

Mechanical Tube Specifications

Round (in) Nominal decimal for ordering gauge																
Outside Diameter	Equiv. Sizes (in)	22	20	19	18	17	16	15	14	13	12	11	10	9	8	7
		.028	.035	.042	.049	.058	.065	.072	.083	.095	.109	.120	.134	.148	.165	.180
.500		.1413	.1740	.2056	.2362	.2740	.3023									
.625		.1787	.2207	.2618	.3017	.3516	.3891									
.706	½ EMT	.2029	.2511	.2981	.3441	.4018	.4454									
.750		.2161	.2675	.3179	.3672	.4291	.4760	.5218								
.815	½ IMC	.2356	.2918	.3471	.4012	.4694	.5211	.5719	.6495							
.870		.2520	.3124	.3718	.4300	.5035	.5594	.6142								
.875			.3143	.3740	.4327	.5066	.5628	.6181	.7027							
.922	¾ EMT	.2676	.3319	.3951	.4573	.5357	.5955	.6542	.7444							
.995		.2894	.3592	.4279	.4955	.5810	.6462	.7104	.8092							
1.000		.2909	.3611	.4301	.4981	.5841	.6497	.7143	.8136							
1.029		.2996	.3719	.4431	.5133	.6020	.6698	.7366	.8394							
1.125		.3284	.4078	.4862	.5636	.6616	.7365	.8105	.9245							
1.163	1 EMT		.4220	.5033	.5835	.6851	.7629	.8397	.9583							
1.187				.5141	.5961	.7000	.7796									
1.250			.4546	.5424	.6291	.7391	.8234	.9067	1.0354	1.1730	1.3295					
1.290	1 IMC			.5603	.6500	.7639	.8512	.9375	1.0709	1.2136	1.3761	1.5009	1.6559			
1.315	1 NPS		.4789	.5716	.6631	.7794	.8686	.9567	1.0931	1.2390	1.4052	1.5329	1.6917			
1.375			.5014	.5985	.6946	.8166	.9103	1.0029	1.1464							
1.500			.5481	.6546	.7600	.8941	.9971	1.0991	1.2573	1.4268	1.6208	1.7703	1.9567			
1.510	1½ EMT		.5519	.6591	.7653	.9003	1.0041	1.1068	1.2661	1.4370	1.6325	1.7831	1.9711			
1.625					.8255	.9716	1.0840	1.1953	1.3682	1.5538	1.7665	1.9306	2.1358			
1.638	1½ IMC			.7166	.8323	.9796	1.0930	1.2053	1.3797	1.5670	1.7816	1.9473	2.1544			
1.660	1½ NPS	.4885	.6080	.7264	.8439	.9933	1.1083	1.2223	1.3992	1.5893	1.8072	1.9755	2.1859			
1.690							1.1291	1.2453	1.4258	1.6198	1.8422	2.0140	2.2289			
1.740	1½ EMT		.6379	.7624	.8858	1.0429	1.1639	1.2838	1.4702							
1.750			.6417	.7669	.8910	1.0491	1.1708	1.2915	1.4791							
1.764			.6469	.7731	.8983	1.0578	1.1806	1.3023	1.4915							
1.875				.8230	.9565	1.1266	1.2577	1.3877	1.5900							
1.900	1½ NPS		.6978	.8342	.9696	1.1421	1.2750	1.4070	1.6122	1.8331	2.0869	2.2834	2.5297	2.7719		
1.948			.7157	.8558	.9947	1.1718	1.3084	1.4439	1.6548							
1.968	50 MM		.7232	.8647	1.0052	1.1842	1.3223	1.4593	1.6725							
2.000			.7352	.8791	1.0220	1.2041	1.3445	1.4839	1.7009	1.9346	2.2034	2.4117	2.6730	2.9301		
2.197	2 EMT						1.4814	1.6356	1.8757	2.1347	2.4330	2.6644	2.9552	3.2418		
2.360	2 IMC				1.2105	1.4273	1.5947	1.7610	2.0203	2.3002	2.6229	2.8735	3.1887	3.4996		
2.375	2 NPS			1.0475	1.2184	1.4366	1.6051	1.7726	2.0336	2.3155	2.6404	2.8927	3.2101	3.5234	3.8981	4.2236
2.500							1.6920	1.8688	2.1445	2.4424	2.7860	3.0531	3.3892	3.7211	4.1186	
2.750								2.0612	2.3663	2.6963	3.0773	3.3738	3.7473			
2.875	2½ NPS							2.1574	2.4773	2.8232	3.2230	3.5341	3.9264	4.3144	4.7800	5.1857
3.000								2.2536	2.5882	2.9502	3.3686	3.6945	4.1054	4.5122	5.0005	5.4262
3.500	3 NPS							2.6385	3.0318	3.4579	3.9512	4.3359	4.8217	5.3033	5.8824	6.3883
4.000	3½ NPS							3.0233	3.4754	3.9657	4.5338	4.9773	5.5379	6.0943	6.7644	7.3504
4.500	4 NPS							3.4081	3.9191	4.4735	5.1164	5.6187	6.2541	6.8854	7.6463	8.3125
5.000	4½ NPS								4.3627	4.9813	5.6990	6.2601	6.9704	7.6764	8.5282	9.2746

Typical Mechanical Properties Achieved For Galvanized Tube Products:

Higher mechanical properties available on request



40,000 psi yield/45,000 psi tensile



45,000 psi yield/48,000 psi tensile



50,000 psi yield/55,000 psi tensile



70,000 psi yield/75,000 psi tensile



Shapes																
Size	RTS	WIC	20	19	18	17	16	15	14	13	12	11	10	9	8	7
			.035	.042	.049	.058	.065	.072	.083	.095	.109	.120	.134	.148	.165	.180
Square																
.625	X		.2810	.3333	.3841	.4476	.4954									
.709	X		.3211	.3813	.4401											
.750	X		.3406	.4047	.4675	.5463	.6060	.6644	.7535							
.813	X		.3706	.4407	.5095	.5960	.6617	.7261	.8246							
.875	X		.4001	.4762	.5509	.6449	.7166	.7869	.8947							
.975	X				.6175	.7239	.8050	.8849	1.0076							
1.000	X		.4597	.5476	.6342	.7436	.8271	.9094	1.0359							
1.250*	X	X	.5788	.6905	.8009	.9409	1.0483	1.1543	1.3183	1.4934	1.6927	1.8455				
1.500*	X	X	.6979	.8334	.9677	1.1383	1.2695	1.3993	1.6007	1.8166	2.0635	2.2538				
1.625		X					1.3801	1.5218	1.7419	1.9782	2.2490	2.4580				
1.750*		X					1.4906	1.6443	1.8831	2.1398	2.4344	2.6621				
1.875		X								2.6198						
2.000*	X	X					1.7118	1.8893	2.1655	2.4631	2.8053	3.0704	3.4031	3.7304		
2.188		X								3.0842	3.3775	3.7460				
2.250*	X	X						2.1343	2.4479	2.7863	3.1762	3.4787	3.8590			
2.500*	X	X						2.3792	2.7303	3.1095	3.5470	3.8870	4.3150	4.7376	5.2436	
3.000	X						2.5964	2.8692	3.2951	3.7560	4.2888	4.7036	5.2268	5.7447	6.3664	6.9084
4.000	X								4.4248	5.0490	5.7723	6.3368	7.0506	7.7590	8.6121	9.3582
4.724	X									5.9856	6.8469	7.5199	8.3717	9.2182	10.2388	11.1329
5.000	X									6.3419	7.2557	7.9700	8.8743	9.7733	10.8577	11.8080
5.906	X									7.5127	8.5990	9.4489	10.5257	11.5972	12.8912	14.0263
6.000	X									7.6349	8.7392	9.6032	10.6981	11.7876	13.1034	14.2578
Flat Sided Oval																
.750x1.000			.3319	.3951	.4573	.5357	.5955									
1.500x1.000			.4789	.5716	.6631	.7794	.8686									
1.75x1.125			.5519	.6591	.7653	.9003	1.0041	1.1068	1.2661							
2.000x1.094			.6080	.7264	.8439	.9933	1.1083									
2.250x1.313			.6978	.8342	.9696	1.1421	1.2750									
2.375x1.625					1.1251	1.3262	1.4814									
Rectangle																
.625x1.125			.4001	.4762	.5509	.6449	.7166									
.750x1.500			.5192	.6191	.7176	.8423	.9377	1.0319	1.1771							
.750x2.250			.6979	.8334	.9677	1.1383	1.2695	1.3993	1.6007							
.875x1.917			.6483	.7740	.8983	1.0562	1.1775									
1.000x1.750			.6383	.7620	.8843	1.0396	1.1589									
1.000x2.000			.6979	.8334	.9677	1.1383	1.2695	1.3993	1.6007							
1.500x2.000			.8169	.9763	1.1344	1.3356	1.4906	1.6443	1.8831	2.1398	2.4344	2.6621				
1.500x2.500							1.7118	1.8893	2.1655	2.4631	2.8053	3.0704				
1.500x3.000										2.7863	3.1762	3.4787				
1.500x3.500								2.3792	2.7303	3.1095	3.5470	3.8870				
1.540x3.110								2.2078	2.5326	2.8833	3.2874	3.6012	3.9958			
2.000x3.000								2.3792	2.7303	3.1095	3.5470	3.8870	4.3150	4.7376	5.2436	5.6835
2.000x4.000									3.2951	3.7560	4.2888	4.7036	5.2268	5.7447	6.3664	
2.000x5.000									3.8599	4.4025	5.0305	5.5202	6.1387	6.7519	7.4892	
3.000x4.000										4.4025	5.0305	5.5202	6.1387	6.7519	7.4892	
5.000x3.000										5.0490	5.7723	6.3368	7.0506	7.7590	8.6121	9.3582
6.000x2.000										5.0490	5.7723	6.3368	7.0506	7.7590	8.6121	9.3582
5.000x4.000										5.6954	6.5140	7.1534	7.9624	8.7661	9.7349	10.5831
6.000x4.000										6.3419	7.2557	7.9700	8.8743	9.7733	10.8577	11.8080
8.000x4.000										7.6349	8.7392	9.6032	10.6981	11.7876	13.1034	14.2578
Octagon																
4.783											5.7505	6.3159	7.0316	7.7429	8.6006	

* Also available as Square-Fit*

Higher mechanical properties available on request

Square tubing is available as round-to-square (RTS), weld-in-corner (WIC) or both. Please inquire for details.
For rectangles and ovals, weld is on the larger side.

45,000 psi yield/48,000 psi tensile 50,000 psi yield/55,000 psi tensile 70,000 psi yield/75,000 psi tensile

