Minimum Stock Removal For Steel Test Bars Subject to Magnetic Particle Inspection

Stock Removal on Formed Parts Should Be Comparable with the Amounts Shown In These Tables

Hot Rolled Size, in. (mm)	Minimum Stock Removal from the Surface,* In. (mm)
To 1/2 incl. (12.70)	0.030 (0.76)
Over 1/2 to ¾ incl. (12.70 to 19.05)	0.045 (1.14)
Over 3/4 to 1 incl. (19.05 to 25.40)	0.060 (1.52)
Over 1 to 11/2 incl. (25.40 to 38.10)	0.075 (1.90)
Over 11/2 to 2 incl. (38.10 to 50.80)	0.090 (2.29)
Over 2 to 21/2 incl. (50.80 to 63.50)	0.125 (3.18)
Over 21/2 to 31/2 incl. (63.50 to 88.90)	0.156 (3.96)
Over 31/2 to 41/2 incl. (88.90 to 114.3)	0.187 (4.75)
Over 41/2 to 6 incl. (114.3 to 152.4)	0.250 (6.35)
Over 6 to 71/2 incl. (152.4 to 190.5)	0.312 (7.92)
Over 71/2 to 9 incl. (190.5 to 228.6)	0.375 (9.52)
Over 9 to 10 incl. (228.6 to 254.0)	0.437 (11.10)

^{*}For example, the minimum reduction in diameter of rounds is twice the minimum stock removal from the surface.

Nonresulfurized steels of this quality are ordinarily furnished with the phosphorus content up to 0.030 per cent and the sulfur content up to 0.035 per cent by cast or heat analysis.

Reference: AISI Steel Products Manual, Alloy, Carbon and HSLA Steels. March, 1986.