

Quality	X39CrMo17-1
According to Standard	EN 10088-3:2005 (E)
Number	1.4122



Comparable Standards

EN	W.N.	AISI
X39CrMo17-1	1.4122	—

Chemical Analysis

C %	P% max				
Si % max	Mn %	S%	Cr %		
0,33 to 0,45	1,00	≤ 1,50	0,040	≤ 0,030 ^b	15,5 to 17,5
Cu	Mo %	Nb	Ni %	Others	
—	0,80 to 1,30	—	≤ 1,00	—	

Hot Work and Heat Treatment Temperature

Heat Treatment Symbol	Hot Forming		Annealing		Quenching		Tempering
	Temperature °C	Type of cooling	Temperature °C	Type of cooling	Temperature °C	Type of cooling	Temperature °C
+A	1100 to 800	slow cooling	750 to 850	furn.,air	—	—	—
+QT 750	1100 to 800	slow cooling	—	—	980 to 1060	oil	650 to 750

Mechanical Properties at Room Temperature

Heat Treatment Condition	Ø	Hardness	Rp0,2 ^d min.	Rm ^d	A ^d min. %	KV min. J
	mm.	HB ^c max	N/mm2	N/mm2		
+A	—	280	—	max 900	—	20
+QT 750	≤ 60 60 < t ≤ 160	—	550	750 to 950	12	14