



Material No.: Code:  
**1.2343 X37CrMoV5-1**

DE - Brand:  
**WP5**

**Chemical composition:**  
(Typical analysis in %)

C	Si	Cr	Mo	V			
0,37	1,00	5,30	1,30	0,40			

**Steel properties:**

Hot work steel with excellent toughness combined with high thermal stability, high resistance to thermal shocks, good thermal conductivity, limited water cooling possible. For toughest applications also available in EFS and ESR. Similar to AISI H11.

**Applications:**

Die casting tools, forging dies, extrusion tools, cylinders and screws for plastic processing, hot shear knives, hydro forming tools.

**Condition of delivery:**

Soft annealed to max. 229 HB

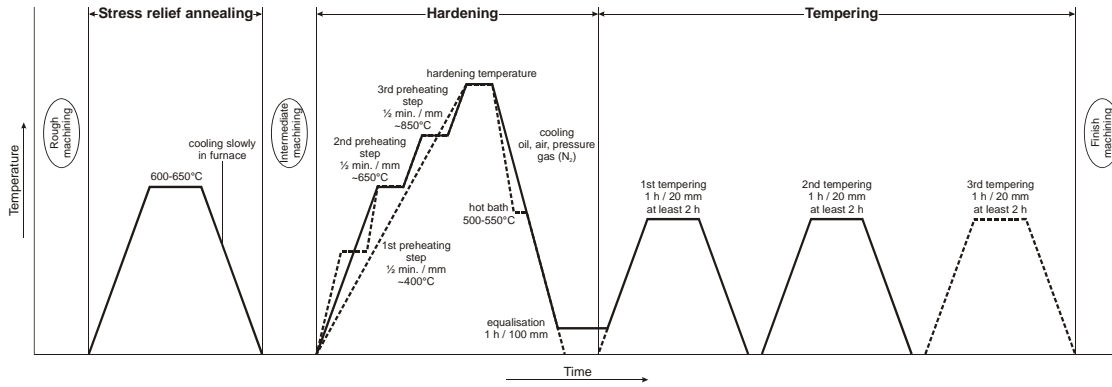
**Physical properties:**

Thermal expansion coefficient	$\left[ \frac{10^{-6} \cdot \text{m}}{\text{m} \cdot \text{K}} \right]$	20-100°C	20-300°C	20-500°C	20-700°C
		11,4	12,4	13,1	13,3
Thermal conductivity	$\left[ \frac{\text{W}}{\text{m} \cdot \text{K}} \right]$	20°C	350°C	700°C	
		25,3	27,6	30,5	

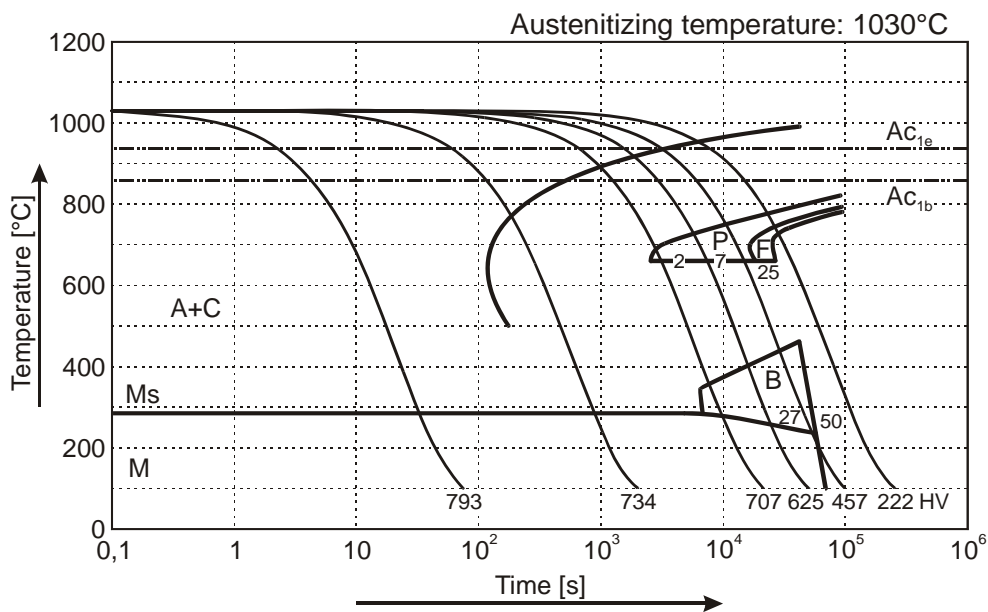
**Heat treatment:**

Soft annealing	<table border="1"><thead><tr><th>Temperature</th><th>Cooling</th><th>Hardness</th></tr></thead><tbody><tr><td>750 - 790°C</td><td>furnace</td><td>max. 229 HB</td></tr></tbody></table>	Temperature	Cooling	Hardness	750 - 790°C	furnace	max. 229 HB
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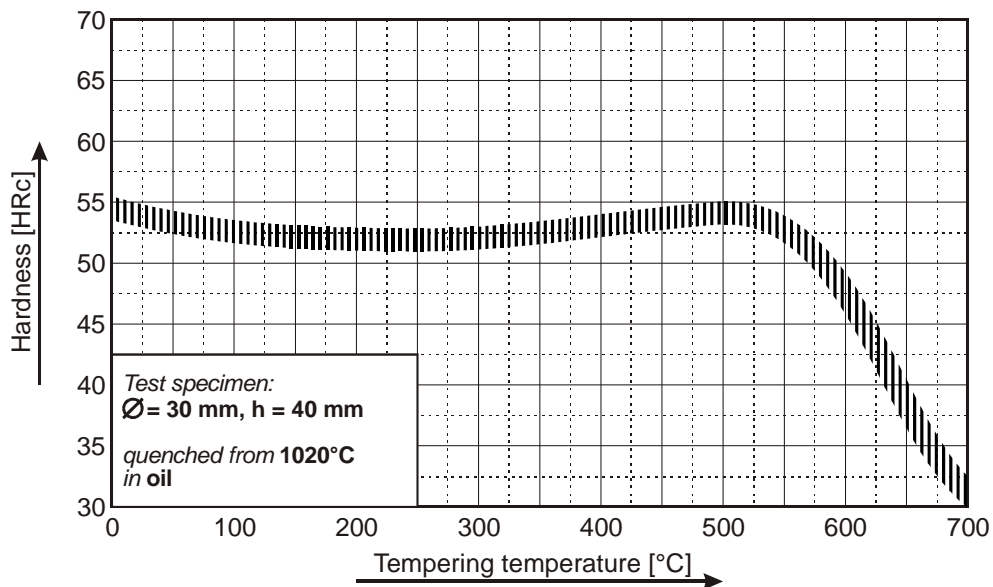
# (1.2343) Thermal Cycle Diagram



## Continuous Cooling Transformation Diagram (CCT)



## Tempering Diagram



Remarks: All technical information is for reference only.