

Quality 100CrMo7
 According to standards EN ISO 683-17: 2012
 Number 1.3537 B5



Chemical composition

C% max 0.93-1.05	Si% 0.15-0.35	Mn% 0.25-0.45	P% max 0.025	S% max 0.015	Cr% max 1.65-1.95
	Mo% max 0.15-0.30	Al% max 0.050	Cu% max 0.30		
Temperature °C					

Hot-forming 1100-850	Quenching 850 oil or polymer, salt bath 500-550	Tempering 150-220 air	Stress-relieving 600-650 furnace cooling	Soft Annealing 730 air (HB max 220)
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Mechanical properties

Table of tempering values obtained at room temperature after quenching at 850°C in oil

HB	739	739	722	670	615	595
HRC	65	65	64	61	58	57
R N/mm2			2000	2400	2430	2300
Rp 0.2 N/mm2			1800	2050	2150	2090
A						
Z						
Tempering at °C	50	100	150	200		
Thermal Expansion	10 ⁻⁶ . K ⁻ⁱ				12	
Modulus of elasticity long.	GP a	210				
Modulus of elasticity tang.	GP a	80				
Poisson Number	v	0.3				
Specific heat capacity	J/(kg.K)	480				
Density	kg/dm3	7.8				
Thermal Conductivity	W/(m.K)	45				
Specific electric resistivity	ohm.mm2/m Siemens.m/m	0.22				
Electrical conductivity	m2	4.54				
°C		20	100	200	300	