Dörrenberg Edelstahl

Material No.: 1.2363 Code: X100CrMoV5 DE - Brand: P5M

Chemical composition:
(Typical analysis in %)

C	Cr	Mo	V				
1,00	5,30	1,10	0,25				

Steel properties:

Medium alloyed cold work steel with 1% Carbon, high achievable hardness, high through hardenability, good dimensional stability, excellent compressive strength, good toughness, high wear resistance.

Applications:

Shear blades, cutting punching stamping, bending tools, form rolls, cold pilger mandrels, moulds for plastic processing, embossing dies.

Condition of delivery:

Soft annealed to max. 241 HB

Physical properties:

Thermal expansion coefficient $\left[\frac{10^{-6}\cdot m}{m \cdot K}\right]$	20-100°C	20-200°C	20-300°C	20-400°C
	11,6	12,9	13,2	13,7

Thermal conductivity $\left[\frac{W}{m \cdot K}\right]$	20°C	350°C	700°C
	15,8	26,7	28,9

Heat treatment:

Soft annealing

Temperature	Cooling	Hardness
800 - 840°C	furnace	max. 241 HB

Stress relief annealing

Temperature	Cooling	
600 - 650°C	furnace	

Hardening

Temperature	Cooling	Tempering
950 - 980°C	oil, pressure gas (N_2), air or hot bath 500 - 550°C	see tempering diagram

04/05

Dörrenberg Edelstahl GmbH · Hammerweg 7 · D-51766 Engelskirchen
Tel.: +49 22 63 / 79 1 · Fax: +49 22 63 / 79 20 5 · www.doerrenberg.de

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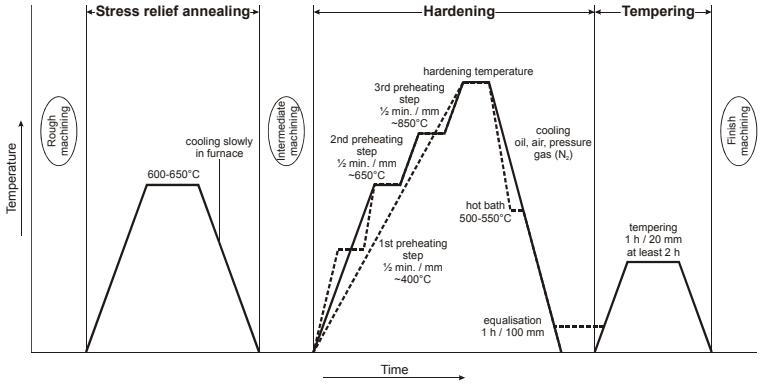
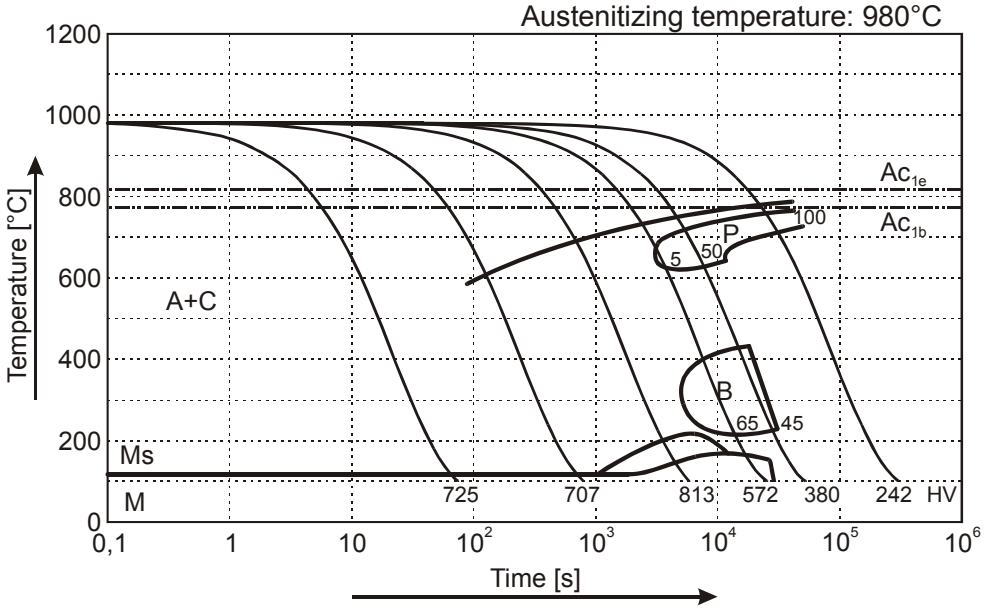
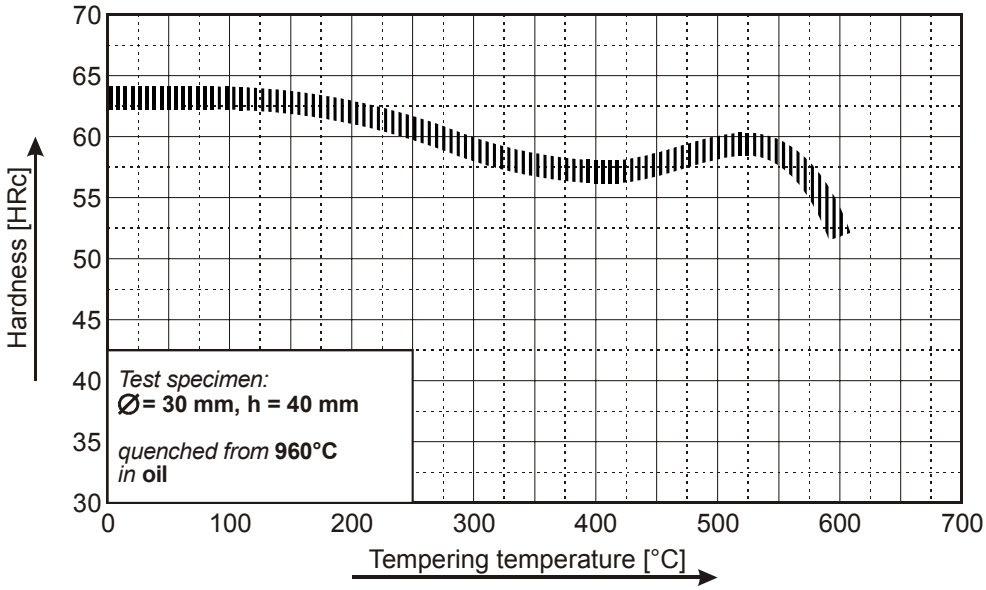
(1.2363) Thermal Cycle Diagram



Continuous Cooling Transformation Diagram (CCT)



Tempering Diagram



Remarks: All technical information is for reference only.