

Corrosion resistant knife steel (X50CrMoVN15)

Typical analysis

	C	Si	Mn	P	S	Cr	Mo	V	N
Typical Analysis	0.50	0.60	0.55	0.025	0.001	14.70	0.60	0.10	0.15
Chemical Composition accord. DIN EN 10088	0.45-0.55	≤ 1.00	≤ 1.00	≤ 0.040	≤ 0.015	14.00-15.00	0.50-0.80	0.10-0.20	-

Values in weight %

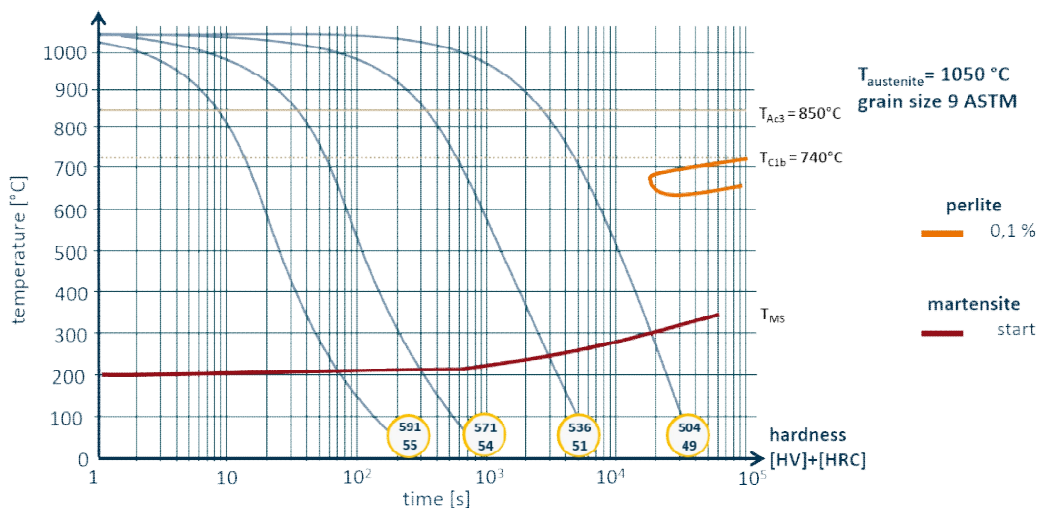
Heat treatment

Soft annealing:	750°C - 850°C	furnace
Hardening:	1020°C - 1100°C	oil, water
Tempering:	150°C - 300°C	

Physical Properties (Reference values for 20°C)

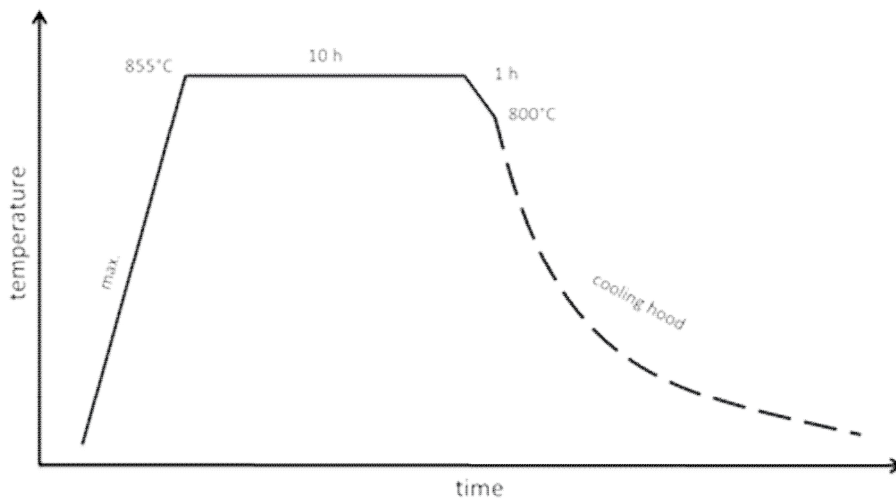
Density [g/cm³]	7.7
Young's modulus [Gpa]	221
Electrical resistivity [$10^{-8}\Omega\cdot m$]	20
Thermal conductivity [W/m·K]	46

CCT-curve (Austenising temperature 1050°C)

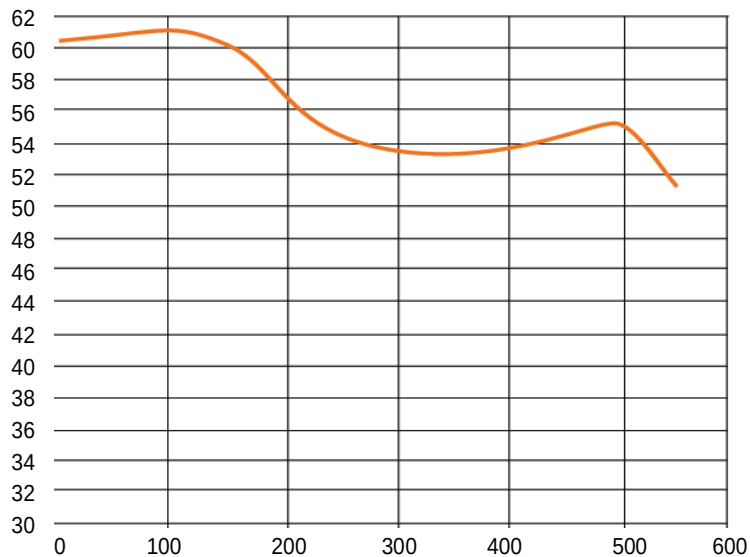


Corrosion resistant knife steel (X45CrMoVN15)

Spherical Annealing



Tempering Curve



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