

Quality	1.4305		 KRANTI INDUSTRIAL METAL SUPPLIER LLP						
According to Standard	EN 10088 - 1 : 2014								
Number									
Comparable Standards	German DIN	China GB	USA AISI - SAE	Japan JIS	U.K. B.S.	Russia GOST			
	X8CrNiS18-9	Y1Cr18Ni9	303	SUS 303					
Chemical Analysis	C% max	Si% max	Mn% max	P% max	S% max	Cr%	N% max		
	0.1	1.00	2.00	0.045	0.15 - 0.35	17.0 - 19.0	0.11		
	Ni%	Cu% max							
	8.0 - 10.0	1.00							
Hot Work and Heat Treatment Temperatures									
Temperature °C									
Melting Range	Hot Forming	Soft Annealing +A	Solution Annealing	Sensitization	Stabilizing	Quenching	Tempering	Annealing	
1420-1400	1200-900	not suitable	1150-1040	800-450	not necessary	not suitable	not suitable	-	
			water/air						
Mechanical Properties at Room Temperature									
Heat Treated Materials EN 10088 - 3 : 2014									
Size d/t	mm	Testing at Room Temperature (Longitudinal)							
From	To	R N/mm2	Rp 0.2 N/mm2	A% min.	C% min.	Kv J min.	HB max		
	160	500-750	190	35			230		
Bright Bars of Heat Treated Materials EN 10088 - 3 : 2014									
Size d/t	mm	Testing at Room Temperature (Longitudinal)							
From	To	R N/mm2	Rp 0.2 N/mm2	A% min.	C% min.	Kv J min.	HB max		
	10	600-950	400	15	-	-	-		
10	16	600-950	400	15	-	-	-		
16	40	500-850	190	20	-	-	-		
40	63	500-850	190	20	-	-	-		
63	100	500-750	190	35	-	-	-		
Effect of Cold-working (Hot rolled +RA +C)									
R	N/mm2	610	800	1000	1200	1320	1480	1600	1750
Rp 0.2	N/mm2	240	550	740	880	1020	1200	1320	1450
A	%	40	20	16	10	8	8	8	6
permeability		1.005	1.06	1.64	3.44				
Reduction	%	0	0	20	30	40	40	60	70
Magnetic	not								
Machinability	high								
Hardening	cold-drawn and other cold plastic deformatuions								
Service temperature in air	continous service up to 870 °C; intermittent service up to 760 °C								