Dörrenberg Edelstahl

Special Steel

DE - Brand:
CP4M®

Chemical composition:
(Typical analysis in %)

C	Cr	Mo	V				
0,60	5,00	+	+				

Steel properties:

Cr-Mo-V alloyed, secondary hardenable cold work tool steel with high toughness, dimensionally stable, better weldability and through-hardenability (compared to the carbide rich cold work tool steel 1.2379). Excellent base material for nitriding or coating (CVD, PVD). This steel is usually supplied in the hardened condition.

Applications:

Deep drawing, punching and cutting tools, tools for hot and cold forming of higher tensile sheet material.

Condition of delivery:

a) Soft annealed to max. 250 HB
b) Quenched and tempered, 900 - 1050 N/mm²

Heat treatment:

Soft annealing

Temperature	Cooling	Hardness
820 - 860°C	furnace	max. 250 HB

Stress relief annealing

Temperature	Cooling	
600 - 650°C	furnace	

Hardening

Temperature	Cooling	Tempering
1000 - 1050°C	oil, pressure gas (N_2), air or hot bath 500 - 550°C	see tempering diagram

11/07

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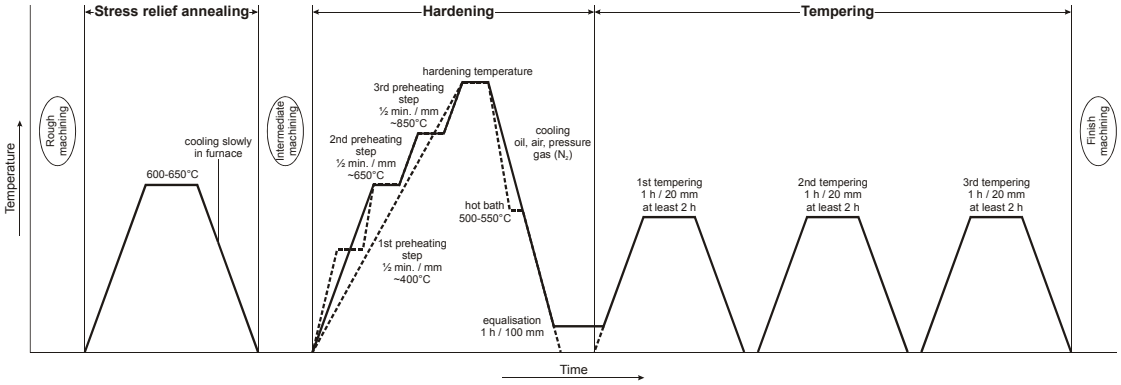
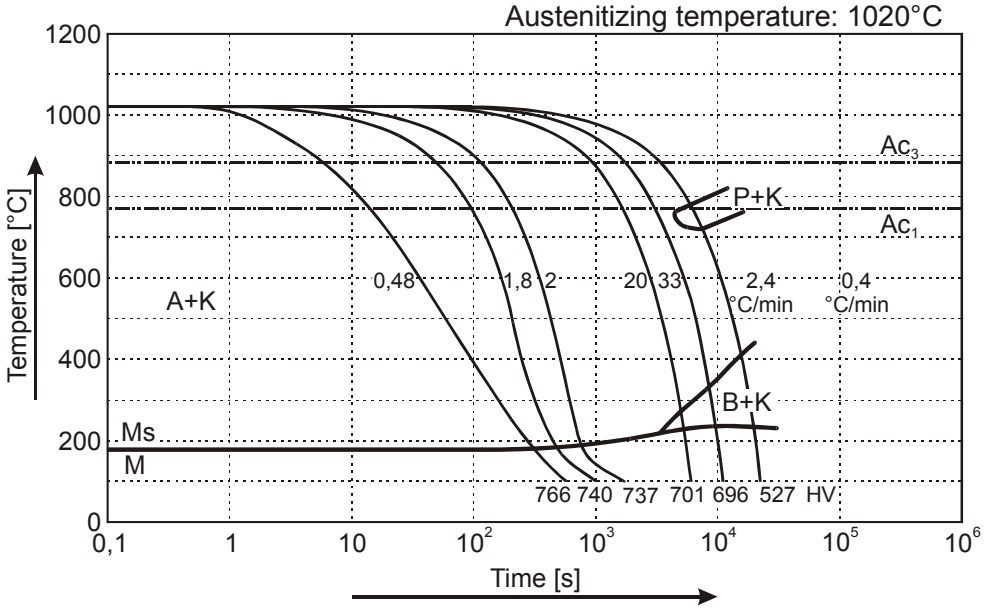
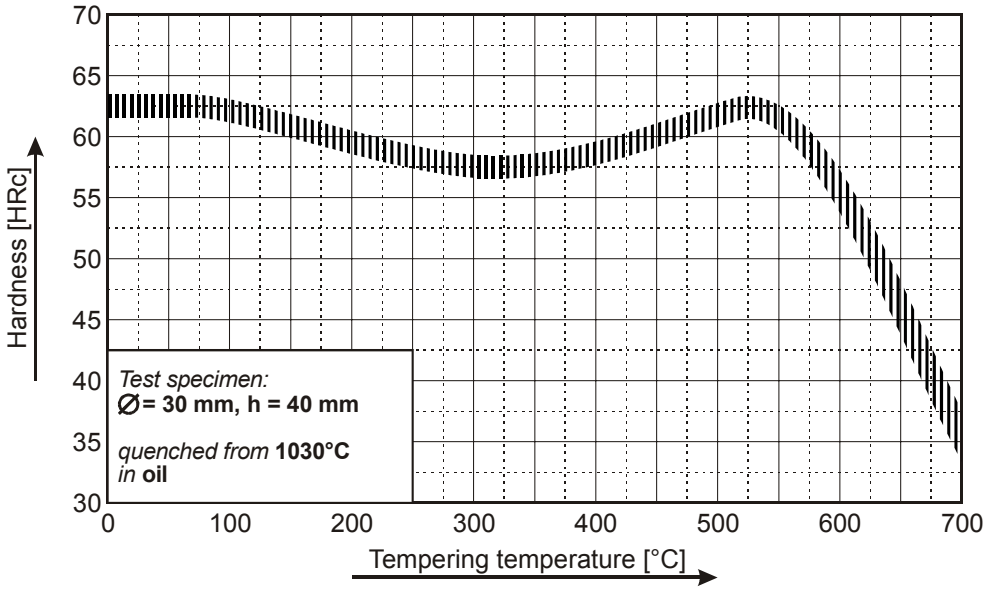
(CP4M®) Thermal Cycle Diagram



Continuous Cooling Transformation Diagram (CCT)



Tempering Diagram



Remarks: All technical information is for reference only.