



SIHARD 2327 Steel

Designation by Standards

Brand Name	Ravne	Mat. No.	DIN	EN	AISI/SAE
SIHARD 2327	OHV4	1.2327	86CrMoV7	-	-

Chemical Composition (in weight %)

C	Si	Mn	Cr	Mo	Ni	V	W	Others
0.87	0.30	0.38	1.75	0.28	0.13	0.10	-	-

Description

Low alloyed cold working tool steel.

Applications

Cold rolls, back-up rolls, straightening rolls, non-ferrous 2 and 4 high roll mills.

Physical properties (average values) at ambient temperature

Modulus of elasticity [$10^3 \times \text{N/mm}^2$]: 210

Density [g/cm^3]: 7.85

Thermal conductivity [W/m.K]: 35.0

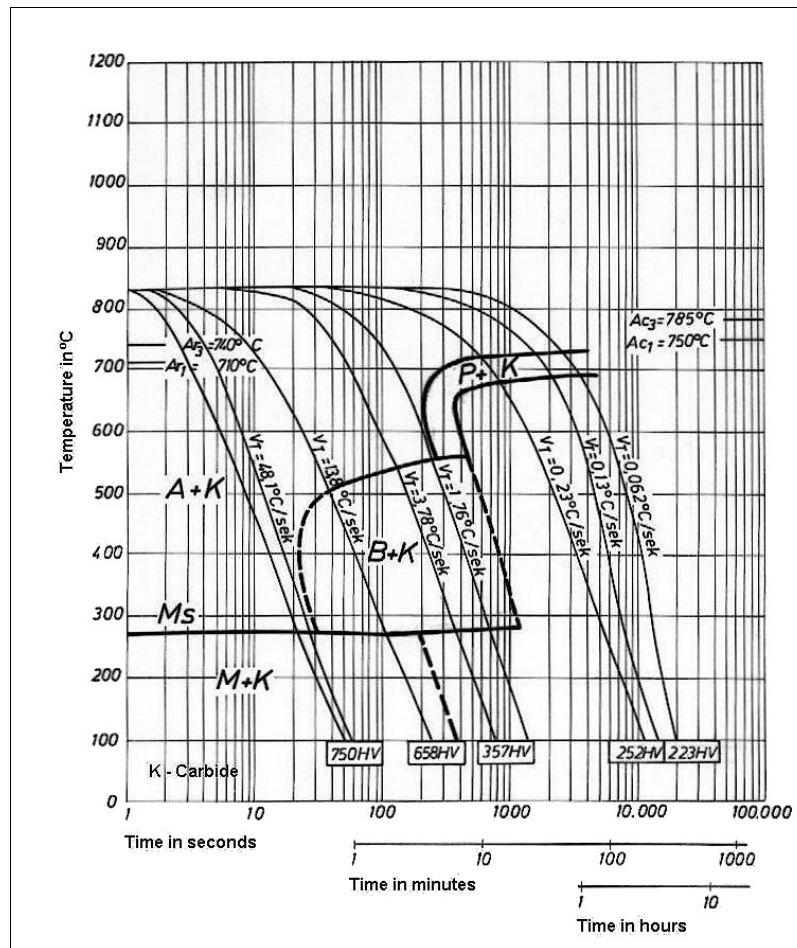
Electric resistivity [$\text{Ohm mm}^2/\text{m}$]: 0.30

Specific heat capacity [J/g.K]: 0.46

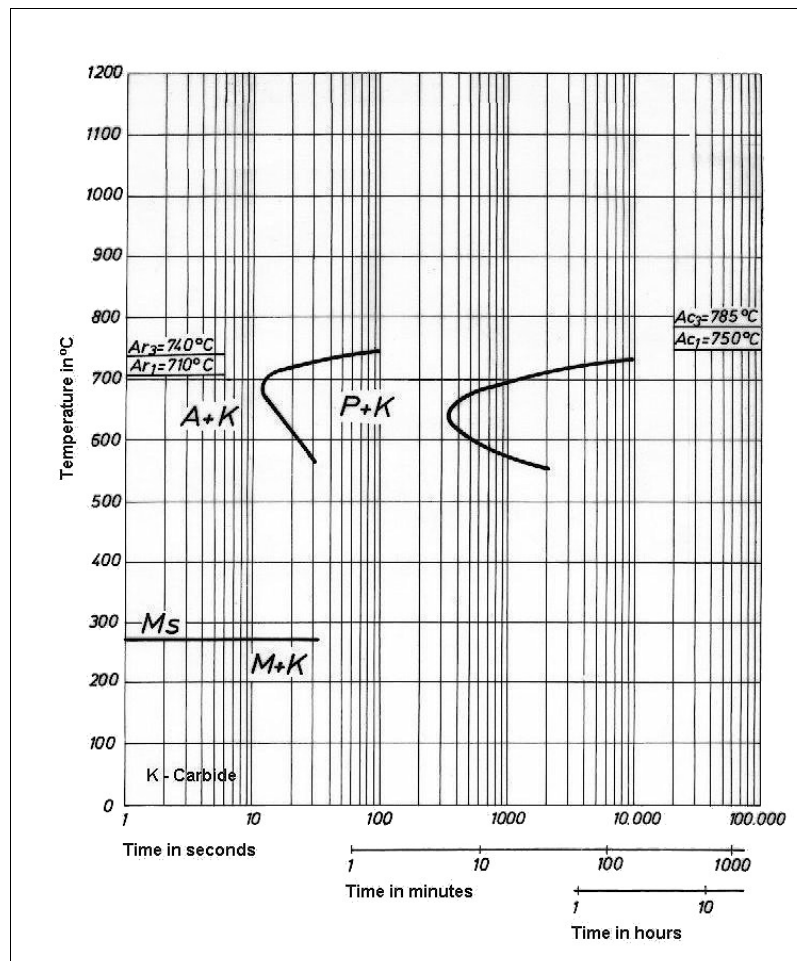
Coefficient of Linear Thermal Expansion $10^{-6} \text{ }^\circ\text{C}^{-1}$

20-100°C	20-200°C	20-300°C	20-400°C	20-500°C
12.5	13.2	13.6	14.0	14.3

Continuous Cooling Transformation (CCT) Diagram



Time-Temperature Transformation (TTT) Diagram



Soft Annealing

Heat to 720-750°C, cool slowly in furnace. This will produce a maximum Brinell hardness of 230.

Stress Relieving

Stress relieving to remove machining stresses should be carried out by heating to approx. 650°C, holding for 1-2 hours at heat, followed by air cooling. This operation is performed to reduce distortion during heat treatment.

Hardening

Harden from a temperature of 800-820°C, 830-850°C followed by water or oil quenching. Hardness after quenching is 64-67 HRC.

Tempering

Tempering temperature: 200-600°C.

Tempering Temperature (°C) vs. Hardness (HRC)

100°C	200°C	300°C	400°C
65	61	58	-

Forging

Hot forming temperature: 1150-850°C.

Machinability

No data.

Forms manufactured: Please see the [Dimensional Sales Program](#).

Disclaimer

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