

HOT ROLLED CARBON AND ALLOY BAR TOLERANCES

ROUNDS AND SQUARES									
Specified Size	Over	Under	Out of Round						
Up to 5/16" included	0.005"	0.005"	0.008"						
Over 5/16" to 7/16" included	0.006"	0.006"	0.009"						
Over 7/16" to 5/8" included	0.007"	0.007"	0.010"						
Over 5/8" to 7/8" included	0.008"	0.008"	0.012"						
Over 7/8" to 1" included	0.009"	0.009"	0.013"						
Over 1" to 1-1/8" included	0.010"	0.010"	0.015"						
Over 1-1/8" to 1-1/4" included	0.011"	0.011"	0.016"						
Over 1-1/4" to 1-3/8" included	0.012"	0.012"	0.018"						
Over 1-3/8" to 1-1/2" included	0.014"	0.014"	0.021"						
Over 1-1/2" to 2" included	0.016"	0.016"	0.023"						
Over 2" to 2-1/2" included	0.031"	0.000"	0.023"						
Over 2-1/2" to 3-1/2" included	0.047"	0.000"	0.035"						
Over 3-1/2" to 4-1/2" included	0.063"	0.000"	0.046"						
Over 4-1/2" to 5-1/2" included	0.078"	0.000"	0.058"						
Over 5-1/2" to 6-1/2" included	0.125"	0.000"	0.070"						
Over 6-1/2" to 8-1/4" included	0.156"	0.000"	0.085"						
Over 8-1/4" to 9-1/2" included	0.188"	0.000"	0.100"						
Over 9-1/2" to 10" included	0.250"	0.000"	0.120"						

SQUARE EDGE AND ROUND EDGE FLATS												
									Variations from			
Tolerances apply to thickness and are Plus or Minus								width				
Width	.023 to .230"	under 1/4"	1/4" - 1/2"	Over 1/2"-1"	Over 1"-2"	Over 2"-3"	Over 3"	Over	Under			
Up to 1"	0.007"	0.007"	0.008"	0.010"	Х	Х	Х	0.016"	0.016"			
Over 1" to 2"	0.007"	0.007"	0.012"	0.015"	0.031"	Х	Х	0.031"	0.031"			
Over 2" to 4"	0.008"	0.008"	0.015"	0.020"	0.031"	0.047"	0.047"	0.063"	0.031"			
Over 4" to 6"	0.009"	0.009"	0.015"	0.020"	0.031"	0.047"	0.047"	0.094"	0.063"			
Over 6" to 8"	Х	0.015"	0.016"	0.025"	0.031"	0.047"	**	0.125**	0.094**			

^{**} Thickness and width tolerances for flats over 6" to 8" incl in width and over 3" in thickness should be established in each instance

Standard Straightness: 1/4" in any 5 feet (.25" x number of feet of length divided 5)

Special Straightness: 1/8" in any 5 Feet (.125" x number of feet of length divided 5)

Note: Straightness tolerances do not apply if any subsequent heating operation.