Quality	**1.4404**
According to Standard Number	**EN 10088 - 1 : 2014**

KRANTI INDUSTRIAL METAL SUPPLIER LLP

Comparable Standards	German DIN	France AFNOR	Spain UNE	China GB	U.K. B.S.	Russia GOST	USA AISI - SAE	Japan JIS
	X2CrNiMo17-12-2			022Cr17Ni12Mo2		03Ch17N13M2	316L	SUS 316L

Chemical Analysis	C% max	Si% max	Mn% max	P% max	S% max	Cr%	N% max	Ni%	Mo% max
	0.03	1.00	2.00	0.045	0.015	16.5-18.5	0.11	10.0-13.0	2.0-2.5

Hot Work and Heat Treatment Temperatures

Temperature °C

Melting Range	Hot Forming	Soft Annealing +A	Solution Annealing	Sensitization	Stabilizing	Quenching	Tempering	Annealing
1400-1380	1200-925	not suitable	not suitable	700-450	885 calm air	not suitable	not suitable	-

Mechanical Properties at Room Temperature

Heat Treated Materials EN 10088 - 3 : 2014

Size d/t mm		Testing at Room Temperature (Longitudinal)					
		R	Rp 0.2	A%	C%	Kv	HB
From	To	N/mm2	N/mm2	min.	min.	J min.	max
	160	500-700	200	40		100	215
160	250	500-700	200	30		60	215

Bright Bars of Heat Treated Material EN 10088-3: 2014

Size d/t mm		Testing at Room Temperature (Longitudinal)					
		R	Rp 0.2	A%	Z%	Kv	HB
From	To	N/mm2	N/mm2	min.	min.	J min.	max
	10	600-930	400	25			
10	16	580-930	380	25			
16	40	500-830	200	30		100	
40	63	500-830	200	30		100	
63	160	500-700	200	40		100	
160	250	500-700	200	30		60	

Effect of Cold-working (Hot rolled +RA +C)

R	N/mm2	500	650	790	850	940	1030	1100	1200
Rp 0.2	N/mm2	200	520	700	760	830	920	1000	1080
A	%	55	30	14	12	10	9	8	8
Reduction	%	0	10	20	30	40	50	60	70

Magnetic	no
Machinability	high
Hardening	cold-drawn and other cold plastic deformatuions
Service temperature in air	continous service up to 850 C; intermittent service up to 800 C