

Material No.: Code:
1.2210 115CrV3

DE - Brand:
PV4

Chemical composition:
 (Typical analysis in %)

C	Cr	V					
1,20	0,70	0,10					

Steel properties:

Wear resistant Cr-V-alloyed tool steel. Similar to AISI L2.

Applications:

Cutting and punching tools, thread rolling tools, twist drills, ejector pins.

Condition of delivery:

Soft annealed to max. 220 HB

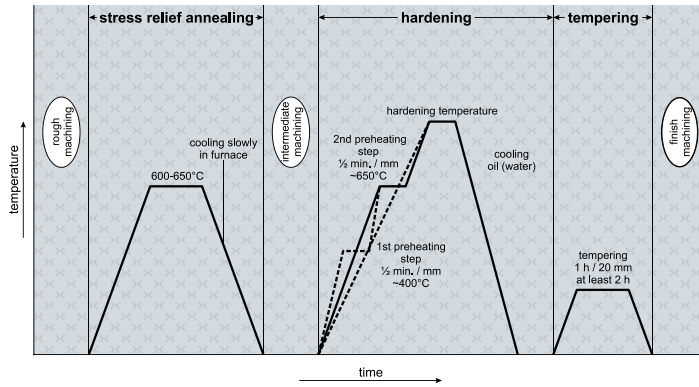
Physical properties:

Thermal expansion coefficient	$\left[\frac{10^{-6} \cdot \text{m}}{\text{m} \cdot \text{K}} \right]$	20-100°C	20-200°C	20-300°C	20-400°C
		11,8	12,5	12,9	13,5
Thermal conductivity	$\left[\frac{\text{W}}{\text{m} \cdot \text{K}} \right]$	20°C	350°C	700°C	
		33,5	32,0	31,0	

Heat treatment:

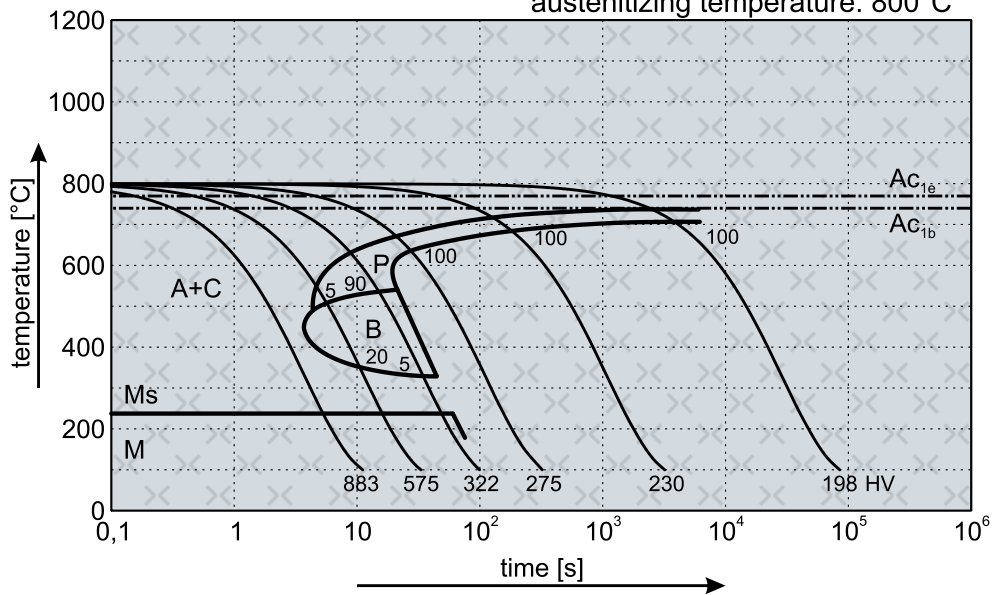
Soft annealing	Temperature	Cooling	Hardness
	710 - 750°C	furnace	max. 220 HB
Stress relief annealing	Temperature	Cooling	
	600 - 650°C	furnace	
Hardening	Temperature	Cooling	Tempering
	780 - 840°C	oil (water)	see tempering diagram

(1.2210) Thermal Cycle Diagram

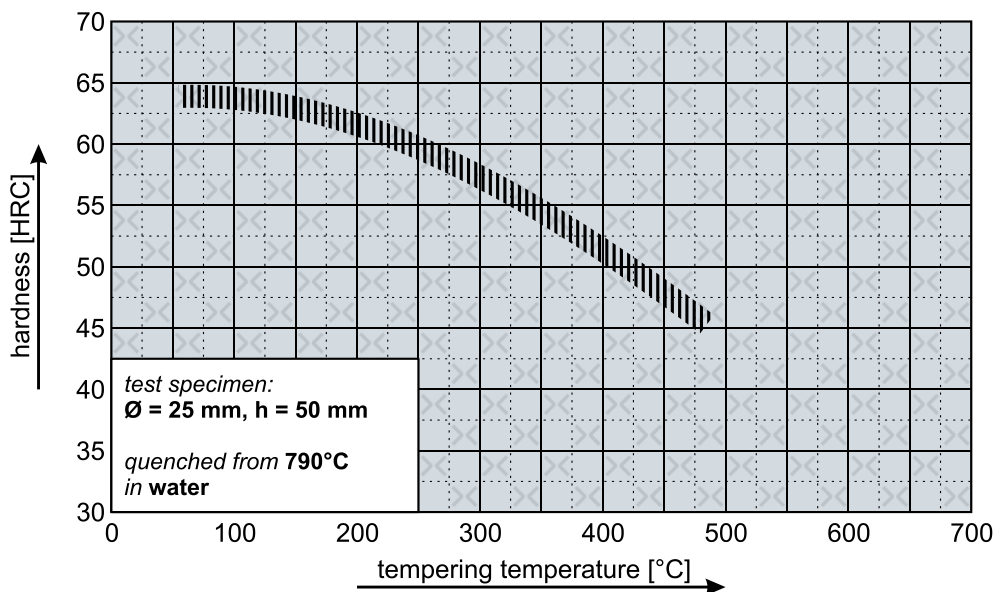


Continuous Cooling Transformation Diagram (CCT)

austenitizing temperature: 800°C



Tempering Diagram



Remarks: All technical information is for reference only.