TOLERANCES

CF ALLOY BARS

Cold Drawn or Turned & Polished

		Undersize Variations in Inches				
Specified Size in Inches	Max. Carbon Range .28% or less	Max. Carbon Range over .28 to .55% incl.	Annid. or Stress Relieved after C.F. Max. carb. to .55%	Max. Carbon range over 0.55% with or without stress relieving or annealing after cold finishing. Also all carbons Heat Tr. or Norm. & Temp. before cold Finishing		
To 1 incl. (in coils)	.002	.003	.004	.005		
To $1\frac{1}{2}$ incl.	.003	.004	.005	.006		
Over $1\frac{1}{2}$ to $2\frac{1}{2}$.004	.005	.006	.007		
Over $2\frac{1}{2}$ to 4	.005	.006	.007	.008		
Over 4 to 6	.006	.007	.008	.009		
Over 6 to 8	.007	.008	.009	.010		
Over 8 to 9	.008	.009	.010	.011		
Over 9.009	.010	.011	.012			
	COLD DF	AWN HEXAGO	DNS			
To $\frac{3}{4}$, incl.	.003	.004	.005	.007		
Over $\frac{34}{4}$ to $1\frac{1}{2}$.004	.005	.006	.008		
Over $1\frac{1}{2}$ to $2\frac{1}{2}$.005	.006	.007	.009		
Over 2½ to 31/8	.006	.007	.008	.010		
	COLD D	RAWN SQUAR	ES			
To $\frac{3}{4}$, incl.	.003	.005	.006	.008		
Over $\frac{3}{4}$ to $1\frac{1}{2}$.004	.006	.007	.009		
Over 1½ to 2½	.005	.007	.008	.010		
Over $2\frac{1}{2}$ to 4	.007	.009	.010	.012		
Over 4 to 5	.011	—				

COLD DRAWN FLATS

Tolerances for flats apply to thickness as well as width

Width in Inches	6			
To ¾, incl. Over ¾ to 1½	.004	.005	.007	.009
	.005	.006	.009	.011
Over 1½ to 3	.006	.007	.011	.013
Over 3 to 4	.007	.009	.012	.017
Over 4 to 6	.009	.011	.013	.021
Over 6.014	_			

COLD DRAWN, GROUND AND POLISHED ROUNDS TURNED, GROUND AND POLISHED ROUNDS

	Cold Drawn, Ground & <u>Polished</u> All Carbons with		Turned, Ground & Polished	
Diameter in	or without thermal treatment before		Not Heat Treated	Heat* Treated
Inches	Cold Drawing		All Carb.	All Carb.
To $1\frac{1}{2}$ incl.	.001	.0005	.0015	.0015
Over $1\frac{1}{2}$ to $2\frac{1}{2}$, excl.	.0015	.0005	.0020	.0020
$2\frac{1}{2}$ to 3, incl.	.002	.0005	.0025	.0025
Over 3 to 4, incl.	.003	.0005	.0035	.0035
Over 4 to 6, incl.	—	.0005	.0045	.0045
Over 6—	.0005	.0055	.0055	

*All tolerances are on the minus side, +.000. Applies to quenched and tempered (heat treated), normalized and tempered, or any similar double treatment prior to turning.

RYERSON