

## 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 <sup>1</sup>	Max. Carbon Range Over .55% or all Grades Quenched & Tempered or Normalized and 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
<b>COLD DRAWN HEXAGONS</b>				
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
<b>COLD DRAWN SQUARES</b>				
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
<b>COLD DRAWN FLATS</b>				
<b>Tolerances for flats apply to thickness as well as width</b>				
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	...	...
<b>TURNED, GROUND AND POLISHED ROUNDS</b>				
<b>COLD DRAWN, GROUND AND POLISHED ROUNDS</b>				
Undersize Variations in Inches				

<b>Size Range in Inches</b>	<b>Turned, Ground and Polished Rounds</b>	<b>Cold Drawn, Ground and Polished Rounds</b>
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"