

WORKING, YIELD AND BURST PRESSURE FOR SEAMLESS TUBING (PSI)

Type 316L at -20 to +100F

										Safety Factor (WP)	2/3
OD (in.)	OD (mm)	Wall (in.)	Wall (mm)	Nominal ID (in.)	Nominal ID (mm)	Yield Strength	Tensile Strength	Working Pressure	Yield Pressure	Burst Pressure	
0.125	3.18	0.020	0.50	0.085	2.16	30,000	70,000	7,339	11,009	25,688	
0.125	3.18	0.028	0.70	0.069	1.75	30,000	70,000	10,658	15,987	37,304	
0.125	3.18	0.035	0.90	0.055	1.40	30,000	70,000	13,512	20,268	47,292	
0.158	4.00	0.039	1.00	0.080	2.03	30,000	70,000	11,838	17,757	41,432	
0.188	4.75	0.028	0.70	0.132	3.35	30,000	70,000	6,763	10,145	23,671	
0.188	4.75	0.035	0.90	0.118	3.00	30,000	70,000	8,695	13,043	30,434	
0.188	4.75	0.049	1.25	0.090	2.29	30,000	70,000	12,542	18,813	43,897	
0.188	4.75	0.065	1.65	0.058	1.47	30,000	70,000	16,524	24,786	57,833	
0.236	6.00	0.030	0.75	0.176	4.47	30,000	70,000	5,660	8,491	19,811	
0.236	6.00	0.035	0.90	0.166	4.22	30,000	70,000	6,731	10,096	23,558	
0.236	6.00	0.039	1.00	0.158	4.01	30,000	70,000	7,617	11,426	26,660	
0.236	6.00	0.049	1.25	0.138	3.51	30,000	70,000	9,808	14,712	34,328	
0.236	6.00	0.059	1.50	0.118	3.00	30,000	70,000	12,000	18,000	42,000	
0.250	6.35	0.020	0.50	0.210	5.33	30,000	70,000	3,419	5,128	11,966	
0.250	6.35	0.024	0.60	0.202	5.13	30,000	70,000	4,159	6,239	14,558	
0.250	6.35	0.028	0.70	0.194	4.93	30,000	70,000	4,921	7,381	17,223	
0.250	6.35	0.035	0.90	0.180	4.57	30,000	70,000	6,306	9,459	22,072	
0.250	6.35	0.049	1.25	0.152	3.86	30,000	70,000	9,204	13,806	32,215	
0.250	6.35	0.065	1.65	0.120	3.05	30,000	70,000	12,510	18,765	43,784	
0.315	8.00	0.030	0.75	0.255	6.48	30,000	70,000	4,124	6,186	14,433	
0.315	8.00	0.035	0.90	0.245	6.22	30,000	70,000	4,878	7,317	17,073	
0.315	8.00	0.039	1.00	0.237	6.02	30,000	70,000	5,497	8,245	19,239	
0.315	8.00	0.049	1.25	0.217	5.51	30,000	70,000	7,107	10,660	24,873	
0.315	8.00	0.059	1.50	0.197	5.00	30,000	70,000	8,754	13,131	30,638	
0.375	9.50	0.020	0.50	0.335	8.51	30,000	70,000	2,228	3,343	7,799	
0.375	9.50	0.028	0.70	0.319	8.10	30,000	70,000	3,176	4,765	11,117	
0.375	9.50	0.030	0.75	0.315	8.00	30,000	70,000	3,419	5,128	11,966	
0.375	9.50	0.035	0.90	0.305	7.75	30,000	70,000	4,035	6,052	14,121	
0.375	9.50	0.049	1.25	0.277	7.04	30,000	70,000	5,837	8,755	20,429	
0.375	9.50	0.065	1.65	0.245	6.22	30,000	70,000	8,034	12,051	28,119	
0.375	9.50	0.083	2.10	0.209	5.31	30,000	70,000	10,520	15,780	36,820	
0.375	9.50	0.125	3.18	0.125	3.18	30,000	70,000	16,000	24,000	56,000	
0.394	10.00	0.030	0.75	0.334	8.48	30,000	70,000	3,243	4,865	11,351	
0.394	10.00	0.039	1.00	0.316	8.03	30,000	70,000	4,300	6,450	15,050	
0.394	10.00	0.046	1.15	0.302	7.67	30,000	70,000	5,151	7,727	18,029	
0.394	10.00	0.059	1.50	0.276	7.01	30,000	70,000	6,805	10,208	23,818	
0.394	10.00	0.063	1.60	0.268	6.81	30,000	70,000	7,334	11,001	25,669	
0.394	10.00	0.078	2.00	0.238	6.05	30,000	70,000	9,306	13,960	32,572	
0.4375	11.11	0.028	0.70	0.382	9.70	30,000	70,000	2,698	4,047	9,444	
0.4375	11.11	0.035	0.90	0.368	9.35	30,000	70,000	3,419	5,128	11,966	
0.472	12.00	0.035	0.90	0.402	10.21	30,000	70,000	3,153	4,730	11,036	
0.472	12.00	0.039	1.00	0.394	10.01	30,000	70,000	3,539	5,309	12,387	
0.472	12.00	0.047	1.20	0.378	9.60	30,000	70,000	4,328	6,492	15,147	
0.472	12.00	0.059	1.50	0.354	8.99	30,000	70,000	5,556	8,333	19,444	

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0.500	12.70	0.035	0.90	0.430	10.92	30,000	70,000	2,966	4,449	10,381	
0.500	12.70	0.042	1.07	0.416	10.57	30,000	70,000	3,602	5,403	12,607	
0.500	12.70	0.049	1.25	0.402	10.21	30,000	70,000	4,253	6,380	14,887	
0.500	12.70	0.056	1.42	0.388	9.86	30,000	70,000	4,921	7,381	17,223	
0.500	12.70	0.065	1.65	0.370	9.40	30,000	70,000	5,804	8,705	20,313	
0.500	12.70	0.083	1.65	0.334	8.48	30,000	70,000	7,657	11,485	26,799	
0.500	12.70	0.095	1.65	0.310	7.87	30,000	70,000	8,893	13,340	31,127	
0.551	14.00	0.039	1.00	0.473	12.01	30,000	70,000	3,001	4,502	10,504	
0.551	14.00	0.059	1.50	0.433	11.00	30,000	70,000	4,684	7,027	16,395	
0.562	14.27	0.049	1.25	0.464	11.79	30,000	70,000	3,749	5,624	13,122	
0.590	15.00	0.039	1.00	0.512	13.00	30,000	70,000	2,792	4,188	9,771	
0.590	15.00	0.059	1.50	0.472	11.99	30,000	70,000	4,348	6,522	15,217	
0.625	15.88	0.035	0.90	0.555	14.10	30,000	70,000	2,345	3,518	8,208	
0.625	15.88	0.049	1.25	0.527	13.39	30,000	70,000	3,346	5,019	11,710	
0.625	15.88	0.056	1.42	0.513	13.03	30,000	70,000	3,861	5,791	13,513	
0.625	15.88	0.059	1.50	0.507	12.88	30,000	70,000	4,084	6,127	14,296	
0.625	15.88	0.065	1.65	0.495	12.57	30,000	70,000	4,538	6,806	15,881	
0.625	15.88	0.083	2.10	0.459	11.66	30,000	70,000	5,943	8,915	20,802	
0.708	18.00	0.059	1.50	0.590	14.99	30,000	70,000	3,571	5,357	12,500	
0.708	18.00	0.098	2.50	0.512	13.00	30,000	70,000	6,226	9,339	21,792	
0.750	19.00	0.049	1.25	0.652	16.56	30,000	70,000	2,757	4,136	9,651	
0.750	19.00	0.065	1.65	0.620	15.75	30,000	70,000	3,725	5,587	13,037	
0.750	19.00	0.083	2.10	0.584	14.83	30,000	120,000	4,857	7,285	29,140	
0.750	19.00	0.095	2.41	0.560	14.22	30,000	70,000	5,638	8,457	19,733	
0.750	19.00	0.103	2.62	0.544	13.82	30,000	70,000	6,171	9,257	21,600	
0.750	19.00	0.109	2.77	0.532	13.51	30,000	70,000	6,578	9,867	23,024	
0.787	20.00	0.049	1.25	0.689	17.50	30,000	70,000	2,621	3,932	9,174	
0.787	20.00	0.059	1.50	0.669	16.99	30,000	70,000	3,190	4,785	11,165	
0.878	22.30	0.065	1.65	0.748	19.00	30,000	70,000	3,148	4,722	11,017	
1.000	25.40	0.065	1.65	0.870	22.10	30,000	70,000	2,743	4,114	9,599	
1.000	25.40	0.083	2.10	0.834	21.18	30,000	70,000	3,556	5,334	12,446	

For other alloys and temperatures, multiply the pressure shown by the following factor:

Alloy	Temperature F			
	RT	300	500	700
304L	1.00	1.00	0.89	0.81
316L	1.00	1.00	0.86	0.77
Monel 400	1.12	0.92	0.89	-
Inconel 625	2.40	2.40	2.33	2.24
Incoloy 825	1.22	1.17	1.04	0.96
C-276	1.50	1.50	1.43	1.38