D2 1.2601 Steel

Designation by Standards

Mat. No.	DIN	EN	AISI/SAE
1.2601	X165CrMoV12	-	-

Chemical Composition (in weight %)

C	Si	Mn	Cr	Mo	Ni	V	W	Others
1.60	0.35	0.30	11.50	0.60	-	0.30	0.50	-

Description

Ledeburitic Cr-steel for high performance cutting tools, toughness better than D3, possibility of nitriding. This alloy possesses a very high compressive strength and is deep hardening.

Applications

Cutting tools, stamping, woodworking, drawing, deep drawing and pressing tools, cold working rolls, measuring tools.

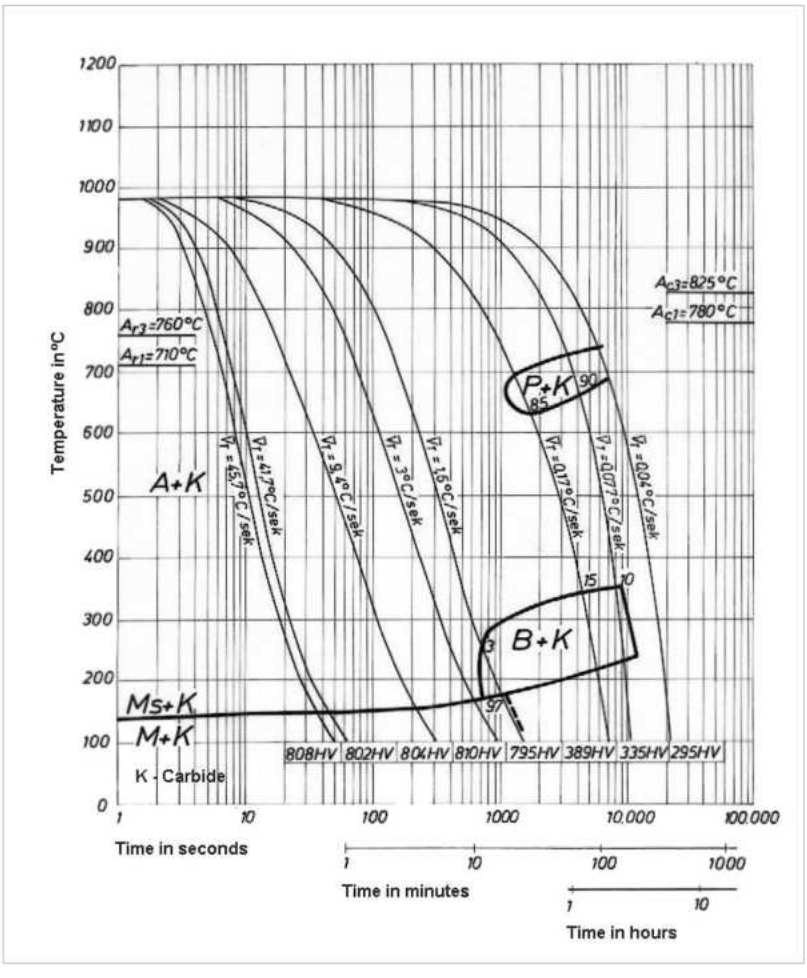
Physical properties (average values) at ambient temperature

Modulus of elasticity [10^3 x N/mm^2]: 210
Density [g/cm^3]: 7.70
Thermal conductivity [W/m.K]: 20.0
Electric resistivity [Ohm mm^2/m]: 0.65
Specific heat capacity[J/g.K]: 0.46

Coefficient of Linear Thermal Expansion 10^{-6} $^oC^{-1}$

20-100°C	20-200°C	20-300°C	20-400°C	20-500°C
10.5	11.0	11.0	11.5	12.0

Continuous Cooling Transformation (CCT) Diagram



Time-Temperature Transformation (TTT) Diagram