

Material No.: Code:
1.3243 HS6-5-2-5

DE - Brand:
EMo5Co5

Chemical composition:
 (Typical analysis in %)

C	Cr	Mo	V	W	Co		
0,92	4,10	5,00	1,90	6,40	4,80		

Steel properties:

Co-alloyed high-speed steel with high hot strength and excellent toughness.

Applications:

Cutting of high strength material, highly stressed tools for twist and thread drills, milling cutters, profile knives, broaches.

Condition of delivery:

Soft annealed to max. 269 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
		9,7	11,0	11,5	12,5
Thermal conductivity	$\left[\frac{\text{W}}{\text{m} \cdot \text{K}} \right]$	20°C	350°C	700°C	
		27,4	27,2	26,0	

Heat treatment:

Soft annealing

Temperature	Cooling	Hardness
800 - 860°C	furnace	max. 269 HB

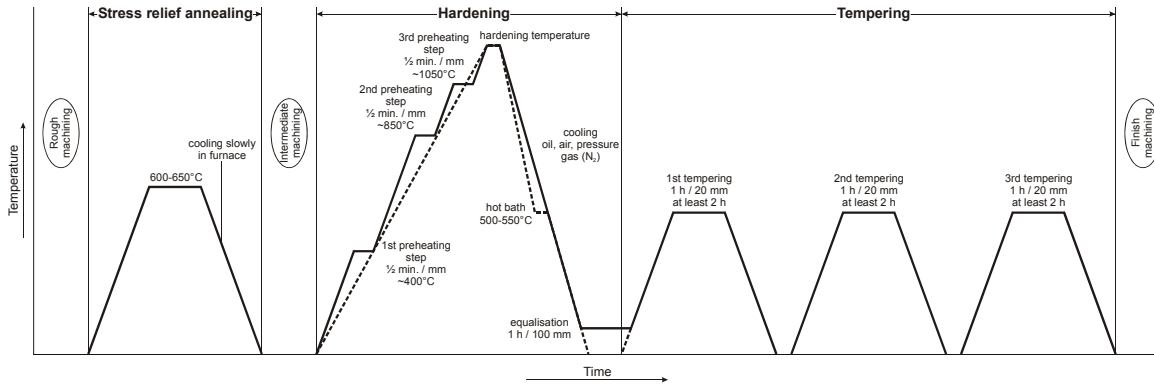
Stress relief annealing

Temperature	Cooling	
600 - 650°C	furnace	

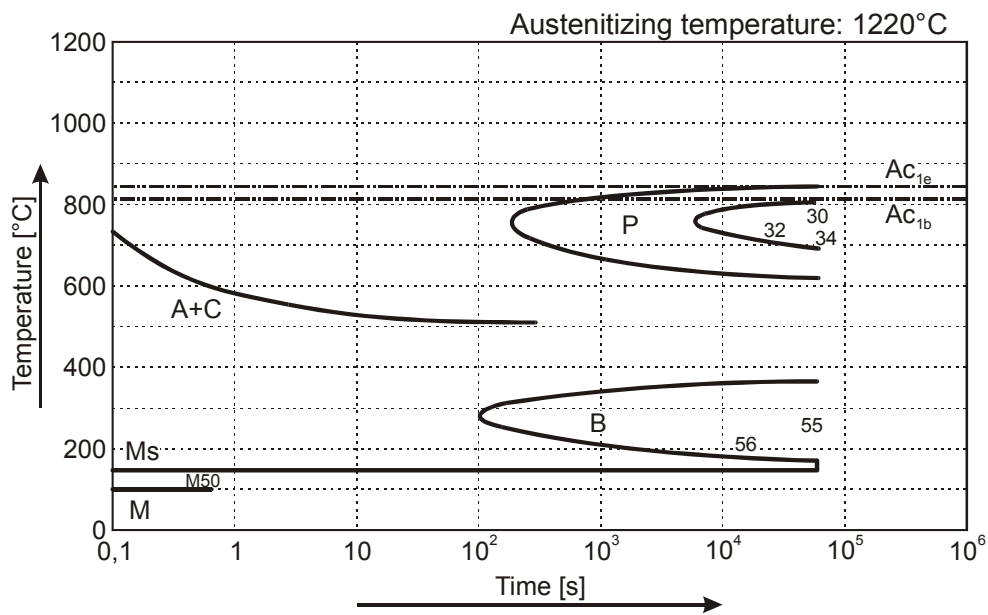
Hardening

Temperature	Cooling	Tempering
1160 - 1230°C	oil, pressure gas (N ₂), air or hot bath 500 - 550°C	see tempering diagram

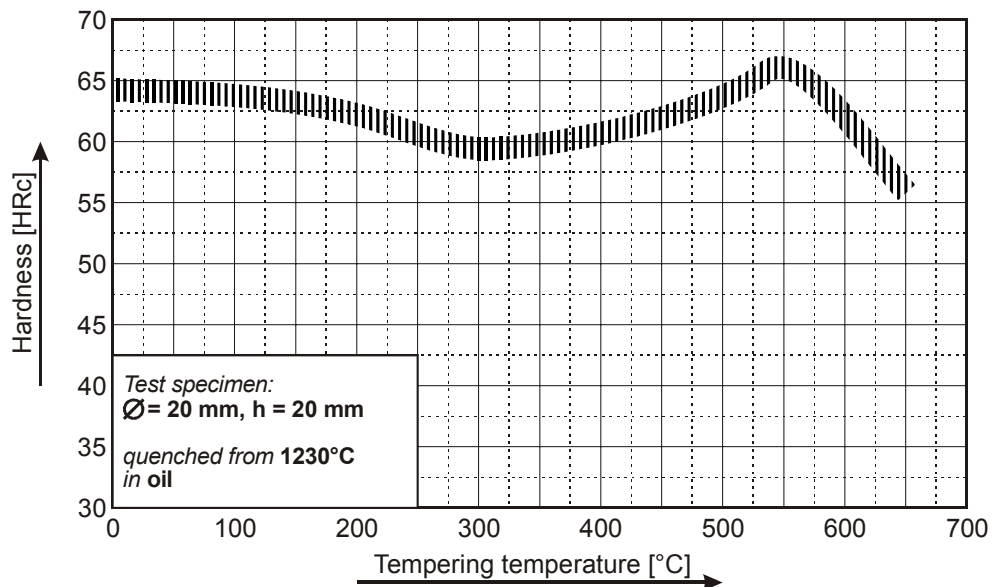
(1.3243) Thermal Cycle Diagram



Time Temperature Transformation Diagram (TTT)



Tempering Diagram



Remarks: All technical information is for reference only.