316/316L Stainless Steel Tubing Weight Per Foot

Diameter		Wall Thickness							
Fraction	Decimal	0.010	0.012	0.020	0.028	0.035	0.049	0.065	0.083
1/8	0.1250	0.0126	0.0148	0.0230	0.0297	0.0344	0.0407	0.0426	0.0381
5/32	0.1563	0.0160	0.0189	0.0298	0.0393	0.0464	0.0575	0.0648	0.0665
3/16	0.1875	0.0194	0.0230	0.0366	0.0488	0.0584	0.0742	0.0871	0.0948
1/4	0.2500	0.0262	0.0312	0.0503	0.0680	0.0823	0.1077	0.1315	0.1515
5/16	0.3125	0.0331	0.0394	0.0640	0.0871	0.1062	0.1412	0.1759	0.2083
3/8	0.3750	0.0399	0.0476	0.0776	0.1062	0.1301	0.1746	0.2203	0.2650
7/16	0.4375	0.0467	0.0558	0.0913	0.1254	0.1540	0.2081	0.2647	0.3217
1/2	0.5000	0.0536	0.0640	0.1050	0.1445	0.1779	0.2416	0.3091	0.3784
9/16	0.5625	0.0604	0.0722	0.1186	0.1636	0.2019	0.2751	0.3535	0.4351
5/8	0.6250	0.0672	0.0804	0.1323	0.1828	0.2258	0.3086	0.3980	0.4918
3/4	0.7500	0.0809	0.0968	0.1596	0.2210	0.2736	0.3755	0.4868	0.6053

Weight/Ft = 0.290 lb/In^3 * 12 In/Ft * π * Wall Thickness * (Diameter – Wall Thickness)

Weight/Ft = 10.933 * Wall Thickness * (Diameter – Wall Thickness)

Conversion Factors to Determine Tubing Weight per Foot for Other Alloys

Alloy	Conversion Factor
Alloy 625	1.052
Alloy 825	1.010
304	0.990
2205	0.983

Composition Limits (%) of Stainless Steels and Nickel-Base Alloys Based on ASTM A240, B424, and B443 Alloy UNS No. ASTM Specifications

		Alloy 625	Alloy 825	2205	316L	304L
		N06625	N08825	S32205	S31603	S30403
Element	Symbol	B 443	B 424	A 240	A 240	A 240
Carbon	C	0.10 max	0.05 max	0.030 max	0.030 max	0.030 max
Chromium	Cr	20.0–23.0	19.5–23.5	22.0–23.0	16.0–18.0	18.0–20.0
Manganese	Mn	0.50 max	1.0 max	2.00 max	2.00 max	2.00 max
Molybdenum	Mo	8.0–10.0	2.5–3.5	3.0–3.5	2.0–3.0	—
Nitrogen	N	—	—	0.14–0.20	0.10 max	0.10 max
Nickel	Ni	58.0 min	38.0–46.0	4.5–6.5	10.0–14.0	8.0–12.0
Phosphorous	P	0.015 max	—	0.030 max	0.045 max	0.045 max
Sulfur	S	0.015 max	0.03 max	0.020 max	0.030 max	0.030 max
Silicon	Si	0.50 max	0.5 max	1.00 max	0.75 max	0.75 max
Copper	Cu	—	1.5–3.0	—	—	—
Other		Co 1.0 max Al 0.40 max Cb+Ta 3.15–4.15 Fe 5.0 max Ti 0.040 max	Al 0.2 max Fe 22.0 min Ti 0.6–1.2			