

# Bradford™ Tubing

## Product Specifications

**Size range:**

- ½" - 6" OD tube

**Materials:**

- G = 304 stainless steel
- R = 316L stainless steel

**Finish:**

- 3A sanitary finish ID and OD
- unpolished
- BPE finishes are available

**Notes:**

- tubing available in 20' lengths only
- surcharges change MONTHLY
- broken box charges will apply
- tubing only ships via truck
- call Dixon Sanitary for pricing and full freight allowance
- other sizes may be available, call Dixon Sanitary for information
- tubing is NOT returnable



Tube OD	Nominal Wall Thickness	Gage Number	Wt. Pounds per Ft.
½"	.065	16	0.31
¾"	.065	16	0.49
1"	.065	16	0.67
1½"	.065	16	1.02
2"	.065	16	1.36
2½"	.065	16	1.71
3"	.065	16	2.06
4"	.083	14	3.45
6"	.109	12	6.92

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## Operating Pressures

304 Stainless Steel Tube

Tube OD Size	Nominal Wall Thickness	Pressure (PSI)		
		working	yield	burst
½"	.065	4,870	7,800	19,500
¾"	.065	3,250	5,200	13,000
1"	.065	2,440	3,900	9,800
1½"	.065	1,630	2,600	6,500
2"	.065	1,220	2,000	4,900
2½"	.065	980	1,600	3,900
3"	.065	810	1,300	3,300
4"	.083	780	1,200	3,100
6"	.109	680	1,090	2,720

The pressures shown in the table above are calculated using Barlow's Formula and the following properties:

- material: 304
- yield strength (PSI): 30,000
- tensile strength (PSI): 75,000

Working Pressure = ¼ of Burst Pressure, these calculate from -20°F to 100°F.

316L Stainless Steel Tube

Tube OD Size	Nominal Wall Thickness	Pressure (PSI)		
		working	yield	burst
½"	.065	3,250	6,500	19,500
¾"	.065	2,167	4,330	13,000
1"	.065	2,280	3,300	9,100
1½"	.065	1,520	2,200	6,100
2"	.065	1,140	1,600	4,600
2½"	.065	910	1,300	3,600
3"	.065	760	1,100	3,000
4"	.083	730	1,000	2,900
6"	.109	635	900	2,540

The pressures shown in the table above are calculated using Barlow's Formula and the following properties:

- material: 316L
- yield strength (PSI): 25,000
- tensile strength (PSI): 70,000

Working Pressure = ¼ of Burst Pressure, these calculate from -20°F to 100°F.



Pipe size and Tube OD size materials are not interchangeable

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## ASTM-A270 Polished ID and OD Tubing

### Polished ID and OD - ASTM-A270



Size	Packaged	304 Stainless Steel Part Number	316L Stainless Steel Part Number
1/2"	100'	---	<b>A270-R50P</b>
3/4"	100'	---	<b>A270-R75P</b>
1"	280'	<b>A270-G100P</b>	<b>A270-R100P</b>
1 1/2"	340'	<b>A270-G150P</b>	<b>A270-R150P</b>
2"	340'	<b>A270-G200P</b>	<b>A270-R200P</b>
2 1/2"	220'	<b>A270-G250P</b>	<b>A270-R250P</b>
3"	220'	<b>A270-G300P</b>	<b>A270-R300P</b>
4"	100'	<b>A270-G400P</b>	<b>A270-R400P</b>
6"	40'	<b>A270-G600P</b>	<b>A270-R600P</b>

### Tolerances for Welded Tubing - ASTM-A270

Tube OD Size	Nominal Wall Thickness	OD Tolerance	Wall Thickness Tolerance	Ovality Allowance
1/2"	.065	+ .002 / - .008	± .008	± .010
3/4"	.065	+ .002 / - .008	± .008	± .010
1"	.065	+ .002 / - .008	± .008	± .010
1 1/2"	.065	+ .002 / - .008	± .008	± .020
2"	.065	+ .002 / - .011	± .008	± .020
2 1/2"	.065	+ .002 / - .011	± .008	± .020
3"	.065	+ .003 / - .012	± .008	± .020
4"	.083	+ .003 / - .015	± .010	± .020
6"	.109	+ .030 / - .030	± .014	± .030

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**Features:**

- ASTM-A270-02 welded austenitic stainless steel sanitary tubing

