

AISI H12 H12 DIN 2606

X37CrMoW 5-1

C 0.30-0.40 Si 0.80-1.25 Cr 4.75-5.50 Mo 1.25-1.75 V 0.20-0.50

Steel properties

Excellent Resistance to Wear, High Strength at Elevated Temperature with good Homogenizing with High Toughness. Extra- Fine- Structure without Grain-Boundary Carbide.

Standards

AISI H12 AFNOR Z 35 CDW 5-1

Physical properties

Coefficient of thermal expansion

at °C 20-100 20- 250 20- 500
10⁻⁶m/(m • K) 11.7 12.4 12.9

Thermal conductivity

at °C 20 250 500

W/(m • K) Quenched and tempered 24.2 25.6 28.0

Applications

This steel use for Forming dies, Press dies, Hot Shear, Immediate Roller for Cold Rolling.

Heat treatment

Soft annealing °C
820

Cooling
Furnace

Hardness HB
max. 240

Stress-relief annealing °C
approx. 650

Cooling
Furnace

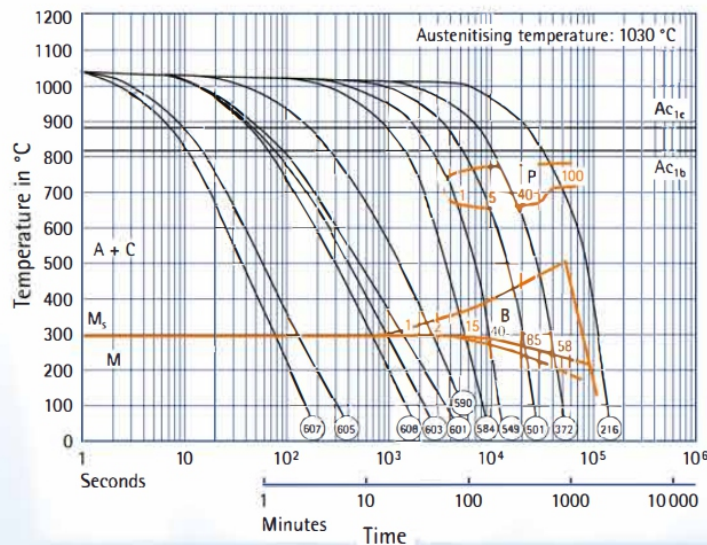
Hardening °C
1030- 1130

Quenching
Oil or
Hot bath

Hardness after quenching HRC
57

Tempering °C
HRC

100	200	300	400	500	600
55	54	54.3	54.8	56	48



Tempering curve

