



Hot Work Steel DIN 2606 AISI H12 H12

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

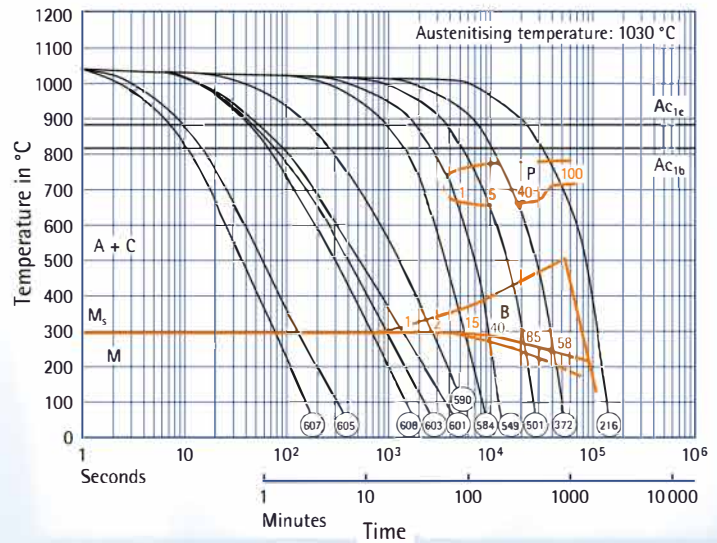
Coefficient of thermal expansion at °C 10 ⁻⁶ m/(m · K)	20 – 100 11.7	20 – 250 12.4	20 – 500 12.9
Thermal conductivity at °C	20	250	500
W/(m · K) Quenched and tempered	24.2	25.6	28.0

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

