

Quality		1.4105									
According to Standard		EN 10088 - 1 : 2014									
Number		1.6773									
Comparable Standards		German DIN	France AFNOR	Spain UNE	China GB	U.K. B.S.	Russia GOST	USA AISI - SAE	Japan JIS		
		X6CrMoS17						430F			
Chemical Analysis		C% max	Si% max	Mn% max	P% max	S% max	Cr%	Mo%	Ni%		
		0.08	1.50	1.50	0.04	0.15 - 0.35	16.0 - 18.0	0.20 - 0.60			
Hot Work and Heat Treatment Temperatures											
Temperature °C											
Melting Range	Hot Forming	Soft Annealing +A	Isothermal Annealing +I	Normalising	Recrystallization	Quenching	Tempering	Annealing			
1500 - 1490	1150 - 815	850 - 750	not suitable	-	790 - 710 cooling to 300, then air	not suitable	not suitable	825-805 protectet atmosphere cooling 50-100°C/h to 400, then air			
		air									
Mechanical Properties at Room Temperature											
Heat Treated Materials EN 10088 - 3 : 2014											
Size d/t		Testing at Room Temperature (Longitudinal)									
mm		R	Rp 0.2	A%	C%	Kv	HB				
From	To	N/mm2	N/mm2	min.	min.	J min.	max				
	100	430-630	250	20	-	-	200				
Bright Bars of Heat Treated Materials EN 10088 - 3 : 2014											
Size d/t		Testing at Room Temperature (Longitudinal)									
mm		R	Rp 0.2	A%	C%	Kv	HB				
From	To	N/mm2	N/mm2	min.	min.	J min.	max				
	10	530-780	330	7	-	-	-				
10	16	500-780	310	7	-	-	-				
16	40	430-730	250	12	-	-	-				
40	63	430-730	250	12	-	-	-				
63	100	430-630	250	20	-	-	-				
Effect of Cold-working (Hot rolled +RA +C)											
R	N/mm2	570	620	690	710	740	780	800	840	880	920
Rp 0.2	N/mm2	280	510	590	620	650	690	730	760	800	850
A	%	20	10	9	9	8	8	8	8	8	8
Reductio	%	0	10	20	30	50	60	60	70	75	80
Minimum values at high temperatures EN 10088-3: 2014											
Rp 0.2	N/mm2	230	220	215	210	205	200	195 +A annealed material			
Test at °C		100	150	200	250	300	350	400			
Magnetic	yes										
Machinability	high										
Hardening	cold-drawn and other cold plastic deformatuions										
Service temperature in air	continous service up to 810 °C; intermittent service up to 860 °C										