

Material No.: Code:
1.3343 HS6-5-2C

DE - Brand:
DMO5

Chemical composition:
 (Typical analysis in %)

C	Cr	Mo	V	W			
0,90	4,00	5,00	1,90	6,40			

Steel properties:

High-speed steel, high strength at elevated temperatures, good toughness, high compressive strength, good wear resistance. Similar to AISI M2.

Applications:

Standard material for machining tools, e.g. drill bits, milling cutters, screw dies, broaches, inserts for circular saw blades. slotting tools and wood working tools. In addition cold forming tools e.g. cutting and blanking tools, cold extrusion punches and dies. Excellent base material for PVD/CVD coating.

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	20-200°C	20-300°C	20-400°C
		10,8	11,8	12,0	12,5
Thermal conductivity	$\left[\frac{\text{W}}{\text{m} \cdot \text{K}} \right]$	20°C	350°C	700°C	
		27,6	27,2	26,1	

Heat treatment:

Soft annealing

Temperature	Cooling	Hardness
780 - 860°C	furnace	max. 269 HB

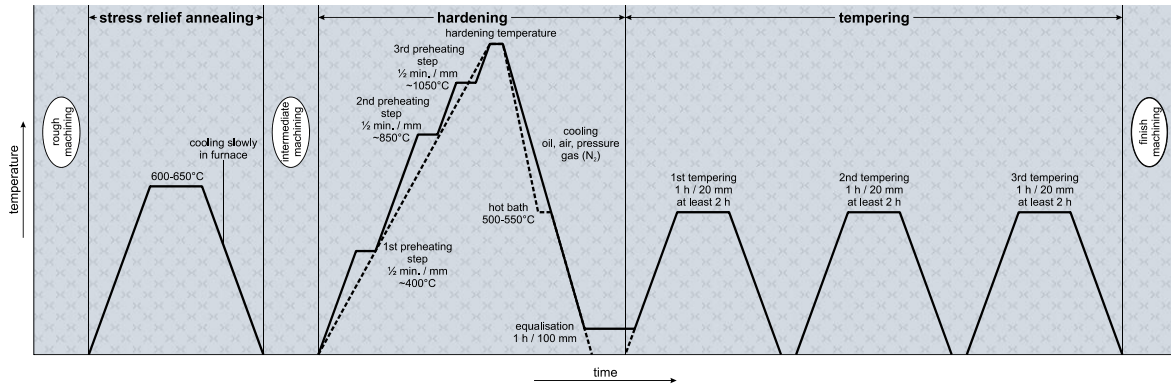
Stress relief annealing

Temperature	Cooling	
600 - 650°C	furnace	

Hardening

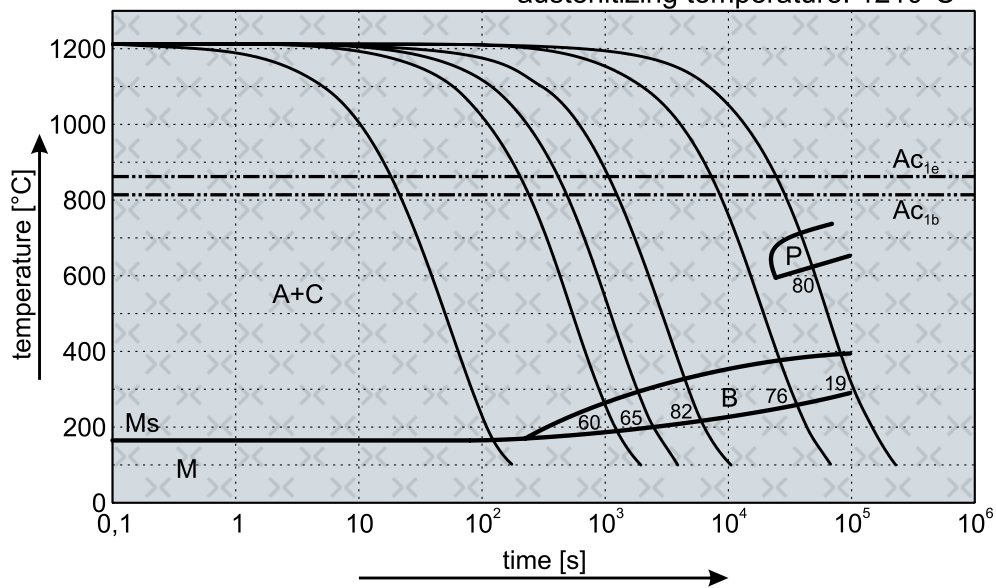
Temperature	Cooling	Tempering
1180 - 1230°C	oil, pressure gas (N ₂), air or hot bath 500 - 550°C	see tempering diagram

(1.3343) Thermal Cycle Diagram

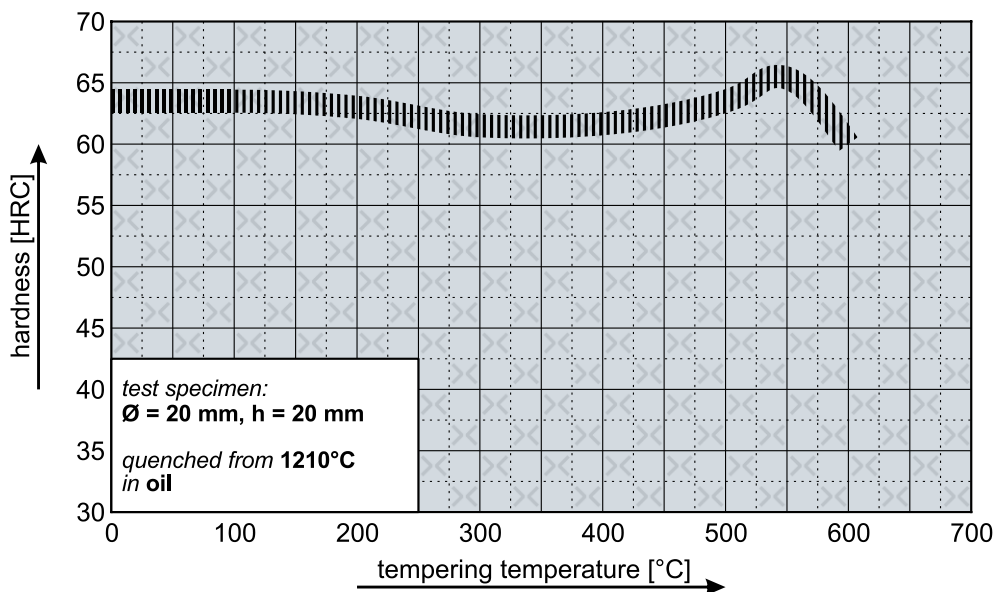


Continuous Cooling Transformation Diagram (CCT)

austenitizing temperature: 1210°C



Tempering Diagram



Remarks: All technical information is for reference only.