

Cold Finished Carbon Steel Bars

Standard (16/10 Under) Manufacturing Tolerances

Cold Finished Carbon Steel Bars COLD DRAWN OR TURNED & POLISHED ROUNDS

Undersize Variations in Inches				
Size Range in Inches	Max. Carbon Range .28% or less	Max. Carbon Range over .28% to .55% incl.	Max. Carbon Range to 0.55% incl., Stress Relieved or Annealed After Cold Finishing ¹	Max. Carbon Range Over .55% or all Grades Quenched & Tempered or Normalized or Tempered Before cold Finishing
1 ½ or under	.002	.003	.004	.005
Over 1 ½ to 2 ½, incl.	.003	.004	.005	.006
Over 2 ½ to 4, incl.	.004	.005	.006	.007
Over 4 to 6, incl.	.005	.006	.007	.008
Over 6 to 8, incl.	.006	.007	.008	.009
Over 8 to 9, Incl.	.007	.008	.009	.010
Over 9	.008	.009	.010	.011
COLD DRAWN HEXAGONS				
¾ or under	.002	.003	.004	.006
Over ¾ to 1 ½, incl.	.003	.004	.005	.007
Over 1 ½ to 2 ½, incl.	.004	.005	.006	.008
Over 2 ½ to 4, incl.	.005	.006	.007	.009
COLD DRAWN SQUARES				
¾ or under	.002	.004	.005	.007
Over ¾ to 1 ½, incl.	.003	.005	.006	.008
Over 1 ½ to 2 ½, incl.	.004	.006	.007	.009
Over 2 ½ to 4, incl.	.006	.008	.009	.011
COLD DRAWN FLATS				
Tolerances for flats apply to thickness as well as width				
Width in Inches				
To 2/4 incl.	.003	.004	.006	.008
Over ¾ to 1 ½, incl.	.004	.005	.008	.010
Over 1 ½ to 3, incl.	.005	.006	.010	.012
Over 3 to 4, incl.	.006	.008	.011	.016
Over 4 to 6, incl.	.008	.010	.012	.020
Over 6	.013	.015
TURNED, GROUND AND POLISHED ROUNDS				
COLD DRAWN, GROUND AND POLISHED ROUNDS				
Undersize Variations in Inches				

Size Range in Inches	Turned, Ground and Polished Rounds	Cold Drawn, Ground and Polished Rounds
1 ½ and under	.001	.001
Over 1 ½ to less than 2 ½	.0015	.0015
2 ½ to 3, incl.	.002	.002
Over 3 to 4, incl.	.003	.003
Over 4 to 6, incl.	.004*	...
Over 6	.005*	...

*For nonresulphurized steels (steels specified to maximum sulphur limits under 0.08%) or for steels thermally treated, the tolerance is increased by .001"