

Cryodur 2550

60WCrV8

C 0.60 Si 0.60 Mn 0.35 Cr 1.10 V 0.20 W 2.00

Steel properties Impact-resistant oil-hardenable steel, characterized by very good toughness in combination with high hardenability.

Standards AISI ~S1 AFNOR 55WC20

Physical properties **Coefficient of thermal expansion at °C**
 $10^{-6} \text{ m}/(\text{m} \cdot \text{K})$

20 – 100	20 – 200	20 – 300	20 – 400	20 – 500	20 – 600	20 – 700
11.8	12.7	13.1	13.5	14.0	14.3	14.5

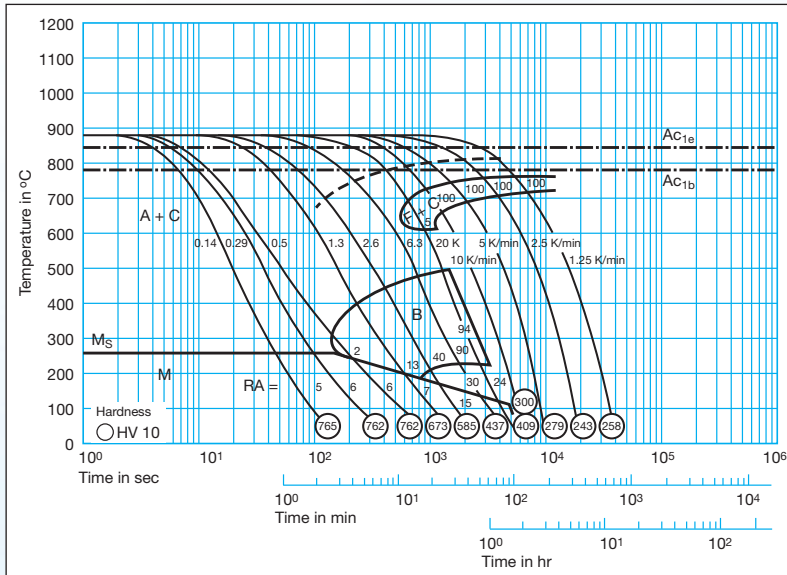
Thermal conductivity at °C
 $\text{W}/(\text{m} \cdot \text{K})$

20	350	700
34.2	32.6	30.9

Applications Blanking dies for cutting sheets up to 12 mm thickness, trimming and splitting dies, cold piercing punches, preforming punches, shear blades, chipping knives, pneumatic chisels, coining tools, cold shear blades, ejectors.

Heat treatment	Soft annealing °C 710 – 750	Cooling Furnace	Hardness HB max. 225				
	Stress-relief annealing °C approx. 650	Cooling Furnace					
	Hardening °C 870 – 900	Quenching Oil or saltbath, 180 – 220 °C	Hardness after quenching HRC 60				
	Tempering °C HRC	100	200	300	400	500	600
		60	58	56	52	48	43

Time-temperature-transformation diagram



Tempering diagram

