

Sanitary Tube

Specifications, Grit & Finish Guide

Tube vs. Pipe?

Manufactured to a set outside diameter, **tube** is expressed as 1.5" OD, .065" wall. **Pipe** is specified by a nominal, not actual, inside diameter. The wall thickness of pipe is described by the "schedule" such as schedule 40.

Tube OD	Tube ID	Wall Thickness	Weight Dry	Volume	Weight with Water	Flow at a Mean Velocity		
						GPM		
Inches	Inches	Inches	lbs/100 ft	gal/100 ft	lbs/100 ft	5 fps	7 fps	10 fps
1/4	0.180	0.035	8.1	.013	9.2	0.40	0.56	0.79
3/8	0.305	0.035	12.9	.038	16.0	1.14	1.59	2.28
1/2	0.370	0.065	30.6	0.56	35.3	1.7	2.3	3.4
3/4	0.620	0.065	48.2	1.57	61.3	4.7	6.6	9.4
1	0.870	0.065	65.8	3.09	91.5	9.3	13	19
1 1/2	1.370	0.065	100.9	7.66	164.8	23	32	46
2	1.870	0.065	136.1	14.27	255.1	43	60	86
2 1/2	2.370	0.065	171.2	22.92	362.4	69	96	138
3	2.870	0.065	206.4	33.60	486.7	101	141	202
4	3.834	0.083	351.8	59.97	851.9	180	252	360
6	5.782	0.109	694.7	136.39	1832.2	409	573	818
8	7.782	0.109	930.6	247.07	2991.1	741	1038	1482

Grit & Finish

Grit	R _a (Range, micro-inch)
150	30-35
180	20-25
240	15-20
320	9-11

Sanitary Tubing: Brief Description by Finish Number

No.	Description
1	Industrial or mill finish. Bright annealed, pickled, sand blast or tumbled.
3	Sanitary. ID polished to #150 grit or 32 Ra, OD mill finish.
3A	Polished 150 grit OD, 180 grit ID
5	Industrial. ID mill finish, OD polish to #150 grit or 32 Ra.
7	Sanitary. ID and OD polished to #150 grit or 32 Ra.

Finish Specifications

Process	RA Micro Inch	RA Micron	ISO designation
150 grit	30 - 35	0.75 - 0.875	N6
150 grit + Electropolish	12 - 20	0.3 - .05	
180 grit	20 - 25	0.5 - .0625	
180 grit + Electropolish	10 - 16	0.25 - 0.4	
240 grit	15 - 20	0.375 - 0.5	N5
240 grit + Electropolish	8 - 12	0.2 - 0.3	
320 grit	8 - 12	0.2 - 0.3	N4
320 grit + Electropolish	6 - 12	0.15 - 0.3	