

# Tectron® Mechanical Tube Specifications

Round (in) Nominal decimal for ordering gauge													
Outside Diameter	Fraction Equiv. Sizes (in)	22	20	19	18	17	16	15	14	13	12	11	10
		.028	.035	.042	.049	.058	.065	.072	.083	.095	.109	.120	.134
0.500	½	0.1413	0.1740	0.2056	0.2362	0.2740	0.3023						
0.555			0.1946	0.2303	0.2650	0.3081	0.3405						
0.562			0.1972	0.2335	0.2687	0.3125	0.3453						
0.625	⅝		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	¾		0.2675	0.3179	0.3672	0.4291	0.4760	0.5218	0.5918	0.6652	0.7469		
0.787			0.2814	0.3345	0.3866	0.4520	0.5017	0.5503	0.6246	0.7028	0.7900		
0.813	13/16		0.2909	0.3459	0.3999	0.4678	0.5194	0.5699	0.6473	0.7287	0.8197		
0.840			0.3012	0.3583	0.4143	0.4849	0.5385	0.5911	0.6717	0.7566	0.8518		
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	
1.033			0.3734	0.4449	0.5154	0.6045	0.6726	0.7397	0.8429	0.9526	1.0767	1.1712	
1.050			0.3798	0.4526	0.5243	0.6151	0.6844	0.7527	0.8580	0.9699	1.0965	1.1930	
1.063	11/16		0.3844	0.4582	0.5309	0.6228	0.6931	0.7624	0.8691	0.9825	1.1110	1.2090	
1.125	1⅝		0.4078	0.4862	0.5636	0.6616	0.7365	0.8105	0.9245	1.0460	1.1839	1.2892	
1.250	1¼		0.4546	0.5424	0.6291	0.7391	0.8234	0.9067	1.0354	1.1730	1.3295	1.4496	
1.313	1⅞		0.4780	0.5704	0.6618	0.7778	0.8668	0.9548	1.0909	1.2364	1.4023	1.5297	
1.315			0.4789	0.5716	0.6631	0.7794	0.8686	0.9567	1.0931	1.2390	1.4052	1.5329	
1.375	1¾		0.5014	0.5985	0.6946	0.8166	0.9103	1.0029	1.1464	1.2999	1.4752	1.6099	
1.438	17/16		0.5247	0.6266	0.7273	0.8553	0.9537	1.0510	1.2018	1.3634	1.5480	1.6901	
1.500	1½		0.5481	0.6546	0.7600	0.8941	0.9971	1.0991	1.2573	1.4268	1.6208	1.7703	
1.563	1⅞		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	1⅞		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	1.5893	1.8072	1.9755	
1.690			0.6192	0.7399	0.8596	1.0119	1.1291	1.2453	1.4258	1.6198	1.8422	2.0140	
1.750	1¾				0.8910	1.0491	1.1708	1.2915	1.4791	1.6807	1.9121	2.0910	
1.875	1⅞				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	2.6730
2.125	2⅝				1.0874	1.2816	1.4314	1.5802	1.8118	2.0616	2.3491	2.5720	2.8520
2.195					1.1241	1.3250	1.4800	1.6340	1.8739	2.1327	2.4306	2.6618	2.9523
2.250	2¼				1.1529	1.3591	1.5182	1.6764	1.9227	2.1885	2.4947	2.7324	3.0311
2.255					1.1555	1.3622	1.5217	1.6802	1.9272	2.1936	2.5005	2.7388	3.0382
2.375					1.2184	1.4366	1.6051	1.7726	2.0336	2.3155	2.6404	2.8927	3.2101
2.500	2½				1.2839	1.5141	1.6920	1.8688	2.1445	2.4424	2.7860	3.0531	3.3892
3.000	3						2.0394	2.2536	2.5882	2.9502	3.3686	3.6945	4.1054

Our capabilities are continuously evolving; additional sizes will soon be available.  
For information on those and other sizes not listed please contact your sales representative.

## Shapes

	Size	Fraction Equiv. Sizes (in)	20	19	18	17	16	15	14	13	12	11	10
			.035	.042	.049	.058	.065	.072	.083	.095	.109	.120	.134
SQUARE	0.500	½	0.2215	0.2618	0.3008	0.3489	0.3848	0.4194	0.4711				
	0.750	¾	0.3406	0.4047	0.4675	0.5463	0.6060	0.6644	0.7535	0.8469	0.9509	1.0289	
	0.875	⅞	0.4001	0.4762	0.5509	0.6449	0.7166	0.7869	0.8947	1.0085	1.1364	1.2331	
	0.890		0.4073	0.4847	0.5609	0.6568	0.7298	0.8016	0.9116	1.0279	1.1586	1.2576	
	1.000	1	0.4597	0.5476	0.6342	0.7436	0.8271	0.9094	1.0359	1.1701	1.3218	1.4372	
	1.250	1¼	0.5788	0.6905	0.8009	0.9409	1.0483	1.1543	1.3183	1.4934	1.6927	1.8455	
	1.500	1½	0.6979	0.8334	0.9677	1.1383	1.2695	1.3993	1.6007	1.8166	2.0635	2.2538	
	1.585				1.0243	1.2054	1.3447	1.4826	1.6967	1.9265	2.1896	2.3926	
	1.750	1¾			1.1344	1.3356	1.4906	1.6443	1.8831	2.1398	2.4344	2.6621	2.9472
	2.000	2			1.3011	1.5330	1.7118	1.8893	2.1655	2.4631	2.8053	3.0704	3.4031
2.500	2½					2.1541	2.3792	2.7303	3.1095	3.5470	3.8870	4.3150	
Nominal Sizes													
RECTANGLE	0.500 x 1.500		0.4597	0.5476	0.6342	0.7436	0.8271	0.9094	1.0359				
	0.750 x 1.500		0.5192	0.6191	0.7176	0.8423	0.9377	1.0319	1.771	1.3317	1.5072	1.6414	
	1.000 x 1.500			0.6905	0.8009	0.9409	1.0483	1.1543	1.3183	1.4934	1.6927	1.8455	
	1.000 x 2.000			0.8334	0.9677	1.1383	1.2695	1.3993	1.6007	1.8166	2.0635	2.2538	
	1.250 x 0.500		0.4001	0.4762	0.5509	0.6449	0.7166	0.7869	0.8947	1.0085	1.1364	1.2331	
	1.250 x 0.750				0.6342	0.7436	0.8271	0.9094	1.0359	1.1701	1.3218	1.4372	
	1.250 x 2.000		0.7574	0.9049	1.0510	1.2370	1.3801	1.5218	1.7419	1.9782	2.2490	2.4580	2.7192
	1.500 x 0.750		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				1.1344	1.3356	1.4906	1.6443	1.8831	2.1398	2.4344	2.6621	2.9472
	1.500 x 2.500				1.3011	1.5330	1.7118	1.8893	2.1655	2.4631	2.8053	3.0704	3.4031
	1.500 x 3.000								2.4479	2.7863	3.1762	3.4787	3.8590
	1.920 x 0.890				0.9043	1.0633	1.1854	1.3062	1.4934				
	2.000 x 1.000			0.8334	0.9677	1.1383	1.2695	1.3993	1.6007	1.8166	2.0635	2.2538	
	2.000 x 1.250		0.7574	0.9049	1.0510	1.2370	1.3801	1.5218	1.7419	1.9782	2.2490	2.4580	2.7192
	2.000 x 3.000						2.1541	2.3792	2.7303	3.1095	3.5470	3.8870	4.3150
	2.250 x 0.750		0.6979	0.8334	0.9677	1.1383	1.2695	1.3993	1.6007	1.8166	2.0635	2.2538	
2.500 x 1.500				1.3011	1.5330	1.7118	1.8893	2.1655	2.4631	2.8053	3.0704	3.4031	
3.000 x 1.000						1.7118	1.8893	2.1655	2.4631	2.8053	3.0704	3.4031	
OVAL	0.630 x 1.358	FSO	0.3585	0.4271	0.4946	0.5799	0.6450	0.7091	0.8077				
	0.735 x 0.985	FSO	0.3375	0.4018	0.4651	0.5450	0.6059	0.6658	0.7577				
	1.500 x 0.750	EO	0.4075	0.4859	0.5632	0.661	0.7359	0.8098	0.9238	1.0452	1.1829		
	1.750 x 1.125	FSO			0.7600	0.8941	0.9971	1.0991	1.2573	1.4268	1.6208	1.7703	
	1.968 x 1.181	FSO	0.5755	0.6875	0.7984	0.9395	1.0480	1.1555	1.3223	1.5013	1.7062	1.8643	
D	1.910 x 1.227			0.8910		1.0491	1.1708	1.2915	1.4791				
HEX			0.2907	0.3457	0.3997	0.4675	0.5191	0.5696	0.6468	0.7281	0.8191		

### Tolerances Achieved:

Standard O.D. Tolerances						Length Tolerances	
Round	Hot Rolled	Cold Rolled	Shapes			Length (in)	Tolerance
.500-.625	±.0035	±.003	.500	±.004	±.004	48-120	±1/16
>.625-1.125	±.0035	±.0035	.750-1.125	±.005	±.005	>120-180	±1/8
>1.125-2.000	±.005	±.005	>1.125-1.500	±.006	±.006	>180	±3/16
>2.000-2.500	±.006	±.006	>1.500-2.000	±.008	±.008	Closer length tolerances available upon request	
>2.500-3.000	±.008	±.008	>2.000-2.500	±.010	±.010		

For all rectangle, oval, and 'D' shaped sizes, the weld is located on the first side listed. Our capabilities are continuously evolving; additional sizes will soon be available.

At Tectron Tube, we stock a wide variety of Hot rolled, Cold rolled, and Pre-galvanized steel grades and gauges formulated to meet customer specific chemistry and/or mechanical property requirements.

For information on those and other sizes not listed please contact your sales representative.

#### Other Specification Parameters

- ID Flash:
  - Flash In: Not to exceed wall thickness or 3/32", whichever is less.
  - Flash Rolled: Controlled to .005" or .010". Minimum OD requirement is .875."
  - Flash Cut: Minimum OD requirement is 1.250" to flash cut.
- Cut length:
  - Tectron Tube has extensive in line and secondary cutting, de-burring, and end chamfering capabilities.
  - Please inquire regarding your specific end finish requirements.
- Eddy Current Testing:
  - All steel tube products are manufactured per ASTM-A513, Types 1 and 2.
  - Please inquire about our ability to meet other ASTM specifications