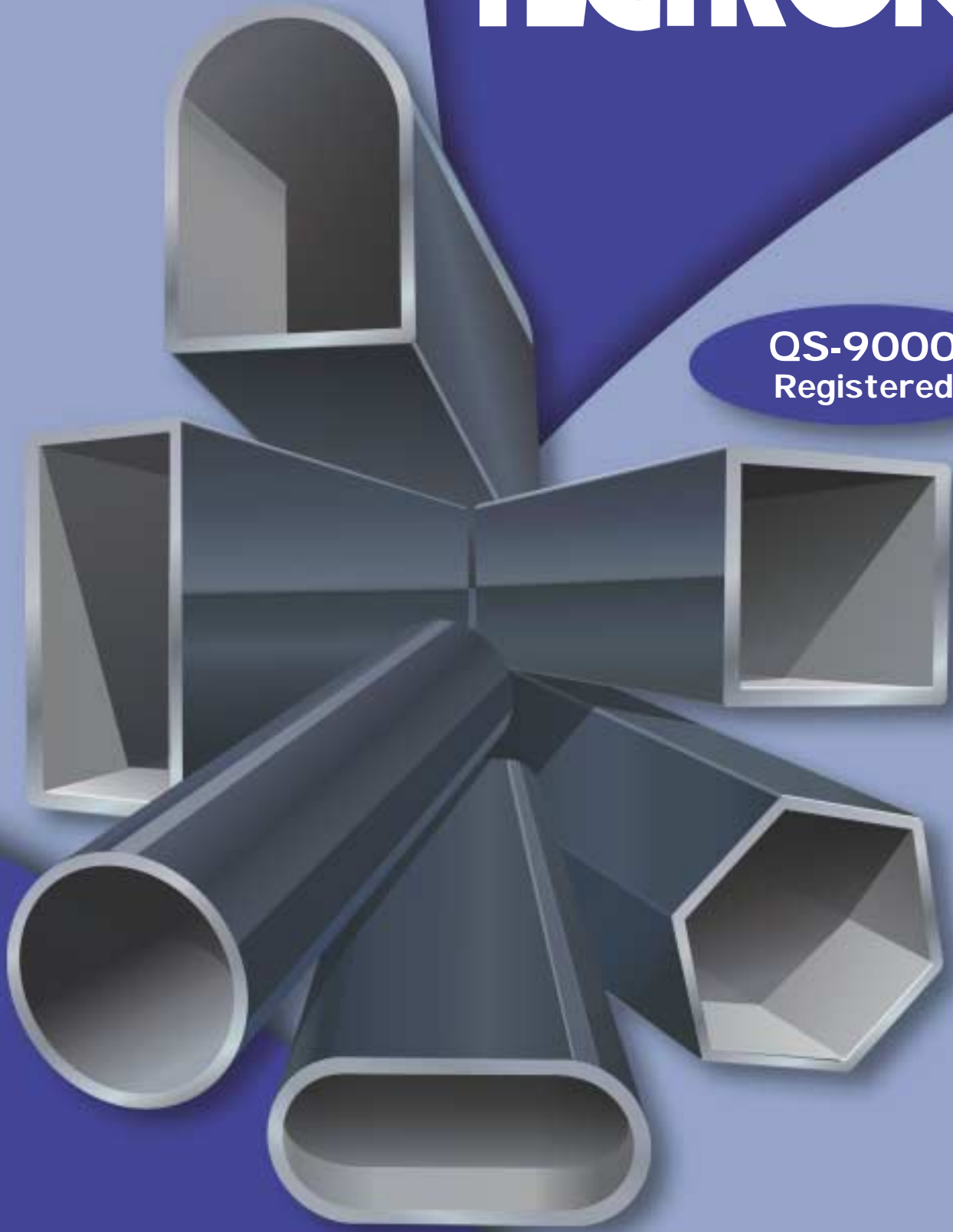


TECTRON™

QS-9000
Registered



M E C H A N I C A L T U B E

TECTRON™ weight chart in lbs./foot

ROUND TUBING	Gauge Nom. Dec.	20 0.035	19 0.042	18 0.049	17 0.058	16 0.065	15 0.072	14 0.083	13 0.095	12 0.109	11 0.120
0.500	Outside Diam. 1/2"	0.1740	0.2056	0.2362	0.2740	0.3023					
0.562		0.1972	0.2335	0.2687	0.3125	0.3453					
0.625	5/8"	0.2207	0.2618	0.3017	0.3516	0.3891	0.4256	0.4809			
0.706		0.2511	0.2981	0.3441	0.4018	0.4454	0.4880	0.5528			
0.745		0.2656	0.3156	0.3646	0.4260	0.4725	0.5180	0.5874			
0.750	3/4"	0.2675	0.3179	0.3672	0.4291	0.4760	0.5218	0.5918			
0.813	13/16"	0.2909	0.3459	0.3999	0.4678	0.5194	0.5699	0.6473			
0.840		0.3012	0.3583	0.4143	0.4849	0.5385	0.5911	0.6717			
0.855		0.3068	0.3650	0.4222	0.4942	0.5489	0.6027	0.6850			
0.866		0.3109	0.3700	0.4280	0.5010	0.5566	0.6111	0.6947	0.7830	0.8821	0.9570
0.875	7/8"	0.3143	0.3740	0.4327	0.5066	0.5628	0.6181	0.7027	0.7921	0.8926	0.9685
0.937		0.3375	0.4018	0.4651	0.5450	0.6059	0.6658	0.7577	0.8551	0.9648	1.0480
0.995		0.3592	0.4279	0.4955	0.5810	0.6462	0.7104	0.8092	0.9140	1.0324	1.1225
1.000	1"	0.3611	0.4301	0.4981	0.5841	0.6497	0.7143	0.8136	0.9191	1.0382	1.1289
1.050		0.3798	0.4526	0.5243	0.6151	0.6844	0.7527	0.8580	0.9699	1.0965	1.1930
1.063	1-1/16"	0.3844	0.4582	0.5309	0.6228	0.6931	0.7624	0.8691	0.9825	1.1110	1.2090
1.125	1-1/8"	0.4078	0.4862	0.5636	0.6616	0.7365	0.8105	0.9245	1.0460	1.1839	1.2892
1.139		0.4131	0.4925	0.5710	0.6702	0.7463	0.8212	0.9370	1.0602	1.2002	1.3072
1.250	1-1/4"	0.4546	0.5424	0.6291	0.7391	0.8234	0.9067	1.0354	1.1730	1.3295	1.4496
1.313		0.4782	0.5707	0.6621	0.7781	0.8672	0.9952	1.0913	1.2369	1.4029	1.5304
1.375	1-3/8"	0.5014	0.5985	0.6946	0.8166	0.9103	1.0029	1.1464	1.2999	1.4752	1.6099
1.438	1-7/16"	0.5247	0.6266	0.7273	0.8553	0.9537	1.0510	1.2018	1.3634	1.5480	1.6901
1.457		0.5320	0.6353	0.7375	0.8674	0.9672	1.0660	1.2191	1.3832	1.5707	1.7151
1.468		0.5362	0.6402	0.7433	0.8742	0.9749	1.0745	1.2289	1.3944	1.5835	1.7292
1.500	1-1/2"	0.5481	0.6546	0.7600	0.8941	0.9971	1.0991	1.2573	1.4268	1.6208	1.7703
1.563	1-9/16"	0.5715	0.6827	0.7928	0.9328	1.0405	1.1472	1.3127	1.4903	1.6936	1.8504
1.600		0.5855	0.6995	0.8124	0.9561	1.0666	1.1761	1.3460	1.5284	1.7373	1.8985
1.625	1-5/8"	0.5949	0.7107	0.8255	0.9716	1.0840	1.1953	1.3682	1.5538	1.7665	1.9306
1.660		0.6080	0.7264	0.8439	0.9933	1.1083	1.2223	1.3992			
1.690		0.6192	0.7399	0.8596	1.0119	1.1291	1.2453	1.4258	1.6198	1.8422	2.0140
1.750	1-3/4"	0.6417	0.7669	0.8910	1.0491	1.1708	1.2915	1.4791	1.6807	1.9121	2.0910
1.875	1-7/8"	0.6884	0.8230	0.9565	1.1266	1.2577	1.3877	1.5900	1.8077	2.0578	2.2513
1.900				0.9696	1.1421	1.2750	1.4070	1.6122	1.8331	2.0869	2.2834
2.000	2"			1.0220	1.2041	1.3445	1.4839	1.7009	1.9346	2.2034	2.4117
2.125	2-1/8"			1.0874	1.2816	1.4314	1.5802	1.8118	2.0616	2.3491	2.5720
2.250	2-1/4"			1.1529	1.3591	1.5182	1.6764	1.9227	2.1885	2.4947	2.7324
2.375				1.2184	1.4366	1.6051	1.7726	2.0336	2.3155	2.6404	
2.500	2-1/2"			1.2839	1.5141	1.6920	1.8688	2.1445	2.4424	2.7860	3.0531

Please inquire about sizes not shown.

ROUND TUBING	
OD SIZE	STANDARD BUNDLE
0.500	564
0.625	863
0.750	567
0.875	440
1.000	658
1.125	258
1.250	204
1.375	165
1.500	155
1.625	116
1.750	108
1.875	88
2.000	81
2.250	63
2.500	57

Please inquire about packaging for sizes not listed.

Packaging

Standard packaging for all items is a square bundle. Round tubing has wood collars. Square and rectangular tubing is packaged without collars. Collars are available upon request. Round tubing heavier than 18 gauge can be packaged in hex bundles if requested. Please inquire.

Any special packaging, such as special piece counts, cardboard or paper wrap, paper interleaf, etc. can be done with an extra charge.

Lengths 38 inches and less are packaged in tri-wall cartons and palletized.

301" is the maximum mill length.

Returnable/recyclable packaging materials are available. Please inquire.

See next page for shaped tubing

SHAPED TUBING* Gauge Nom. Dec.	20 0.035	19 0.042	18 0.049	17 0.058	16 0.065	15 0.072	14 0.083	13 0.095	12 0.109	11 0.120
Outside Diam.										
0.500 SQ	0.2215	0.2618	0.3008	0.3489	0.3848	0.4194	0.4711			
0.750 SQ	0.3406	0.4047	0.4675	0.5463	0.6060	0.6644	0.7535			
0.875 SQ	0.4001	0.4762	0.5509	0.6449	0.7166	0.7869	0.8947	1.0085	1.1364	1.2331
0.890 SQ	0.4073	0.4847	0.5609	0.6568	0.7298	0.8016	0.9116	1.0279	1.1586	1.2576
1.000 SQ	0.4597	0.5476	0.6342	0.7436	0.8271	0.9094	1.0359	1.1701	1.3218	1.4372
1.250 SQ	0.5788	0.6905	0.8009	0.9409	1.0483	1.1543	1.3183	1.4934	1.6927	1.8455
1.500 SQ	0.6979	0.8334	0.9677	1.1383	1.2695	1.3993	1.6007	1.8166	2.0635	2.2538
1.585 SQ			1.0243	1.2054	1.3447	1.4826	1.6967	1.9265	2.1896	2.3926
1.750 SQ			1.1344	1.3356	1.4906	1.6443	1.8831	2.1398	2.4344	2.6621
2.000 SQ			1.3011	1.5330	1.7118	1.8893	2.1655	2.4631	2.8053	3.0704
0.688 HEX	0.2907	0.3457	0.3997	0.4675	0.5191	0.5696	0.6468	0.7281	0.8191	0.8877
0.735 x 0.985 FSO*	0.3375	0.4018	0.4651	0.5450	0.6059	0.6658	0.7577			
1.750 x 1.125 FSO*			0.7600	0.8941	0.9971	1.0991	1.2573	1.4268	1.6208	1.7703
1.910 x 1.227 "D"			0.8910	1.0491	1.1708	1.2915	1.4791			
1.000 x 1.500 RCT		0.6905	0.8009	0.9409	1.0483	1.1543	1.3183	1.4934	1.6927	1.8455
1.000 x 2.000 RCT		0.8334	0.9677	1.1383	1.2695	1.3993	1.6007	1.8166	2.0635	2.2538
1.125 x 0.625 RCT			0.5509	0.6449	0.7166	0.7869	0.8947			
1.500 x 0.750 RCT	0.5192	0.6191	0.7176	0.8423	0.9377	1.0319	1.1771	1.3317	1.5072	1.6414
1.500 x 2.000 RCT			1.1344	1.3356	1.4906	1.6443	1.8831	2.1398	2.4344	2.6621
1.920 x 0.890 RCT			0.8910	1.0491	1.1708	1.2915	1.4791			
2.000 x 1.000 RCT			0.9677	1.1383	1.2695	1.3993	1.6007	1.8166	2.0635	2.2538
2.000 x 1.250 RCT			1.0510	1.2370	1.3801	1.5218	1.7419	1.9782	2.2490	2.4580
2.500 x 1.500 RCT			1.3011	1.5330	1.7118	1.8893	2.1655	2.4631	2.8053	3.0704

* Flat Sided Oval

CHEMISTRY

Carbon Steel Chemical Properties	1008 Steel	1010 Steel	MT 1010 Steel	1015 Steel	1022 Steel
Carbon max %	0.10	0.13	0.15	0.18	0.23
Manganese max %	0.50	0.60	0.60	0.60	1.00
Phosphorous max %	0.035	0.035	0.035	0.035	0.035
Silicon max %	0.05	0.04	0.04	0.04	0.04
Sulphur max %	0.035	0.035	0.035	0.035	0.035

SHAPED TUBING	
OD SIZE	STANDARD BUNDLE
0.500 SQ	576
0.750 SQ	512
0.875 SQ	378
0.890 SQ	378
1.000 SQ	288
1.250 SQ	190
1.500 SQ	128
1.585 SQ	128
1.750 SQ	98
2.000 SQ	72
0.735 x 0.985 FSO	200
1.750 x 1.125 FSO	91
1.000 x 1.500 RCT	192
1.000 x 2.000 RCT	144
1.500 x 0.750 RCT	256
1.500 x 2.000 RCT	96
2.000 x 1.000 RCT	144
2.000 x 1.250 RCT	120
2.500 x 1.500 RCT	80

STANDARD TOLERANCES —
Per ASTM A-513

STANDARD STEEL USED
16-20 gauge —
cold rolled steel (1008/1010)

16-11 gauge —
hot rolled steel (1008/1010)

Please inquire about other types of steel.

*On rectangles and ovals, weld is located on the first side listed.
Please inquire about sizes not shown.

Please inquire about packaging for sizes not listed.

PRODUCT INFORMATION

All Steel Tube Products: are manufactured per ASTM A-513, Types 1 and 2. Please inquire about our ability to meet other ASTM specifications.

Flash: When the edges of the steel strip are passed through the welder and brought to fusion temperature, a weld seam is formed lengthwise down the tube. A small amount of molten metal is squeezed out of the weld seam during this process on the OD (outside diameter) and the ID (inside diameter) of the tube. This excess metal is called weld flash. The weld flash on the OD is always removed to form a uniform outside surface. The weld flash on the inside of the tube can be specified as follows:

Flash in: The weld flash remains in the as-welded condition and the height of the weld seam inside the tube will be no more than the wall thickness or 3/32", whichever is less.

Flash rolled to .005" or .010": The ID weld flash can be rolled back up into the weld area just after welding. The seam can be controlled to .005" or .010" maximum height at an extra charge. This is the most common method of flash controlling the ID seam. The minimum OD that can be flash rolled is .875".

Flash Cut: The weld flash can be cut away rather than rolled back into the weld. The standard minimum O.D. that can be flash cut is 1.250". Please inquire about smaller O.D. tube sizes.

Punch Cut: All tubing is punch cut as it comes off the mill. This type of cut leaves an inside protrusion (dimple) and a burr. This end cut is normally specified when the tubing is going to be re-cut. Square tubing is cut on the diamond (through the corner first) and there is little or no dimple. Rectangles are cut through the center of one side and have a dimple. The shortest punch cut length is 48".

Dedimpling: This is a process for removing the dimple caused by punch cutting. The dimple is moved from the ID of the tube to the face of the tube. This is done either in-line or by hand, depending on the size and length of the tube. After dedimpling, the end cut is not square. Dedimpling does not remove burrs.

Haven Cut: This is a secondary cutting method to achieve closer length tolerance and a cleaner end. It is a double action shear cut that does not cause a dimple. On light gauges, the tube is left virtually burr-free. This shear cutting is most efficient on gauges lighter than 14. For 14 gauge and heavier we recommend a saw cut for the best finish.

Cold Saw Cut: Saw cutting leaves a smaller, more uniform burr than shear cutting. This burr is easily removed by brush deburring. A deburred saw cut is recommended for the most critical applications.

Deburring: This is a final step to remove burrs on both the OD and ID of the end cut. The tube ends are passed through stiff wire brushes. To achieve the best finish it is important to use the right cutting method before deburring.

Other end finishes available: We can supply additional end finishing or fabrication such as slotting, punching, bending, mitre cutting, chamfering, lathe, swaging, flaring and plating or powder coating.

Manufacturing: For over 35 years, Tectron has been manufacturing mechanical tubing to serve a wide variety of customers and applications. Tectron has continued to strengthen its dedication to producing quality tubing. Continuous investment in state-of-the-art manufacturing technology and on-going research and development keep our operations running effectively, with consistently excellent quality.

Products: Tectron offers a full range of mechanical tubing products including:

- CRCS - Cold Rolled Commercial Steel
- Cold Rolled Dust
- HRPO - Hot Rolled Pickled and Oiled
- HSLAS - High Strength Low Alloy Steel
- DS - Drawing Steel
- Pregalvanized G-60 or G-90 and Galvanneal

Quality Assurance: Tectron has been registered to the QS-9000 standard with the objective of total quality and continuous improvement.

Optimum steel quality is assured through the implementation of full traceability procedures, including physical and chemical testing programs. To ensure weld integrity, Tectron performs both destructive and non-destructive testing.

Simply call or fax us your prints. See for yourself the difference Tectron and Allied Tube can mean to your company.

tyco
Electrical &
Metal Products



ISO 9002: 1994
QS-9000: 1998

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