

Quality	90MnCrV8					
According to standards	EN ISO 4957 : 2002					
Number	1.2842					
 KRANTI INDUSTRIAL METAL SUPPLIER LLP						
Chemical composition						
C% max 0.85-0.95	Si% 0.10-0.40	Mn% 1.80-2.20	P% max 0.03	S% max 0.03	Cr% max 0.20-0.50	
	Mo% max -	Ni% max -	V% max 0.05-0.20			
Temperature °C						
Hot-forming 1050-850	Quenching 790-820 oil, polymer or salt bath 200-250 °C	Tempering +T (180-220 calm air) minimum 2 cycles	Stress-relieving after machining & before quenching 650 furnace cooling to 320, then air		Soft annealing 700 calm air (HB max 229)	
Mechanical properties						
Tempering table after quenching at 790 ⁰ C in oil						
HB	739	722	706	668	654	595
HRC	65	64	63	62	60	57
R N/mm2						2240
Tempering at ⁰ C	50	100	150	200	250	300
Thermal Expansion	10 ⁻⁶ . K ⁻ⁱ		11.5	12	12.2	12.5
Modulus of elasticity long.	GP a	210				
Modulus of elasticity tang.	GP a	80				
Specific heat capacity	J/(kg.K)	460				
Thermal conductivity	W/(m.K)	30				
Density	kg/dm3	7.85				
Specific electric resistivity	ohm.mm2/m	0.35				
	Siemens.m/m					
Electrical conductivity	m2	2.85				
°C		20	100	200	300	400