

DIN - Material - No. 1.2360
Code X48CnMoV8-1-1
Comparable standards Chipper

Chemical composition	C	Si	Mn	Cr	Mo	V
(Typical analysis %)	0.50	1.05	0.45	8.00	1.50	0.52

Steel properties Cold work tool steel, good wear resistance, medium toughness

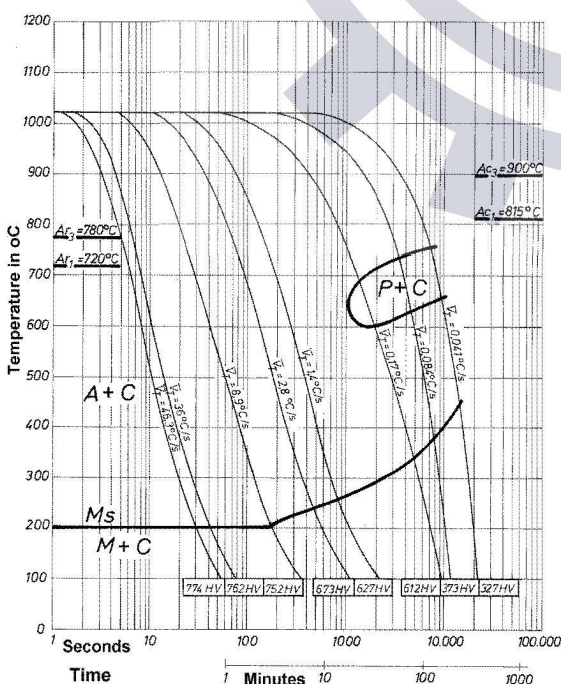
Physical properties	Thermal conductivity W/(m K)	$\frac{20^{\circ}\text{C}}{26}$
	Coefficient of linear thermal expansion	
	$10^{-6} \text{ }^{\circ}\text{C}^{-1}$	20-100 20-200 20-300 20-400 20-500 20-600 20-700 20-800°C
		13.1 13.9 13.8 13.8 14.1 14.3 14.6 14.7

Applications Severely stressed machine blades for cellulose and paper ind., woodworking milling cutters, flat and circular blades for cutting 5 to 15 mm thick sheet/plate.

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

Heat treatment		Soft annealing°C		Cooling		Hardness HB		
		820 - 860		furnace		max. 250		
		Hardening from°C		in		Hardness after quenching HRC		
		1000 - 1040		oil, air		57		
Tempering		C	100	200	300	400	500	600
		HRC	57	56	56	57	58	42

Time - Temperature - Transformation - Diagram



Tempering Diagram

