


Quality	403								
According to Standard	ASTM A 276 - 06								
Number	-								
									
Comparable Standards	EN	W.N.	BS						
	X15Cr13	1.4024	403S17						
Chemical Analysis	C %	Mn %	Si %	P%	Cr %	Ni %	Mo %	S%	Other Elements
	0.15	1.00	0.50	0.040 max.	11.5 to 13.0	—	—	0.030 max.	—
<b>Hot Work and Heat Treatment</b>									
	Type <sup>A</sup>	Heat Treatment Temperature <sup>B</sup> °F (°C), min	Quenchant	Hardness HRC, min					
	403	1750 (955)	Air	35					
<b>Mechanical Properties at Room Temperature</b>									
Finish	Condition	Diameter or Thickness in. (mm)	Tensile Strength, min		Yield Strength, <sup>A</sup> min		Elongation in 2 in. (50 mm) <sup>B</sup> or 4D min%	Reduction of Area, min, %	Brinell Hardness, max
		over 1 1/2 (38.10) to 1 3/4 (44.45)	125	860	100	690	18	45	-
Hot Finished or Cold Finished	A	all	70	480	40	275	20	45	-
		all	70	480	40	275	16	45	
Hot Finished or Cold Finished	T	all	100	690	80	550	15	45	
		all	100	690	80	550	12	40	
Hot Finished or Cold Finished	H	all	120	830	90	620	12	40	
		all (rounds only)	120	830	90	620	12	40	

