

DIN - Material - No. 1.2361
Code X91CrMoV18
Comparable standards AISI: 440B

Chemical composition	C	Si	Mn	Cr	Mo	V
(Typical analysis %)	0.90	Max 1.0	Max 1.0	18.00	1.10	0.10

Steel properties Cold work stainless steel for hardening. Polishability.
 It is not for welding.

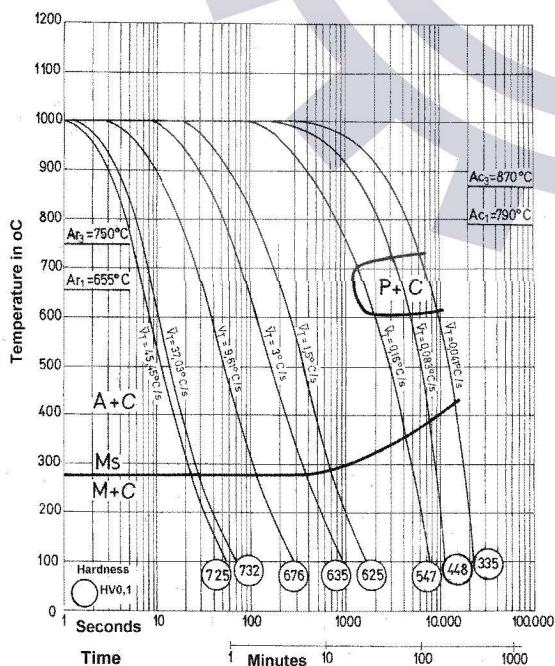
Physical properties	Thermal conductivity W/(m.K)	20°C 15
	Density g/cm ³	20°C 7.70
	Coefficient of linear thermal expansion	
	10 ⁻⁶ °C ⁻¹	20-100 20-200 20-300 20-400 20-500 20-600 20-700 20-800°C 9.8 10.5 10.9 11.2 11.3 11.3 11.5 11.8

Applications Roller bearings, and races, gage blocks, wear plates, cutting components, surgical instruments, cutlery and valve components.

Stress Relieving Holding at approx 650°C for one hour.

Heat treatment	Soft annealing °C	Cooling	Hardness HB
	810 - 860	furnace	max. 265
	Hardening from °C	in	Hardness after quenching HRC
	1000 - 1050	oil	56
	Tempering °C	100 200 300 400 500 550 600 650 700	
	HRC	56 54 52 53 54 51 40 33 29	

Time - Temperature - Transformation - Diagram



Tempering Diagram

