

TOLERANCES, OUTSIDE DIMENSION, O.D. RANGE, ROUND TUBING		
ROUND TUBING	BWG GAUGE	FLASH IN TUBING TOLERANCES IN.
1/2 to 5/8" Incl.	22-16	± .003
Over 5/8 to 1-1/8" Incl.	22-11	± .0035
Over 1-1/8 to 2" Incl.	22-11	± .005
Over 2 to 2-1/2" Incl.	20-11	± .006
Over 2-1/2 to 3" Incl.	20-11	± .008
Over 3 to 4" Incl.	18-11	± .010
*Measured at least 2" from cut end of tubing.		

STRAIGHTNESS TOLERANCE FOR ROUND TUBING
1/32" per every 3ft of tubing

OVALITY (HOT AND COLD ROLLED STEEL)
The ovality maybe 50% greater then the outside tolerances but the mean outside diameter shall be within the specific tolerance.

LENGTH TOLERANCES	
Mill Cut Full Lengths	-0 +1"
Cut-Length	± 1/32"

TOLERANCES, SQUARE AND RECTANGULAR	
Wall Thickness Tolerance, Square & Rectangular Tubing	±10% of nominal wall thickness
Straightness Tolerance Square & Rectangular Tubing	max. = 1/16" in 3'
Squareness of Sides Tolerance	max. = wide side (inches) x .006"

TWIST TOLERANCES	
LARGEST DIMENSION, (inches)	TOLERANCE IN 3 FEET (inches)
1/2 and Under	0.032
Over 1/2 to 1-1/2, Incl.	0.050
Over 1-1/2 to 2-1/2, Incl.	0.062
Over 2-1/2 to 4, Incl.	0.075

TOLERANCES, OUTSIDE DIMENSIONS, SQUARE & RECTANGULAR TUBING*	
WIDEST SIDE (inches)	TOLERANCES (inches)
1/2 to 5/8" Incl.	± .004
Over 5/8 to 1-1/8"	± .005
1-1/8 to 1-1/2"	± .006
1-1/2 to 2"	± .008
2 to 3"	± .010
3 to 4"	± .020

WALL THICKNESS TOLERANCES FOR COLD ROLLED ROUND TUBING

WALL THICKNESS		OUTSIDE DIAMETER (inches)					
		3/8 TO 7/8 INCL.		OVER 7/8 TO 1-7/8 INCL.		OVER 1-7/8 TO 3 INCL.	
IN.	BWG	WALL THICKNESS TOLERANCES (inches)					
		PLUS	MINUS	PLUS	MINUS	PLUS	MINUS
0.028	22	0.001	0.005	0.001	0.005	----	----
0.035	20	0.002	0.005	0.001	0.005	0.001	0.005
0.049	18	0.003	0.006	0.002	0.006	0.002	0.006
0.060	16	0.005	0.007	0.004	0.007	0.004	0.007
0.065	065	0.005	0.007	0.004	0.007	0.004	0.007
0.075	14	0.006	0.007	0.005	0.007	0.004	0.007
0.083	083	0.006	0.007	0.005	0.007	0.004	0.007
0.095	13	0.006	0.007	0.005	0.007	0.004	0.007
0.109	12	0.006	0.007	0.005	0.007	0.004	0.007