

## 1.2363

**Material no.:** 1.2363

**Abbreviated DIN name:** X 100 CrMoV 5

**Chemical analysis (%):**

C	Cr	Mo	V		
1,0	5,2	1,2	0,3		

**HASCO colour code:** yellow / blue

Flat steel: brown

**Hardness when supplied:** soft-annealed to max. 241 HB (~810 N/mm<sup>2</sup>)

### Characteristics

#### Material properties:

Very tough, low distortion cold work steel with very high hardness. Good machinability, high through-hardening capacity. For good eroding results, tempering three times above 520°C is recommended.

#### Uses:

Cavity plates and inserts for cutting and punching tools, shear blades, moulds for plastics processing and their inserts.

### Physical properties

**Thermal expansion coefficient**  
(10<sup>-6</sup>·m)/(m·K)

100	200	300	400	500	600	700	°C
9,9	12,5	13,2	14,5				

**Thermal conductivity** W/(m·K)

20	350	700	°C
15,8	26,7	29,1	

### Remarks

**Polishing:** Is possible.

**Graining:** Not usual.

**Nitriding:** Not usual.

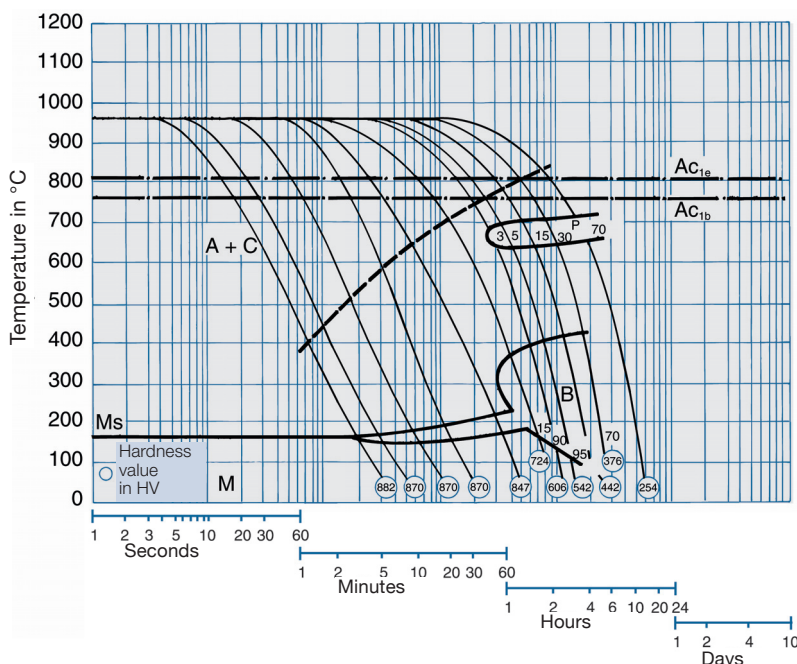
**Hardening:** At 950°C – 980°C. Details can be taken from the time-temperature conversion and tempering charts. The most suitable heat treatment for the relevant workpiece should be fixed by the hardening shop. The hardness should be specified by the hardening shop and checked on delivery.

**Soft annealing:** 820°C – 850°C, approx. 5 h

**Stress-relief annealing:** To eliminate residual stress after coarse machining at approx. 600°C – 650°C, approx. 4 h with slow heating and furnace cooling.

**Normal working hardness:** 58 - 62 HRC

### Time-temperature conversion chart



### Tempering chart

