

ROUND SEAMLESS TUBE

Not Applicable to Condenser Tube (See Page 31 and Page 32),
Pipe (See Page 36), Copper Water Tube (See Page 33), Drain-

age Tube (See Page 35), Threadless Pipe (See Page 37) and
Tube Furnished as Extruded.

Table I. WALL THICKNESS TOLERANCES (In Inches)

Maximum deviation at any point — Tolerances are plus and minus; if tolerances all plus or all minus are desired, double the values given.

Non-refractory Alloys (See Page 25)

WALL THICKNESS (In Inches)	OUTSIDE DIAMETER (In Inches)						
	1/32 to 1/8 Incl.	Over 1/8 to 5/8 Incl.	Over 5/8 to 1 Incl.	Over 1 to 2 Incl.	Over 2 to 4 Incl.	Over 4 to 7 Incl.	Over 7 to 10 Incl.
Up to .018	.002	.001	.0015	.002	....	....	....
Incl. .018 to .025	.003	.002	.002	.0025	....	....	....
Incl. .025 to .035	.003	.0025	.0025	.003	.004	....	....
Incl. .035 to .058	.003	.003	.0035	.0035	.005	.007	....
Incl. .058 to .083	....	.0035	.004	.004	.006	.008	.010
Incl. .083 to .120	....	.004	.005	.005	.007	.009	.011
Incl. .120 to .165	....	.005	.006	.006	.008	.010	.012
Incl. .165 to .220	....	.007	.0075	.008	.010	.012	.014
Incl. .220 to .284	....	....	.009	.010	.012	.014	.016
Incl. .284 to .380	....	....	.011	.012	.014	.016	.018
Incl. .380 and over	....	....	....	5% *	5% *	6% *	6% *

Refractory Alloys (See Page 25)

WALL THICKNESS (In Inches)	OUTSIDE DIAMETER (In Inches)						
	1/32 to 1/8 Incl.	Over 1/8 to 5/8 Incl.	Over 5/8 to 1 Incl.	Over 1 to 2 Incl.	Over 2 to 4 Incl.	Over 4 to 7 Incl.	Over 7 to 10 Incl.
Up to .018	.0025	.0015	.002	.0025	....	....	....
Incl. .018 to .025	.004	.0025	.0025	.003	....	....	....
Incl. .025 to .035	.004	.003	.003	.004	.005	....	....
Incl. .035 to .058	.004	.004	.0045	.0045	.0065	.009	....
Incl. .058 to .083	....	.0045	.005	.005	.0075	.010	.013
Incl. .083 to .120	....	.005	.0065	.0065	.009	.011	.014
Incl. .120 to .165	....	.007	.007	.0075	.010	.013	.015
Incl. .165 to .220	....	....	.009	.010	.013	.015	.018
Incl. .220 to .284	....	....	.012	.013	.015	.018	.020
Incl. .284 to .380	....	....	....	.015	.018	.020	.023
Incl. .380 and over	....	....	....	6% *	6% *	8% *	8% *

*Expressed to the nearest .001 in.

Table II. AVERAGE DIAMETER* TOLERANCES (In Inches)

For tube for redrawing, double the average diameter tolerance given in this table. All tolerances plus and minus.

SPECIFIED DIAMETER	TOLERANCE APPLIES TO	NON-REFRACTORY	REFRACTORY
		ALLOYS (See Page 25)	ALLOYS (See Page 25)
Up to 1/8 incl.	Inside Dia.	.002	.003
	Outside Dia.	.002	.0025
Over 1/8 to 5/8 incl.	Inside or Outside	.002	.0025
	Inside or Outside	.0025	.003
Over 5/8 to 1 incl.	Inside or Outside	.003	.004
	Inside or Outside	.004	.005
Over 2 to 3 incl.	Inside or Outside	.005	.006
	Inside or Outside	.006	.008
Over 3 to 4 incl.	Inside or Outside	.007	.009
	Inside or Outside	.008	.010
Over 4 to 5 incl.	Inside or Outside	.008	.010
	Inside or Outside	.010	.013

Tolerances on a given tube may be specified with respect to any two, but not all three of the following:

- a. Outside dimension
- b. Inside dimension
- c. Wall thickness

When tube is ordered by O.D. and I.D. the maximum plus and minus deviation of the wall thickness from the mean at any point shall not exceed by more than 50% the values in Tables I.

* The average outside or inside diameter of a tube is the average of the maximum and minimum outside diameters, or of the maximum and minimum inside diameters, whichever is applicable, as determined at any one cross-section of the tube.