



Material No.: Code:
1.2358 60CrMoV18-5

DE - Brand:
AMO

Chemical composition:
(Typical analysis in %)

C	Cr	Mo	V				
0,60	4,50	0,50	0,20				

Steel properties:

Medium alloyed cold work steel that is usually supplied hardened and tempered, high hardening capacity, through hardenability and toughness, good weldability, excellent surface hardenability.

Applications:

Cutting inserts for segmented tool, punching tools, shear knives, plastic moulds, cutting tools.

Condition of delivery:

- a) Soft annealed to max. 240 HB
- b) Quenched and tempered, 280 - 325 HB
(950 - 1100 N/mm² according to DIN EN ISO 18265 Table A.1)

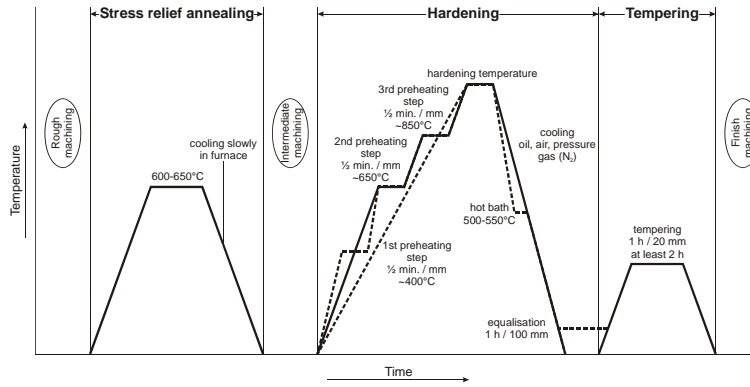
Physical properties:

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
		11,5	11,8	12,4	12,8
Thermal conductivity	$\left[\frac{\text{W}}{\text{m} \cdot \text{K}} \right]$	20°C	350°C	700°C	
		19,4	24,6	26,3	

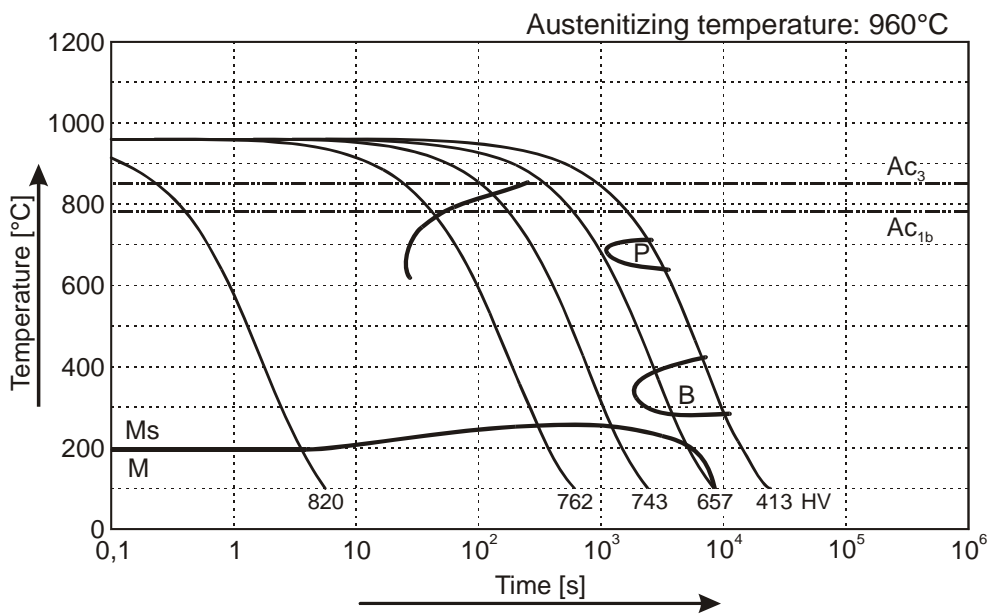
Heat treatment:

Soft annealing	<table border="1"><thead><tr><th>Temperature</th><th>Cooling</th><th>Hardness</th></tr></thead><tbody><tr><td>820 - 860°C</td><td>furnace</td><td>max. 240 HB</td></tr></tbody></table>	Temperature	Cooling	Hardness	820 - 860°C	furnace	max. 240 HB
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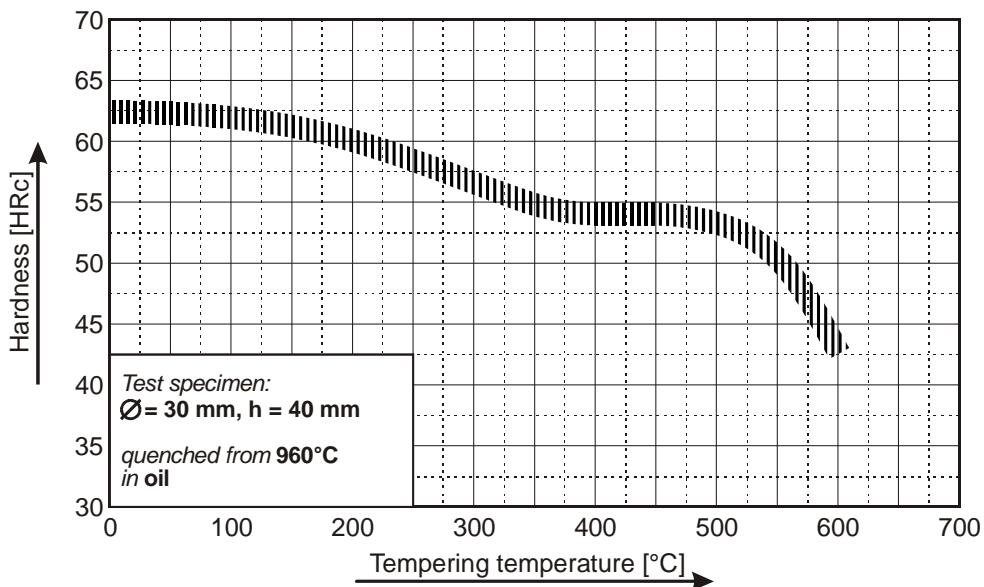
(1.2358) Thermal Cycle Diagram



Continuous Cooling Transformation Diagram (CCT)



Tempering Diagram



Remarks: All technical information is for reference only.