CARBON STEEL ANNEALED SEAMLESS TUBING
ASTM A-179 OR EQUIVALENT

ALLOWABLE WORKING PRESSURE

ALLOWABLE STRESS = 11,700 PSI between -20° F and 650° F

	WALL THICKNESS								
Tubing O.D	.028	.032	.035	.049	.065	.083	.095	.109	.120
1/8	4,294	6,236	7,909						
3/16	2,726	3,966	5,101	7,359	9,688				
1/4		2,878	3,685	5,382	7,312				
5/16		2,258	2,878	4,200	5,745				
3/8			2,363	3,416	4,703	6,154			
1/2			1,732	2,487	3,393	4,481	5,206		
5/8			1,369	1,954	2,656	3,475	4,048		
3/4			1,135	1,615	2,176	2,843	3,299	3,849	
7/8			966	1,396	1,849	2,398	2,785	3,241	
1			842	1,193	1,603	2,083	2,410	2,796	3,100

Factor of Safety = 4, considering tensile strength to be 47,000 PSI at room temperature

CALCULATED BURST PRESSURE

TENSILE STRENGTH = 47,000

	WALL THICKNESS								
Tubing O.D	.028	.032	.035	.049	.065	.083	.095	.109	.120
1/8	17,250	25,045	31,755						
3/16	10,960	15,940	20,490	29,560	38,920				
1/4		11,560	14,820	21,630	29,400				
5/16		9,070	11,560	16,855	23,095				
3/8			9,480	13,715	18,880	2,420			
1/2			6,970	9,995	13,640	17,990	20,900		
5/8			5,515	7,865	10,665	13,970	16,265		
3/4			4,560	6,480	8,750	11,410	13,250	15,465	
7/8			3,880	5,515	7,425	9,650	11,175	13,005	
1			3,385	4,795	6,445	8,335	9,665	11,225	12,480

Reference: ANSI B31.3, Table A-1 and Par. 304.1.2
ASME Pressure Vessels, Section VIII,
Table UCS-23, Par. UG-27 and Appendix 1, Par. 1-2